Voluntary Cleanup Program Report
Snohomish County Campus
Everett, Washington

October 2, 2006

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GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS

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21-1-12132-004

EXECUTIVE SUMMARY

This report summarizes remedial actions completed at the Snohomish County Campus in Everett, Washington. This report will be submitted to the Washington State Department of Ecology (Ecology) under the Voluntary Cleanup Program (VCP) in support of a request for a No Further Action (NFA) designation and remedial grants/matching funds.

The Snohomish County Campus is generally located within the city block bound by Oakes, Pacific, and Rockefeller Avenues, and Wall Street (Figure 1). Redevelopment of the campus included construction of an underground parking garage, a ramp to the garage from Pacific Avenue, and an addition to the existing Administration Building. To perform this new construction, demolition of two buildings and an aboveground parking structure was performed.

During the geotechnical investigation for the project, gasoline-contaminated soil and groundwater were encountered. Based on contaminant concentrations, and field indication of contamination (detected at a higher elevation), the source for the contamination appeared to be in the vicinity of boring B-18 (Figure 2). A geophysical survey was performed in the area of boring B-18 to evaluate the presence of potential underground storage tanks (USTs); no potential USTs were discovered.

For the purposes of this report, and to follow the sequence of construction (excavation), the Snohomish County Campus was divided into the Parking Garage, the Administration Building Addition, and Rockefeller Ramp areas. The selected remedial actions for the Campus generally included site characterization, excavation and offsite disposal of soil, confirmation sampling, and collection and disposal of water. Remedial actions with respect to soil performed in the three areas are briefly summarized below, followed by a discussion of water.

Parking Garage Site. This site was the initial phase of construction on the campus, requiring excavation from approximate elevations of 156 feet to 134 feet down to about 72 feet mean sea level (MSL). During excavation, soil was characterized and segregated using field screening and analytical test results. A large gasoline plume (shown on Figure 5), and two small areas of diesel contamination were discovered and excavated. Approximately 126,500 tons of petroleum-contaminated soil was removed from this site and disposed of at Rinker Materials (Rinker, Everett, Washington). No contamination remains at the bottom of the excavation. Limited

residual contamination remains in the excavation sidewalls. Parking garage construction is complete and the entire excavation is covered.

Rockefeller Ramp Site. To provide an alternate entrance to the garage, the Rockefeller Ramp was constructed. Field observation during installation of temporary shoring and excavation for the ramp found gasoline contamination that appeared to have originated at the northwest corner of the existing Administration Building. This also appeared to be the source for the gasoline contamination encountered during garage excavation. Excavation was conducted to design grade; no overexcavation was performed. Approximately 2,800 tons of petroleum-contaminated soil was disposed of at Rinker. Contaminated soil remains beneath the ramp and in the sidewalls, but is expected to be limited, based on our observations in the adjacent garage excavation. Ramp construction is complete and residual contamination is covered by the ramp and limited areas of landscaping.

Administration Building Addition Site. An area of diesel-contaminated soil was discovered during excavation for construction of the building addition and appeared to extend into the Parking Garage Site. All contaminated soil encountered to design grade within the addition footprint was removed and disposed of offsite; no overexcavation was performed. An area of residual diesel-contaminated soil remains beneath the building (Figure 11). Soil disposed from this area was grouped with soil disposed from the Ramp. The entire area of residual contamination is covered.

Groundwater contamination associated with the "gasoline plume" was detected prior to excavation based on pre-excavation sampling. Therefore, during excavation for the Parking Garage, construction dewatering was discharged under a City of Everett Discharge Authorization (DA) to the sanitary sewer. No contaminants of concern were detected in the dewatering fluids sampled in accordance with the DA. Based on the depth of the garage excavation, the footing drain system will collect local groundwater. Therefore, following excavation and once the garage footing drain system was operational, four quarters of water monitoring within the garage drainage system was performed to evaluate the potential groundwater impacts for potential utility workers. Again, no contaminants were detected. No residual groundwater impacts were observed.

Reasonable remedial actions have been conducted and completed at this site, including offsite disposal of over 129,000 tons of petroleum-contaminated soil. Some petroleum-contaminated

soil remains at excavation boundaries, but residual areas are capped and any local groundwater is expected to go towards the garage excavation and be captured within garage footing drains for discharge to the sanitary sewer. Further, evaluation of indoor air quality suggests no impact within the buildings due to this residual contamination. Site use is not likely to change in the near future given the recent site development. Therefore, based on analytical test results, and our understanding of site geology, hydrogeology, and observations during construction, no exposure to residual contamination is expected. It appears good protection of human health and the environment has been achieved. We recommend that a No Further Action (NFA) designation be applied to this site.

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VOLUNTARY CLEANUP PROGRAM REPORT
SNOHOMISH COUNTY CAMPUS
EVERETT, WASHINGTON

1.0 INTRODUCTION

This report summarizes the environmental data and independent remedial actions conducted at the Snohomish County (County) Campus (Campus) site in Everett, Washington (Figure 1). This report will be submitted to the Washington State Department of Ecology (Ecology) under the Voluntary Cleanup Program (VCP) in support of a request for a No Further Action (NFA) designation, and remedial grants/matching funds.

2.0 BACKGROUND INFORMATION

2.1 Site Description

The project location is shown on the Vicinity Map, Figure 1. The Campus is generally located within the block bound by Oakes, Pacific, and Rockefeller Avenues, and Wall Street. The Snohomish County Courthouse and Mission Building are located to the west of the Campus, and the existing Administration Building is located to the south (Figure 2).

For the purpose of this report, and following the general sequence of project construction (excavation), the Campus was divided into the Administration Building Parking Garage Site, the Administration Building Addition Site, and the Rockefeller Ramp Site (Figure 2).

2.2 Project Background

Campus development included construction of: (1) a new underground parking garage located beneath a civic plaza (about 2.5 acres), (2) an addition to the Administration Building, and (3) a vehicle ramp from Pacific Avenue down to the parking garage (Rockefeller Ramp). Campus redevelopment required demolition of the three-story, aboveground concrete parking garage; the Ginni Stevens Hearing Room; and the Administration Annex Building (Figure 2).

The Parking Garage is approximately 180 by 320 feet in plan with six levels of underground parking and approximately 10-foot floor-to-floor heights. The garage excavation finish floor

elevations range from 73.5 to 83.5 feet mean sea level (MSL). The Rockefeller Ramp involved excavation from ground surface down to about elevation 129 feet MSL, where it connects to the first level of the parking garage. The ground floor of the new Administration Building Addition is connected to the existing Administration Building and houses offices and public hearing and meeting rooms. The Administration Building Addition finish floor elevation is approximately 145 feet MSL.

As part of the development, a below-grade prisoner tunnel for transporting inmates was constructed north of the existing pedestrian tunnel, and between the existing County Courthouse west of the site and the proposed New Jail Building east of the site (see Figure 2). The tunnel floor elevations vary from about 125 feet MSL under Oakes Avenue to 135 feet MSL at the existing Administration Building (to match the existing basement floor elevation) and then up to 145 feet MSL at the Courthouse. The utility infrastructure for the existing County Administration Building that was housed in the basement of the former parking garage was relocated within the new prisoner tunnel as part of construction.

3.0 PREVIOUS INVESTIGATIONS

3.1 Geotechnical Report

3.1.1 Background

This geotechnical report presented the results of subsurface explorations, geotechnical and environmental laboratory testing, hydrogeological and geophysical field testing, and geotechnical engineering recommendations for the Campus Administration Building and Garage sites (Shannon & Wilson, Inc., 2002b). In 2002, the geotechnical field explorations for the project included drilling fifteen borings designated B-7 through B-18 (Figure 2 and Appendix A). The borings were advanced to depths ranging between 15.3 and 100.4 feet, which correspond to approximate bottom elevations of 127.7 to 55.6 feet. Evidence of petroleum contamination was observed during site investigations, as discussed below.

3.1.2 Evidence of Soil and Groundwater Contamination

Field indications of petroleum contamination were observed during drilling of geotechnical borings B-12, B-13, B-16, and B-18. Therefore, select soil samples were collected from the borings for petroleum hydrocarbon (by Methods NWTPH-G/BTEX and NWTPH-Dx)

and total lead analyses. Results of the analytical testing indicated that low levels of weathered gasoline-range petroleum hydrocarbons, and traces of toluene and ethylbenzene were present in soil at these boring locations (Table 1). No detections exceeded Washington Model Toxics Control Act (MTCA) Method A cleanup criteria; lead was not detected. The environmental laboratory analytical reports are included in Appendix B.

During drilling of boring B-18, field screening indicated that potentially-contaminated soil was present from about 25 to 42 feet below ground surface (bgs) (approximate elevation 131 to 114 feet), the most shallow indication of contamination in the geotechnical borings. (The water table was measured at approximately 30 feet bgs at this location.) Analytical testing of soil from this boring indicated an exceedence of MTCA cleanup criteria for gasoline (Table 1). Given this elevated concentration of weathered gasoline and the shallow elevation of field indication of contamination, it seemed likely that a contaminant source is, or was, located in the vicinity of B-18.

Observation wells were installed in borings B-9, B-11, B-14, B-17, and B-18 to measure water levels during construction and to evaluate groundwater quality. During development of wells B-14 and B-18, a slight to moderate hydrocarbon odor and/or petroleum sheen were observed. Groundwater samples were collected from B-14, B-17, and B-18 and submitted for petroleum hydrocarbon analyses. No contaminants of concern were detected in water from B-17. However, results indicated that gasoline concentrations exceeded MTCA Method A cleanup criteria for groundwater in wells B-14 and B-18. Concentrations of benzene and ethylbenzene in B-18 groundwater also exceeded cleanup criteria. Analytical results are summarized in Table 1.

3.1.3 Contaminant Source Evaluation

Field observations and contaminant concentrations in soil during geotechnical explorations suggested a contaminant source was located near boring B-18. Therefore, a geophysical survey was conducted in accessible portions of the former plaza in the vicinity of boring B-18 to look for buried objects, such as an underground storage tank (UST) or piping. The results of the geophysical survey did not provide definitive evidence of a UST beneath the plaza area. No contamination source was apparent in the area evaluated. The geophysical survey report, which was an appendix to our geotechnical report, is contained within Appendix H.

3.2 Addendum Geotechnical Report

An addendum report (Shannon & Wilson, Inc., 2003) was prepared to the aforementioned report to address the geotechnical and potential environmental issues associated with design and construction of the Administration Building Addition. Two additional borings, designated B-19 and B-20, were advanced to depths of approximately 30 feet, which correspond to approximate bottom elevations of 119 and 102 feet (Figure 2). No samples were collected from the two borings for analytical testing; no field indications of contamination were observed. No observation wells were installed in the two additional borings.

3.3 Phase I Environmental Site Assessment (ESA)

Shannon & Wilson completed a Phase I Environmental Assessment (ESA) for the Campus and Jail Site (adjacent to the east) (Shannon & Wilson, Inc., 2002a). The ESA was conducted to evaluate potential sources in response to the discovery of contamination at the Campus. Based on data collected for the ESA, evidence of recognized environmental conditions (RECs) in connection with historical site uses and off-site concerns at the Administration Building and Parking Garage sites were found:

- Prior to County use, the Campus and vicinity were occupied by a number of single- and multi-family homes, as well as the former county jail. These structures likely had heating oil USTs on their properties, which could have leaked, causing a release to the site soil and groundwater. Potential releases from former USTs were considered RECs.
- The former Annex and garage contained sumps that had the potential to contaminate the site. In addition, features associated with the former vehicle maintenance area of the garage were of concern, including USTs, aboveground storage tanks (ASTs), gasoline pump islands, hydraulic lifts, and floor drains. These unresolved site features and the potential presence of contaminated soil were considered RECs.
- Site drawings indicated that there was a transformer room in the basement of the former garage. PCBs could have leaked from the transformer and leached through the concrete foundation, resulting in contamination to the site soil and groundwater. The potential for releases of PCBs was considered an REC.

Copies of historical drawings and other sources reviewed for the ESA are contained with the Phase I ESA report appendices. Refer to the Phase I ESA report for additional information.

3.4 UST Removal Observation Services

A review of historic plans and documents indicate that there were as many as five USTs or ASTs located on the Campus, as shown on Figure 2. Two of the tanks, located beneath the entrance to the former garage, were removed during Campus redevelopment following demolition of the aboveground garage (Shannon & Wilson, Inc., 2004). A summary of our observations during removal of the two tanks follows.

Historical plans indicated that two 10,000-gallon gasoline USTs, a pump island, and an associated oil interceptor were located near the eastern entrance of the aboveground garage approximately 220 feet south of Wall Street. Fill lines for these tanks were underground and the fill ports were located outside the garage along Oakes Avenue. The pump islands installed near the entrance replaced the pump island formerly located on the west side of the second level of the garage. The USTs, installed circa 1971, were closed in place and filled with lean concrete slurry in 1988. The fuel dispensers apparently were removed years ago. Removal of the closed-in-place tanks during Campus redevelopment was completed in general accordance with Ecology guidelines. However, gasoline-related soil contamination remains southeast and southwest of a utility manhole beneath the Oakes Avenue sidewalk. No groundwater was observed during tank removal. The area of residual contamination is expected to be limited based on subsurface soil conditions and the apparent absence of groundwater in the vicinity of the tanks. This area is completely capped by pavement as part of the new Administration Building Addition construction. Any groundwater that may be in the vicinity is expected to drain to the nearby garage footing drain system. Additional UST removal information is contained within Appendix H.

4.0 SELECTION OF CLEANUP CRITERIA AND REMEDIAL ACTION

Contaminants of concern include petroleum in the gasoline and diesel ranges. Because of the limited number of contaminants at the site, and because MTCA Method A soil cleanup standards are available for the contaminants of concern, the selected cleanup criteria are MTCA Method A residential criteria. Points of compliance are the site boundaries and the bottoms of excavations (design grade).

To develop the Campus, mass excavation of site soil from street level (approximately elevation 140 to 138 feet) to design grade (ranging in depth to elevation 90 feet) was required. Therefore, excavation and off-site disposal of the contaminated material was selected as the remedial action.

When impacted soil was encountered, it was segregated and disposed of at Rinker Materials (Rinker, Everett, Washington). Impacted soil was defined as soil with any visible staining/discoloration, detectable odor, photoionization detector (PID) readings greater than background, or contaminants detected via analytical testing. Samples were collected for characterization at a frequency approved by Rinker prior to offsite disposal. Soil samples, or confirmation samples, were also collected beneath the areas of contamination or at final excavation depth to determine if any contamination would remain beneath the completed structures.

Samples of water removed from the excavation were collected prior to sewer discharge, in accordance with City of Everett Discharge Authorization # 204 (DA) and City of Everett Industrial Pretreatment Ordinance # 2034-95 (as amended by Ordinance # 2247-97) requirements. Water samples did not contain concentrations of analytes exceeding discharge criteria. Therefore, no water-specific remedial action was conducted, other than the removal of contaminated soils and quarterly water monitoring (post-garage construction). Sampling data and DA criteria are summarized in Table 5; analytical laboratory reports and a copy of the DA are contained within Appendix G.

5.0 GEOLOGY AND HYDROGEOLOGY

5.1 Geology

The site's subsurface conditions generally consist of the following geologic layers starting from the ground surface: fill, glacial till, advance outwash, glaciolacustrine deposits, and glacial outwash, as shown on Figures 3 and 4. The fill generally consists of slightly gravelly, slightly silty to silty sand. The glacial till generally consists of very dense, slightly gravelly to gravelly, silty sand. Advance outwash consists of very dense, slightly silty to silty sand and slightly clayey, sandy silt. The advance outwash has localized areas that are slightly gravelly to gravelly. The glaciolacustrine deposits are hard and vary from silty clay/clayey silt to slightly sandy, slightly clayey silt. These fine-grained deposits have scattered to numerous silty, fine sand partings/seams and slickensides. In some areas, scattered seams of highly plastic clay were

noted in the glaciolacustrine deposits. Soil with elevated levels of petroleum hydrocarbons were encountered at several locations within the advance outwash and the lower portion of the glacial till.

Fill was encountered in the alleyway (boring B-11) between the former garage and the existing Administration Building. The fill was probably placed during construction of the existing Administration Building.

5.2 Hydrogeology

Groundwater conditions were evaluated prior to and during construction. Groundwater observations were made during the drilling of geotechnical borings and soldier piles, and groundwater levels were measured periodically in dewatering and observation wells. Groundwater seepage was also noted in some areas of the open parking garage excavation. Advance outwash is the primary water-bearing layer beneath the site, with some saturated sandy to silty layers located within the overlying till and the underlying glaciolacustrine deposits. Prior to the start of construction dewatering at the new Parking Garage site, the advance outwash was apparently partially confined, based on water levels measured in observation wells; these water levels were located above the contact with the overlying glacial till deposits. In general, the advance outwash is about 5 to 25 feet thick and is about 20 to 35 feet bgs across most of the northern and western portions of the new Parking Garage footprint. The advance outwash layer is only about 5 to 10 feet thick in the southeast and east portions of the Parking Garage footprint, near Oakes Avenue.

Pre-construction observation well measurements indicated groundwater elevations ranging between about 106 and 126 feet, or about 26 to 36 feet bgs. Specifically, groundwater elevations in wells B-9 and B-17 ranged from about 106 to 115 feet, while wells B-11, B-14, and B-18 were at about 120 to 126 feet. Groundwater elevations measured on November 25, 2002, shortly before the start of parking garage construction dewatering operations, indicated that the western portion of the site is a groundwater high. A probable recharge area existed in this area, due to the presence of lawns and planters within the footprint of the future Rockefeller Ramp. As indicated on Figure 5, the pre-dewatering groundwater gradient in the advance outwash varied; it appeared to flow generally north to northeast beneath the majority of the new parking garage site. Groundwater levels likely fluctuate seasonally on the order of several feet. Review of Ecology records indicates that water at this elevation is not used for potable purposes.

No groundwater was observed during the excavation of the former gasoline underground storage tanks located to the southeast of the new Parking Garage, and no iron-stained horizons were observed in this area that would indicate the past presence of groundwater. No evidence of groundwater was observed to the maximum excavation depth of about 21 feet (about elevation 119 feet) in the nearby sewer excavation.

Based on our monitoring of wells installed around the Parking Garage Site perimeter, we estimate that groundwater levels in the local vicinity of the Campus have been lowered in excess of 13 feet through operation of the construction dewatering system and installation of the new parking garage. The lowest portion of the parking garage excavation is about elevation 73.5 feet; its drainage system has permanently affected the local groundwater flow regime, acting as a local sink for groundwater within the advance outwash and underlying fine-grained glaciolacustrine soils. Discharge from the garage footing drains is tightlined to the sanitary sewer.

6.0 RELEASE INFORMATION

6.1 Soil

During site excavation, contaminated soil containing petroleum hydrocarbons (gasoline and diesel ranges) was encountered in three areas of the site. The date, exact locations, and quantities of any release(s) have not been determined. The areas of contamination, the potential contaminant source, and the extent of contamination are summarized in the following table.

The lateral extent of gasoline-impacted soil encountered and removed by CTI (Sumner, Washington) and Northwest Construction, Inc. (Bellevue, Washington), the excavation and hauling contractors for Campus redevelopment, is presented in Figure 5. The vertical extent of contamination is depicted in Figures 3, 4, and 13. Stained soil observed at the extents (walls) of the garage excavation is shown in Figures 7 through 10. Residual soil contamination remains beneath the Rockefeller Ramp and Administration Building Addition areas.

The two areas of diesel contamination generally overlapped with the gasoline contamination. It is therefore not distinguished separately with the exception of the remaining conditions beneath the Administration Building Addition (Figure 11).

Soil Contamination Area	Potential Source	Vertical Extent of Contamination (Elevation)	Comments
Gasoline plume (Rockefeller Ramp and Parking Garage excavations, Figure 5)	Unknown, but likely in the vicinity of the northwest corner of the Administration Building	148 to 113 feet	Contamination primarily migrated to the northeast. Residual contamination is capped by concrete and limited landscape areas.
Diesel contamination (Administration Building Addition excavation, Figure 11)	Unknown, but likely surficial leaks	138 to ~134 feet	This area of contamination was discovered during construction excavation and appeared to extend into the adjacent Parking Garage excavation. This contamination was removed, except for a limited area under the building addition shown on Figure 11.
Diesel contamination (Parking Garage excavation)	Unknown, but likely surficial leaks	133 to 119 feet	This contamination was discovered in the northeast corner of the Parking Garage excavation and was removed. A seam of elevated diesel remains in the east wall of the excavation

6.2 Groundwater

Groundwater contamination was detected prior to excavation based on pre-excavation sampling (Table 1). This contamination is associated with the "gasoline plume" as discussed above; the potential source of contamination is unknown. Dewatering discharge was monitored, as required by the City of Everett DA, and four quarters of water sampling collected in the permanent parking garage footing drains found no detectable concentrations of fats, oils, and greases (FOG). Because of soil excavation and the lowering of the groundwater table, no residual groundwater contamination is expected, and discharge of any water is routed to the sanitary sewer via garage footing drains.

6.3 Discussion

It is unlikely that sensitive species or environments were damaged or threatened by releases at the site. Site development is complete; the entire site is paved, covered with structures, or covered with limited landscape areas. Any residual areas of soil contamination are not expected to present threats to human health or the environment, as potential exposure pathways (direct, to air, or to water) are not complete. The soil to air pathway was evaluated (Appendix I); no apparent hazards are presently associated with this pathway. Therefore, the site does not present any known potential threats to public health.

7.0 REMEDIAL ACTION SUMMARY

This section discusses the remedial actions completed at the Campus, presented by media (soil and water). Sampling methodology is presented in Appendix A. Environmental samples were analyzed by CCI Analytical Laboratories (Everett, Washington). The complete laboratory analytical reports are contained in Appendices B through E. Contaminated soil was disposed of offsite at Rinker.

7.1 Soil

Remediation of the site involved soil characterization, mass excavation, and offsite disposal. In general, soil samples were collected from locations where contamination was observed to determine proper disposal requirements, and to confirm removal of contaminated soils above regulated criteria. Sample locations were selected based on all or some of the following: PID readings, which measure volatile organic compounds such as benzene; construction sequencing and elevation; visual observation; and odor. Soil samples with suspected contamination were submitted for analyses for gasoline-range petroleum hydrocarbons (NWTPH-G/BTEX) and/or diesel- and oil-range petroleum hydrocarbons (NWTPH-Dx). Sample numbers, locations, elevations, and analyses performed on each soil sample collected are summarized in Tables 2 through 4. Select sample numbers and approximate locations are presented in Figures 6 through 12.

7.1.1 Parking Garage Excavation

Initial data suggested that contamination would be encountered during construction excavation, with the most contaminated area being the southwest corner of the garage footprint. Initial determination of potential contamination was via field observations (staining, elevated PID readings, petroleum odor), and elevation (as determined by borings completed prior to excavation). Further evaluation was conducted during site excavation by excavating test pits and collecting samples from areas to be removed the following day, and submitting samples for analytical testing by rapid turnaround. Upon receipt and review of data, characterized soil was then loaded onto trucks directly or via conveyor for disposal at Rinker. Soil characterization via field screening and laboratory analysis continued until confirmation samples indicated contamination had been removed. All gasoline-contaminated soil excavated within the garage footprint was disposed of offsite.

The gasoline contamination observed within this excavation appeared to have originated in the vicinity of the southwest corner of the garage excavation, based on the elevation contamination was encountered, the distribution of contaminant concentrations (by analytical testing), and field observations (significant staining, odor, PID readings). (Consideration of source is further discussed below in the Rockefeller Ramp excavation section.) The contamination apparently migrated along the granular backfill beneath the Administration Building pedestrian tunnel, and spread northeast across the site, following topography and the outwash layer. Based on observations along the excavation sidewalls (no staining), and field observations during drilling of pumping and monitoring wells at the northeast excavation perimeter (no odor, PID readings), the contaminant plume likely did not migrate far downgradient of the site (Figure 5). Additionally, based on our observations during construction of the Everett Arena (we provided geotechnical services at this downgradient site), and that no soil excavated from that site was rejected from any disposal facilities, it appears that no contamination migrated across the street to the northeast. Pre-excavation testing of groundwater from B-17 (at the northwest corner of the garage) did not have detectable petroleum, suggesting no impacts offsite to the northwest have occurred.

A small area of diesel contamination was observed in the northeast corner of the Parking Garage site. This was discovered during the course of construction (field screening). All diesel-contaminated soil excavated from the site was disposed of at Rinker.

Another small diesel-contaminated area was discovered near the southeast corner of the garage excavation. It is contiguous with the contaminated area beneath the Administration Building Addition and is discussed under Paragraph 7.1.3.

7.1.2 Rockefeller Ramp Excavation

Construction of the ramp included installation of temporary shoring and excavation. In this area, gasoline contamination was observed at a shallower depth than in the Parking Garage excavation, suggesting that the source of the contamination in the both the Parking Garage and Rockefeller Ramp excavations originated in the northwest corner of the existing Administration Building. No physical evidence of a source (a tank or piping) was found during a previously conducted geophysical survey utilizing ground-penetrating radar (GPR) or during excavation.

Within the Rockefeller Ramp area, excavation was conducted only to support installation of the ramp; no overexcavation to remove contaminated soil was performed. Based on field observations, gasoline-contaminated soil remains beneath and on the sidewalls of the ramp. The estimated remaining contamination is depicted in Figures 5 and 13. Based on field observation, our knowledge of site geology, and observations during the adjacent garage excavation, the residual contamination is likely not extensive.

7.1.3 Administration Building Addition Excavation

To construct an addition to the Administration Building, the former aboveground garage was demolished and limited grading was performed. During grading, a small area of diesel contamination was observed in the northwest corner of the Administration Building Addition footprint (Figure 11). This was discovered during the course of construction (field screening), and seemed to extend into the Parking Garage excavation. All diesel-contaminated soil excavated to design grade was removed and disposed offsite. A limited area of diesel-contaminated soil remains beneath the Administration Building Addition as shown on Figure 11; the vertical extent is expected to be limited, based on our knowledge of site geology.

7.1.4 UST Removal

Two USTs were encountered during construction of the Campus. The two 10,000-gallon gasoline USTs beneath the former garage (Figure 2) were previously closed in place and were removed to support construction of the Administration Building Addition. The USTs were removed in general accordance with State requirements (Shannon & Wilson, Inc., 2004). This removal was documented under separate cover and is summarized in Paragraph 3.4; select data from the UST removal are contained within Appendix H.

7.1.5 Confirmation Sampling

A Shannon & Wilson, Inc. representative was on site full-time to observe and document the excavation activities in the Ramp and Garage areas, and on an on-call basis for the Administration Building Addition area, and to collect confirmation soil samples. Confirmation samples were collected to evaluate remaining conditions (sidewall samples) and to determine whether contamination remained above MTCA Method A or background in excavation bottom samples. Petroleum was not detected in any of the bottom confirmation samples of the Garage. The bottoms of the Ramp and Building Addition excavations have residual contamination.

Samples at the extents (sidewalls) of the Ramp and Garage excavations contain varying levels of petroleum. Soil samples collected from the Garage excavation north and east sidewalls were generally found to contain low to undetectable concentrations of petroleum. Only one sample, sample N-1.5-119, located on the east excavation sidewall exceeded a MTCA Method A cleanup level. Samples collected from sidewalls in the interior of the site (south and west sidewalls) contained varying levels of contamination ranging from not-detectable to above MTCA Method A levels. Confirmation sample results are summarized in Table 4.

7.2 Groundwater Within the Parking Garage Excavation

7.2.1 Sampling During Construction (Excavation)

Construction dewatering wells were installed to support garage excavation down to approximate elevation 73.5 feet. Any water removed from the Parking Garage excavation (via dewatering systems) was collected and piped to a temporary storage tank prior to sewer discharge. The discharge location was a catch basin at the northeast corner of the garage excavation; the sewer DA (Appendix G) was obtained from the City of Everett by Malcolm Drilling, the dewatering contractor.

Water from construction dewatering was collected and tested for arsenic, cadmium, chromium, copper, lead, mercury, nickel, silver, zinc, fats, oils and greases, suspended solids, flashpoint, cyanide, and pH prior to sewer discharge in accordance with the sewer DA. Samples were collected from the baker tank (used for temporary storage and sediment settling) at street level at the frequency required by the DA and analyzed in accordance with DA requirements. No sheen was observed on the water, nor were any odors detected during sampling events. No contaminants were detected at concentrations of concern. Water sampling results are summarized in Table 5. Analytical laboratory reports for all water sampling during construction are contained in Appendix G.

7.2.2 Footing Drain Sampling

Once the footing drain system (installed below the parking garage) was operational, temporary storage of water at street grade was no longer required. However, to evaluate the potential presence of residual groundwater contamination and future exposure to utility workers, water monitoring was performed for one year. Since the garage acts as a groundwater sink, and the footing drain system collects local area groundwater, the drain system was logical place to

sample water. The footing drain system would also collect some trace amounts of water collected from drains within the garage. Sampling and analytical testing from a footing drain sump was conducted on a quarterly basis (four events). Analytical testing methods were selected to meet DA requirements. No contaminants were detected at concentrations of concern. Water sampling results are summarized in Table 5. Analytical laboratory reports are contained in Appendix G. Based on this testing, no apparent groundwater impacts remain.

8.0 WASTE DISPOSAL

8.1 Soil

Contaminated soil was disposed of at Rinker Materials in Everett, Washington. Soil was pre-designated by the geotechnical investigation results, and as excavation was performed. Samples were tested for petroleum and metals. Approximately 129,400 tons of petroleum-contaminated soil were excavated and transported for off-site disposal (Appendix F). Disposal was contracted between Rinker and the County. Copies of the actual tickets are on file with the County.

8.2 Water

All water was disposed of through the sewer system in accordance with the sewer DA. Analytical laboratory reports associated with testing to meet DA requirements are contained in Appendix G.

9.0 IMPACTS ON INDOOR AIR QUALITY

To explore the potential for residual soil contamination to impact the air within buildings on site, Shannon & Wilson Inc., performed an exposure assessment of the indoor air in select building locations adjacent to residual soil contamination. The assessment was conducted in January 2006, and is summarized in Appendix I. The results indicate no petroleum contaminants were present above Recommended Exposure Limits in samples collected during typical low- or high-activity periods. This suggests that the residual petroleum contamination has not migrated into buildings on site and no exposure to petroleum contaminants has occurred.

10.0 WELL DECOMMISSIONING

Eight monitoring wells (MW-1, MW-2 MW-3, B-9, B-11, B-14, B-17, and B-18) were installed at the site over the course of the project (Figure 2). Cascade Drilling decommissioned monitoring wells MW-1 and B-17. Monitoring wells B-11 and B-18 were located in areas of excavation and were removed and abandoned during construction. The final depths of wells MW-2, MW-3, B-9, and B-14 are above the Parking Garage foundation drain elevations, and they were closed during the construction of the concrete sidewalks; these wells were within the capture area of the garage footing drains. Appendix J contains site resource well completion reports on file with the Ecology, decommissioning reports for wells MW-1 and B-17, and a table summarizing well information.

11.0 INSTITUTIONAL CONTROLS

Based on conformational sampling, some petroleum-contaminated soil remains at excavation boundaries. However, as a result of construction, a majority of the contaminated soil was removed, areas of residual contamination are capped, surface water infiltration is limited, and any local groundwater is expected to go towards the garage excavation and be captured within garage footing drains. An indoor air evaluation was completed; no volatile petroleum compounds were detected. Site use is not likely to change in the near future, minimizing the likelihood of any new development. Therefore, no exposure to residual contamination is expected, and no institutional controls are required.

12.0 CONCLUSIONS AND RECOMMENDATIONS

Reasonable remedial actions have been conducted and completed at this site. Soil sampling within the Parking Garage site indicates that all contamination within the excavation footprint has been removed. Limited areas of residual petroleum-contaminated soil beneath the Rockefeller Ramp, Administration Building Addition areas, and on excavation sidewalls are capped and not impacting indoor air quality. Groundwater impacts are not expected, as any water that may be present will drain to the garage footing drains for discharge to the sanitary sewer.

Based on analytical test results, and our understanding of site geology, hydrogeology, and observations during construction, we expect that no potential exposure pathways are complete. Therefore, we recommend that an NFA designation be applied to this site

13.0 LIMITATIONS

Shannon & Wilson, Inc. has prepared this report in a professional manner, using that level of skill and care normally exercised for similar projects under similar conditions by reputable and competent environmental consultants currently practicing in the area. Shannon & Wilson, Inc. is not responsible for conditions or consequences arising from relevant facts that were concealed, withheld, or not fully disclosed at the time the report was prepared. We also note that the facts and conditions referenced in this report may change over time, and that the conclusions and recommendations set forth here are applicable to the facts and conditions as described only at the time of this report. We believe that the conclusions stated here are factual, but no guarantee is made or implied.

This report was prepared for the exclusive use of Snohomish County and its representatives. Shannon & Wilson, Inc. has prepared Appendix K, "Important Information About Your Environmental Report," to assist you and others understand the use and limitations of our reports.

SHANNON & WILSON, INC.

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Principal Engineer

Scott W. Gaulke, P.E., L.H.G.
Vice President

ACT:SWG/act

14.0 REFERENCES

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TABLE 1
PRE-CONSTRUCTION SAMPLES
ADMINISTRATION BUILDING, PARKING GARAGE, AND ROCKEFELLER RAMP

Location	Sample Number	Sample Elev. (feet)	Sample Date	Probable Product Type	Oil	Diesel	Gasoline	MBTE	Benzene	Toluene	Ethylbenzene	Xylenes	Lead
Soil Samples													
B-16	S-6	126	3/4/2002	Highly Weathered Gasoline	ND<50	ND<25	91	ND<0.1	ND<0.03	0.07	0.1	ND<0.2	ND<6
B-12	S-3	128	3/4/2002	Highly Weathered Gasoline	ND<50	ND<25	38	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2	ND<6
B-13	S-4	123	3/4/2002		ND<50	ND<25	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2	ND<6
B-16A	S-2	131	5/6/2002	Highly Weathered Gasoline	ND<50	ND<25	13	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2	ND<5.1
B-18	S-5	131	6/21/2002		ND<50	ND<25	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2	--
B-18	S-6	126	6/21/2002	Highly Weathered Gasoline	ND<50	ND<130	**2,900**	ND<10	ND<3	ND<5	ND<5	ND<20	--
MTCA Method A					2,000	2,000	100/30	0.1	0.03	7	6	9	250
Groundwater Samples													
B-14	GW-1		7/3/2002	Lightly Weathered Gasoline	ND<130	ND<250	**6,800**	ND<2	**310**	74	**890**	**683**	--
B-17	GW-1		7/3/2002		ND<130	ND<250	ND<50	ND<3	ND<1	ND<1	ND<1	ND<3	--
B-18	GW-1		7/3/2002	Weathered Gasoline	ND<130	ND<250	**2,900**	ND<2	ND<2	ND<2	43	53	--
MTCA Method A					500	500	1,000/800	20	5	1,000	700	1,000	15

NOTES:
(1) Soil cleanup level is 100 mg/kg for gasoline mixtures without benzene and for which the total BTEX concentration is less than 1% of the gasoline mixture. Soil cleanup level is 30 mg/kg for all other gasoline mixtures.
(2) Groundwater gasoline cleanup level is 1,000 µg/L if there is no detectable benzene in groundwater and 800 µg/L if benzene is present in groundwater.
(3) Benzene, toluene, ethylbenzene, and xylenes (BTEX) and MTBE by EPA Method 8021, except for B-4, GW-1 and B-18, GW-1, which were by EPA Method 8260
(4) Diesel- and oil-range hydrocarbons by Method NWTPH-Dx
(5) EPA = U.S. Environmental Protection Agency
(6) Gasoline-range hydrocarbons by Method NWTPH-Gx
(7) Lead by EPA Method 6010
(8) MTBE = Methyl tertiary-butyl ether
(9) MTCA = Washington Model Toxics Control Act
(10) ND = not detected
(11) Soil results are reported in milligrams per kilogram (mg/kg).
(12) Groundwater results are reported in micrograms per liter (µg/L).
(13) Shaded text indicates detected concentration exceeds MTCA cleanup criteria.
(14) -- = Not tested
(15) Laboratory data reports for these samples are contained in Appendix B.

TABLE 2
WASTE DESIGNATION SAMPLES - PETROLEUM

Sample Number	Sample Elev. (feet)	Sample Date	Probable Product Type	Oil	Diesel	Gasoline	MBTE	Benzene	Toluene	Ethylbenzene	Xylenes
Parking Garage											
PW-12, S-5	116	11/14/2002		--	--	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
PW-8, S-2	107	11/15/2002		--	--	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-J.5-3.5-137	137	12/2/2002	Diesel No. 2, Lube Oil	63	83	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-D-2.5-125	125	12/4/2002		--	--	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-M-1.3-133	133	12/4/2002	Diesel No. 1	ND	1,000	--	--	--	--	--	--
09644-J-3.5-138	138	12/6/2002	Diesel No. 2	ND	120	--	--	--	--	--	--
09644-J-3-125	125	12/9/2002	Highly Weathered Gasoline	--	--	11	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-I.5-3.8-133	133	12/16/2002		ND<50	ND<25	--	--	--	--	--	--
09644-J.2-3.3-130	130	12/16/2002	Diesel	ND	25	--	--	--	--	--	--
09644-K.4-3.7-130	130	12/16/2002		ND<50	ND<25	--	--	--	--	--	--
09644-K.9-3.4-126	126	12/16/2002		ND<50	ND<25	--	--	--	--	--	--
09644-K-3.2-128	128	12/16/2002		ND<50	ND<25	--	--	--	--	--	--
09644-E.8-2.8-125	125	12/17/2002		--	--	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-J.4-2.8-125	125	12/17/2002	Highly Weathered Gasoline	--	--	**2,800**	ND<2.0	ND<0.6	ND<1.0	**17**	**31**
09644-L-2.3-120	120	12/17/2002	Highly Weathered Gasoline	--	--	**430**	ND<1	ND<0.3	ND<0.5	2.0	3.2
09644-M-3.5-120	120	12/18/2002	Highly Weathered Gasoline	--	--	**1,100**	ND<2	**0.7**	ND<1.0	4.3	**11**
09644-K-1.5-120	120	12/18/2002	Highly Weathered Gasoline	--	--	70	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-K-2.5-110	110	12/18/2002		--	--	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-I-2.75-110	110	12/18/2002		--	--	ND<3	ND<0.1	**0.07**	ND<0.05	ND<0.05	ND<0.2
09644-C-2.5-125	125	12/20/2002		--	--	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-E-3.5-133	133	12/20/2002	Highly Weathered Gasoline	--	--	**1,200**	ND<5	ND<1.5	ND<2.5	2.9	ND<10
09644-F-2.3-105	105	12/23/2002		--	--	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-H-3.3-125	125	12/26/2002		--	--	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-I-3.3-125	125	12/26/2002	Weathered Gasoline	--	--	**2,000**	ND<1	**4.4**	3.9	**13**	**25**
09644-E-2.8-125	125	12/26/2002	Highly Weathered Gasoline	--	--	96	ND<0.4	ND<0.12	ND<0.2	ND<0.2	ND<0.8
09644-H-2.6-120	120	12/26/2002	Highly Weathered Gasoline	--	--	4	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-G.5-2.8-108	108	12/27/2002		--	--	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-H.5-2.4-108	108	12/27/2002		--	--	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-I.5-3.5-125	125	12/27/2002	Highly Weathered Gasoline	--	--	**240**	ND<1	ND<0.3	ND<0.5	ND<0.5	ND<2
09644-I-2-125	125	12/27/2002		--	--	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-F-2-125	125	12/27/2002		--	--	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-I-2.75-112	112	12/30/2002		--	--	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-I.5-2.25-112	112	12/30/2002		--	--	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
MTCA Method A				2,000	2,000	100/30	0.1	0.03	7	6	9

TABLE 2
WASTE DESIGNATION SAMPLES - PETROLEUM

Sample Number	Sample Elev. (feet)	Sample Date	Probable Product Type	Oil	Diesel	Gasoline	MBTE	Benzene	Toluene	Ethylbenzene	Xylenes
Parking Garage, Cont.											
09644-K.9-3.5-119	119	1/2/2003	Diesel No. 2	ND	550	ND<5	ND<0.2	ND<0.06	ND<0.1	ND<0.1	ND<0.4
09644-C.5-1.5-121	121	1/3/2003		--	--	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-C-3.8-122	122	1/6/2003	Highly Weathered Gasoline	--	--	**1,200**	ND<1.0	**1.4**	3.1	3.3	7.4
09644-B.3-2.7-121	121	1/6/2003	Highly Weathered Gasoline	--	--	**610**	ND<1.0	ND<0.3	0.6	1.9	3.6
09644-B.5-3-134	134	1/6/2003		--	--	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-G-4-137	137	1/8/2003	Highly Weathered Gasoline	--	--	**1,300**	ND<2	**1**	ND<1	**9.1**	**13**
09644-C.2-4-142	142	1/8/2003	Highly Weathered Gasoline	--	--	**4,700**	ND<10	ND<3	ND<5	ND<5	ND<20
09644-F-3.6-127	127	1/9/2003		--	--	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-F-3.6-124	124	1/9/2003		--	--	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-B.2-1.8-119	119	1/9/2003		--	--	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-Oakes Ave Entrance-128	128	1/13/2003	Weathered Gasoline	--	--	**5,000**	ND<10	ND<3	**140**	**93**	**560**
09644-D-3.3-121	121	1/13/2003	Highly Weathered Gasoline	--	--	90	ND<0.2	ND<0.06	ND<0.1	0.2	0.9
09644-D.5-1.6-117	117	1/15/2003	Highly Weathered Gasoline	--	--	**7,300**	ND<10	**25**	5.6	**60**	**150**
09644-L.8-1.3-123	123	1/16/2003	Diesel No. 1	ND	**1,100**	ND<25	ND<1.0	ND<0.3	ND<0.5	ND<0.5	ND<2.0
09644-B.3-2.4-113	113	1/17/2003		--	--	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-H-1.8-115	115	1/17/2003		--	--	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-D.3-3-115	115	1/23/2003		--	--	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-M-1.3-110	110	2/10/2003		ND<50	ND<25	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-M-2.1-110	110	2/10/2003		ND<50	ND<25	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-M-2.9-109	109	2/10/2003		ND<50	ND<25	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-M.1-3.5-109	109	2/10/2003		ND<50	ND<25	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-K.5-3.7-107	107	2/14/2003		--	--	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-C-3.5-104	104	2/14/2003		--	--	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-E.5-1.3-103	103	2/14/2003		--	--	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-B.7-1.7-101	101	2/14/2003		--	--	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-K-1.3-102	102	2/14/2003		--	--	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-H.5-3.5-108	108	2/14/2003		--	--	ND<3	ND<0.1	**0.05**	ND<0.05	ND<0.05	ND<0.2
09644-H-1.7-102	102	2/17/2003		--	--	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
MTCA Method A				2,000	2,000	100/30	0.1	0.03	7	6	9

TABLE 2
WASTE DESIGNATION SAMPLES - PETROLEUM

Sample Number	Sample Elev. (feet)	Sample Date	Probable Product Type	Oil	Diesel	Gasoline	MBTE	Benzene	Toluene	Ethylbenzene	Xylenes
Rockefeller Ramp (Soldier Pile Cuttings)											
W7-131	130.5	2/6/2004	Highly Weathered Gasoline	--	--	4	--	ND<0.03	ND<0.05	ND<0.05	ND<0.2
W7-127	127	2/6/2004		--	--	ND<3	--	ND<0.03	ND<0.05	ND<0.05	ND<0.2
W8-132	132	2/6/2004		--	--	ND<3	--	ND<0.03	ND<0.05	ND<0.05	ND<0.2
W11-25.5'	131	2/10/2004	Highly Weathered Gasoline	--	--	440	--	0.2	0.6	1.3	2.3
W12-18'	138	2/10/2004		--	--	ND<3	--	ND<0.03	ND<0.05	ND<0.05	ND<0.2
W14-19'	137	2/10/2004		--	--	ND<3	--	ND<0.03	ND<0.05	ND<0.05	ND<0.2
W16-22'	133.5	2/11/2004	Highly Weathered Gasoline	--	--	23	--	ND<0.03	ND<0.05	ND<0.05	ND<0.2
W18-18'	138	2/11/2004		--	--	ND<3	--	ND<0.03	ND<0.05	ND<0.05	ND<0.2
W18-36'	120	2/11/2004	Highly Weathered Gasoline	--	--	28	--	ND<0.03	ND<0.05	ND<0.05	ND<0.2
W20-130.5	130.5	2/12/2004	Highly Weathered Gasoline	--	--	590	--	ND<0.12	ND<0.2	0.9	1.9
W20-129.5	129.5	2/12/2004	Highly Weathered Gasoline	--	--	53	--	ND<0.03	ND<0.05	ND<0.05	ND<0.2
W21-129.5	129.5	2/13/2004	Highly Weathered Gasoline	--	--	1,300	--	ND<0.3	ND<0.5	2.2	4.0
W21-124.5	124.5	2/13/2004	Highly Weathered Gasoline	--	--	71	--	ND<0.12	ND<0.2	ND<0.2	ND<0.8
E4-26'	131	2/9/2004		--	--	ND<3	--	ND<0.03	ND<0.05	0.06	ND<0.2
E2-22'	134.5	2/9/2004	Diesel?	--	Likely	ND<6	--	ND<0.03	ND<0.05	ND<0.05	ND<0.2
E2-33'	123.5	2/9/2004		--	--	ND<3	--	ND<0.03	ND<0.05	ND<0.05	ND<0.2
MTCA Method A				2,000	2,000	100/30	0.1	0.03	7	6	9

NOTES:
(1) Soil cleanup level is 100 mg/kg for gasoline mixtures without benzene and for which the total BTEX concentration is less than 1% of the gasoline mixture.
Soil cleanup level is 30 mg/kg for all other gasoline mixtures.
(2) Benzene, toluene, ethylbenzene, and xylenes (BTEX) and MTBE by EPA Method 8021
(3) Diesel- and oil-range hydrocarbons by Method NWTPH-Dx
(4) EPA = U.S. Environmental Protection Agency
(5) Gasoline-range hydrocarbons by Method NWTPH-Gx
(6) MTBE = Methyl tertiary-butyl ether
(7) MTCA = Washington Model Toxics Control Act
(8) ND = not detected
(9) Soil results are reported in milligrams per kilogram (mg/kg).
(10) Shaded text indicates detected concentration exceeds MTCA cleanup criteria.
(11) -- = Not tested
(12) Laboratory data reports for the Parking Garage, Rockefeller Ramp, and Administration Building Addition are contained in Appendices C, D, and E, respectively.

TABLE 3
WASTE DESIGNATION SAMPLES - NON-PETROLEUM

Location	Sample Number	Sample Elev. (feet)	Sample Date	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver	PCBs
Soil Samples												
PW-1 & PW-2 Cuttings Stockpile	COMPOSITE 11-12-02	--	11/12/2002	3.7	34	ND<0.49	20	ND<5.8	ND<0.02	ND<4.9	ND<0.68	--
	09644-J.5-3.5-137	137	12/2/2002	ND<3.0	36	ND<0.50	13	ND<5.9	0.02	ND<5.0	ND<0.69	--
	09644-M-1.3-133	133	12/4/2002	ND<3.3	56	ND<0.55	17	ND<6.6	0.06	ND<5.5	ND<0.77	--
	09644-J-3.5-138	138	12/6/2002	--	--	--	--	--	--	--	--	ND<0.1
MTCA Method A				20		2	19/2,000	250	2			1

NOTES:
(1) Total metals by EPA Method 6010, except for Mercury, which was by EPA Method 7471
(2) Soil cleanup level for Chromium VI is 19 mg/kg; soil cleanup level for Chromium III is 2,000 mg/kg.
(3) EPA = U.S. Environmental Protection Agency
(4) MTCA = Washington Model Toxics Control Act
(5) ND = not detected
(6) PCBs = polychlorinated biphenyls, by EPA Method 8082
(7) Soil results are reported in milligrams per kilogram (mg/kg).
(8) -- = Not tested
(9) Laboratory data reports for these samples are contained in Appendix C.

TABLE 4
CONFIRMATION SAMPLES (REMAINING CONDITIONS)

Sample Number	Sample Elev (feet)	Sample Date	Probable Product Type	Oil	Diesel	Gasoline	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes
Parking Garage											
09644-C-4-146 (WALL)	146	1/7/2003	Extremely Weathered Gasoline	--	--	19	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-J-4-135 (WALL)	135	1/7/2003		ND<50	ND<25	--	-	--	--	--	--
09644-A-3.3-136 (WALL)	136	1/13/2003		--	--	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-A-3.5-134	134	1/14/2003		--	--	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-C.4-4-134	134	1/14/2003	Highly Weathered Gasoline	--	--	**4,800**	**7.0***	**9.6**	**13**	**10**	8.7
09644-D.6-4.2-135	135	1/14/2003	Highly Weathered Gasoline	--	--	**4,700**	**8.0***	ND<6	**13**	**23**	**34**
09644-B.4-4-137	137	1/14/2003	Highly Weathered Gasoline	--	--	**1,400**	ND<2.0	ND<0.6	ND<1.0	3.8	4.5
09644-A.1-4-140	140	1/14/2003		--	--	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-J.9-4.2-129	129	1/15/2003		ND<50	ND<25	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-E.5-4-131	131	1/20/2003	Highly Weathered Gasoline	--	--	**3,500**	ND<5	ND<1.5	ND<2.5	**30**	**65**
09644-G-4-125	125	1/20/2003	Highly Weathered Gasoline	--	--	**1,400**	ND<2	ND<0.6	ND<1.0	**9.3**	**28**
09644-H.5-4-127	127	1/20/2003	Highly Weathered Gasoline	--	--	69	ND<0.1	ND<0.03	ND<0.05	0.3	0.8
09644-N-1.3-129	129	1/21/2003		ND<50	ND<25	--	--	--	--	--	--
09644-M-1-130	130	1/21/2003		ND<50	ND<25	--	--	--	--	--	--
09644-A-2.7-124	124	1/23/2003	Highly Weathered Gasoline	--	--	**140**	ND<0.2	ND<0.06	ND<0.1	0.5	0.8
09644-A-3.2-123	123	1/23/2003	Highly Weathered Gasoline	--	--	**550**	ND<1.0	ND<0.3	1.0	2.2	5.7
09644-A-3.6-122	122	1/23/2003		--	--	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-C-4-127	127	1/23/2003	Highly Weathered Gasoline	--	--	**8,400**	**18***	**3.5**	**70**	**57**	**270**
09644-A-4-127	127	1/23/2003	Extremely Weathered Gasoline	--	--	39	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-M-1-116	116	1/27/2003		ND<50	ND<25	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-K.5-1-116	116	1/27/2003		ND<50	ND<25	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-J-1-118	118	1/27/2003	Highly Weathered Gasoline	ND<50	ND<25	69	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-N-1.5-119	119	1/27/2003	Diesel No. 2	ND	**2,800**	ND<30	ND<1	ND<0.3	ND<0.5	ND<0.5	ND<2
09644-A-3.5-119	119	1/27/2003		--	--	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-A-2.5-119	119	1/27/2003		--	--	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-C-1-119	119	1/28/2003		--	--	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-D.8-1-118	118	1/28/2003		--	--	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-B.5-4-123	123	1/28/2003	Highly Weathered Gasoline	--	--	**3,900**	ND<2	ND<0.6	**9**	**39**	**140**
09644-C-4-119	119	1/28/2003	Highly Weathered Gasoline	--	--	**6,500**	ND<2	ND<0.6	**80**	**73**	**300**
09644-F-4-118	118	1/29/2003	Highly Weathered Gasoline	--	--	**1,100**	ND<2.0	ND<0.6	2.5	**7.0**	**37**
09644-H-4-118	118	1/29/2003	Highly Weathered Gasoline	--	--	**240**	ND<0.4	ND<0.1	ND<0.2	0.6	**35**
09644-I-4-119	119	1/29/2003		--	--	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
MTCA Method A				2,000	2,000	100/30	0.1	0.03	7	6	9

TABLE 4
CONFIRMATION SAMPLES (REMAINING CONDITIONS)

Sample Number	Sample Elev. (feet)	Sample Date	Probable Product Type	Oil	Diesel	Gasoline	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes
Parking Garage, Cont.											
09644-J-4-125	125	1/29/2003	Diesel & Highly Weathered Gasoline	ND	**1,900**	**300****	ND<0.4	ND<0.1	ND<0.2	1.7	5.4
09644-K-4-122.5	122.5	1/29/2003	Diesel & Highly Weathered Gasoline	ND	**12,000**	**1,700****	ND<2.0	ND<0.6	2.4	5.6	**26**
09644-K.8-1-117	117	2/4/2003	Highly Weathered Gasoline	ND<50	ND<25	23	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-E-1-117	117	2/4/2003		--	--	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-G-1-117	117	2/4/2003		--	--	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-N-1.2-119	119	2/5/2003		ND<50	ND<25	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-N-1.8-119	119	2/5/2003		ND<50	ND<25	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-N-3-119	119	2/5/2003		ND<50	ND<25	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-J.5-4-114	114	2/6/2003		ND<50	ND<25	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-K.8-1-109	109	2/12/2003		ND<50	ND<25	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-B.7-4-107	107	2/27/2003		--	--	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-D.5-4-111	111	2/27/2003		--	--	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-G-4-110	110	2/27/2003		--	--	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-I-4-110	110	2/27/2003		--	--	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
Administration Building											
AB+6, A1-16, 132	132	2/4/2004	Diesel	ND<100	**3,100**	--		--	--	--	--
AB+32.5, A1-18, 131.5	131.5	2/5/2004	Diesel	ND<50	230	--		--	--	--	--
AB+22, A1-3, 134.5	134.5	2/5/2004	Diesel	ND<100	**2,200**	--		--	--	--	--
AB+32, A1-3, 134.5	134.5	2/5/2004		ND<50	ND<25	--		--	--	--	--
AB+19, A1+7, 134	134	2/7/2004		ND<50	ND<25	--		--	--	--	--
AB+3, A1+6, 134.5	134.5	2/7/2004		ND<50	ND<25	--		--	--	--	--
MTCA Method A				2,000	2,000	100/30	0.1	0.03	7	6	9
Rockefeller Ramp											
E5+2.5, 139.5	139.5	3/26/2004	Highly Weathered Gasoline	--	--	**2,600**	--	ND<0.75	ND<2.5	**7.1**	ND<10
W20+4, 134	134	3/29/2004	Highly Weathered Gasoline	--	--	**410**	--	ND<0.12	ND<0.2	0.3	ND<0.8
W14+3, 139	139	3/31/2004		--	--	ND<3	--	ND<0.03	ND<0.05	ND<0.05	ND<0.2
W16+6.5, 135	135	3/31/2004	Highly Weathered Gasoline	--	--	15	--	ND<0.03	ND<0.05	ND<0.05	ND<0.2
W17+6.5, 134.5	134.5	3/31/2004	Highly Weathered Gasoline	--	--	**2,200**	--	ND<0.6	ND<1.0	2.9	6.1
E6+5.5, 141	141	4/5/2004	Weathered Gasoline	--	--	**2,500**	--	ND<0.3	2.0	**9.1**	**23**
E1+4, 136.5	136.5	4/6/2004	Highly Weathered Gasoline	--	--	**3,100**	--	ND<0.6	1.3	3.8	2.2
E3+3.5, 134.5	134.5	4/6/2004	Highly Weathered Gasoline	--	--	**240**	--	ND<0.6	ND<1.0	2.9	ND<4.0
E8+5, 136	136	4/7/2004	Highly Weathered Gasoline	--	--	**1,500**	--	ND<0.6	ND<1.0	3.0	3.7
E1-12, 137	137	4/7/2004	Highly Weathered Gasoline	--	--	**2,000**	--	ND<0.12	0.9	1.8	6.3
W21+12, 135.5	135.5	4/8/2004	Highly Weathered Gasoline	--	--	**1,800**	--	ND<1.5	ND<2.5	**7.5**	ND<10
E6+3, TRENCH, 129.5	129.5	4/12/2004	Highly Weathered Gasoline	--	--	**610**	--	ND<0.3	ND<0.5	1.6	2.0
W21, TRENCH, 127	127	4/13/2004		--	--	ND<3	--	ND<0.03	ND<0.05	ND<0.05	ND<0.2
E2, TRENCH, 134	134	4/13/2004	Highly Weathered Gasoline	--	--	**1,300**	--	ND<0.3	1.1	2.0	ND<2.0
W21+13, WW+9.5, 130.5	130.5	4/16/2004	Highly Weathered Gasoline	--	--	**2,700**	--	ND<0.6	ND<1.0	**14**	**32**
MTCA Method A				2,000	2,000	100/30	0.1	0.03	7	6	9

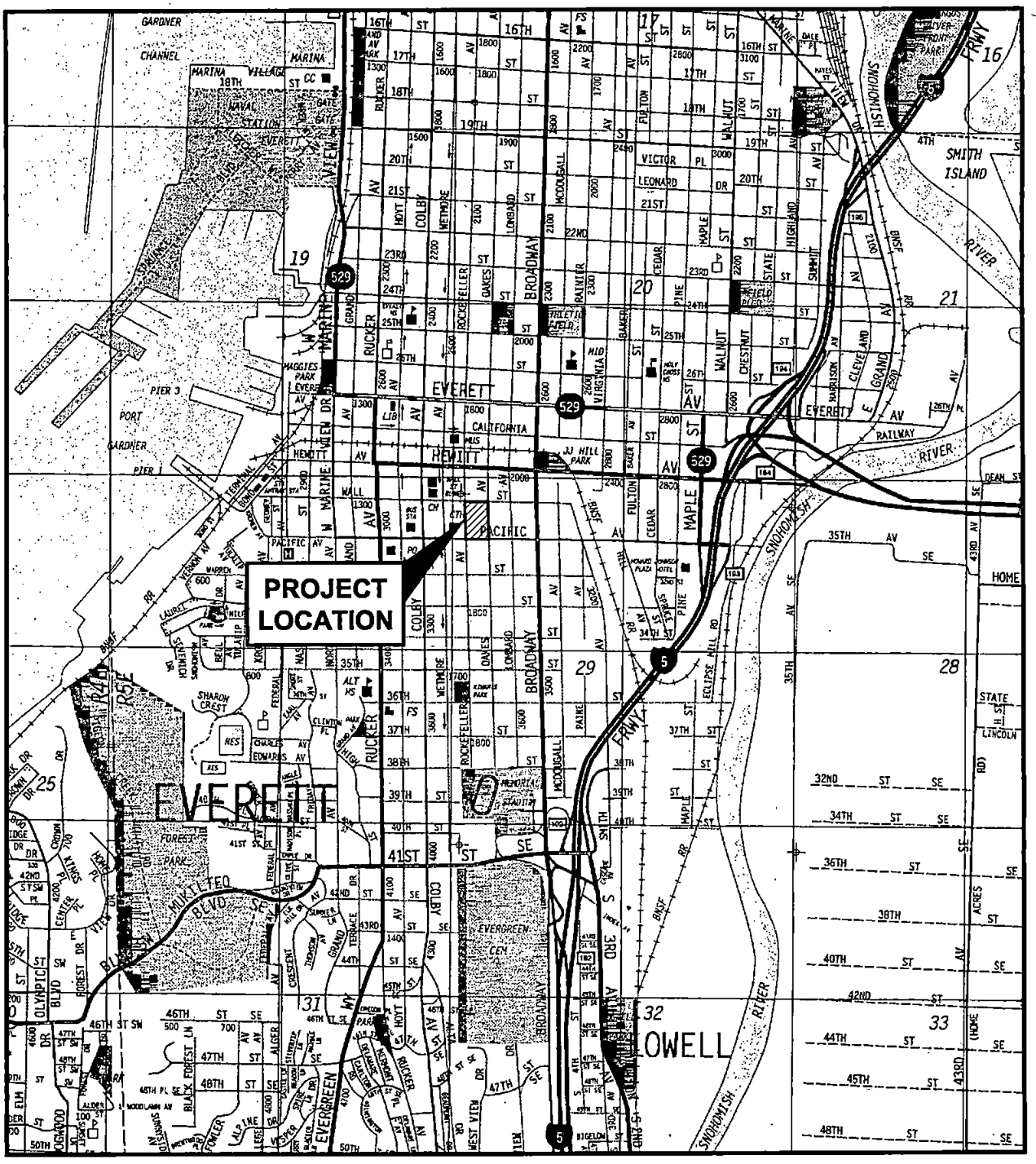
TABLE 4
CONFIRMATION SAMPLES (REMAINING CONDITIONS)

NOTES:
(1) Soil cleanup level is 100 mg/kg for gasoline mixtures without benzene and for which the total BTEX concentration is less than 1% of the gasoline mixture. Soil cleanup level is 30 mg/kg for all other gasoline mixtures.
(2) Benzene, toluene, ethylbenzene, and xylenes (BTEX) and MTBE by EPA Method 8021
(3) Diesel- and oil-range hydrocarbons by Method NWTPH-Dx
(4) EPA = U.S. Environmental Protection Agency
(5) Gasoline-range hydrocarbons by Method NWTPH-Gx
(6) MTBE = Methyl tertiary-butyl ether
(7) MTCA = Washington Model Toxics Control Act
(8) ND = not detected
(9) Soil results are reported in milligrams per kilogram (mg/kg).
(10) Shaded text indicates detected concentration exceeds MTCA cleanup criteria.
(11) -- = Not tested
(12) * = No gas chromatograph/mass spectrometer (GC/MS) analysis was performed to confirm MTBE detection.
(13) ** = Gasoline result biased high due to diesel range overlap.
(14) Laboratory data reports for the Parking Garage, Rockefeller Ramp, and Administration Building Addition are contained in Appendices C, D, and E, respectively.

TABLE 5
WATER DISCHARGE SAMPLES

Sample Location	Baker Tank	Discharge Location at Curb (Effluent from Baker Tank)						Parking Garage Sump				Discharge Criteria *
Sample Designation	TANK 1	DISCHARGE 1	DISCHARGE 2	DISCHARGE 4	DISCHARGE 5	DISCHARGE 6	DISCHARGE 7	SUMP-3-2004	SUMP-6-2004	SUMP-9-2004	SUMP-12-2004	
Sample Date	11/25/2002	12/22-12/23/2002	1/26-1/27/2003	3/3-3/4/2003	3/31-4/1/2003	5/4-5/5/2003	6/2-6/3/2003	3/18-3/19/2004	6/17-6/18/2004	9/7-9/8/2004	12/15-12/16/2004	
Arsenic	ND<0.03	--	--	ND<0.03	--	--	ND<0.03	ND<0.04	ND<0.04	ND<0.04	ND<0.04	0.5
Cadmium	ND<0.005	--	--	ND<0.005	--	--	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	0.24
Chromium	0.01	--	--	0.02	--	--	ND<0.01	ND<0.007	ND<0.007	ND<0.007	0.009	5.00
Copper	ND<0.006	--	--	ND<0.006	--	--	ND<0.006	ND<0.005	ND<0.005	ND<0.005	ND<0.005	3.0
Lead	ND<0.06	--	--	ND<0.06	--	--	ND<0.06	ND<0.04	ND<0.04	ND<0.04	ND<0.04	1.89
Mercury	ND<0.0002	--	--	ND<0.0002	--	--	ND<0.0002	ND<0.0002	ND<0.0002	ND<0.0002	ND<0.0002	0.1
Nickel	ND<0.02	--	--	ND<0.02	--	--	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	2.83
Silver	ND<0.007	--	--	ND<0.007	--	--	ND<0.007	ND<0.03	ND<0.03	ND<0.03	ND<0.03	0.49
Zinc	0.023	--	--	0.027	--	--	ND<0.007	0.11	0.02	0.03	0.05	4.00
Total FOG	ND<1	ND<1	ND<1	2	ND<1	1	2	ND<1	ND<5	ND<5	ND<5	50
Non-polar FOG	ND<1	--	3	ND<1	ND<1	ND<1	1	ND<1	ND<5	ND<5	ND<5	200
TSS	ND<5	28	11	27	110	43	98	ND<5	ND<5	ND<5	ND<5	250
Flashpoint	>200°F	--	--	>200°F	--	--	>200°F	>200°F	>200°F	>200°F	>200°F	>140°F
Cyanide	ND<0.05	--	--	ND<0.05	--	--	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	0.65
pH **	7.18	7.32	7.64	8.03	8.55	9.82	8.87	8.12	7.3	7.11	7.62	10.0

NOTES:
(1) * City of Everett Industrial Waste discharge criteria
(2) ** pH field measurement
(3) Water results are reported in milligrams per liter (mg/L), except for Flashpoint.
(4) FOG = fats, oils, greases
(5) ND = not detected above reporting limit
(6) TSS = total suspended solids
(7) -- = not tested
(8) Sample designated "Discharge 3" was collected on 2/19/2003 to evaluate if municipal water was contributing to water collecting on site. The sample was analyzed for residual chloride, fluoride, and trihalomethanes (THMs). Results (all "Non Detect") are not presented in this table since the analyses were not conducted to meet Industrial Waste discharge criteria.
(9) Laboratory data reports for the dewatering discharge samples are contained in Appendix G.



0 1/4 1/2 1

Scale in Miles

NOTE

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Snohomish County Campus Redevelopment
Remedial Action Report
Everett, Washington

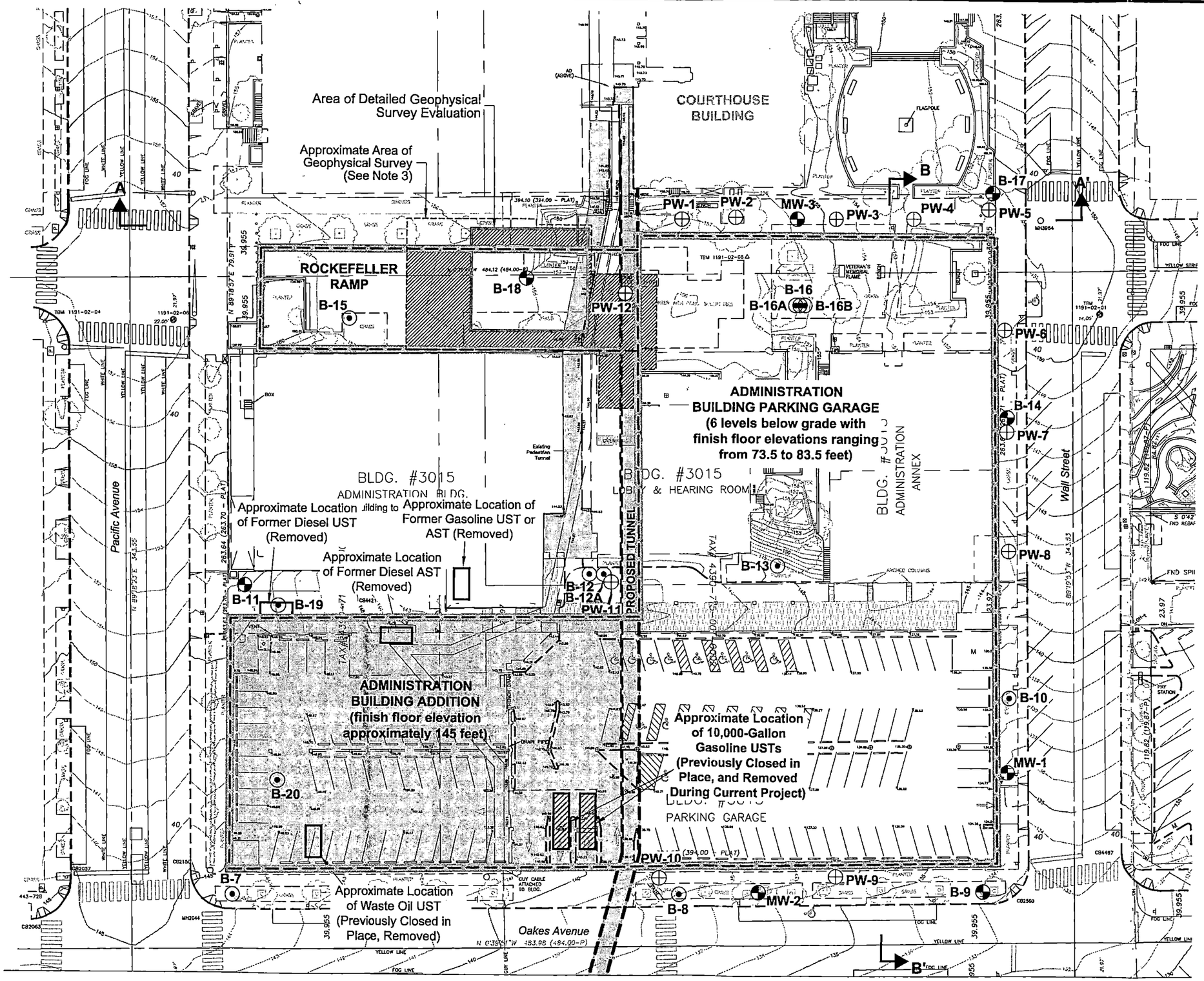
VICINITY MAP

September 2006 21-1-12132-004

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FIG. 1

Filename: J:\21\12132-004\21-1-12132-004 Fig 01.dwg Date: 08-23-2006 Login: LR



LEGEND

- Approximate Extent of Excavations
- B-7 ⊙ Boring Designation and Approximate Location
- B-9 ◔ Boring Designation and Approximate Location, Completed as a Monitoring Well
- PW-1 ⊕ Boring Designation and Approximate Location, Completed as a Pumping Well
- A Generalized Subsurface Profile (See Figures 3 and 4)

NOTES

1. This figure adapted from site topographic survey by Perteet Engineering, Inc., dated 6-2001. Elevation datum NAVD 88.
2. Boring locations are based on tape measurements from former site features and should be considered approximate.
3. No potential underground storage tanks were found during the geophysical survey.
4. Boring logs of the explorations shown are contained in Appendix A.

0 50 100

Scale in Feet

Snohomish County Campus Redevelopment
Remedial Action Report
Everett, Washington

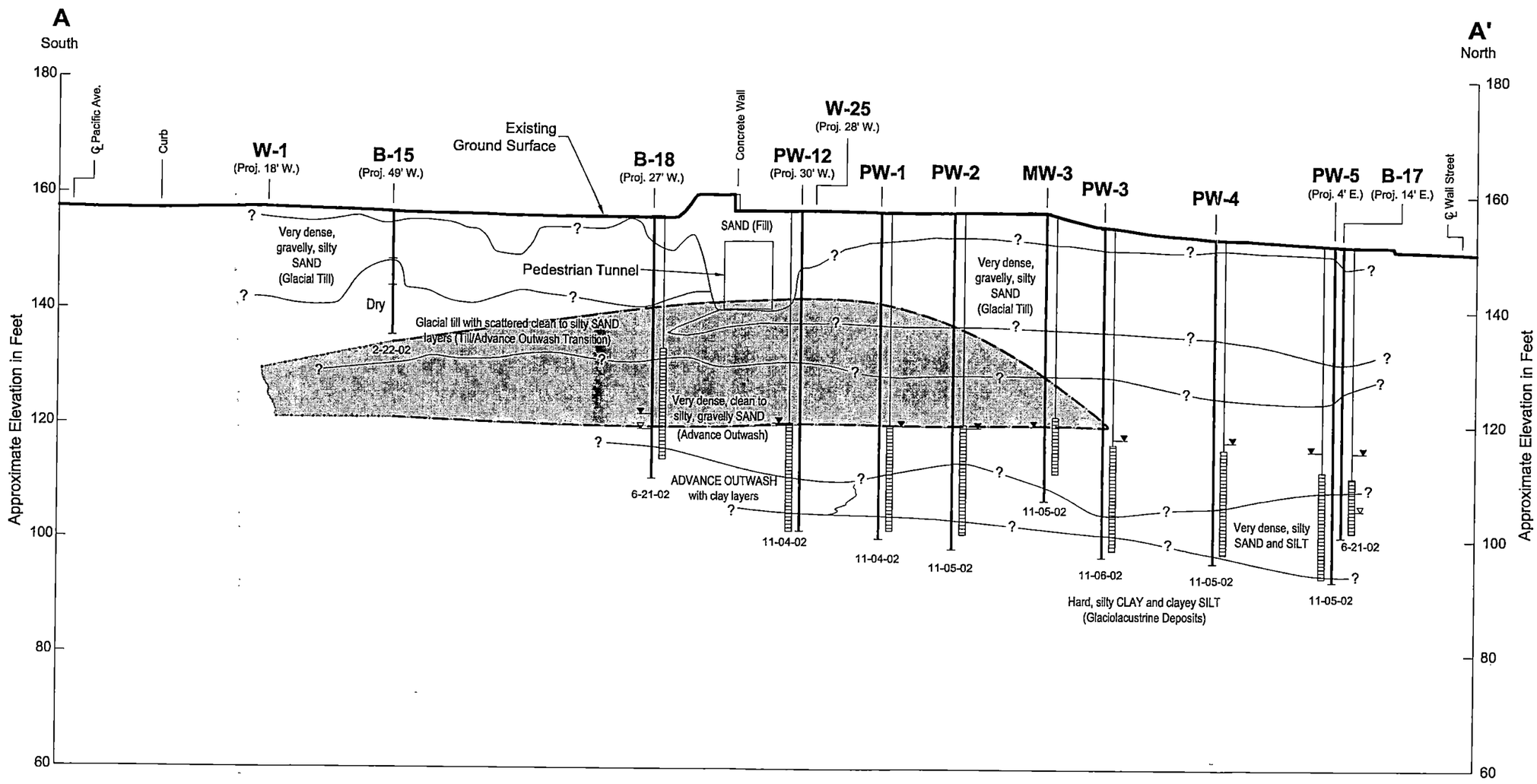
PRE-EXCAVATION SITE AND EXPLORATION PLAN

September 2006 21-1-12132-004

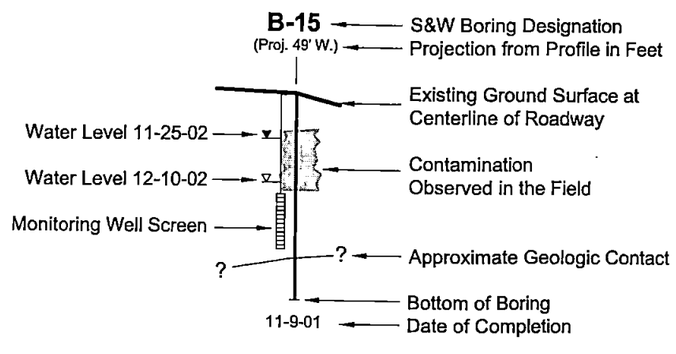
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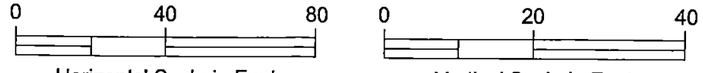
FIG. 2

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LEGEND





Vertical Exaggeration = 2X

NOTES

1. This subsurface profile is generalized from materials observed in soil borings and during site excavation.
2. For clarity, this profile has been simplified. For detailed soil descriptions, refer to the boring logs.
3. Extent of contamination shown is approximate and based primarily on field observations.

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Remedial Action Report
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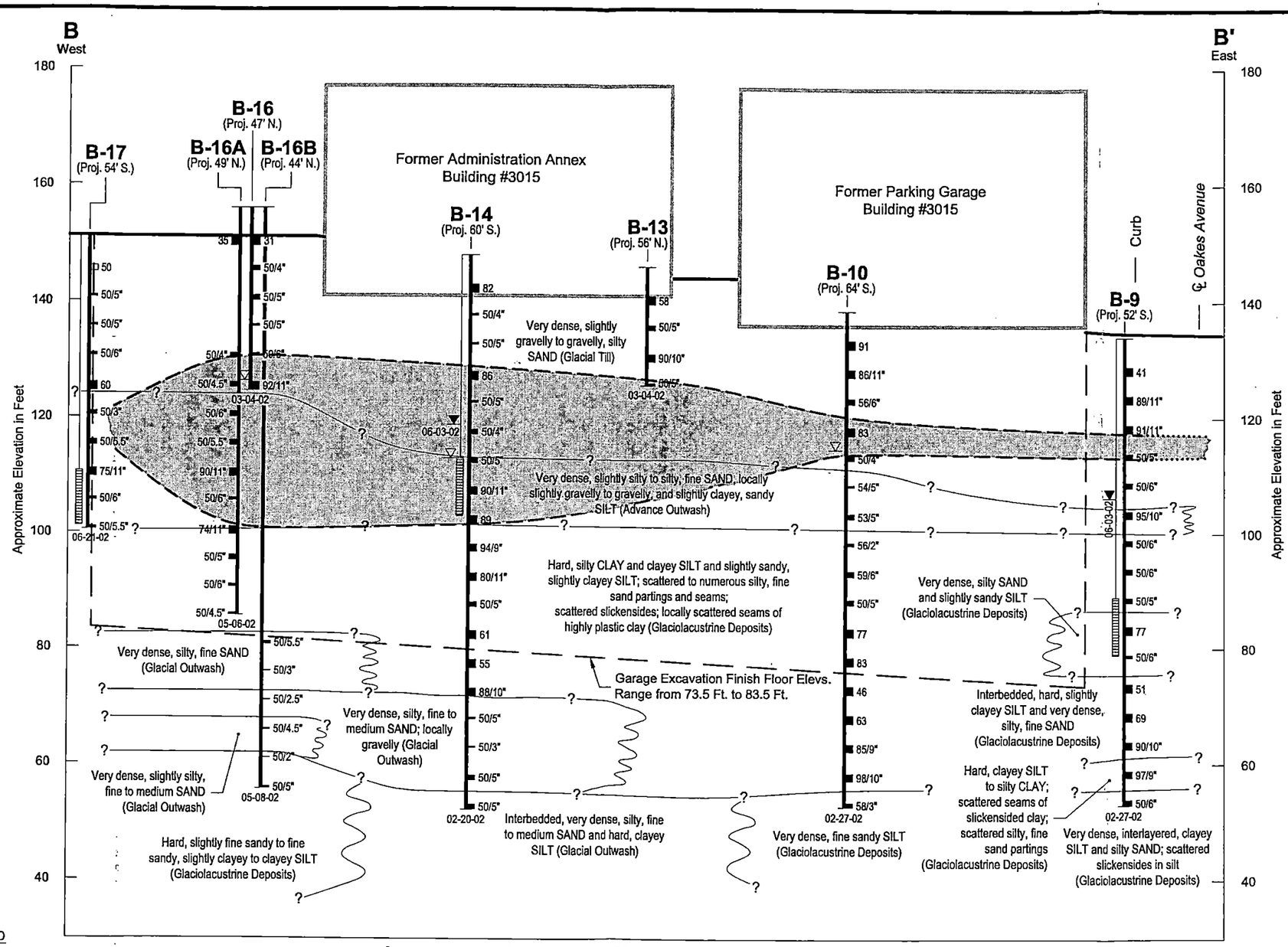
GENERALIZED SUBSURFACE PROFILE A-A'

September 2006 21-1-12132-004

SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

FIG. 3

Filename: J:\21\12132-004\21-1-12132-004 Fig 03 (09-06).dwg Date: 08-23-2006 Login: LR



LEGEND

- **B-1** (Proj. 28' S.) — Boring Designation; Projected Distance and Direction
- Contamination Observed in the Field
- 03-04-02 — Water Level in Monitoring Well and Date Observed
- Monitoring Well Screen
- Water Level Observed During Drilling
- Approximate Geologic Contact
- 02-28-02 — Bottom of Boring; Date Completed

Horizontal Scale in Feet: 0, 40, 80

Vertical Scale in Feet: 0, 20, 40

Vertical Exaggeration = 2x

NOTES

1. This subsurface profile is generalized from materials observed in soil borings and during site excavation.
2. For clarity, this profile has been simplified. For detailed soil descriptions, refer to the boring logs.
3. Extent of contamination shown is approximate and based primarily on field observations.

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Remedial Action Report
Everett, Washington

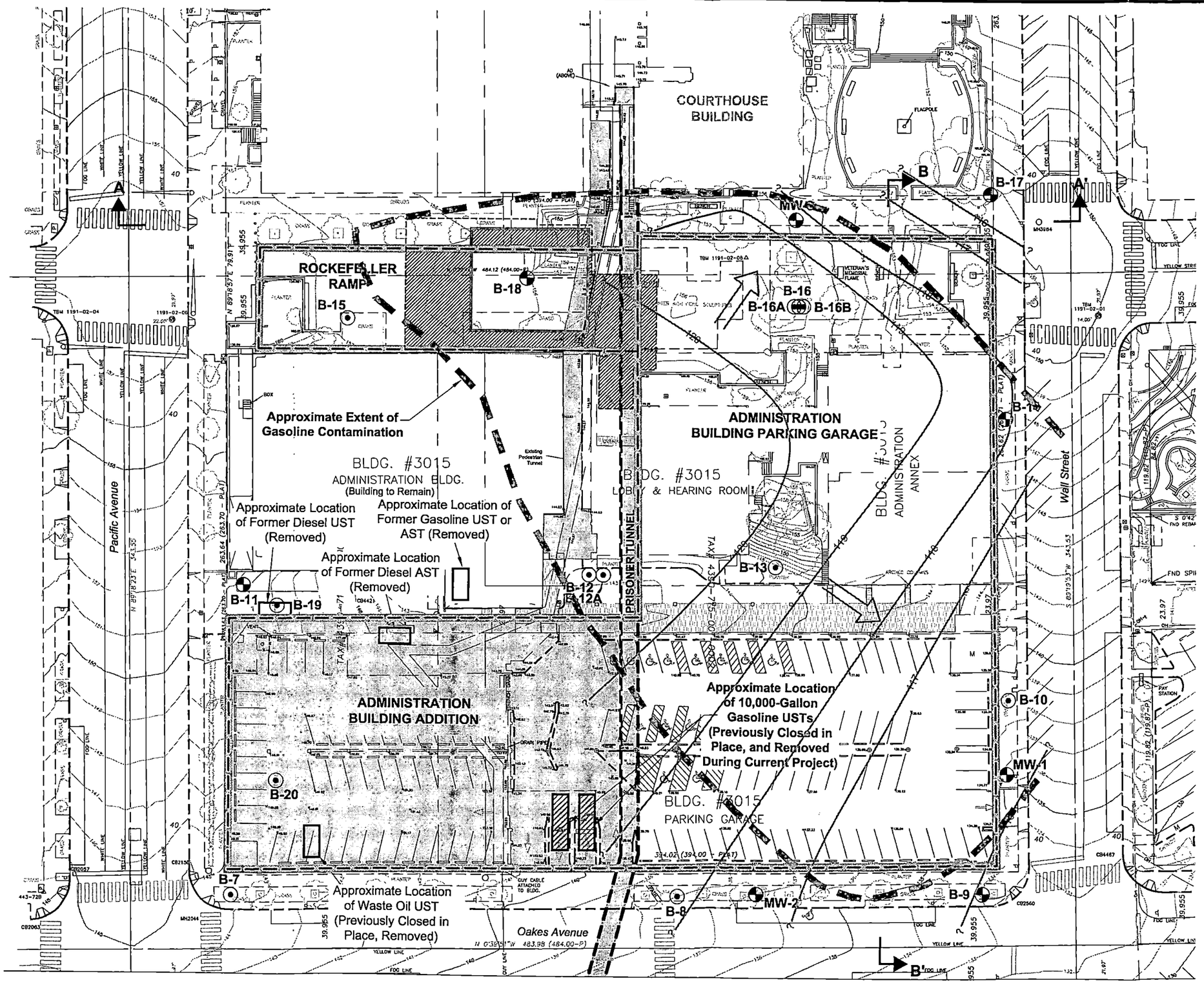
GENERALIZED SUBSURFACE PROFILE B-B'

September 2006 | 21-1-12132-004

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FIG. 4

Filename: J:\21\12132-004\21-1-12132-004 Fig 04 (09-06).dwg Date: 08-23-2006 Login: LR



LEGEND

- Approximate Extent of Excavations
- B-7 — Boring Designation and Approximate Location
- B-9 — Boring Designation and Approximate Location, Completed as a Monitoring Well
- 119 — Approximate Groundwater Elevation Contour and Direction of Groundwater Flow (November 25, 2002)
- A — Generalized Subsurface Profile (See Figures 3 and 4)

NOTES

1. This figure adapted from site topographic survey by Perteet Engineering, Inc., dated 6-2001. Elevation datum NAVD 88.
2. Boring locations are based on tape measurements from former site features and should be considered approximate.
3. Lateral extent of contamination is approximate and based primarily on field observations. Contaminated soil within excavations, where encountered above design grade, were disposed of offsite.

0 50 100

Scale in Feet

Snohomish County Campus Redevelopment
Remedial Action Report
Everett, Washington

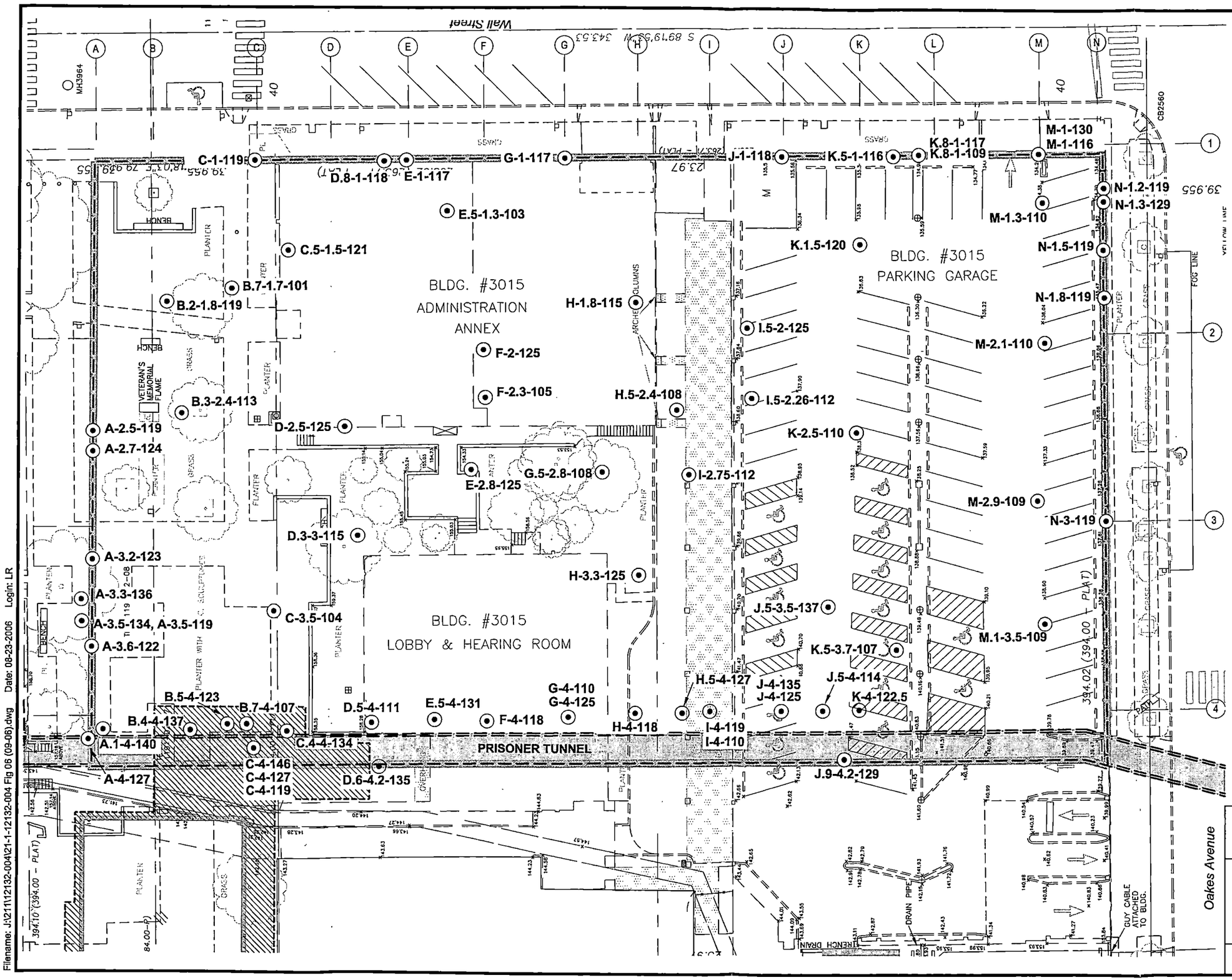
LATERAL EXTENT OF GASOLINE CONTAMINATION

September 2006 21-1-12132-004

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FIG. 5

Filename: J:\21\12132-004\21-1-12132-004 Fig 05 (09-06).dwg Date: 08-23-2006 Login: LR



LEGEND

Approximate Extent of Excavation

C-1-119 Confirmation Sample Designation and Approximate Location

NOTES

1. This figure adapted from site topographic survey by Perteet Engineering, Inc., dated 6-2001. Elevation datum NAVD 88.
2. Confirmation sample locations are based on tape measurements from former site features and should be considered approximate.

0 30 60

Scale in Feet

Snohomish County Campus Redevelopment
Remedial Action Report
Everett, Washington

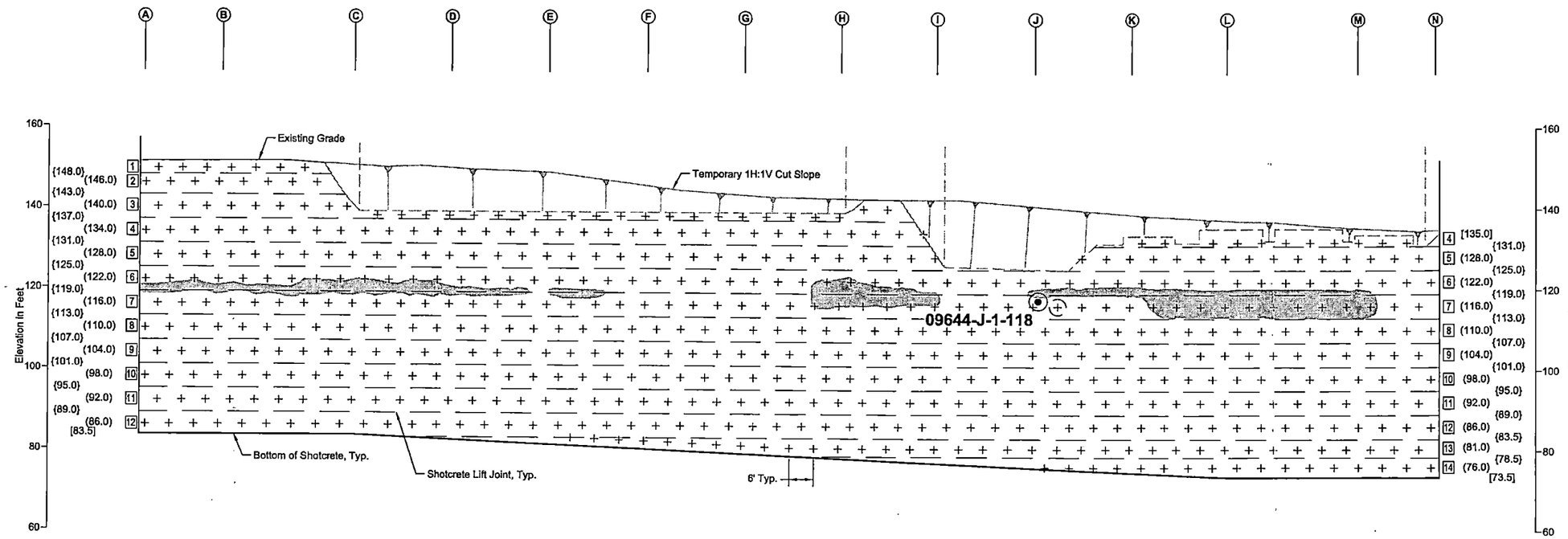
PARKING GARAGE PLAN VIEW AND CONFIRMATION SAMPLE LOCATIONS

September 2006 21-1-12132-004

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FIG. 6

Filename: J:\21\12132-004\21-1-12132-004 Fig 06 (09-06).dwg Date: 08-23-2006 Login: LR



NORTH WALL

0 30 60

Scale in Feet
Horizontal = Vertical

NOTES

1. Ten soil samples were collected from the North Wall. Only the sample with the highest detected gasoline concentration is shown.
2. Contaminant concentration ranges detected in the North Wall are:
   Gasoline: 23-69 milligrams per kilogram (mg/kg)
3. Extent of stained (contaminated) soil shown is approximate.

LEGEND

- Stained Soil Observed on Wall Face
- Sample Designation and Approximate Location

Snohomish County Campus Redevelopment
Remedial Action Report
Everett, Washington

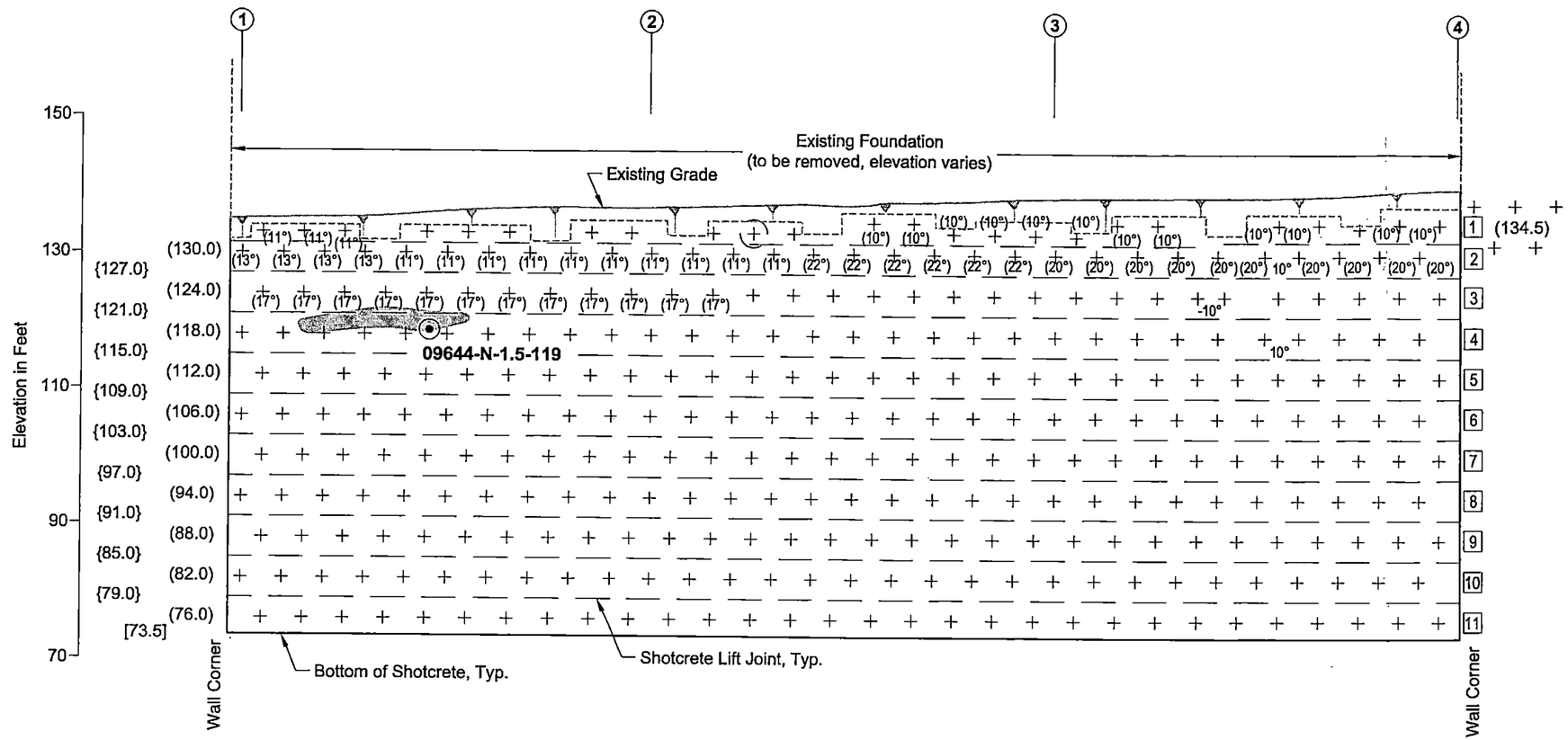
PARKING GARAGE
NORTH WALL

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FIG. 7

Filename: J:\21\12132-004\21-1-12132-004 Fig 07 (03-06).dwg Date: 08-23-2006 Login: LR



EAST WALL

0 20 40

Scale in Feet
Horizontal = Vertical

NOTES

1. Five soil samples were collected from the East Wall. Only the sample with the highest detected contaminant concentration is shown.
2. Diesel was detected in one sample at 2,800 milligrams per kilogram. No gasoline was detected.
3. Extent of stained (contaminated) soil shown is approximate.

LEGEND

- Stained Soil Observed on Wall Face
- Sample Designation and Approximate Location

Snohomish County Campus Redevelopment
Remedial Action Report
Everett, Washington

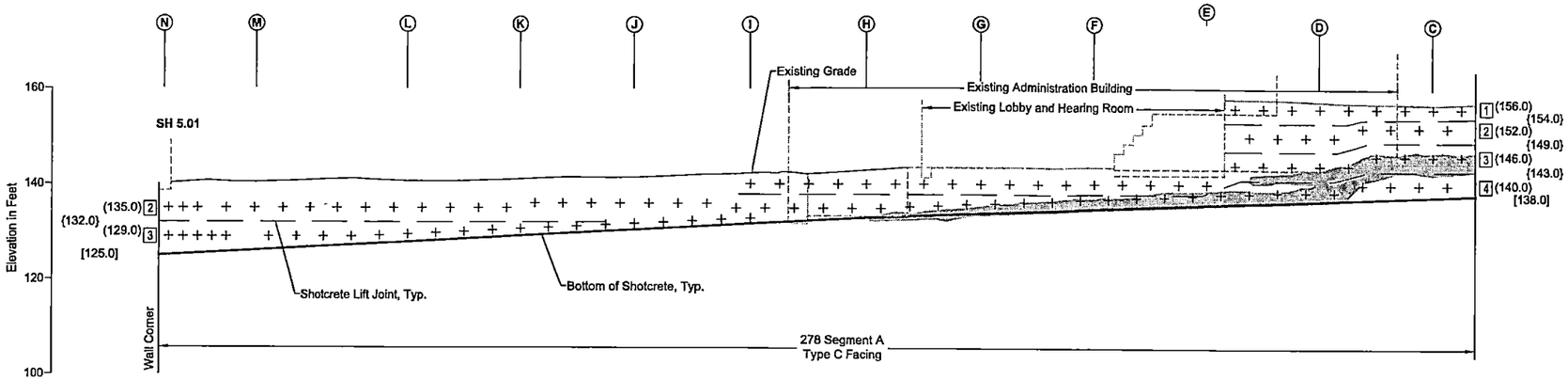
PARKING GARAGE
EAST WALL

September 2006 21-1-12132-004

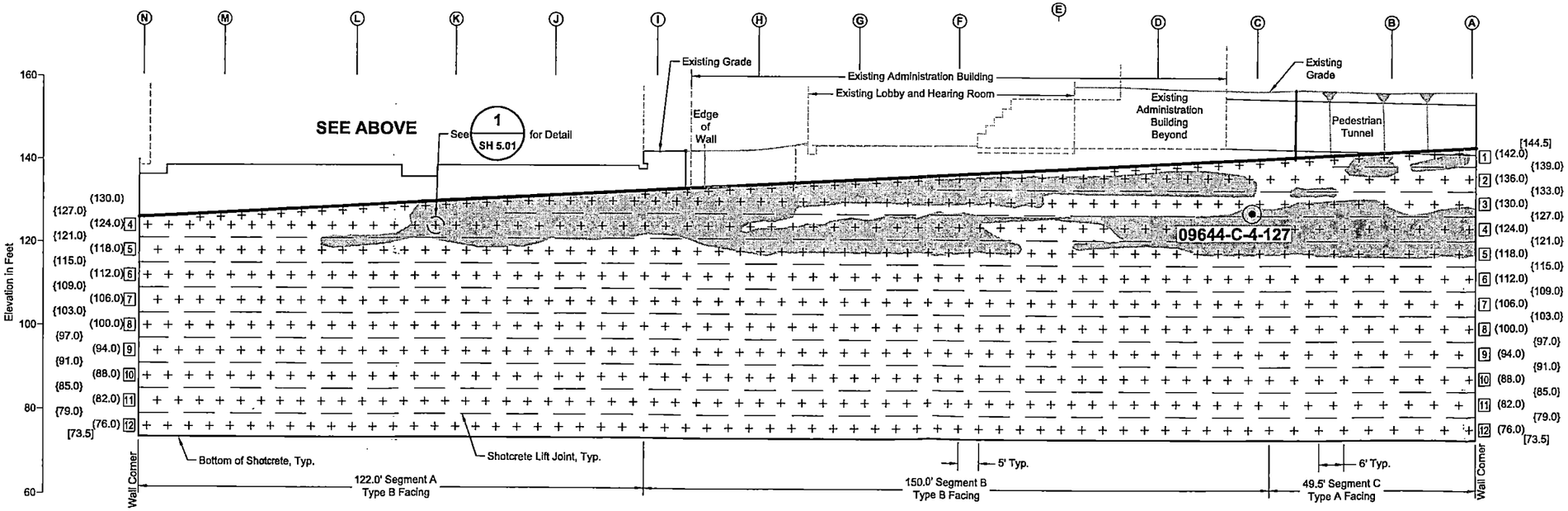
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FIG. 8

Filename: J:\21\1\12132-004\21-1-12132-004 Fig 08 (09-06).dwg Date: 08-23-2006 Login: LR



SOUTH WALL #2



SOUTH WALL #1

0 30 60

Scale in Feet
Horizontal = Vertical

NOTES

1. Twenty-four soil samples were collected from South Wall #1 and #2. Only the sample with the highest detected gasoline concentration is shown.
2. Contaminant concentration ranges exceeding cleanup criteria detected in the South Wall are:
   - Gasoline: 140 - 8,400 milligrams per kilogram (mg/kg)
   - Benzene: 3.5 - 9.6 mg/kg
   - Toluene: 9 - 70 mg/kg
   - Ethylbenzene: 7.0 - 73 mg/kg
   - Xylenes: 26 - 300 mg/kg
3. Extent of stained (contaminated) soil shown is approximate.

LEGEND

- Stained Soil Observed on Wall Face
- Sample Designation and Approximate Location

Snohomish County Campus Redevelopment
Remedial Action Report
Everett, Washington

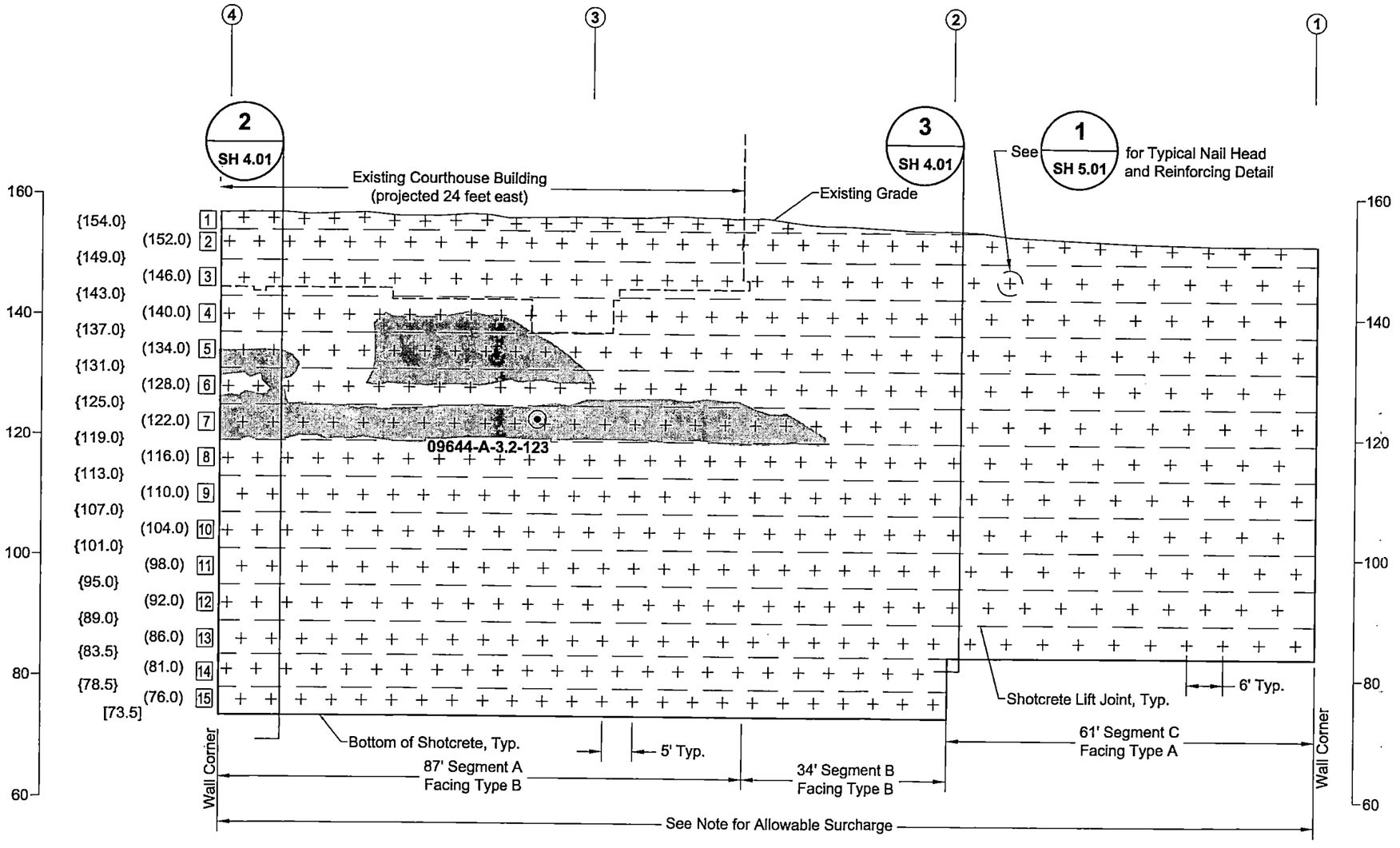
PARKING GARAGE
SOUTH WALL

September 2006 21-1-12132-004

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FIG. 9

Filename: J:\21\12132-004\21-1-12132-004 Fig 09 (09-06).dwg Date: 08-23-2006 Login: LR



NOTES

1. Eight soil samples were collected from the West Wall. Only the sample with the highest detected gasoline concentration is shown.

2. Contaminant concentration ranges detected in the West Wall are:
   Gasoline: 140 - 550 milligrams per kilogram (mg/kg)
   Benzene: not detected (ND)
   Toluene: ND - 1.0 mg/kg
   Ethylbenzene: 0.5 - 2.2 mg/kg
   Xylenes: 0.8 - 5.7 mg/kg

3. Extent of stained (contaminated) soil shown is approximate.

WEST WALL

0 20 40

Scale in Feet
Horizontal = Vertical

LEGEND

Stained Soil Observed on Wall Face

Sample Designation and Approximate Location

Snohomish County Campus Redevelopment
Remedial Action Report
Everett, Washington

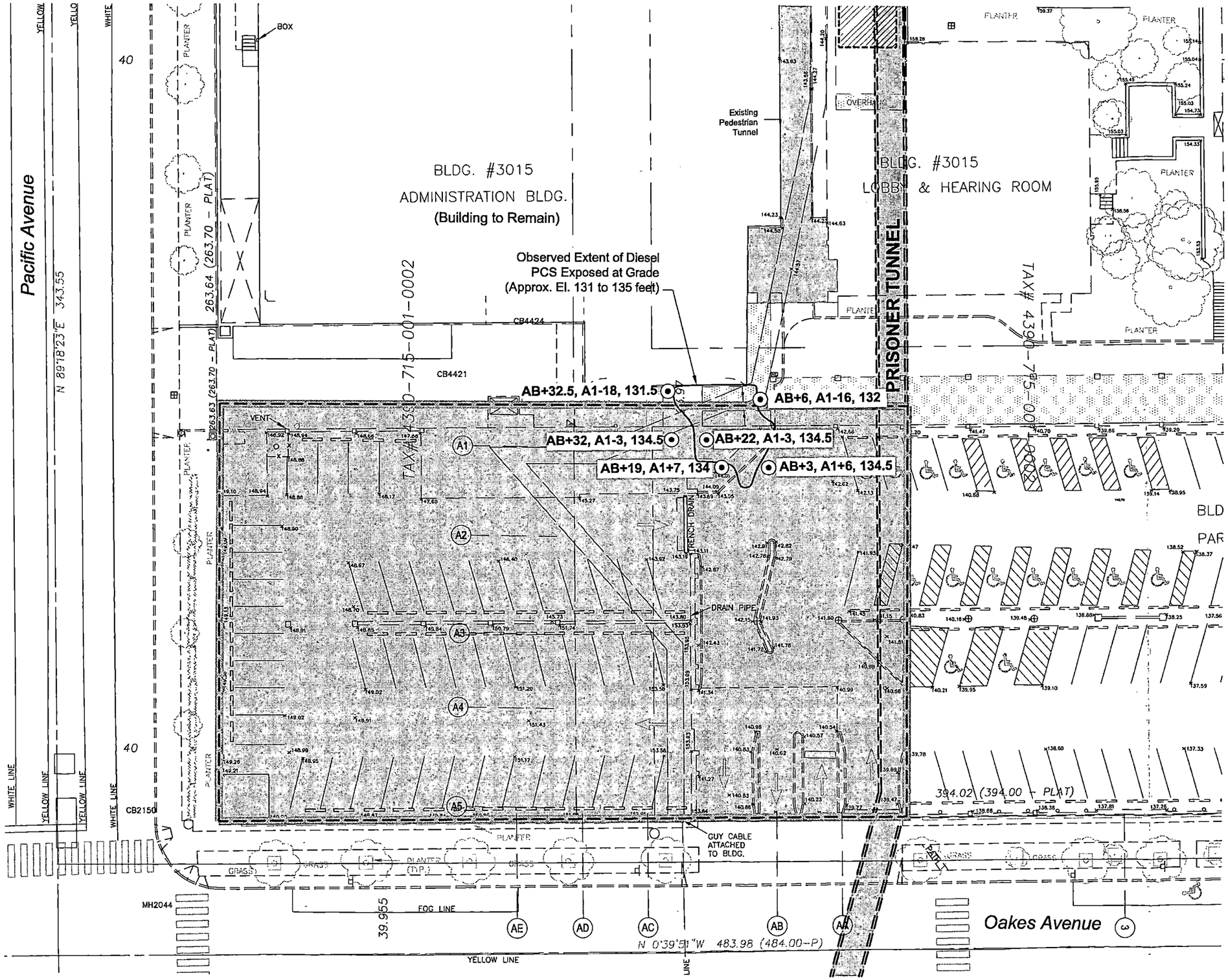
PARKING GARAGE
WEST WALL

September 2006 21-1-12132-004

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FIG. 10

Filename: J:\21\12132-004\21-1-12132-004 Fig 10 (09-06).dwg Date: 08-23-2006 Login: LR



LEGEND

Approximate Extent of Excavation

AB+6, A1-16, 132 — Confirmation Sample Designation and Approximate Location

AC — Gridline

NOTES

1. This figure adapted from site topographic survey by Perteet Engineering, Inc., dated 6-2001. Elevation datum NAVD 88.
2. Confirmation sample locations are based on tape measurements from former site features and should be considered approximate.

0 30 60

Scale in Feet

Snohomish County Campus Redevelopment
Remedial Action Report
Everett, Washington

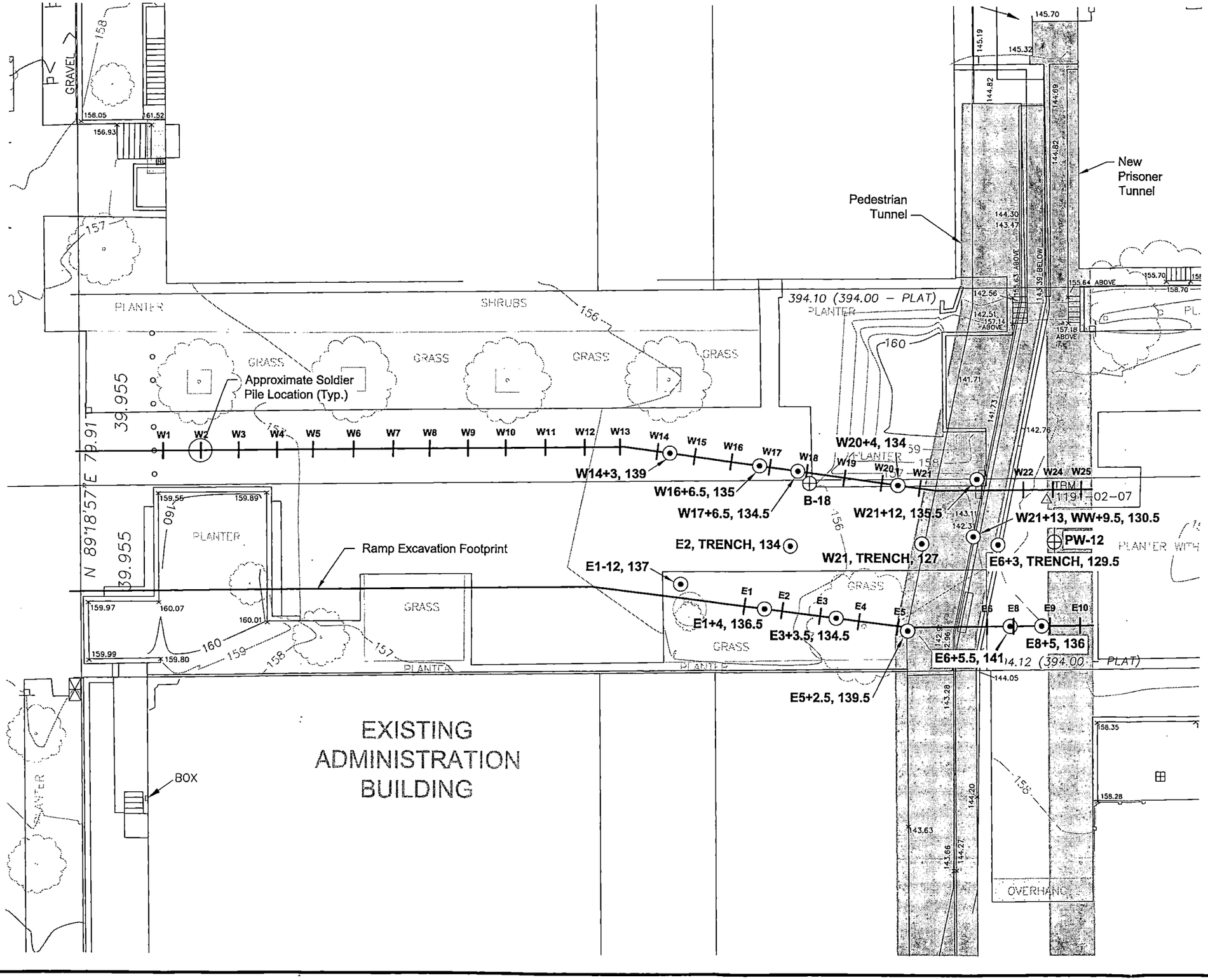
ADMINISTRATION BUILDING ADDITION CONFIRMATION SAMPLE LOCATIONS

September 2006 21-1-12132-004

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FIG. 11

Filename: J:\21\12\132-004\21-1-12132-004 Fig 11 (09-06).dwg Date: 08-23-2006 Login: LR



LEGEND

W14+3, 139 — Sample Designation and Approximate Location

B-18 — Boring Designation and Approximate Location

W1 — Soldier Pile Designation and Approximate Location

NOTES

1. This figure adapted from site topographic survey by Perteet Engineering, Inc., dated 6-2001. Elevation datum NAVD 88.
2. Boring and sampling locations are based on tape measurements from existing site features and should be considered approximate.

0 20 40

Scale in Feet

Snohomish County Campus Redevelopment
Remedial Action Report
Everett, Washington

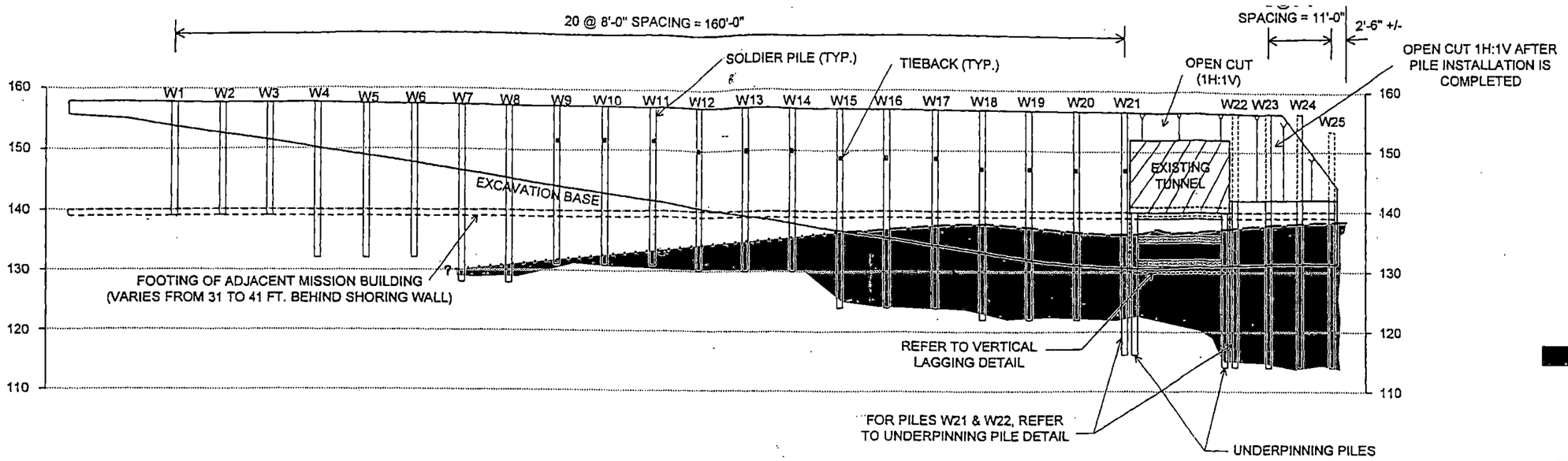
ROCKEFELLER RAMP CONFIRMATION SAMPLE LOCATIONS

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Geotechnical and Environmental Consultants

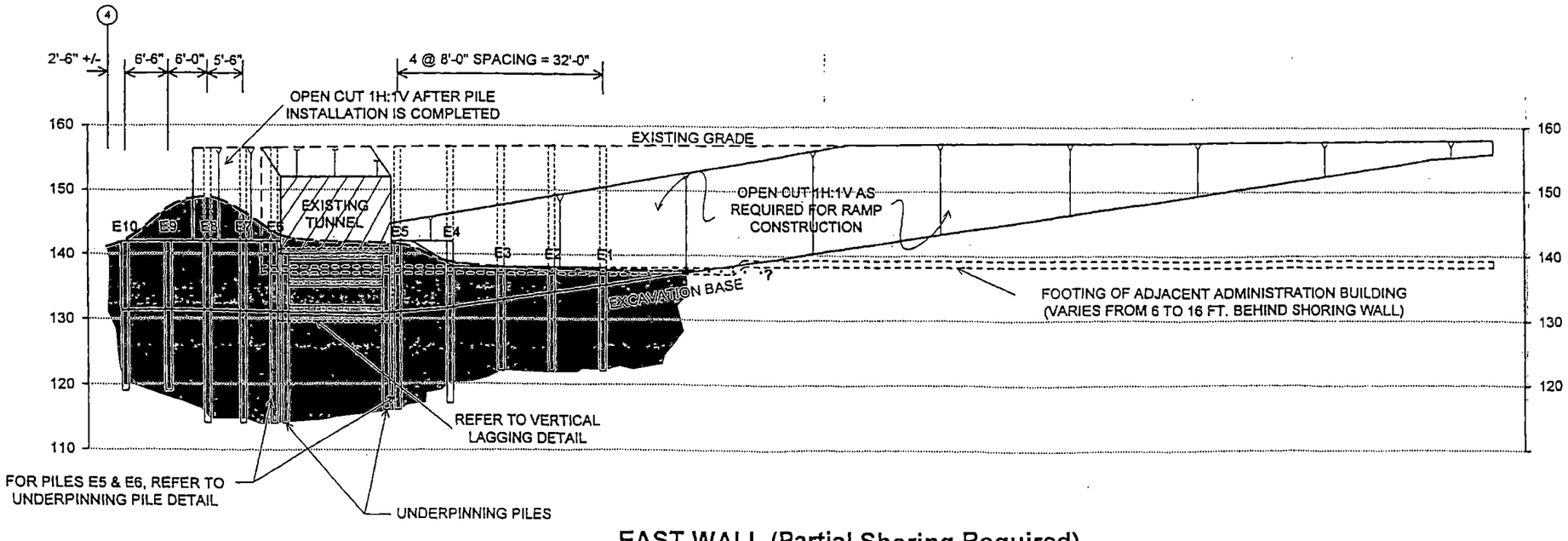
FIG. 12

Filename: J:\21\1\12132-004\21-1-12132-004 Fig 12 (09-06).dwg Date: 08-23-2006 Login: LR



WEST WALL (Full Height Shoring Required)

SCALE 1" = 20'



EAST WALL (Partial Shoring Required)

SCALE 1" = 20'

LEGEND

Contamination Observed in the Field

NOTES

1. This figure adapted from project shoring drawings by others.
2. Soldier piles W23 and E7 were eliminated, and positions of W22 through W25 and E6 through E10 were shifted slightly. Refer to Figure 12 for revised pile locations.
3. Extent of contamination shown is approximate and based primarily on field observations. The bottom of the contamination is estimated, as neither the base of the ramp excavation nor the bottom of the soldier piles confirm the extent. The bottom is estimated to be between elevation 120 and 115 feet.

0 20 40

Scale in Feet

Snohomish County Campus Redevelopment
Remedial Action Report
Everett, Washington

ROCKEFELLER RAMP PROFILE VIEWS

September 2006 21-1-12132-004

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FIG. 13

Filename: J:\21\112132-004\21-1-12132-004 Fig 13 (09-06).dwg Date: 08-23-2006 Login: LR

APPENDIX A

FIELD SAMPLING METHODOLOGY AND BORING LOGS

APPENDIX A

FIELD SAMPLING METHODOLOGY AND BORING LOGS

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- A.3.2 Visual Observations A-2
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LIST OF FIGURES (cont.)

Figure No.

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A-15 Log of Boring B-17
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A-25 Log of Boring PW-4 (2 sheets)
A-26 Log of Boring PW-5 (2 sheets)
A-27 Log of Boring PW-6 (2 sheets)
A-28 Log of Boring PW-7 (2 sheets)
A-29 Log of Boring PW-8 (2 sheets)
A-30 Log of Boring PW-9
A-31 Log of Boring PW-10
A-32 Log of Boring PW-11
A-33 Log of Boring PW-12 (2 sheets)

APPENDIX A

FIELD SAMPLING METHODOLOGY AND BORING LOGS

A.1 GENERAL

Standard methods, including sample collection, field screening, documentation procedures, and selected analyses, are described briefly in the following subsections. Sample collection and documentation was completed in accordance with Shannon & Wilson, Inc.'s standard operating procedures.

A.2 FIELD INVESTIGATION

The field exploration program for geotechnical design of the Administration Building and Garage site consisted of drilling and sampling 15 borings (Shannon & Wilson, Inc., 2002). To support dewatering and groundwater monitoring during construction, three monitoring wells (MW-1 through MW-3), and 12 pumping wells (PW-1 through PW-12) were also installed. (Soldier pile logs for Rockefeller Ramp construction are not included.) These explorations are shown on the Pre-excavation Site and Exploration Plan (Figure 2) in the main text of the report.

The exploration logs presented in Figures A-2 through A-33 represent our interpretation of the contents of the field logs and the results of laboratory testing. Figure A-1 presents a key to our classification of the materials encountered.

A.3 FIELD SCREENING AND ENVIRONMENTAL SAMPLING METHODOLOGY

During construction, soil samples were retrieved during boring installation, soil nail installation, excavation, and soldier pile installation, and field screened for the potential presence of contamination. Field screening methods included photoionization detector (PID) measurements; visual observations; and olfactory observations.

A.3.1 Photoionization (PID) Measurements

PID measurements screen for volatile organic vapors such as gasoline and solvents. PID measurements were obtained by passing the instrument directly over the soil or by performing a headspace measurement. Readings of 2 parts per million (ppm) or more above background were considered suspect.

A.3.2 Visual Observations

Visual observations (such as sheen, or gray or black discoloration) of soil samples and groundwater were recorded on the boring logs, field forms, or field notebook.

A.3.3 Olfactory Observations

Olfactory observations were recorded when noted. Soil was not intentionally smelled for contamination.

A.3.4 General Soil Sampling and Sample Handling

All environmental soil samples were collected using disposable sampling equipment and immediately placed into laboratory-provided glassware. Each sample was identified with a unique sampling number, immediately logged and sealed in plastic bags, and then placed in a cooler and maintained at 4°C (± 2°C). Sample information was recorded on chain-of-custody forms that accompanied the samples to the laboratory. Samples were maintained under chain-of-custody until delivered to the analytical laboratory, CCI Analytical Laboratory (CCIAL) of Everett, Washington.

A.4 WATER SAMPLING

Water samples were collected from three locations to meet City of Everett discharge authorization requirements. One grab sample was collected from the on-site Baker tank (used on site for temporary storage and sediment settlement). Seven samples were collected at the discharge location at the curb (Discharge 1 through Discharge 7, Table 5). Four samples were collected from a sump within the parking garage. With the exception of the first sample and sample "Discharge 3," all samples were collected over two days, per City of Everett sample requirements. Samples were either placed directly into laboratory-supplied glassware or collected using a new, disposable bailer.

A.5 ANALYTICAL METHODS

Selected soil samples were analyzed for one or more of the following: petroleum by Methods Northwest Total Petroleum Hydrocarbons as Diesel – Extended (NWTPH-Dx) and Northwest Total Petroleum Hydrocarbons as Gasoline (NWTPH-Gx); benzene, toluene, ethylbenzene, and xylenes (BTEX) by U.S. Environmental Protection Agency (EPA) Method 8021B; total lead by

EPA method 7420/7421; Resource Conservation and Recovery Act (RCRA) eight metals by EPA 6010/7471; and polychlorinated biphenyls (PCBs) by EPA 8082 Mod.

Water samples were analyzed for one or more of the following to meet construction dewatering permit discharge requirements: total and non-polar fats, oils, and greases by EPA 1664; total suspended solids by EPA 160.2; flashpoint by EPA 1010; cyanide by EPA 335.2; metals by EPA 6010/7060/7470; THMs by EPA B260B; chlorine residual by SM 4500-ClG; and fluoride by EPA 340.2. Field measurements of pH were also obtained during sample collection.

Analytical work was performed by CCIAL in accordance with their in-house Quality Assurance/Quality Control Plans. Sample analyses were performed in compliance with EPA analytical methods and Washington State Department of Ecology guidelines. Samples were analyzed within specified holding times. Laboratory test results are presented in Tables 1 through 5 after the main report text, and are contained in Appendices B through E, and Appendix G.

A.6 REFERENCES

American Society for Testing and Materials (ASTM), 2002, Annual book of ASTM standards: Soil and rock, building stone; geosynthetics: Philadelphia, Pa., v. 04.08.

Shannon & Wilson, Inc., 2002, Geotechnical and environmental engineering report, Snohomish County campus, administration building and garage, Everett, Washington: Report prepared by Shannon & Wilson, Inc., Seattle, Wash., project no. 21-1-09644-005, for NBBJ, Seattle, Wash., August.

Shannon & Wilson, Inc. (S&W), uses a soil classification system modified from the Unified Soil Classification System (USCS). Elements of the USCS and other definitions are provided on this and the following page. Soil descriptions are based on visual-manual procedures (ASTM D 2488-93) unless otherwise noted.

S&W CLASSIFICATION OF SOIL CONSTITUENTS

- MAJOR constituents compose more than 50 percent, by weight, of the soil. Major consituents are capitalized (i.e., SAND).
- Minor constituents compose 12 to 50 percent of the soil and precede the major constituents (i.e., silty SAND). Minor constituents preceded by "slightly" compose 5 to 12 percent of the soil (i.e., slightly silty SAND).
- Trace constituents compose 0 to 5 percent of the soil (i.e., slightly silty SAND, trace of gravel).

MOISTURE CONTENT DEFINITIONS

Dry	Absence of moisture, dusty, dry to the touch
Moist	Damp but no visible water
Wet	Visible free water, from below water table

ABBREVIATIONS

ATD	At Time of Drilling
Elev.	Elevation
ft	feet
FeO	Iron Oxide
MgO	Magnesium Oxide
HSA	Hollow Stem Auger
ID	Inside Diameter
in	inches
lbs	pounds
Mon.	Monument cover
N	Blows for last two 6-inch increments
NA	Not applicable or not available
NP	Non plastic
OD	Outside diameter
OVA	Organic vapor analyzer
PID	Photo-ionization detector
ppm	parts per million
PVC	Polyvinyl Chloride
SS	Split spoon sampler
SPT	Standard penetration test
USC	Unified soil classification
WLI	Water level indicator

GRAIN SIZE DEFINITION

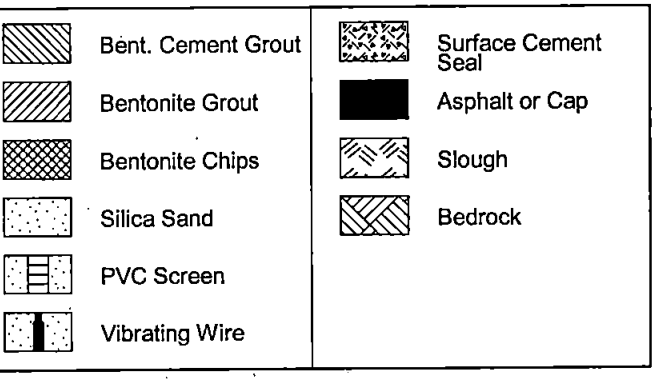
DESCRIPTION	SIEVE NUMBER AND/OR SIZE
FINES	< #200 (0.08 mm)
SAND*	
- Fine	#200 to #40 (0.08 to 0.4 mm)
- Medium	#40 to #10 (0.4 to 2 mm)
- Coarse	#10 to #4 (2 to 5 mm)
GRAVEL*	
- Fine	#4 to 3/4 inch (5 to 19 mm)
- Coarse	3/4 to 3 inches (19 to 76 mm)
COBBLES	3 to 12 inches (76 to 305 mm)
BOULDERS	> 12 inches (305 mm)

* Unless otherwise noted, sand and gravel, when present, range from fine to coarse in grain size.

RELATIVE DENSITY / CONSISTENCY

COARSE-GRAINED SOILS		FINE-GRAINED SOILS	
N, SPT, BLOWS/FT.	RELATIVE DENSITY	N, SPT, BLOWS/FT.	RELATIVE CONSISTENCY
0 - 4	Very loose	Under 2	Very soft
4 - 10	Loose	2 - 4	Soft
10 - 30	Medium dense	4 - 8	Medium stiff
30 - 50	Dense	8 - 15	Stiff
Over 50	Very dense	15 - 30	Very stiff
		Over 30	Hard

WELL AND OTHER SYMBOLS



Snohomish County Campus
New Jail Building
Everett, Washington

SOIL CLASSIFICATION AND LOG KEY

January 2005 21-1-09644-011

SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

FIG. A-1
Sheet 1 of 2

BORING CLASS1 21-09644.GPJ SWNEW.GDT 9/28/06

UNIFIED SOIL CLASSIFICATION SYSTEM (USCS)
(From ASTM D 2487-98 & 2488-93)

MAJOR DIVISIONS			GROUP/GRAPHIC SYMBOL		TYPICAL DESCRIPTION
COARSE-GRAINED SOILS *(more than 50% retained on No. 200 sieve)*	Gravels *(more than 50% of coarse fraction retained on No. 4 sieve)*	Clean Gravels *(less than 5% fines)*	GW		Well-graded gravels, gravels, gravel/sand mixtures, little or no fines.
			GP		Poorly graded gravels, gravel-sand mixtures, little or no fines
		Gravels with Fines *(more than 12% fines)*	GM		Silty gravels, gravel-sand-silt mixtures
			GC		Clayey gravels, gravel-sand-clay mixtures
	Sands *(50% or more of coarse fraction passes the No. 4 sieve)*	Clean Sands *(less than 5% fines)*	SW		Well-graded sands, gravelly sands, little or no fines
			SP		Poorly graded sand, gravelly sands, little or no fines
		Sands with Fines *(more than 12% fines)*	SM		Silty sands, sand-silt mixtures
			SC		Clayey sands, sand-clay mixtures
FINE-GRAINED SOILS *(50% or more passes the No. 200 sieve)*	Silts and Clays *(liquid limit less than 50)*	Inorganic	ML		Inorganic silts of low to medium plasticity, rock flour, sandy silts, gravelly silts, or clayey silts with slight plasticity
			CL		Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
		Organic	OL		Organic silts and organic silty clays of low plasticity
	Silts and Clays *(liquid limit 50 or more)*	Inorganic	MH		Inorganic silts, micaceous or diatomaceous fine sands or silty soils, elastic silt
			CH		Inorganic clays or medium to high plasticity, sandy fat clay, or gravelly fat clay
		Organic	OH		Organic clays of medium to high plasticity, organic silts
HIGHLY-ORGANIC SOILS	Primarily organic matter, dark in color, and organic odor		PT		Peat, humus, swamp soils with high organic content (see ASTM D 4427)

NOTE: No. 4 size = 5 mm; No. 200 size = 0.075 mm

NOTES

1. Dual symbols *(symbols separated by a hyphen, i.e., SP-SM, slightly silty fine SAND)* are used for soils with between 5% and 12% fines or when the liquid limit and plasticity index values plot in the CL-ML area of the plasticity chart.

2. Borderline symbols *(symbols separated by a slash, i.e., CL/ML, silty CLAY/clayey SILT; GW/SW, sandy GRAVEL/gravelly SAND)* indicate that the soil may fall into one of two possible basic groups.

Snohomish County Campus
New Jail Building
Everett, Washington

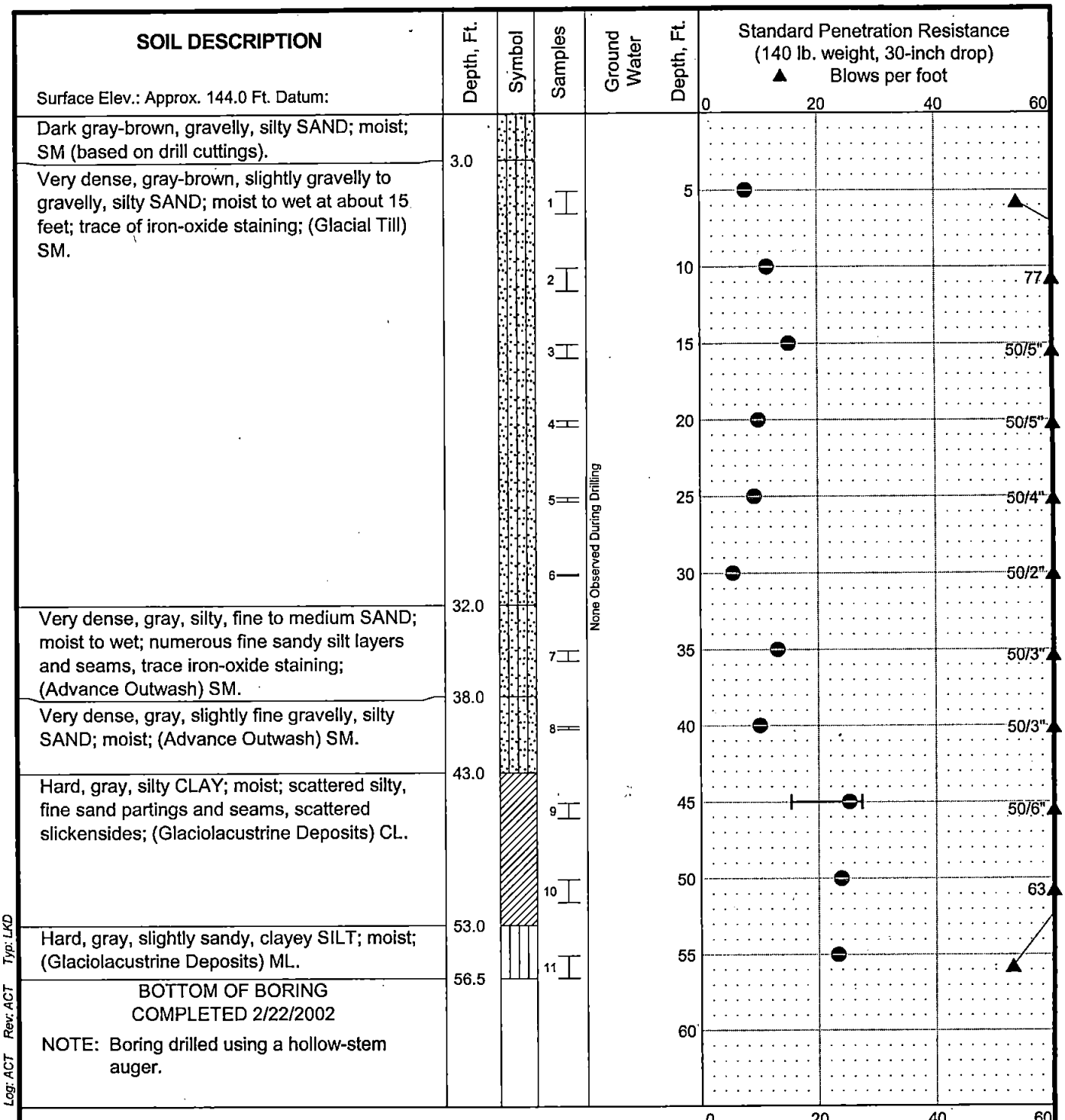
SOIL CLASSIFICATION AND LOG KEY

January 2005 | 21-1-09644-011

SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

FIG. A-1
Sheet 2 of 2

BORING_CLASS2 21-09644.GPJ SWNEW.GDT 9/28/06



NOTES

1. The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual.
2. The discussion in the text of this report is necessary for a proper understanding of the nature of the subsurface maerials.
3. Groundwater level, if indicated above, is for the date specified and may vary.
4. Refer to KEY for explanation of symbols, codes, and definitions.
5. USCS designation is based on visual-manual classification and selected lab testing.

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LOG OF BORING B-7

January 2005 21-1-09644-002

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FIG. A-2

Log: ACT Rev: ACT Typ: LKD

MASTER_LOG2 21-09644.GPJ SHAN_WIL.GDT 9/28/06

SOIL DESCRIPTION Surface Elev.: Approx. 138.0 Ft. Datum:	Depth, Ft.	Symbol	Samples	Ground Water Depth, Ft.	Standard Penetration Resistance (140 lb. weight, 30-inch drop) ▲ Blows per foot
Very dense, gray-brown, slightly gravelly to gravelly, silty SAND; moist; grass at surface, scattered iron-oxide staining; (Glacial Till) SM.			1 2 3 4 5 6 7 8 9	None Observed During Drilling	71 99/11" 89/11" 68 87 63 50/2" 50/5" 50/5"
Very dense, gray, silty, fine SAND and slightly fine sandy SILT with fine sand seams; moist; (Advance Outwash) SM/ML.	31.0				
Very dense, gray, clayey SILT; moist to wet; scattered to numerous silty, fine sand partings and seams, scattered silty clay seams, locally trace of fine gravel; (Glaciolacustrine Deposits) ML.	38.0				
CONTINUED NEXT SHEET					

0 20 40 60

5 10 15 20 25 30 35 40 45

0 20 40 60

LEGEND

* Sample Not Recovered

Standard Penetration Test

● % Water Content

Plastic Limit ⊢●⊣ Liquid Limit

Natural Water Content

NOTES

1. The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual.
2. The discussion in the text of this report is necessary for a proper understanding of the nature of the subsurface maerials.
3. Groundwater level, if indicated above, is for the date specified and may vary.
4. Refer to KEY for explanation of symbols, codes, and definitions.
5. USCS designation is based on visual-manual classification and selected lab testing.

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LOG OF BORING B-8

January 2005 21-1-09644-002

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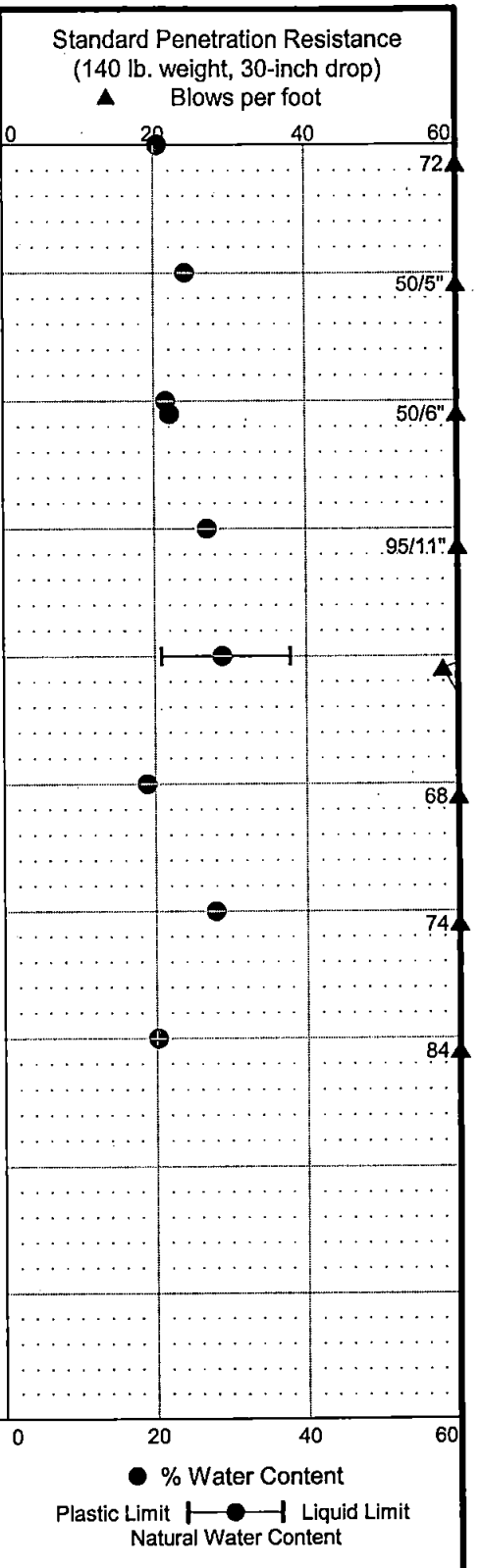
FIG. A-3
Sheet 1 of 2

MASTER LOG2 21-09644.GPJ SHAN WIL.GDT 9/28/06 Log: ACT Rev: ACT Typ: LKD

SOIL DESCRIPTION Surface Elev.: Approx. 138.0 Ft. Datum:	Depth, Ft.	Symbol	Samples	Ground Water Depth, Ft.
- grading to silty CLAY and clayey SILT; trace of gravel; CL/ML - sample 11 interbedded to laminated silty CLAY and fine sandy SILT; CL/ML			10 11	
Very dense, gray, slightly silty to silty, fine SAND; wet; SM/SP-SM.	60.5		12	
Hard, gray, silty CLAY; moist to wet; scattered to numerous silty, fine sand partings and seams; (Glaciolacustrine Deposits) CL.	63.0		13 14 15 16	
BOTTOM OF BORING COMPLETED 2/26/2002	86.0		17	

NOTES:

1. Samples 14 through 17 were driven only 12 inches; the blow count shown represents two times the second 6-inch increment blow count.
2. Hollow-stem auger advanced to 5 feet, then mud-rotary techniques were used to drill the hole.



LEGEND

* Sample Not Recovered

I Standard Penetration Test

NOTES

1. The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual.
2. The discussion in the text of this report is necessary for a proper understanding of the nature of the subsurface maerials.
3. Groundwater level, if indicated above, is for the date specified and may vary.
4. Refer to KEY for explanation of symbols, codes, and definitions.
5. USCS designation is based on visual-manual classification and selected lab testing.

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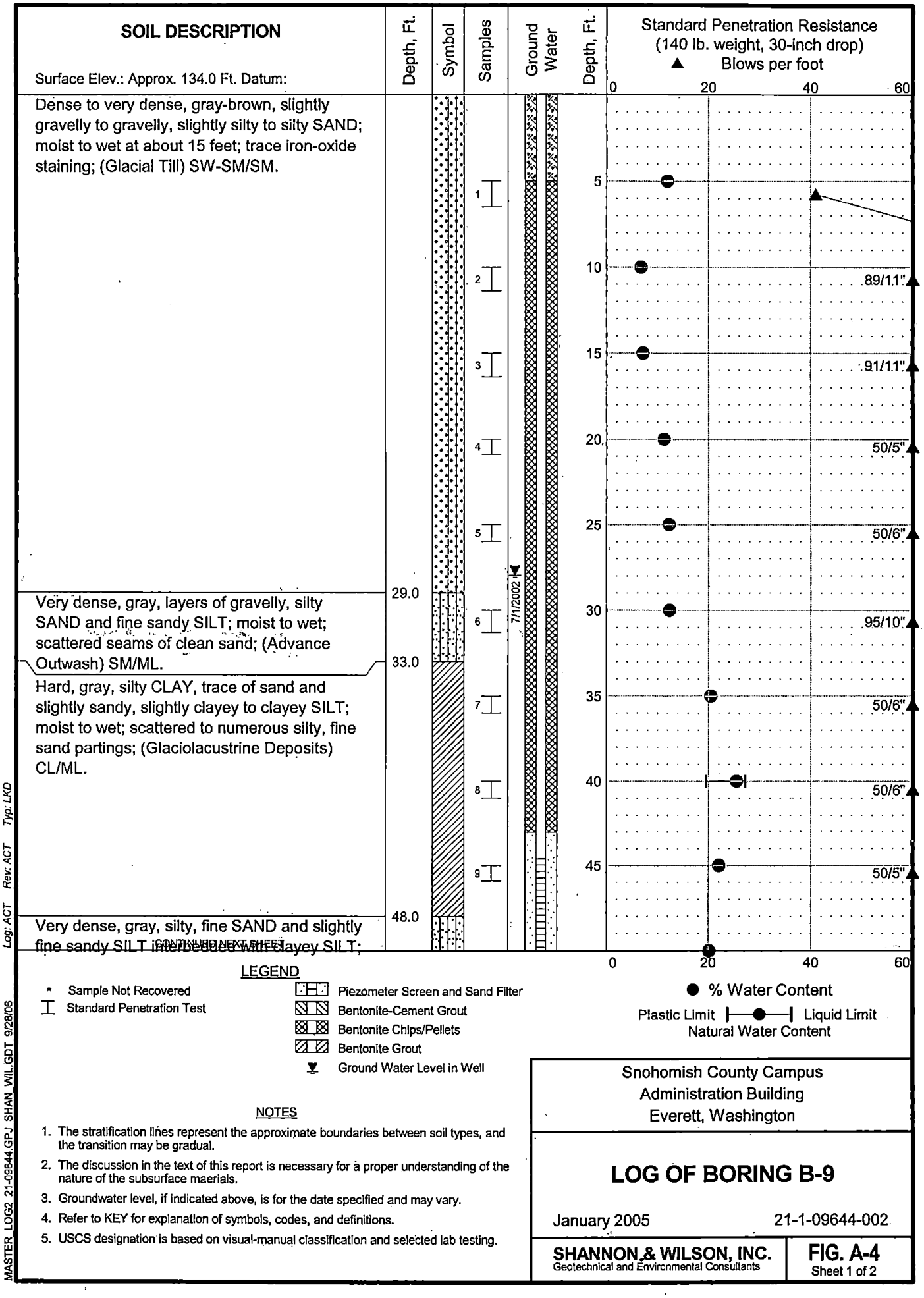
LOG OF BORING B-8

January 2005 21-1-09644-002

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FIG. A-3
Sheet 2 of 2

MASTER LOG2 21-09644.GPJ SHAN WIL.GDT 9/28/06 Log: ACT Rev: ACT Typ: LKD



NOTES

1. The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual.
2. The discussion in the text of this report is necessary for a proper understanding of the nature of the subsurface maerials.
3. Groundwater level, if indicated above, is for the date specified and may vary.
4. Refer to KEY for explanation of symbols, codes, and definitions.
5. USCS designation is based on visual-manual classification and selected lab testing.

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LOG OF BORING B-9

January 2005 21-1-09644-002

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FIG. A-4
Sheet 1 of 2

MASTER LOG2 21-09644.GPJ SHAN WIL.GDT 9/28/06 Log: ACT Rev: ACT Typ: LKD

SOIL DESCRIPTION Surface Elev.: Approx. 134.0 Ft. Datum:	Depth, Ft.	Symbol	Samples	Ground Water	Depth, Ft.	Standard Penetration Resistance (140 lb. weight, 30-inch drop) ▲ Blows per foot
moist; (Glaciolacustrine Deposits) SM/ML.			10			77
Very dense, gray, silty, fine to medium SAND, trace of fine gravel; wet; SM.	53.0		11		55	50/6"
Interbedded, hard, gray, slightly clayey SILT and very dense, silty, fine SAND; moist; (Glaciolacustrine Deposits) ML/SM.	58.0		12		60	
- moist to wet near 65 feet			13		65	69
			14		70	90/10"
Hard, gray, clayey SILT to silty CLAY; moist; scattered seams of slickensided highly plastic clay and scattered silty, fine sand partings; (Glaciolacustrine Deposits) ML/CL.	73.0		15		75	97/9"
Very dense, gray, interlayered clayey SILT and silty SAND, trace of gravel; moist; scattered slickensides in silt, iron oxide staining; (Glaciolacustrine Deposits) SM/ML.	78.0 81.0		16		80	50/6"
BOTTOM OF BORING COMPLETED 2/27/2002					85	
NOTE: Hollow-stem auger was advanced to 30 feet, then mud-rotary techniques were used to drill the hole.					90	
					95	
						0 20 40 60

Log: ACT Rev: ACT Typ: LKD

MASTER LOG2 21-09644.GPJ SHAN WIL.GDT 9/28/06

LEGEND

- * Sample Not Recovered
- Standard Penetration Test
- Piezometer Screen and Sand Filter
- Bentonite-Cement Grout
- Bentonite Chips/Pellets
- Bentonite Grout
- Ground Water Level in Well

● % Water Content

Plastic Limit ⊢●⊣ Liquid Limit

Natural Water Content

NOTES

1. The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual.
2. The discussion in the text of this report is necessary for a proper understanding of the nature of the subsurface maerials.
3. Groundwater level, if indicated above, is for the date specified and may vary.
4. Refer to KEY for explanation of symbols, codes, and definitions.
5. USCS designation is based on visual-manual classification and selected lab testing.

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LOG OF BORING B-9

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FIG. A-4
Sheet 2 of 2

SOIL DESCRIPTION Surface Elev.: Approx. 138.0 Ft. Datum:	Depth, Ft.
Very dense, gray-brown, slightly gravelly to gravelly, silty SAND; moist; trace iron-oxide staining; (Glacial Till) SM.	
- hydrocarbon odor noted in the laboratory in Sample 4	
Very dense, gray, silty, gravelly SAND; moist to wet; (Glacial Till) SM.	23.0
Very dense, gray, slightly clayey, sandy SILT and slightly clayey, silty SAND; moist to wet; scattered silty, fine sand seams; (Advance Outwash) SM/ML.	27.0
Hard, gray, slightly sandy, slightly clayey SILT and slightly clayey SILT, trace of sand; scattered seams of silty, fine sand; scattered slickensides; (Glaciolacustrine Deposits) ML.	38.0
CONTINUED NEXT SHEET	

Symbol

Samples: 1, 2, 3, 4, 5, 6, 7, 8, 9

Ground Water Depth, Ft.: None Observed During Drilling

Standard Penetration Resistance
(140 lb. weight, 30-inch drop)
▲ Blows per foot

Depth, Ft.	Blows per foot
5	91
10	86/1.1"
15	56/6"
20	83
25	50/4"
30	54/5"
35	53/5"
40	56/2"
45	59/6"

0 20 40 60

LEGEND

* Sample Not Recovered

I Standard Penetration Test

● % Water Content

Plastic Limit ⊢●⊣ Liquid Limit
Natural Water Content

NOTES

1. The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual.
2. The discussion in the text of this report is necessary for a proper understanding of the nature of the subsurface maerials.
3. Groundwater level, if indicated above, is for the date specified and may vary.
4. Refer to KEY for explanation of symbols, codes, and definitions.
5. USCS designation is based on visual-manual classification and selected lab testing.

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LOG OF BORING B-10

January 2005 21-1-09644-002

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FIG. A-5
Sheet 1 of 2

MASTER LOG2 21-09644.GPJ SHAN WIL.GDT 9/28/06 Log: RT Rev: ACT Typ: LKD

SOIL DESCRIPTION Surface Elev.: Approx. 138.0 Ft. Datum:	Depth, Ft.	Symbol	Samples	Ground Water	Depth, Ft.	Standard Penetration Resistance (140 lb. weight, 30-inch drop) ▲ Blows per foot
Hard, gray, silty CLAY; moist; numerous silt partings; bedded; (Glaciolacustrine Deposits) CL.	53.0		10, 11		55	50/5", 77
Very dense, gray, slightly silty to silty, fine to medium SAND; wet; SP-SM.	60.0		12		60	83
Hard, gray, silty CLAY to clayey SILT, trace of sand; moist; scattered to numerous silty, fine sand partings, scattered seams of highly plastic clay, grades less plastic with depth, occasional slickensides; (Glaciolacustrine Deposits) CL/CH/ML.	60.8		13, 14		65, 70	63
Very dense, gray, fine sandy SILT; moist; scattered iron-oxide staining; (Glaciolacustine Deposits) ML.	83.0		15, 16		75, 80	85/9", 98/10"
	85.8		17		85	58/3"
BOTTOM OF BORING COMPLETED 2/27/2002					90, 95	

NOTES:

1. The moist to wet nature of the soil and the presence of a hydrocarbon odor in Sample 4 suggest that groundwater may be present about 20 to 25 feet below ground surface.
2. Mud-rotary techniques were used to drill the hole.

0 20 40 60

● % Water Content

Plastic Limit ⊢●⊣ Liquid Limit

Natural Water Content

LEGEND

* Sample Not Recovered

⌶ Standard Penetration Test

NOTES

1. The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual.
2. The discussion in the text of this report is necessary for a proper understanding of the nature of the subsurface maerials.
3. Groundwater level, if indicated above, is for the date specified and may vary.
4. Refer to KEY for explanation of symbols, codes, and definitions.
5. USCS designation is based on visual-manual classification and selected lab testing.

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LOG OF BORING B-10

January 2005 21-1-09644-002

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FIG. A-5
Sheet 2 of 2

Log: RT Rev: ACT Typ: LKD

MASTER LOG2 21-09644.GPJ SHAN WIL.GDT 9/28/06

SOIL DESCRIPTION Surface Elev.: Approx. 150.0 Ft. Datum:	Depth, Ft.
Asphalt.	0.3
Very loose, gray, slightly fine gravelly to fine gravelly, slightly silty SAND; moist to wet; (Fill) SW-SM.	
Very loose, gray and light gray-brown, trace to slightly fine gravelly, silty SAND; moist to wet; (Fill) SM.	21.0
Very dense, light gray-brown, trace to slightly fine gravelly, silty SAND; moist; (Glacial Till) SM.	28.0
Very dense, gray, silty SAND; wet; occasional layer of moist trace fine gravelly, silty sand; (Advance Outwash) SM.	38.0
Hard, gray-brown, clayey SILT and fine sandy, clayey SILT interlayered; moist; trace of gravel; (Glaciolacustrine Deposits) ML.	43.0
Hard, gray, trace to slightly fine to medium sandy, silty CLAY; moist; scattered to numerous silty, fine sand partings; (Glaciolacustrine Deposits) CL.	48.0
BOTTOM OF BORING COMPLETED 2/21/2002	56.3
NOTE: Boring drilled using a hollow-stem auger.	

Symbol | Samples | Ground Water | Depth, Ft.

Standard Penetration Resistance
(140 lb. weight, 30-inch drop)
▲ Blows per foot

0 20 40 60

5 10 15 20 25 30 35 40 45 50 55 60

71/10"
50/6"
50/4"
50/5"
88/10"

0 20 40 60

LEGEND

- * Sample Not Recovered
- Standard Penetration Test
- Piezometer Screen and Sand Filter
- Bentonite-Cement Grout
- Bentonite Chips/Pellets
- Bentonite Grout
- Ground Water Level ATD
- Ground Water Level in Well

● % Water Content
Plastic Limit ⊢●⊣ Liquid Limit
Natural Water Content

NOTES

1. The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual.
2. The discussion in the text of this report is necessary for a proper understanding of the nature of the subsurface materials.
3. Groundwater level, if indicated above, is for the date specified and may vary.
4. Refer to KEY for explanation of symbols, codes, and definitions.
5. USCS designation is based on visual-manual classification and selected lab testing.

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LOG OF BORING B-11

January 2005 21-1-09644-002

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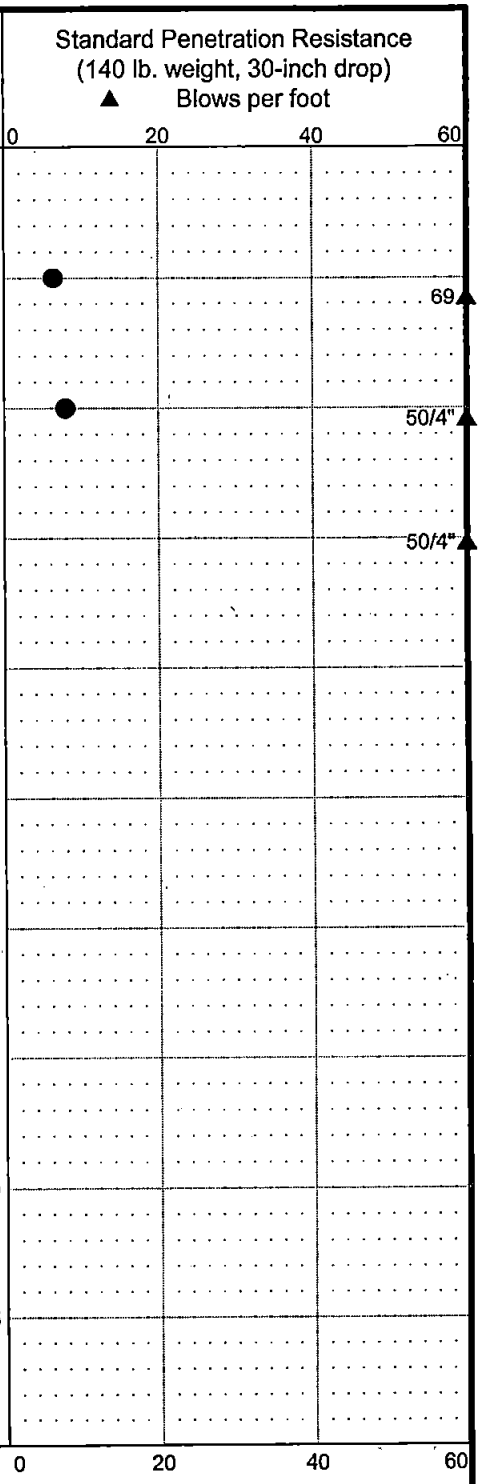
FIG. A-6

MASTER LOG2 21-09644.GPJ SHAN WIL.GDT 9/28/06 Log: ACT Rev: ACT Typ: LKD

SOIL DESCRIPTION Surface Elev.: Approx. 143.0 Ft. Datum:	Depth, Ft.	Symbol	PID, ppm	Samples	Ground Water Depth, Ft.
Asphalt.	0.1				
Very dense, gray-brown, slightly gravelly to gravelly, silty SAND; moist; (Glacial Till) SM.			0	1	None Observed During Drilling
	10.5		0	2	
Very dense, gray-brown, slightly gravelly to gravelly, silty SAND; moist to dry; hydrocarbon odor below 13.5 feet, PID = 900+ ppm (15 - 15.3 feet); (Glacial Till) SM.			900	3	
BOTTOM OF BORING COMPLETED 3/4/2002	15.3				

NOTES:

1. Boring was terminated at 15.3 feet because field screening suggested the presence of petroleum hydrocarbon contamination.
2. Boring drilled using a hollow-stem auger.



LEGEND

* Sample Not Recovered

I Standard Penetration Test

● % Water Content

Plastic Limit ⊢●⊣ Liquid Limit

Natural Water Content

NOTES

1. The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual.
2. The discussion in the text of this report is necessary for a proper understanding of the nature of the subsurface maerials.
3. Groundwater level, if indicated above, is for the date specified and may vary.
4. Refer to KEY for explanation of symbols, codes, and definitions.
5. USCS designation is based on visual-manual classification and selected lab testing.

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LOG OF BORING B-12

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FIG. A-7

MASTER LOG2 21-09644.GPJ SHAN WIL.GDT 9/28/06 Log: ACT Rev: ACT Typ: LKD

SOIL DESCRIPTION Surface Elev.: Approx. 143.0 Ft. Datum:	Depth, Ft.	Symbol	PID, ppm	Samples	Ground Water	Depth, Ft.	Standard Penetration Resistance (140 lb. weight, 30-inch drop) ▲ Blows per foot
Asphalt.	0.1						
Very dense, gray-brown, trace to slightly gravelly, silty, fine to medium SAND, trace of clay; moist to wet below 10 feet; mottled iron-oxide staining; (based on limited sampling, drill cuttings, and boring B-12) (Glacial Till) SM.			0	1	During Drilling ▽	10	50/5.5"
- strong hydrocarbon odor during drilling, trace odor below 15 feet			0	2		15	50/5"
Very dense, gray, slightly silty to silty, fine to medium SAND; wet; slightly fine gravelly, silty sand below 30 feet; (Advance Outwash) SP-SM/SM.	17.5		0	3		20	50/6"
			0	4		25	50/5"
			0	5		30	50/4"
Hard, gray, clayey SILT to silty CLAY, trace of sand; moist to wet; scattered to numerous silty, fine to medium sand partings and seams; (Glaciolacustrine Deposits) ML/CL.	35.5		0	6		35	50/6"
			0	7		40	50/6"
Very dense, gray, slightly silty to silty, gravelly SAND; moist to wet; (Outwash) SW-SM/SM.	43.0		0	8		45	50/6"
Hard, gray, slightly clayey to clayey SILT; moist to wet; scattered silty, fine sand	48.0						

(CONTINUED NEXT SHEET)

0 20 40 60

LEGEND

* Sample Not Recovered
Standard Penetration Test
▽ Ground Water Level ATD
● % Water Content
Plastic Limit ⊢●⊣ Liquid Limit
Natural Water Content

NOTES

1. The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual.
2. The discussion in the text of this report is necessary for a proper understanding of the nature of the subsurface maerials.
3. Groundwater level, if indicated above, is for the date specified and may vary.
4. Refer to KEY for explanation of symbols, codes, and definitions.
5. USCS designation is based on visual-manual classification and selected lab testing.

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LOG OF BORING B-12A

January 2005 21-1-09644-011

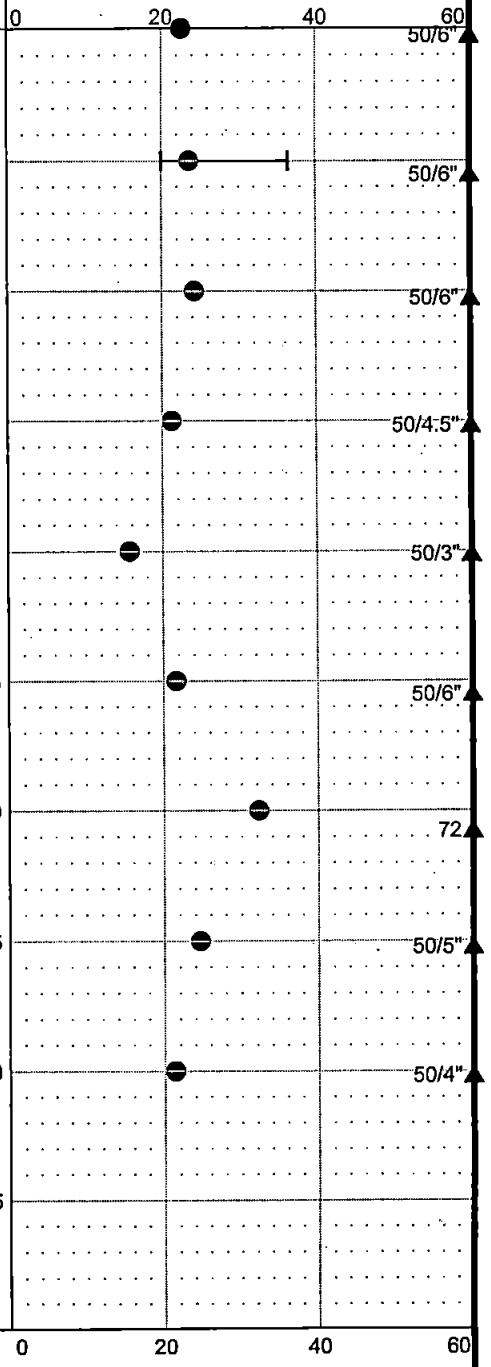
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FIG. A-8
Sheet 1 of 2

MASTER LOG2 21-09644.GPJ SHAN WIL.GDT 9/28/06 Log: ACT Rev: ACT Typ: LKD

SOIL DESCRIPTION Surface Elev.: Approx. 143.0 Ft. Datum:	Depth, Ft.	Symbol	PID, ppm	Samples	Ground Water Depth, Ft.
partings; (Glaciolacustrine Deposits) ML.			0	9	
Hard, gray, silty CLAY grading to slightly fine sandy, clayey SILT; moist; scattered fine sand seams; (Glaciolacustrine Deposits) CL/ML.	52.0			10	
				11	
				12	
Very dense, gray, silty, fine SAND; moist to wet; SM.	68.0			13	
Hard, gray, silty CLAY to clayey SILT; moist; scattered to numerous silty, fine sand seams; layer of silty, gravelly sand at 75 feet; scattered highly plastic slickensided seams; (Glaciolacustrine Deposits) CL/ML.	72.0			14	
				15	
				16	
BOTTOM OF BORING COMPLETED 5/8/2002	90.3			17	

Standard Penetration Resistance
(140 lb. weight, 30-inch drop)
▲ Blows per foot



NOTES:
1. Boring drilled by installing casing to 5 feet and using mud-rotary techniques.
2. Drilled to 85 feet on the first day. On second day, driller had to redrill from 70 to 85 feet.

LEGEND

* Sample Not Recovered
Standard Penetration Test
Ground Water Level ATD
● % Water Content
Plastic Limit ⊢●⊣ Liquid Limit
Natural Water Content

NOTES

1. The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual.
2. The discussion in the text of this report is necessary for a proper understanding of the nature of the subsurface maerials.
3. Groundwater level, if indicated above, is for the date specified and may vary.
4. Refer to KEY for explanation of symbols, codes, and definitions.
5. USCS designation is based on visual-manual classification and selected lab testing.

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LOG OF BORING B-12A

January 2005 21-1-09644-011

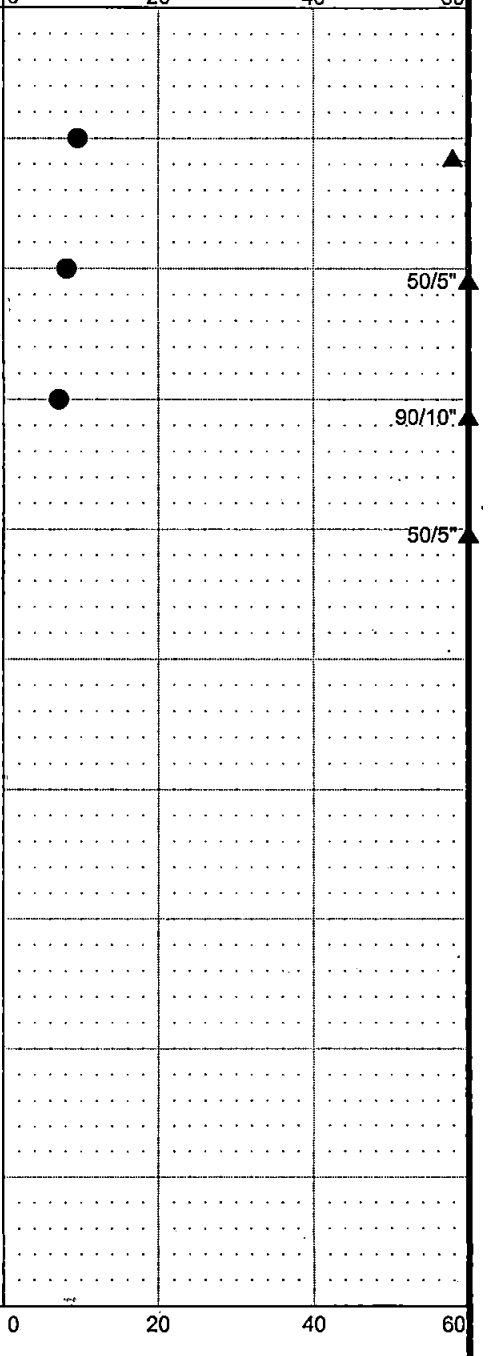
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FIG. A-8
Sheet 2 of 2

MASTER LOG2 21-09644.GPJ SHAN_WIL.GDT 9/28/06 Log: ACT Rev: ACT Typ: LKD

SOIL DESCRIPTION Surface Elev.: Approx. 146.0 Ft. Datum:	Depth, Ft.	Symbol	PID, ppm	Samples	Ground Water Depth, Ft.
Very dense, gray-brown, slightly gravelly to gravelly, silty SAND; moist; wet seam at approximately 15 feet; scattered fine sandy silt pockets; slight hydrocarbon odor below 19 feet, PID = 153 ppm (20 - 20.4 feet); ivy at ground surface; (Glacial Till) SM.			0 0 0 153	1 2 3 4	None Observed During Drilling
BOTTOM OF BORING COMPLETED 3/4/2002	20.4				

Standard Penetration Resistance
(140 lb. weight, 30-inch drop)
▲ Blows per foot



NOTES:

1. Boring was terminated at 20.4 feet because field screening suggested the presence of petroleum hydrocarbon contamination.
2. Boring drilled using a hollow-stem auger.

LEGEND

* Sample Not Recovered

I Standard Penetration Test

● % Water Content

Plastic Limit ⊢—●—⊣ Liquid Limit
Natural Water Content

NOTES

1. The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual.
2. The discussion in the text of this report is necessary for a proper understanding of the nature of the subsurface maerials.
3. Groundwater level, if indicated above, is for the date specified and may vary.
4. Refer to KEY for explanation of symbols, codes, and definitions.
5. USCS designation is based on visual-manual classification and selected lab testing.

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LOG OF BORING B-13

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FIG. A-9

MASTER LOG2 21-09644.GPJ SHAN WIL.GDT 9/28/06 Log: ACT Rev: ACT Typ: LKD

SOIL DESCRIPTION Surface Elev.: Approx. 148.0 Ft. Datum:	Depth, Ft.
Very dense, light gray-brown, trace to slightly fine gravelly, silty SAND; moist; grass at ground surface; (Glacial Till) SM.	
Very dense, gray, slightly silty, gravelly SAND; wet; (Advance Outwash) SW-SM.	35.0
Very dense, gray, slightly silty SAND, trace of gravel, and silty, fine to medium SAND; moist to wet; scattered seams of silt and silty clay; (Advance Outwash) SW-SM/SM.	38.0
Hard, gray, silty CLAY and clayey SILT; moist to wet; scattered fine sand partings and seams, scattered slickensides; (Glaciolacustrine Deposits) CL/ML.	46.0
- grading to interbedded silty CLAY and fine sandy SILT; wet	
CONTINUED NEXT SHEET	

Symbol | Samples | Ground Water | Depth, Ft.

7/3/2002 During Drilling

Standard Penetration Resistance
(140 lb. weight, 30-inch drop)
▲ Blows per foot

Depth, Ft.	Blows per foot
5	82
10	50/4"
15	50/5"
20	86
25	50/5"
30	50/4"
35	50/5"
40	90/11"
45	89
50	94/9"
55	80/11"

0 20 40 60

LEGEND

* Sample Not Recovered
Standard Penetration Test
Piezometer Screen and Sand Filter
Bentonite-Cement Grout
Bentonite Chips/Pellets
Bentonite Grout
Ground Water Level ATD
Ground Water Level in Well

● % Water Content
Plastic Limit ⊢●⊣ Liquid Limit
Natural Water Content

NOTES

1. The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual.
2. The discussion in the text of this report is necessary for a proper understanding of the nature of the subsurface maerials.
3. Groundwater level, if indicated above, is for the date specified and may vary.
4. Refer to KEY for explanation of symbols, codes, and definitions.
5. USCS designation is based on visual-manual classification and selected lab testing.

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LOG OF BORING B-14

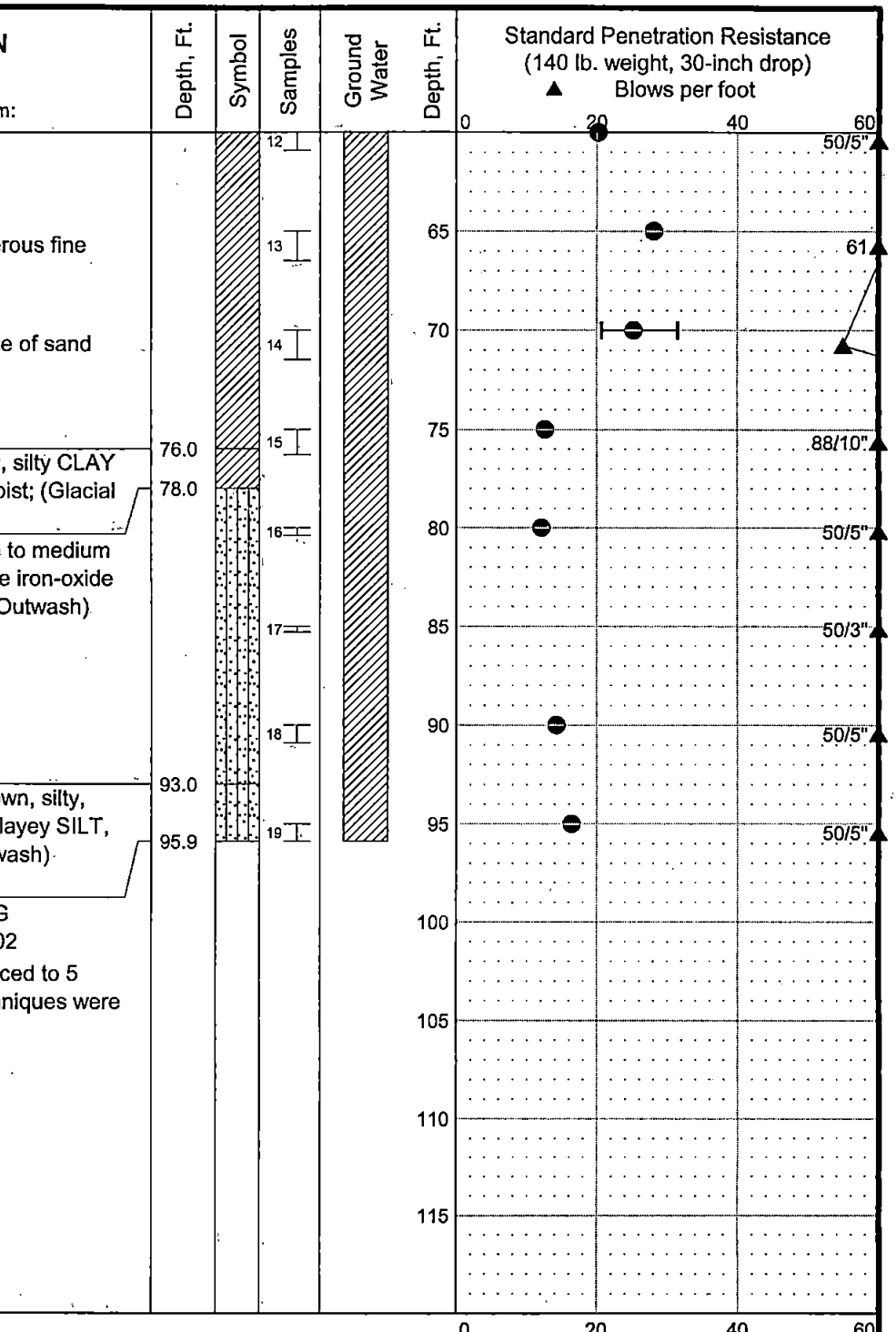
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FIG. A-10
Sheet 1 of 2

MASTER_LOG2 21-09644.GPJ SHAN WIL.GDT 9/28/06 Log: ACT Rev: ACT Typ: LKD

SOIL DESCRIPTION Surface Elev.: Approx. 148.0 Ft. Datum:	Depth, Ft.
- grading to silty CLAY with numerous fine sand partings; moist	
- grading to hard, silty CLAY, trace of sand	
Hard and very dense, gray, sandy, silty CLAY to silty, clayey, gravelly SAND; moist; (Glacial Outwash?) CL/SC.	76.0 78.0
Very dense, gray-brown, silty, fine to medium SAND, trace of gravel; moist; trace iron-oxide staining; locally gravelly; (Glacial Outwash) SM.	
Interbedded, very dense, gray-brown, silty, fine to medium SAND and hard, clayey SILT, trace of sand; moist; (Glacial Outwash) SM/ML.	93.0 95.9
BOTTOM OF BORING COMPLETED 2/20/2002	
NOTE: Hollow-stem auger advanced to 5 feet, then mud-rotary techniques were used to drill the hole.	



LEGEND

- * Sample Not Recovered
- I Standard Penetration Test
- Piezometer Screen and Sand Filter
- Bentonite-Cement Grout
- Bentonite Chips/Pellets
- Bentonite Grout
- ▽ Ground Water Level ATD
- ▼ Ground Water Level in Well
- ● % Water Content
- Plastic Limit ⊢●⊣ Liquid Limit
- Natural Water Content

NOTES

1. The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual.
2. The discussion in the text of this report is necessary for a proper understanding of the nature of the subsurface maerials.
3. Groundwater level, if indicated above, is for the date specified and may vary.
4. Refer to KEY for explanation of symbols, codes, and definitions.
5. USCS designation is based on visual-manual classification and selected lab testing.

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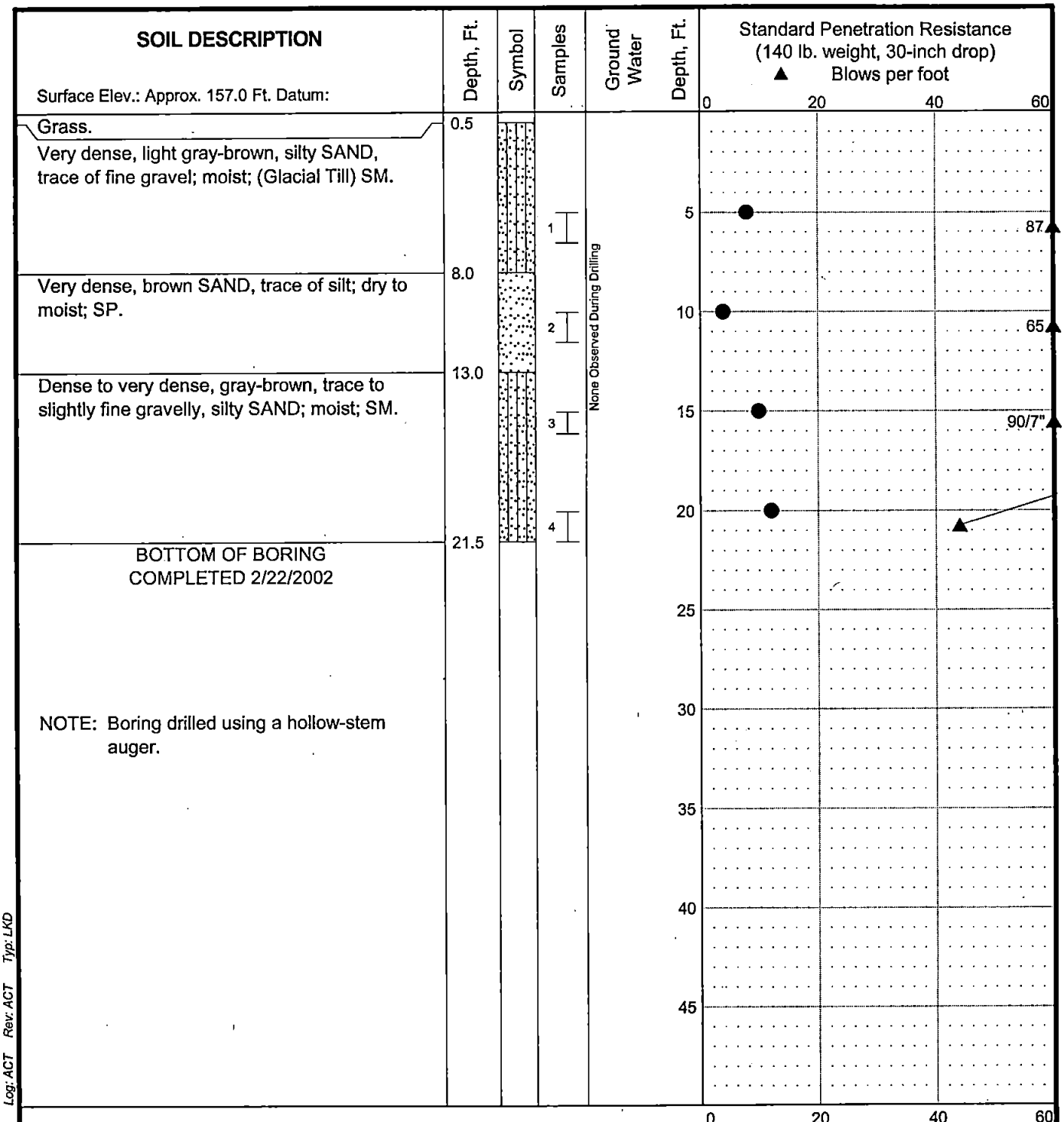
LOG OF BORING B-14

January 2005 21-1-09644-002

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FIG. A-10
Sheet 2 of 2

MASTER LOG2 21-09644.GPJ SHAN WIL.GDT 9/28/06 Log: ACT Rev: ACT Typ: LKD



NOTES

1. The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual.
2. The discussion in the text of this report is necessary for a proper understanding of the nature of the subsurface maerials.
3. Groundwater level, if indicated above, is for the date specified and may vary.
4. Refer to KEY for explanation of symbols, codes, and definitions.
5. USCS designation is based on visual-manual classification and selected lab testing.

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LOG OF BORING B-15

January 2005 21-1-09644-002

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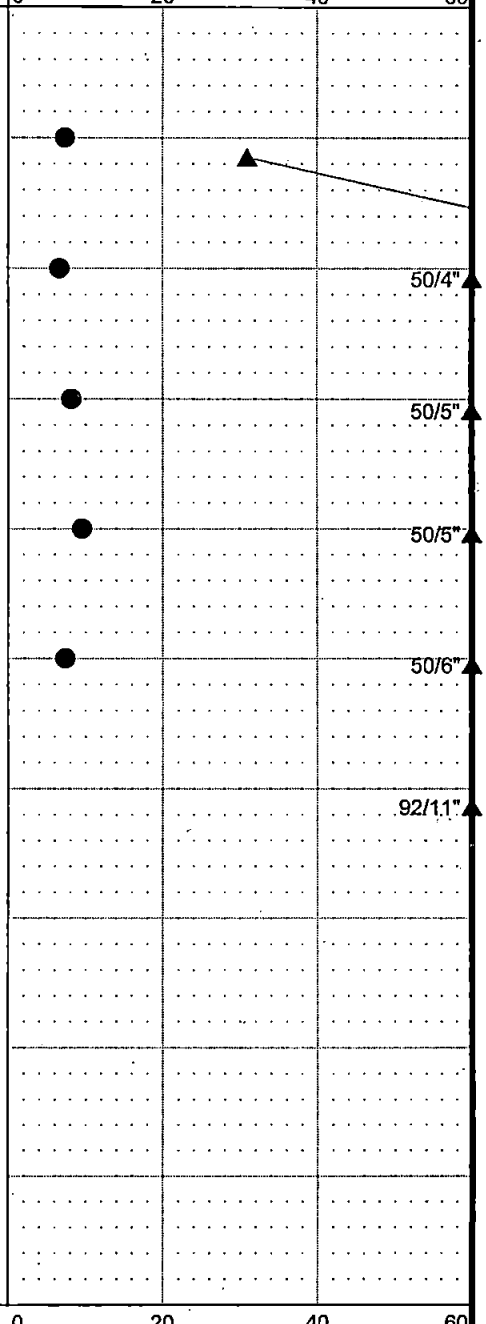
FIG. A-11

Log: ACT Rev: ACT Typ: LKD

MASTER LOG2 21-09644.GPJ SHAN WIL.GDT 9/28/06

SOIL DESCRIPTION Surface Elev.: Approx. 156.0 Ft. Datum:	Depth, Ft.	Symbol	PID, ppm	Samples	Ground Water Depth, Ft.
Medium dense to dense, dark brown, gravelly, silty SAND; dry to moist; grass at surface, scattered organics; (Weathered Glacial Till or Fill) SM.			5	1	
Very dense, light gray-brown, slightly gravelly to gravelly, silty SAND; moist to wet; layer of fine to coarse sand, trace of silt at 30 feet; hydrocarbon odor below 25 feet, PID = 600+ ppm (30 - 31.4 feet); (Glacial Till) SM.	8.0		0	2	
			0	3	
				4	
				5	
BOTTOM OF BORING COMPLETED 3/4/2002	31.4		600	6	During Drilling ▽

Standard Penetration Resistance
(140 lb. weight, 30-inch drop)
▲ Blows per foot



NOTES:

1. Boring was terminated at 31.4 feet because field screening suggested the presence of petroleum hydrocarbon contamination.
2. Boring drilled using a hollow-stem auger.

LEGEND

* Sample Not Recovered
I Standard Penetration Test
▽ Ground Water Level ATD
● % Water Content
Plastic Limit ⊢●⊣ Liquid Limit
Natural Water Content

NOTES

1. The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual.
2. The discussion in the text of this report is necessary for a proper understanding of the nature of the subsurface maerials.
3. Groundwater level, if indicated above, is for the date specified and may vary.
4. Refer to KEY for explanation of symbols, codes, and definitions.
5. USCS designation is based on visual-manual classification and selected lab testing.

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LOG OF BORING B-16

January 2005 21-1-09644-002

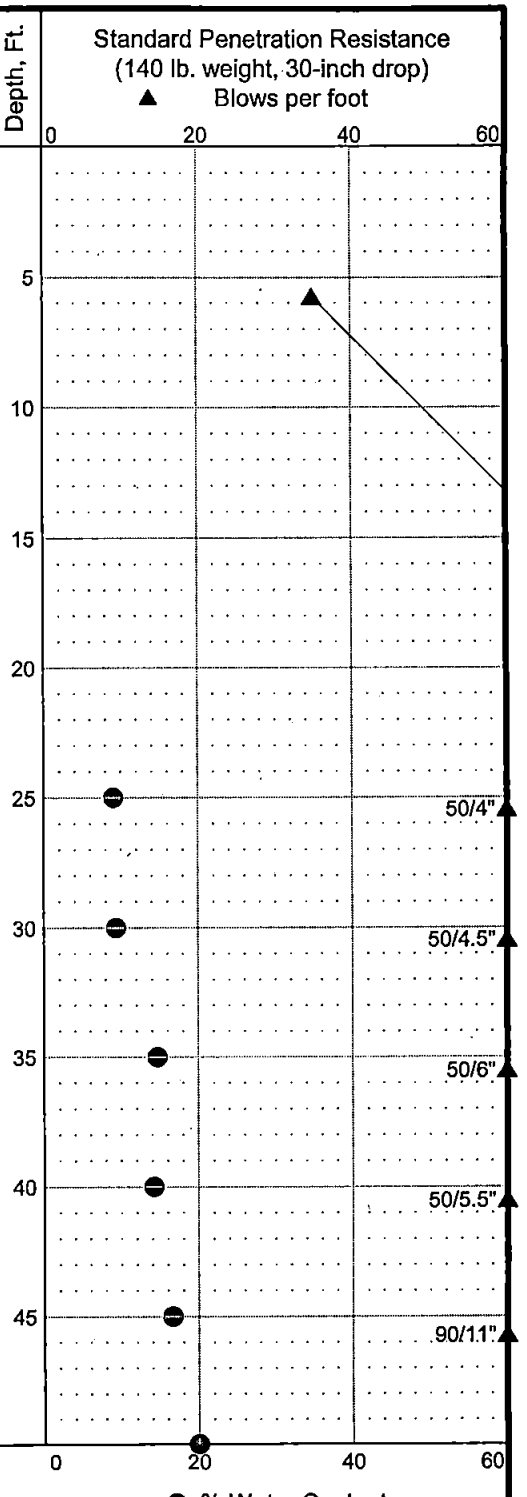
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FIG. A-12

MASTER LOG2 21-09644.GPJ SHAN WIL.GDT 9/28/06 Log: ACT Rev: ACT Typ: LKD

SOIL DESCRIPTION Surface Elev.: Approx. 156.0 Ft. Datum:	Depth, Ft.	Symbol	PID, ppm	Samples	Ground Water Depth, Ft.
Medium dense to dense, dark brown, gravelly, silty SAND; moist; grass at surface; SM.			0	1	
Very dense, light gray-brown, gravelly, slightly silty to silty SAND, trace of clay; moist; hydrocarbon odor below 28 feet; (based on boring B-16 and limited sampling in B-16A) (Weathered Glacial Till to Glacial Till) SM.	8.0		0	2	
Very dense, gray, silty, fine to medium SAND; moist; wet below 35 feet; strong hydrocarbon odor (30.6 to 43 feet), slight hydrocarbon odor (43 to 56 feet); (Advance Outwash) SM.	30.6		1200 323	3 4	During Drilling ▽
Very dense, gray, slightly silty, gravelly SAND; moist to wet; (Advance Outwash) SP-SM.	38.0		44	5	
Very dense, gray, silty, fine SAND and fine sandy SILT; moist to wet; (Advance	48.0		0	6	

CONTINUED NEXT SHEET



LEGEND

* Sample Not Recovered
I Standard Penetration Test
▽ Ground Water Level ATD
● % Water Content
Plastic Limit ⊢●⊣ Liquid Limit
Natural Water Content

NOTES

1. The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual.
2. The discussion in the text of this report is necessary for a proper understanding of the nature of the subsurface maerials.
3. Groundwater level, if indicated above, is for the date specified and may vary.
4. Refer to KEY for explanation of symbols, codes, and definitions.
5. USCS designation is based on visual-manual classification and selected lab testing.

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LOG OF BORING B-16A

January 2005 21-1-09644-011

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FIG. A-13
Sheet 1 of 2

Log: ACT Rev: ACT Typ: LKD
MASTER_LOG2 21-09644.GPJ SHAN WIL.GDT 9/28/06

SOIL DESCRIPTION Surface Elev.: Approx. 156.0 Ft. Datum:	Depth, Ft.	Symbol	PID, ppm	Samples	Ground Water	Depth, Ft.	Standard Penetration Resistance (140 lb. weight, 30-inch drop) ▲ Blows per foot
Outwash) SM/ML.			0	7			50/6"
- grading to slightly silty, fine to medium SAND; 3 feet of heave in auger at 55 feet	56.0		0	8		55	74/11"
Hard, gray, laminated, silty CLAY and clayey SILT, trace of sand; moist; scattered to numerous silty, fine sand partings and seams, wet; (Glaciolacustrine Deposits) CL/ML.			0	9		60	50/5"
- began mud-rotary drilling at 60 feet			0	10		65	50/6"
BOTTOM OF BORING COMPLETED 5/6/2002	70.4			11		70	50/4.5"
						75	
						80	
						85	
						90	
						95	

0 20 40 60

NOTES:

1. Boring drilled to 60 feet with hollow-stem auger. Mud-rotary was used to 70.4 feet. Lost mud circulation through auger bolt holes. Abandoned hole. Will redrill as boring B-16B.
2. Driller chose to remove all the augers before backfilling hole. Hole collapsed up to 15 feet.

LEGEND

* Sample Not Recovered
Standard Penetration Test
▽ Ground Water Level ATD
● % Water Content
Plastic Limit ⊢●⊣ Liquid Limit
Natural Water Content

NOTES

1. The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual.
2. The discussion in the text of this report is necessary for a proper understanding of the nature of the subsurface maerials.
3. Groundwater level, if indicated above, is for the date specified and may vary.
4. Refer to KEY for explanation of symbols, codes, and definitions.
5. USCS designation is based on visual-manual classification and selected lab testing.

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LOG OF BORING B-16A

January 2005 21-1-09644-011

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FIG. A-13
Sheet 2 of 2

MASTER LOG2 21-09644.GPJ SHAN WIL.GDT 9/28/06 Log: ACT Rev: ACT Typ: LKD

SOIL DESCRIPTION Surface Elev.: Approx. 156.0 Ft. Datum:	Depth, Ft.	Symbol	Samples	Ground Water Depth, Ft.	Standard Penetration Resistance (140 lb. weight, 30-inch drop) ▲ Blows per foot 0 20 40 60
Boring drilled down to 75 feet prior to sampling. This boring is a continuation of boring B-16A.					5 10 15 20 25 30 35 40 45
CONTINUED NEXT SHEET					0 20 40 60

LEGEND

* Sample Not Recovered

I Standard Penetration Test

● % Water Content

Plastic Limit ├─●─┤ Liquid Limit

Natural Water Content

NOTES

1. The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual.
2. The discussion in the text of this report is necessary for a proper understanding of the nature of the subsurface maerials.
3. Groundwater level, if indicated above, is for the date specified and may vary.
4. Refer to KEY for explanation of symbols, codes, and definitions.
5. USCS designation is based on visual-manual classification and selected lab testing.

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LOG OF BORING B-16B

January 2005 21-1-09644-011

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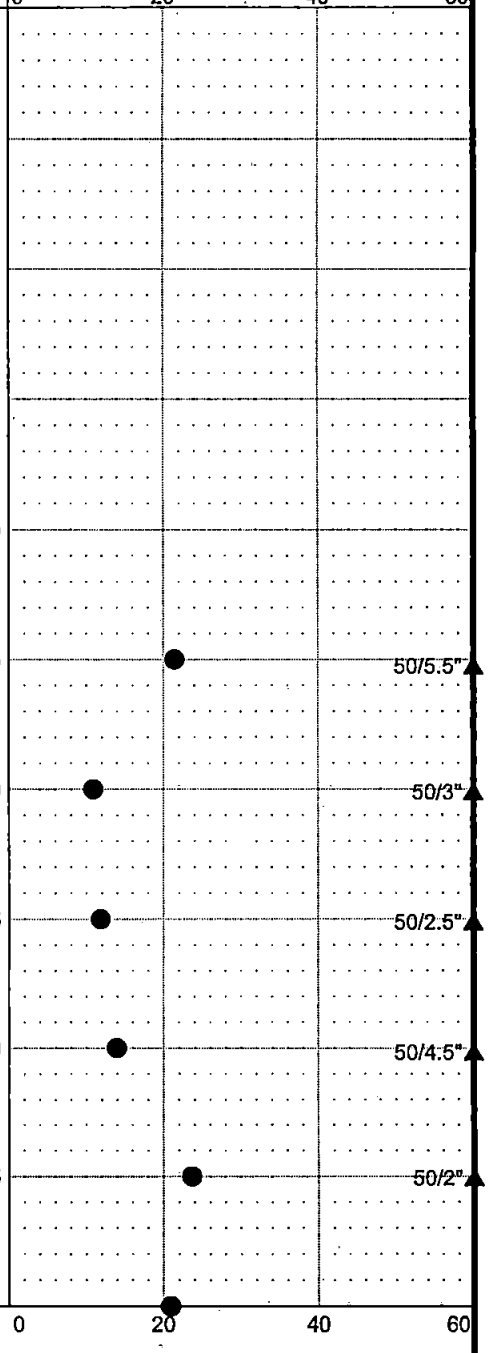
FIG. A-14
Sheet 1 of 3

MASTER LOG2 21-09644.GPJ SHAN WIL.GDT 9/28/06 Log: ACT Rev: ACT Typ: LKD

SOIL DESCRIPTION Surface Elev.: Approx. 156.0 Ft. Datum:	Depth, Ft.	Symbol	Samples	Ground Water Depth, Ft.
Very dense, gray, silty, fine SAND and fine sandy SILT; wet to moist; (Glacial Outwash) SM.	73.0		1	
Very dense, gray, slightly gravelly, slightly silty to silty SAND; moist; (Glacial Outwash) SM/SW-SM.	83.0		2 3	
Very dense, gray, slightly silty, fine to medium SAND; moist; (Glacial Outwash) SP-SM.	88.0		4	
Hard, gray, slightly fine sandy to fine sandy, clayey SILT; wet; (Glaciolacustrine Deposits) ML.	93.0		5	

CONTINUED NEXT SHEET

Standard Penetration Resistance
(140 lb. weight, 30-inch drop)
▲ Blows per foot



LEGEND

* Sample Not Recovered

I Standard Penetration Test

● % Water Content

Plastic Limit ⊢●⊣ Liquid Limit

Natural Water Content

NOTES

1. The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual.
2. The discussion in the text of this report is necessary for a proper understanding of the nature of the subsurface maerials.
3. Groundwater level, if indicated above, is for the date specified and may vary.
4. Refer to KEY for explanation of symbols, codes, and definitions.
5. USCS designation is based on visual-manual classification and selected lab testing.

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LOG OF BORING B-16B

January 2005 21-1-09644-011

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FIG. A-14
Sheet 2 of 3

MASTER LOG2 21-09644.GPJ SHAN WIL.GDT 9/28/06 Log: ACT Rev: ACT Typ: LKD

SOIL DESCRIPTION Surface Elev.: Approx. 156.0 Ft. Datum:	Depth, Ft.	Symbol	Samples	Ground Water Depth, Ft.	Standard Penetration Resistance (140 lb. weight, 30-inch drop) ▲ Blows per foot 0 20 40 60
	100.4		6		50/5" ▲
BOTTOM OF BORING COMPLETED 5/10/2002					
NOTES: 1. Boring drilled by installing casing to 5 feet and using mud-rotary techniques. 2. Drilled to 80 feet on first day. Drilled to 95 feet on second day; site use limitations prevented further sampling and drilling. 3. On third day, driller sampled at 95 feet, then had to redrill from 25 to 95 feet when the borehole caved in. Hole completed on third day.					
				105	
				110	
				115	
				120	
				125	
				130	
				135	
				140	
				145	

0 20 40 60

LEGEND

* Sample Not Recovered

I Standard Penetration Test

● % Water Content

Plastic Limit ⊢●⊣ Liquid Limit

Natural Water Content

NOTES

1. The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual.
2. The discussion in the text of this report is necessary for a proper understanding of the nature of the subsurface maerials.
3. Groundwater level, if indicated above, is for the date specified and may vary.
4. Refer to KEY for explanation of symbols, codes, and definitions.
5. USCS designation is based on visual-manual classification and selected lab testing.

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LOG OF BORING B-16B

January 2005 21-1-09644-011

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FIG. A-14
Sheet 3 of 3

MASTER LOG2 21-09644.GPJ SHAN WIL.GDT 9/28/06 Log: ACT Rev: ACT Typ: LKD

SOIL DESCRIPTION Surface Elev.: Approx. 151.0 Ft. Datum:	Depth, Ft.	Symbol	PID, ppm	Samples	Ground Water	Depth, Ft.	Standard Penetration Resistance (140 lb. weight, 30-inch drop) ▲ Blows per foot
Brown, slightly gravelly to gravelly, slightly silty to silty, fine SAND; moist; (Fill) SP-SM/SM. (Based on drill cuttings.)	4.0						
Very dense, gray-brown, slightly gravelly to gravelly, silty, fine SAND; moist; minor iron-oxide staining; (Glacial Till) SM.			0	1		5	
			0	2		10	50/5"
			0	3		15	50/5"
Very dense, gray-brown, silty, fine SAND, trace of gravel; moist; (Advance Outwash) SM.	20.1		0	4		20	50/6"
Very dense, gray-brown, slightly gravelly to gravelly, slightly silty, fine to medium SAND; moist; (Advance Outwash) SP-SM.	26.0		0	5		25	60
- wet below 32.5 feet			0	6		30	50/3"
			0	7	7/3/2002 drilling	35	50/5.5"
Very dense, gray-brown, slightly gravelly, silty SAND interbedded with hard, brown, silty CLAY below 43 feet; moist to wet; (Advance Outwash) SM/CL.	38.0		0	8		40	75/11"
			0	9		45	50/6"
BOTTOM OF BORING COMPLETED 6/21/2002 NOTE: Boring drilled using hollow-stem auger technique.	50.5		0	10		50	50/5.5"
						55	

0 20 40 60

LEGEND

- * Sample Not Recovered
- 3.25" O.D. Split Spoon Sample
- Standard Penetration Test
- Piezometer Screen and Sand Filter
- Bentonite-Cement Grout
- Bentonite Chips/Pellets
- Bentonite Grout
- Ground Water Level ATD
- Ground Water Level in Well

● % Water Content

Plastic Limit ⊢●⊣ Liquid Limit

Natural Water Content

NOTES

1. The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual.
2. The discussion in the text of this report is necessary for a proper understanding of the nature of the subsurface maerials.
3. Groundwater level, if indicated above, is for the date specified and may vary.
4. Refer to KEY for explanation of symbols, codes, and definitions.
5. USCS designation is based on visual-manual classification and selected lab testing.

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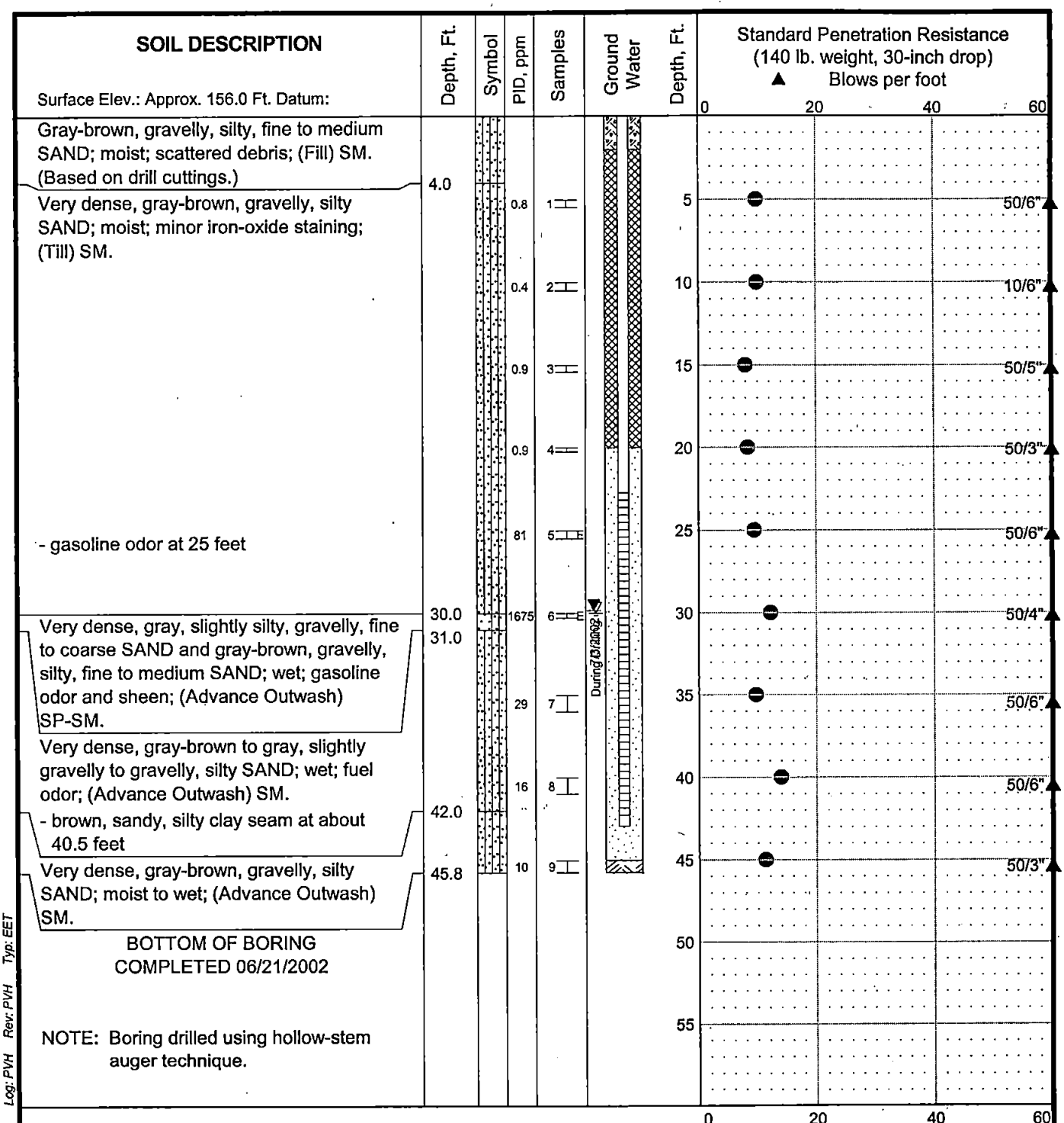
LOG OF BORING B-17

August 2002 21-1-09644-006

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FIG. A-15

MASTER LOG2 21-09644.GPJ SHAN WIL.GDT 9/28/06 Log: PVH Rev: PVH Typ: EET



LEGEND

- * Sample Not Recovered
- E Environmental Sample Obtained
- Standard Penetration Test
- Piezometer Screen and Sand Filter
- Bentonite-Cement Grout
- Bentonite Chips/Pellets
- Bentonite Grout
- Ground Water Level ATD
- Ground Water Level In Well
- ● % Water Content
- Plastic Limit ⊢●⊣ Liquid Limit
- Natural Water Content

NOTES

1. The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual.
2. The discussion in the text of this report is necessary for a proper understanding of the nature of the subsurface maerials.
3. Groundwater level, if indicated above, is for the date specified and may vary.
4. Refer to KEY for explanation of symbols, codes, and definitions.
5. USCS designation is based on visual-manual classification and selected lab testing.

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LOG OF BORING B-18

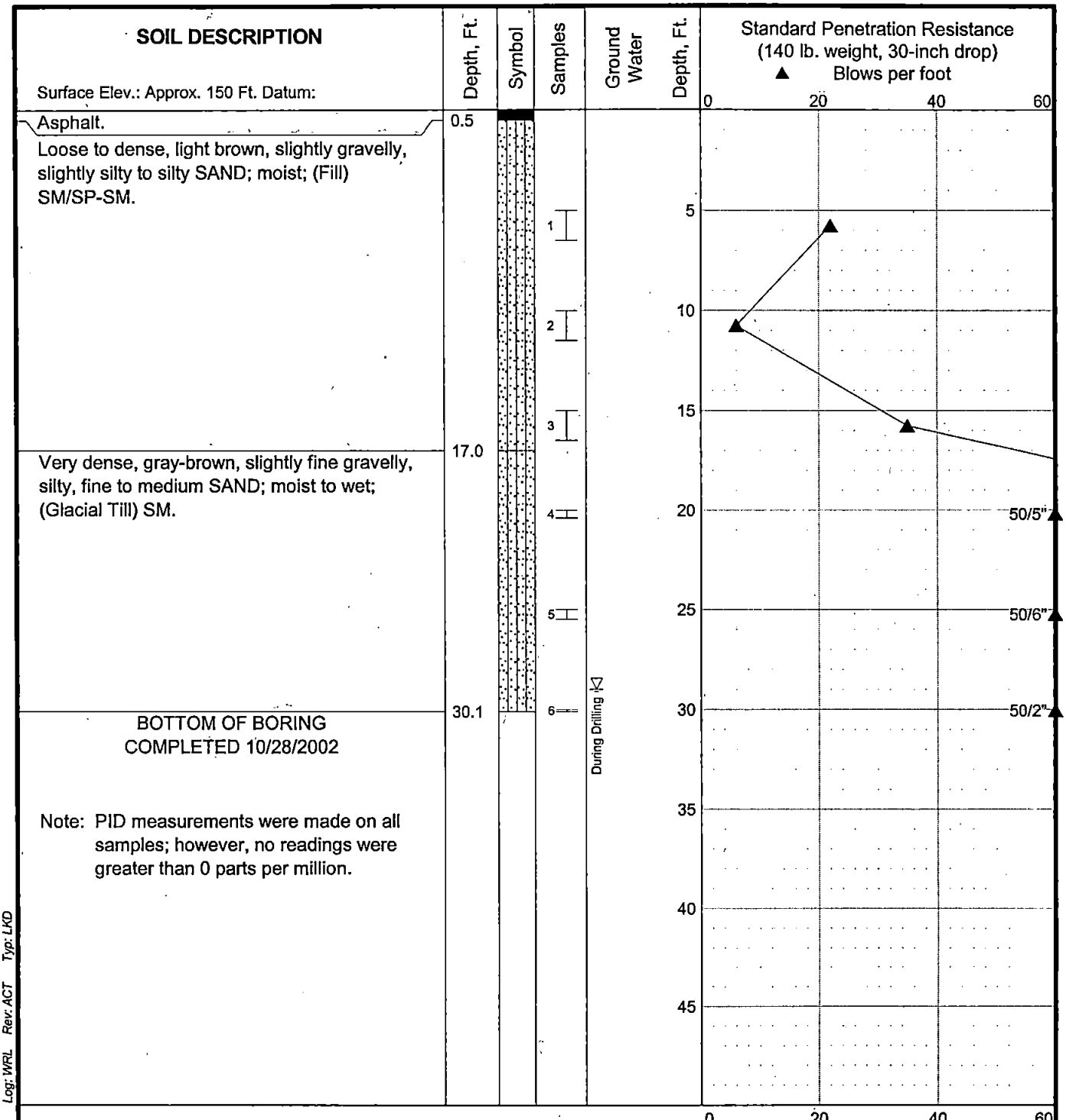
August 2002 21-1-09644-006

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FIG. A-16

Log: PVH Rev: PVH Typ: EET

MASTER_LOG2 21-09644.GPJ SHAN_WIL.GDT 9/28/06



LEGEND

* Sample Not Recovered

Standard Penetration Test

Ground Water Level ATD

Plastic Limit — Liquid Limit

Natural Water Content

NOTES

1. The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual.
2. The discussion in the text of this report is necessary for a proper understanding of the nature of the subsurface maerials.
3. Groundwater level, if indicated above, is for the date specified and may vary.
4. Refer to KEY for explanation of symbols, codes, and definitions.
5. USCS designation is based on visual-manual classification and selected lab testing.

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LOG OF BORING B-19

May 2003 21-1-09644-005

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FIG. A-17

MASTER LOG FINE 21-09644.GPJ SHAN WIL.GDT 10/4/06 Log: WRL Rev: ACT Typ: LKD

SOIL DESCRIPTION Surface Elev.: Approx. 150.0 Ft. Datum:	Depth, Ft.	Symbol	Samples	Ground Water Depth, Ft.	Standard Penetration Resistance (140 lb. weight, 30-inch drop) ▲ Blows per foot
Concrete.	0.5				
Hard, light brown, slightly clayey, sandy SILT, trace of fine gravel interbedded with layers of silty, fine to medium SAND; moist; (Weathered Till) ML/SM.	6.0		1	None Observed During Drilling	50/4"
Very dense, brown-gray, silty SAND, trace of gravel; moist to wet; (Glacial Till) SM.			2		50/5.5"
			3		50/5"
			4		50/6"
			5		50/4"
Vey dense, gray to dark gray, silty, fine to medium SAND, trace of fine gravel interbedded with seams of fine sandy SILT; moist; (Advance Outwash) SM/ML.	26.0		6		50/5"
BOTTOM OF BORING COMPLETED 10/28/2002	30.9				

Note: PID measurements were made on all samples; however, no readings were greater than 0 parts per million.

Depth scale: 5, 10, 15, 20, 25, 30, 35, 40, 45

Standard Penetration Resistance scale: 0, 20, 40, 60

LEGEND

* Sample Not Recovered

I Standard Penetration Test

● % Water Content

Plastic Limit ⊢●⊣ Liquid Limit

Natural Water Content

NOTES

1. The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual.
2. The discussion in the text of this report is necessary for a proper understanding of the nature of the subsurface maerials.
3. Groundwater level, if indicated above, is for the date specified and may vary.
4. Refer to KEY for explanation of symbols, codes, and definitions.
5. USCS designation is based on visual-manual classification and selected lab testing.

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LOG OF BORING B-20

May 2003 21-1-09644-005

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FIG. A-18

MASTER LOG2 21-09644.GPJ SHAN WIL.GDT 9/28/06 Log: WRL Rev: ACT Typ: LKD

SOIL DESCRIPTION Surface Elev.: Approx. 136.0 Ft. Datum:	Depth, Ft.
Very dense, brown, gravelly, silty, fine to medium SAND to silty, fine to medium sandy GRAVEL; moist; trace of iron-oxide stains; (Till) SM.	
Very dense, brownish-gray, slightly silty to slightly gravelly, silty, fine to coarse and fine to medium SAND; moist; trace of peat at 17.6 feet and slight gasoline-like odor; (Advance Outwash?) SM/SP-SM.	14.0
Very dense, gray, slightly silty to silty, gravelly to slightly gravelly, fine to medium and fine to coarse SAND; wet; SM/SP-SM.	21.0
Very dense, gray, interbedded, fine sandy SILT; moist to wet and clayey SILT; laminated; moist; common fine sand seams; moist; ML/SM.	28.2
BOTTOM OF BORING COMPLETED 11/14/2002	38.4

Symbol | Samples | Ground Water | Depth, Ft.

During Drilling 11/14/2002

Standard Penetration Resistance
(140 lb. weight, 30-inch drop)
▲ Blows per foot

Sample	Blows per foot
1	50/3"
2	50/3.5"
3	87/10.5"
4	50/3"
5	50/5"
6	50/5"
7	50/4.5"

0 20 40 60

5 10 15 20 25 30 35 40 45

0 20 40 60

LEGEND

* Sample Not Recovered
Standard Penetration Test
Piezometer Screen and Sand Filter
Bentonite-Cement Grout
Bentonite Chips/Pellets
Bentonite Grout
Ground Water Level ATD
Ground Water Level in Well

● % Water Content
Plastic Limit ⊢●⊣ Liquid Limit
Natural Water Content

NOTES

1. The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual.
2. The discussion in the text of this report is necessary for a proper understanding of the nature of the subsurface maerials.
3. Groundwater level, if indicated above, is for the date specified and may vary.
4. Refer to KEY for explanation of symbols, codes, and definitions.
5. USCS designation is based on visual-manual classification and selected lab testing.

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LOG OF BORING MW-1

January 2005 21-1-09644-010

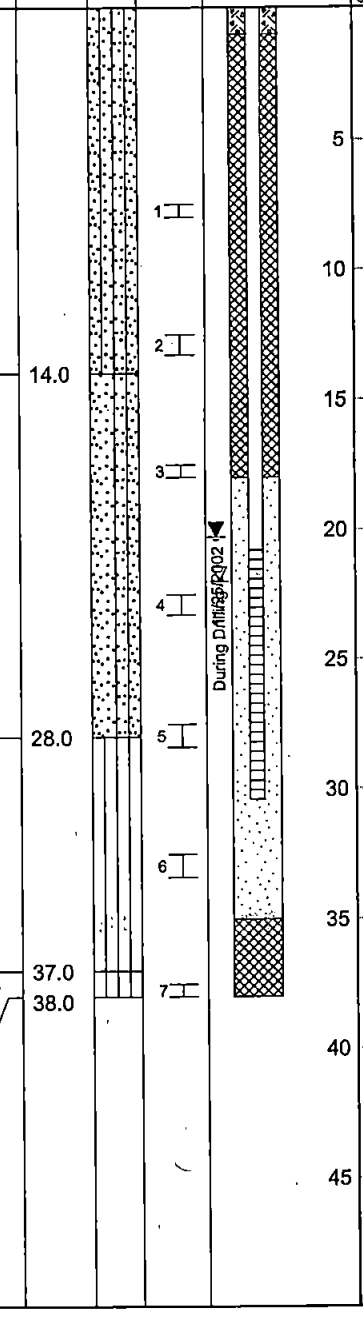
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FIG. A-19

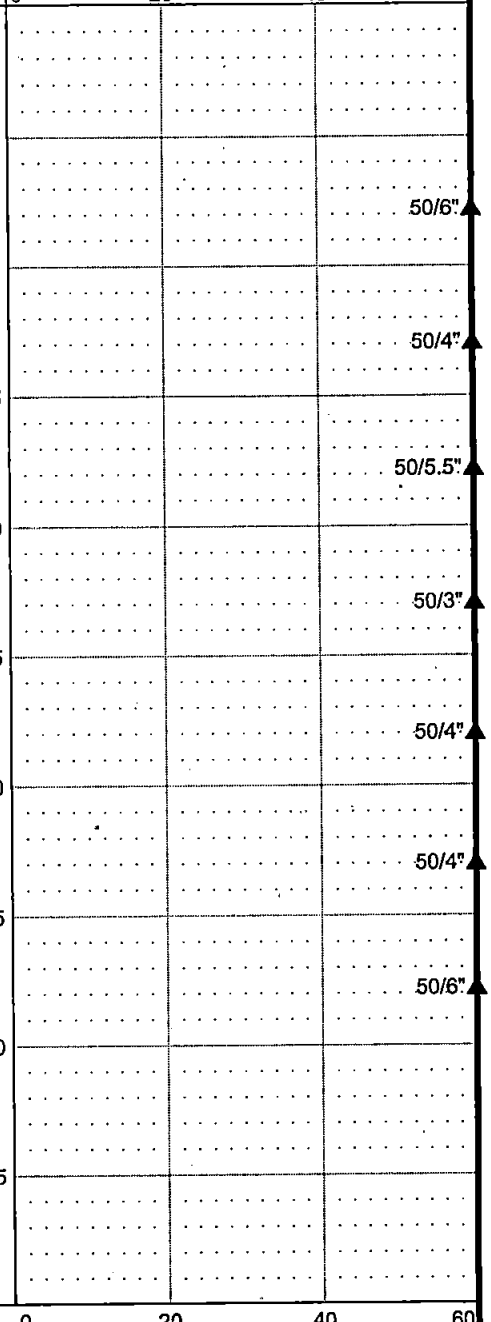
MASTER LOG2 21-09644.GPJ SHAN WIL.GDT 9/28/06 Log: PJP Rev: PVH Typ: LKD

SOIL DESCRIPTION Surface Elev.: Approx. 138.0 Ft. Datum:	Depth, Ft.
Very dense, brown, slightly gravelly to gravelly, silty, fine SAND; moist; scattered cobbles; compact; (Till) SM.	
Very dense, slightly silty to silty, fine to coarse gravelly, fine to medium and fine to coarse SAND; moist; distinct grain size change for sand at 22 feet; wet below about 22 feet; SP-SM.	14.0
Hard, gray, interbedded, clayey SILT and SILT; moist to wet; common sand seams; ML.	28.0
Hard, gray, laminated, clayey SILT and SILT; moist; scattered sand partings; ML.	37.0 38.0
BOTTOM OF BORING COMPLETED 11/13/2002	

Symbol, Samples, Ground Water, Depth, Ft.



Standard Penetration Resistance
(140 lb. weight, 30-inch drop)
▲ Blows per foot



LEGEND

- * Sample Not Recovered
- Standard Penetration Test
- Piezometer Screen and Sand Filter
- Bentonite-Cement Grout
- Bentonite Chips/Pellets
- Bentonite Grout
- Ground Water Level ATD
- Ground Water Level in Well

● % Water Content

Plastic Limit ⊢●⊣ Liquid Limit

Natural Water Content

NOTES

1. The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual.
2. The discussion in the text of this report is necessary for a proper understanding of the nature of the subsurface maerials.
3. Groundwater level, if indicated above, is for the date specified and may vary.
4. Refer to KEY for explanation of symbols, codes, and definitions.
5. USCS designation is based on visual-manual classification and selected lab testing.

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LOG OF BORING MW-2

January 2005 21-1-09644-010

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FIG. A-20

MASTER LOG2 21-09644.GPJ SHAN WIL.GDT 9/28/06 Log: PJP Rev: PVH Typ: LKD

SOIL DESCRIPTION Surface Elev.: Approx. 156.5 Ft. Datum:	Depth, Ft.	Symbol	Samples	Ground Water	Depth, Ft.	Standard Penetration Resistance (140 lb. weight, 30-inch drop) ▲ Blows per foot
Loose, brown-gray, gravelly, fine to coarse SAND, trace of silt; moist; (Fill) SW.						
Very dense, brown, gravelly, silty SAND and sandy SILT; moist; scattered cobbles; compact; (Till) SM.	5.0		1		5	50/5.5"
			2		10	50/6"
			3		15	50/3"
			4		20	50/5"
Very dense, gray-brown, silty, gravelly, fine SAND; moist; faint gasoline odor; (Outwash) SM.	28.0		5		25	50/5"
Very dense, gray-brown, slightly silty, gravelly, fine to medium SAND; moist; faint gasoline odor; SP-SM. - wet below 37 feet	34.0		6		30	50/5"
			7	11/30/2002 During Drilling	35	50/6"
			8		40	50/5"
Very dense, gray, sandy SILT; moist to wet; ML	48.0 48.5		9		45	50/6"
CONTINUED NEXT SHEET						

0 20 40 60

LEGEND

- * Sample Not Recovered
- I Standard Penetration Test
- Piezometer Screen and Sand Filter
- Bentonite-Cement Grout
- Bentonite Chips/Pellets
- Bentonite Grout
- Ground Water Level ATD
- Ground Water Level in Well

● % Water Content

Plastic Limit ⊢●⊣ Liquid Limit

Natural Water Content

NOTES

1. The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual.
2. The discussion in the text of this report is necessary for a proper understanding of the nature of the subsurface maerials.
3. Groundwater level, if indicated above, is for the date specified and may vary.
4. Refer to KEY for explanation of symbols, codes, and definitions.
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FIG. A-21
Sheet 1 of 2

Log: PJP Rev: PVH . Typ: LKD

MASTER LOG2 21-09644.GPJ SHAN WIL.GDT 9/28/06

SOIL DESCRIPTION Surface Elev.: Approx. 156.5 Ft. Datum:	Depth, Ft.	Symbol	Samples	Ground Water Depth, Ft.	Standard Penetration Resistance (140 lb. weight, 30-inch drop) ▲ Blows per foot 0 20 40 60
BOTTOM OF BORING COMPLETED 11/15/2002					55 60 65 70 75 80 85 90 95

0 20 40 60

● % Water Content

Plastic Limit ⊢●⊣ Liquid Limit

Natural Water Content

LEGEND

* Sample Not Recovered	Piezometer Screen and Sand Filter
I Standard Penetration Test	Bentonite-Cement Grout
	Bentonite Chips/Pellets
	Bentonite Grout
	▽ Ground Water Level ATD
	▼ Ground Water Level in Well

NOTES

1. The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual.
2. The discussion in the text of this report is necessary for a proper understanding of the nature of the subsurface maerials.
3. Groundwater level, if indicated above, is for the date specified and may vary.
4. Refer to KEY for explanation of symbols, codes, and definitions.
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LOG OF BORING MW-3

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FIG. A-21
Sheet 2 of 2

Log: PJP Rev: PVH Typ: LKD

MASTER LOG2 21-09644.GPJ SHAN WIL.GDT 9/28/06

SOIL DESCRIPTION Surface Elev.: Approx. 157.0 Ft. Datum:	Depth, Ft.	Symbol	Samples	Ground Water	Depth, Ft.	Standard Penetration Resistance (140 lb. weight, 30-inch drop) ▲ Blows per foot 0 20 40 60
Concrete sidewalk.	0.3					
Gray-brown, gravelly, fine to coarse SAND, trace to slightly silty; moist; concrete and metal debris at 4.5 to 5 feet; (Fill) SW.						
Very dense, gray-brown, gravelly, fine sandy SILT/gravelly, silty, fine SAND; moist; scattered cobbles; compact; (Till) ML/SM.	5.0		1 G		5	
					10	
					15	
			2 G		20	
					25	
Very dense, brown-gray, silty, fine SAND; moist; (Advance Outwash) SM.	29.0		3 G		30	
Very dense, gray, gravelly, fine to medium SAND; moist; gasoline odor; (Advance Outwash) SP.	33.0		4 G		35	
- Wet below about 39 feet.			5 G	During Drilling 10/25/2004	40	
- Little odor below about 43 feet.					45	
Interbedded hard, brown-gray to gray, gravelly, clayey, sandy SILT and very dense, slightly gravelly, silty, fine SAND; moist to wet; no odor; ML/SM.	46.0		6 G			
CONTINUED NEXT SHEET						0 20 40 60

LEGEND

- * Sample Not Recovered
- G Grab Sample
- Piezometer Screen and Sand Filter
- Bentonite-Cement Grout
- Bentonite Chips/Pellets
- Bentonite Grout
- Ground Water Level ATD
- Ground Water Level in Well
- ● % Water Content
- Plastic Limit ⊢●⊣ Liquid Limit
- Natural Water Content

NOTES

1. The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual.
2. The discussion in the text of this report is necessary for a proper understanding of the nature of the subsurface maerials.
3. Groundwater level, if indicated above, is for the date specified and may vary.
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LOG OF BORING PW-1

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FIG. A-22
Sheet 1 of 2

Log: PVH Rev: PVH Typ: LKD
MASTER LOG2 21-09644.GPJ SHAN WIL.GDT 9/28/06

SOIL DESCRIPTION Surface Elev.: Approx. 157.0 Ft. Datum:	Depth, Ft.	Symbol	Samples	Ground Water	Depth, Ft.	Standard Penetration Resistance (140 lb. weight, 30-inch drop) ▲ Blows per foot 0 20 40 60
Hard, gray, silty CLAY, trace of gravel; moist; no odor; CL.	53.0		7 G		55	
BOTTOM OF BORING COMPLETED 11/5/2002	57.2				60	
					65	
					70	
					75	
					80	
					85	
					90	
					95	
						0 20 40 60

LEGEND

- * Sample Not Recovered
- G Grab Sample
- Piezometer Screen and Sand Filter
- Bentonite-Cement Grout
- Bentonite Chips/Pellets
- Bentonite Grout
- ▽ Ground Water Level ATD
- ▼ Ground Water Level in Well

● % Water Content

Plastic Limit ⊢●⊣ Liquid Limit

Natural Water Content

NOTES

1. The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual.
2. The discussion in the text of this report is necessary for a proper understanding of the nature of the subsurface maerials.
3. Groundwater level, if indicated above, is for the date specified and may vary.
4. Refer to KEY for explanation of symbols, codes, and definitions.
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LOG OF BORING PW-1

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FIG. A-22
Sheet 2 of 2

MASTER LOG2 21-09644.GPJ SHAN WIL.GDT 9/28/06 Log: PVH Rev: PVH Typ: LKD

SOIL DESCRIPTION Surface Elev.: Approx. 157.0 Ft. Datum:	Depth, Ft.	Symbol	Samples	Ground Water	Depth, Ft.
Concrete sidewalk.	0.3				
Brown-gray, gravelly, fine to coarse SAND, trace to slightly silty; moist; (Fill) SW.					
Very dense, gray-brown, gravelly, silty, fine and fine to medium SAND; moist; scattered cobbles; compact; (Till) SM.	4.0				
Very dense, gray-brown, gravelly, silty, fine SAND/gravelly, sandy SILT; moist; scattered cobbles and boulders; compact; (Till) ML/SM.	10.0		1 G		
Very dense, gray-brown, gravelly, fine to medium SAND, trace of silt; moist; slight gasoline odor; (Advance Outwash) SP.	28.0		2 G		
Very dense, gray, slightly gravelly, silty, fine to medium SAND; moist; strong gasoline odor; (Advance Outwash) SM.	32.0				
Very dense, gray, gravelly, fine to medium SAND, trace of silt; moist; strong gasoline odor; (Advance Outwash) SP. - Wet below about 39 feet.	35.0		3 G	During Drilling 1/26/2005	
Interbedded hard, gray-brown, slightly gravelly, clayey, sandy SILT and very dense, slightly gravelly, silty, fine to medium SAND; wet; little to no odor below about 48 feet; ML/SM.	44.0		4 G		

CONTINUED NEXT SHEET

Standard Penetration Resistance
(140 lb. weight, 30-inch drop)
▲ Blows per foot

0 20 40 60

5 10 15 20 25 30 35 40 45

0 20 40 60

LEGEND

* Sample Not Recovered
G Grab Sample
Piezometer Screen and Sand Filter
Bentonite-Cement Grout
Bentonite Chips/Pellets
Bentonite Grout
Ground Water Level ATD
Ground Water Level in Well

● % Water Content
Plastic Limit ⊢●⊣ Liquid Limit
Natural Water Content

NOTES

1. The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual.
2. The discussion in the text of this report is necessary for a proper understanding of the nature of the subsurface maerials.
3. Groundwater level, if indicated above, is for the date specified and may vary.
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LOG OF BORING PW-2

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FIG. A-23
Sheet 1 of 2

Log: PVH Rev: PVH Typ: LKD

MASTER LOG2 21-09644.GPJ SHAN WIL.GDT 9/28/06

SOIL DESCRIPTION Surface Elev.: Approx. 157.0 Ft. Datum:	Depth, Ft.	Symbol	Samples	Ground Water	Depth, Ft.	Standard Penetration Resistance (140 lb. weight, 30-inch drop) ▲ Blows per foot 0 20 40 60
Hard, gray, trace to slightly gravelly, silty CLAY/clayey SILT; moist; common seams of fine to medium sand; wet; CL/ML.	54.0				55	
	59.0		5 G		60	
BOTTOM OF BORING COMPLETED 11/5/2002					65	
					70	
					75	
					80	
					85	
					90	
					95	
						0 20 40 60

LEGEND

- * Sample Not Recovered
- G Grab Sample
- Piezometer Screen and Sand Filter
- Bentonite-Cement Grout
- Bentonite Chips/Pellets
- Bentonite Grout
- Ground Water Level ATD
- Ground Water Level In Well

● % Water Content

Plastic Limit ⊢●⊣ Liquid Limit

Natural Water Content

NOTES

1. The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual.
2. The discussion in the text of this report is necessary for a proper understanding of the nature of the subsurface maerials.
3. Groundwater level, if indicated above, is for the date specified and may vary.
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FIG. A-23
Sheet 2 of 2

Log: PVH Rev: PVH Typ: LKD

MASTER LOG2 21-09644.GPJ SHAN WIL.GDT 9/28/06

SOIL DESCRIPTION Surface Elev.: Approx. 155.0 Ft. Datum:	Depth, Ft.	Symbol	Samples	Ground Water	Depth, Ft.	Standard Penetration Resistance (140 lb. weight, 30-inch drop) ▲ Blows per foot 0 20 40 60
Concrete sidewalk.	0.3					
Gray-brown, gravelly, fine to coarse SAND, trace of silt; moist; (Fill) SW.	4.0					
Very dense, gray-brown, gravelly, sandy SILT/gravelly, silty, fine SAND; moist; scattered cobbles; compact; (Till) SM/ML.					5 10 15 20 25	
Very dense, gray-brown, slightly silty, gravelly, fine to medium SAND; moist; no odor; (Advance Outwash) SP-SM.	26.0					
Very dense, gray-brown, fine to medium SAND, trace of silt; moist; faint gasoline odor below about 35 feet; (Advance Outwash) SP.	31.0		1 G 2 G	During Drilling ▼	30 35	
Very dense, gray-brown, silty, gravelly, fine to medium SAND; wet; no odor; interbeds of moist, gray-brown, silty CLAY; moist; (Advance Outwash) SM.	40.0		3 G		40 45	
Very dense, gray-brown, fine to medium SAND, trace of silt and gravel; moist to wet; CONTINUED NEXT SHEET	48.0		4 G			

LEGEND

- * Sample Not Recovered
- G Grab Sample
- Piezometer Screen and Sand Filter
- Bentonite-Cement Grout
- Bentonite Chips/Pellets
- Bentonite Grout
- ▽ Ground Water Level ATD
- ▼ Ground Water Level in Well

● % Water Content

Plastic Limit ⊢●⊣ Liquid Limit

Natural Water Content

NOTES

1. The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual.
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LOG OF BORING PW-3

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FIG. A-24
Sheet 1 of 2

MASTER LOG2 21-09644.GPJ SHAN WIL.GDT 9/28/06 Log: PVH Rev: PVH Typ: LKD

SOIL DESCRIPTION Surface Elev.: Approx. 155.0 Ft. Datum:	Depth, Ft.	Symbol	Samples	Ground Water	Depth, Ft.	Standard Penetration Resistance (140 lb. weight, 30-inch drop) ▲ Blows per foot 0 20 40 60
(Advance Outwash) SP. Very dense, gray-brown, slightly gravelly, silty, fine SAND and sandy SILT; moist to wet; SM/ML.	51.0				55	
Hard, gray-brown, clayey SILT/silty CLAY; moist; with common silty sand seams; ML/CL.	54.0				60	
BOTTOM OF BORING COMPLETED 11/6/2002	58.0		5 G		65 70 75 80 85 90 95	

0 20 40 60

LEGEND

- * Sample Not Recovered
- G Grab Sample
- Piezometer Screen and Sand Filter
- Bentonite-Cement Grout
- Bentonite Chips/Pellets
- Bentonite Grout
- Ground Water Level ATD
- Ground Water Level in Well

● % Water Content

Plastic Limit ⊢●⊣ Liquid Limit

Natural Water Content

NOTES

1. The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual.
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3. Groundwater level, if indicated above, is for the date specified and may vary.
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LOG OF BORING PW-3

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FIG. A-24
Sheet 2 of 2

Log: PVH Rev: PVH Typ: LKD

MASTER LOG2 21-09644.GPJ SHAN_WIL.GDT 9/28/06

SOIL DESCRIPTION Surface Elev.: Approx. 152.5 Ft. Datum:	Depth, Ft.	Symbol	Samples	Ground Water	Depth, Ft.	Standard Penetration Resistance (140 lb. weight, 30-inch drop) ▲ Blows per foot 0 20 40 60
Concrete sidewalk.	0.3					
Brown-gray, gravelly, fine to coarse SAND, trace of silt; moist; (Fill) SW.	2.0					
Very dense, gray-brown, gravelly, silty, fine SAND/gravelly, sandy SILT; moist; scattered cobbles; compact; (Till) SM/ML.			1 G		5 10 15 20 25	
Very dense, gray-brown, slightly gravelly, slightly silty, fine to medium SAND; moist; (Advance Outwash) SP-SM.	28.0				30	
Very dense, brown-gray, slightly gravelly, fine to medium SAND, trace of silt; moist; (Advance Outwash) SP.	33.0		2 G	During Drilling 1/25/2002	35	
Very dense, gray-brown, slightly gravelly, slightly silty to silty, fine to medium SAND; wet; (Advance Outwash) SM/SP-SM.	41.0		3 G		40 45	
Hard, gray-brown, gravelly, silty CLAY; moist; with common moist, silty, fine to medium SAND seams; CL/SM.	47.0		4 G			
CONTINUED NEXT SHEET						0 20 40 60

LEGEND

- * Sample Not Recovered
- G Grab Sample
- Piezometer Screen and Sand Filter
- Bentonite-Cement Grout
- Bentonite Chips/Pellets
- Bentonite Grout
- Ground Water Level ATD
- Ground Water Level in Well

● % Water Content

Plastic Limit ⊢●⊣ Liquid Limit

Natural Water Content

NOTES

1. The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual.
2. The discussion in the text of this report is necessary for a proper understanding of the nature of the subsurface maerials.
3. Groundwater level, if indicated above, is for the date specified and may vary.
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LOG OF BORING PW-4

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FIG. A-25
Sheet 1 of 2

MASTER LOG2 21-09644.GPJ SHAN WIL.GDT 9/28/06 Log: PVH Rev: PVH Typ: LKD

SOIL DESCRIPTION Surface Elev.: Approx. 152.5 Ft. Datum:	Depth, Ft.	Symbol	Samples	Ground Water	Depth, Ft.	Standard Penetration Resistance (140 lb. weight, 30-inch drop) ▲ Blows per foot 0 20 40 60
Interbedded hard, gray-brown, silty CLAY and very dense, gray-brown, silty, fine SAND; moist to wet; CL/SM.	52.0		5 G		55	
- Clay is moist below about 55 feet.			6 G		60	
BOTTOM OF BORING COMPLETED 11/5/2002	57.0				65	
					70	
					75	
					80	
					85	
					90	
					95	
						0 20 40 60

LEGEND

- * Sample Not Recovered
- G Grab Sample
- Piezometer Screen and Sand Filter
- Bentonite-Cement Grout
- Bentonite Chips/Pellets
- Bentonite Grout
- Ground Water Level ATD
- Ground Water Level in Well

● % Water Content

Plastic Limit ⊢●⊣ Liquid Limit

Natural Water Content

NOTES

1. The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual.
2. The discussion in the text of this report is necessary for a proper understanding of the nature of the subsurface maerials.
3. Groundwater level, if indicated above, is for the date specified and may vary.
4. Refer to KEY for explanation of symbols, codes, and definitions.
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LOG OF BORING PW-4

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FIG. A-25
Sheet 2 of 2

Log: PVH Rev: PVH Typ: LKD

MASTER LOG2 21-09644.GPJ SHAN WIL.GDT 9/28/06

SOIL DESCRIPTION Surface Elev.: Approx. 151.5 Ft. Datum:	Depth, Ft.	Symbol	Samples	Ground Water	Depth, Ft.	Standard Penetration Resistance (140 lb. weight, 30-inch drop) ▲ Blows per foot
Concrete sidewalk.	0.3					
Gray-brown, gravelly, fine to coarse SAND, trace of silt; moist; (Fill) SW.	1.5					
Very dense, gray-brown, gravelly, silty, fine SAND and gravelly, sandy SILT; moist; scattered cobbles; compact; (Till) SM/ML.					5, 10, 15, 20, 25	
Very dense, gray-brown, silty, gravelly, fine SAND; moist; scattered cobbles; (Advance Outwash) SM.	28.0				30	
Very dense, slightly silty, gravelly, fine to medium SAND; moist; scattered cobbles; (Advance Outwash) SP-SM.	31.0					
Very dense, gray-brown, gravelly, fine to medium SAND; moist; scattered cobbles; (Advance Outwash) SP. - Wet below about 38 feet.	35.0		1 G	During Drilling 12/2002	35, 40	
Hard, gray-brown, silty CLAY; moist; with moist to wet interbeds of very dense, silty, fine to medium SAND; scattered gravel; CL/SM.	43.0		2 G		45	
CONTINUED NEXT SHEET						0 20 40 60

LEGEND

- * Sample Not Recovered
- G Grab Sample
- Piezometer Screen and Sand Filter
- Bentonite-Cement Grout
- Bentonite Chips/Pellets
- Bentonite Grout
- Ground Water Level ATD
- Ground Water Level in Well
- ● % Water Content
- Plastic Limit ⊢●⊣ Liquid Limit
- Natural Water Content

NOTES

1. The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual.
2. The discussion in the text of this report is necessary for a proper understanding of the nature of the subsurface maerials.
3. Groundwater level, if indicated above, is for the date specified and may vary.
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LOG OF BORING PW-5

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FIG. A-26
Sheet 1 of 2

MASTER LOG2 21-09644.GPJ SHAN WIL.GDT 9/28/06 Log: PVH Rev: PVH Typ: LKD

SOIL DESCRIPTION Surface Elev.: Approx. 151.5 Ft. Datum:	Depth, Ft.	Symbol	Samples	Ground Water	Depth, Ft.	Standard Penetration Resistance (140 lb. weight, 30-inch drop) ▲ Blows per foot 0 20 40 60
			3 G		55	
Hard, gray-brown, clayey SILT and silty CLAY; moist; scattered gravel and slickensides; common seams of moist to wet, silty, fine SAND with minor iron staining; ML/CL/SM.	58.0 59.5		4 G		60	
BOTTOM OF BORING COMPLETED 11/5/2002					65	
					70	
					75	
					80	
					85	
					90	
					95	
						0 20 40 60

LEGEND

- * Sample Not Recovered
- G Grab Sample
- Piezometer Screen and Sand Filter
- Bentonite-Cement Grout
- Bentonite Chips/Pellets
- Bentonite Grout
- Ground Water Level ATD
- Ground Water Level in Well

● % Water Content

Plastic Limit ⊢●⊣ Liquid Limit

Natural Water Content

NOTES

1. The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual.
2. The discussion in the text of this report is necessary for a proper understanding of the nature of the subsurface maerials.
3. Groundwater level, if indicated above, is for the date specified and may vary.
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LOG OF BORING PW-5

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FIG. A-26
Sheet 2 of 2

Log: PVH Rev: PVH Typ: LKD

MASTER LOG2 21-09644.GPJ SHAN_WIL.GDT 9/28/06

SOIL DESCRIPTION Surface Elev.: Approx. 151.0 Ft. Datum:	Depth, Ft.	Symbol	Samples	Ground Water	Depth, Ft.	Standard Penetration Resistance (140 lb. weight, 30-inch drop) ▲ Blows per foot 0 20 40 60
Brown, gravelly, silty, fine to medium SAND; moist; scattered debris; (Fill) SM.					5	
Very dense, gray-brown, gravelly, silty, fine to medium and fine SAND; moist; scattered cobbles; compact; (Till) SM.	6.0				10	
Very dense, gray-brown, slightly silty to silty, gravelly, fine to medium SAND; moist; SP-SM/SM (Till?).	22.0				15 20 25	
Very dense, gray-brown, slightly gravelly to gravelly, fine to medium SAND; trace of silt; moist; (Advance Outwash) SP. - Gray and wet below about 33 feet; gasoline odor at about 33 to 37 feet. - Possible SILT layer at 37 feet. - With SILT interbeds below about 43 feet.	28.0		1 G 2 G 3 G	During Drilling	30 35 40 45	
Hard, gray-brown, slightly gravelly, silty CLAY/clayey SILT; moist; laminated; no odor; with sandy SILT and silty SAND interbeds;	47.0					

CONTINUED NEXT SHEET

0 20 40 60

LEGEND

- * Sample Not Recovered
- G Grab Sample
- Piezometer Screen and Sand Filter
- Bentonite-Cement Grout
- Bentonite Chips/Pellets
- Bentonite Grout
- Ground Water Level ATD
- Ground Water Level in Well

● % Water Content

Plastic Limit ⊢●⊣ Liquid Limit

Natural Water Content

NOTES

1. The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual.
2. The discussion in the text of this report is necessary for a proper understanding of the nature of the subsurface maerials.
3. Groundwater level, if indicated above, is for the date specified and may vary.
4. Refer to KEY for explanation of symbols, codes, and definitions.
5. USCS designation is based on visual-manual classification and selected lab testing.

Snohomish County Campus
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LOG OF BORING PW-6

January 2005 21-1-09644-010

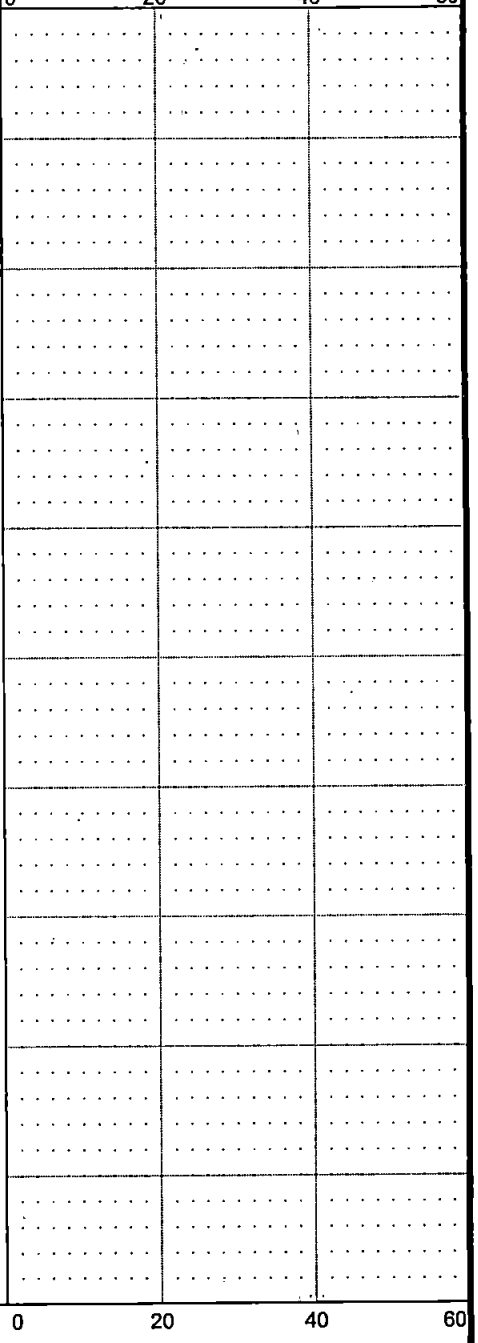
SHANNON & WILSON, INC.
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FIG. A-27
Sheet 1 of 2

MASTER LOG2 21-09644.GPJ SHAN WIL.GDT 9/28/06 Log: PVH Rev: PVH Typ: LKD

SOIL DESCRIPTION Surface Elev.: Approx. 151.0 Ft. Datum:	Depth, Ft.	Symbol	Samples	Ground Water	Depth, Ft.
moist to wet; CL/ML.					
	53.0		4 G		
BOTTOM OF BORING COMPLETED 11/14/2002					

Standard Penetration Resistance
(140 lb. weight, 30-inch drop)
▲ Blows per foot



LEGEND

- • Sample Not Recovered
- G Grab Sample
- Piezometer Screen and Sand Filter
- Bentonite-Cement Grout
- Bentonite Chips/Pellets
- Bentonite Grout
- Ground Water Level ATD
- Ground Water Level in Well

● % Water Content

Plastic Limit ⊢●⊣ Liquid Limit

Natural Water Content

NOTES

1. The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual.
2. The discussion in the text of this report is necessary for a proper understanding of the nature of the subsurface maerials.
3. Groundwater level, if indicated above, is for the date specified and may vary.
4. Refer to KEY for explanation of symbols, codes, and definitions.
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LOG OF BORING PW-6

January 2005 21-1-09644-010

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FIG. A-27
Sheet 2 of 2

MASTER LOG2 21-09644.GPJ SHAN WIL.GDT 9/28/06 Log: PVH Rev: PVH Typ: LKD

SOIL DESCRIPTION Surface Elev.: Approx. 148.0 Ft. Datum:	Depth, Ft.	Symbol	Samples	Ground Water	Depth, Ft.	Standard Penetration Resistance (140 lb. weight, 30-inch drop) ▲ Blows per foot 0 20 40 60
Grass.	0.2					
Very dense, brown-gray, gravelly, silty, fine SAND; moist; scattered cobbles; compact; (Till) ML/SM.					5 10	
Very dense, gray-brown, gravelly, trace to slightly silty, fine SAND; moist; moderately compact; (Till?) SP-SM/SP.	15.0				15 20 25	
Very dense, gray, gravelly, silty, fine SAND; moist; compact; (Till?) SM.	28.0		1 G		30	
- Wet below about 30 feet.	31.0		2 G	6/8/2005		
Very dense, gray, trace to slightly silty, slightly gravelly, fine to medium SAND; moist to wet; slight fuel odor; (Advance Outwash) SP-SM.	34.0				35	
Very dense, gray, silty, fine SAND; wet; fuel odor; (Advance Outwash) SM.	35.0					
Very dense, gray, trace to slightly silty, slightly gravelly to gravelly, fine to medium SAND; wet; fuel odor; (Advance Outwash) SP-SM.	38.0		3 G		40	
- Layer of moist, hard, brown, silty CLAY at about 37 feet.	42.0					
Very dense, gray, trace to slightly silty, gravelly, fine to medium SAND; wet; little to no odor; (Advance Outwash) SP.	44.0		4 G		45	
Very dense, gray, silty, fine SAND; wet; no odor; (Advance Outwash) SM.						

CONTINUED NEXT SHEET

0 20 40 60

LEGEND

- * Sample Not Recovered
- G Grab Sample
- Piezometer Screen and Sand Filter
- Bentonite-Cement Grout
- Bentonite Chips/Pellets
- Bentonite Grout
- ▽ Ground Water Level ATD
- ▼ Ground Water Level in Well

● % Water Content

Plastic Limit ⊢●⊣ Liquid Limit

Natural Water Content

NOTES

1. The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual.
2. The discussion in the text of this report is necessary for a proper understanding of the nature of the subsurface maerials.
3. Groundwater level, if indicated above, is for the date specified and may vary.
4. Refer to KEY for explanation of symbols, codes, and definitions.
5. USCS designation is based on visual-manual classification and selected lab testing.

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Everett, Washington

LOG OF BORING PW-7

January 2005 21-1-09644-010

SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

FIG. A-28
Sheet 1 of 2

MASTER LOG2 21-09644.GPJ SHAN_WIL.GDT 9/28/06 Log: PVH Rev: PVH Typ: LKD

SOIL DESCRIPTION Surface Elev.: Approx. 148.0 Ft. Datum:	Depth, Ft.	Symbol	Samples	Ground Water	Depth, Ft.	Standard Penetration Resistance (140 lb. weight, 30-inch drop) ▲ Blows per foot 0 20 40 60
Hard, gray, clayey SILT to silty CLAY; moist; no odor; ML/CL.	51.1		5			
BOTTOM OF BORING COMPLETED 11/6/2002						
					55	
					60	
					65	
					70	
					75	
					80	
					85	
					90	
					95	
						0 20 40 60

LEGEND

- * Sample Not Recovered
- G Grab Sample
- Piezometer Screen and Sand Filter
- Bentonite-Cement Grout
- Bentonite Chips/Pellets
- Bentonite Grout
- Ground Water Level ATD
- Ground Water Level in Well

● % Water Content

Plastic Limit ⊢●⊣ Liquid Limit

Natural Water Content

NOTES

1. The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual.
2. The discussion in the text of this report is necessary for a proper understanding of the nature of the subsurface maerials.
3. Groundwater level, if indicated above, is for the date specified and may vary.
4. Refer to KEY for explanation of symbols, codes, and definitions.
5. USCS designation is based on visual-manual classification and selected lab testing.

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New Jail Building
Everett, Washington

LOG OF BORING PW-7

January 2005 21-1-09644-010

SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

FIG. A-28
Sheet 2 of 2

Log: PVH Rev: PVH Typ: LKD

MASTER LOG2 21-09644.GPJ SHAN WIL.GDT 9/28/06

SOIL DESCRIPTION Surface Elev.: Approx. 142.5 Ft. Datum:	Depth, Ft.	Symbol	Samples	Ground Water	Depth, Ft.	Standard Penetration Resistance (140 lb. weight, 30-inch drop) ▲ Blows per foot 0 20 40 60
Very dense, brown, gravelly, silty, fine SAND; moist; scattered cobbles; compact; (Till) SM.					5, 10, 15	
Very dense, gray-brown, slightly silty to silty, gravelly, fine SAND; moist; scattered cobbles; (Advance Outwash?) SP-SM. - Sand is fine to medium below about 21 feet, with till-like layers.	18.0				20, 25	
Very dense, brown-gray, trace to slightly silty, gravelly, fine to medium SAND; wet; scattered cobbles; gasoline odor below about 36 feet; (Advance Outwash) SP. - Layer of moist, gray-brown, sandy SILT at about 36.5 feet; moist.	33.0		1 G 2 G	11/25/2002 ▼ During Drilling ▽	30, 35	
Very dense, gray-brown, sandy SILT; wet; no odor; with interbeds of wet, silty, fine SAND and moist, clayey SILT; ML/SM.	40.0		3 G		40, 45	
CONTINUED NEXT SHEET						0 20 40 60

LEGEND

- * Sample Not Recovered
- G Grab Sample
- Piezometer Screen and Sand Filter
- Bentonite-Cement Grout
- Bentonite Chips/Pellets
- Bentonite Grout
- ▽ Ground Water Level ATD
- ▼ Ground Water Level In Well
- ● % Water Content
- Plastic Limit |—●—| Liquid Limit
- Natural Water Content

NOTES

1. The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual.
2. The discussion in the text of this report is necessary for a proper understanding of the nature of the subsurface maerials.
3. Groundwater level, if indicated above, is for the date specified and may vary.
4. Refer to KEY for explanation of symbols, codes, and definitions.
5. USCS designation is based on visual-manual classification and selected lab testing.

Snohomish County Campus
New Jail Building
Everett, Washington

LOG OF BORING PW-8

January 2005 21-1-09644-010

SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

FIG. A-29
Sheet 1 of 2

MASTER LOG2 21-09644.GPJ SHAN_WIL.GDT 9/28/06 Log: PVH Rev: PVH Typ: LKD

SOIL DESCRIPTION Surface Elev.: Approx. 142.5 Ft. Datum:	Depth, Ft.	Symbol	Samples	Ground Water	Depth, Ft.	Standard Penetration Resistance (140 lb. weight, 30-inch drop) ▲ Blows per foot 0 20 40 60
Hard, gray, silty CLAY; moist; with moist to wet, fine SAND seams; CL.	50.0					
	52.0					
BOTTOM OF BORING COMPLETED 11/15/2002					55	
					60	
					65	
					70	
					75	
					80	
					85	
					90	
					95	

0 20 40 60

LEGEND

- * Sample Not Recovered
- G Grab Sample
- Piezometer Screen and Sand Filter
- Bentonite-Cement Grout
- Bentonite Chips/Pellets
- Bentonite Grout
- Ground Water Level ATD
- Ground Water Level in Well

● % Water Content

Plastic Limit ⊢●⊣ Liquid Limit

Natural Water Content

NOTES

1. The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual.
2. The discussion in the text of this report is necessary for a proper understanding of the nature of the subsurface maerials.
3. Groundwater level, if indicated above, is for the date specified and may vary.
4. Refer to KEY for explanation of symbols, codes, and definitions.
5. USCS designation is based on visual-manual classification and selected lab testing.

Snohomish County Campus
New Jail Building
Everett, Washington

LOG OF BORING PW-8

January 2005 21-1-09644-010

SHANNON & WILSON, INC.
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FIG. A-29
Sheet 2 of 2

MASTER LOG2 21-09644.GPJ SHAN WIL.GDT 9/28/06 Log: PVH Rev: PVH Typ: LKD

SOIL DESCRIPTION Surface Elev.: Approx. 136.5 Ft. Datum:	Depth, Ft.
Concrete sidewalk.	0.3
Very dense, brown, gravelly, silty, fine SAND; moist; compact; (Till) SM.	
Very dense, brown, slightly silty to silty, gravelly, fine to medium SAND; moist; (Advance Outwash) SP-SM/SM. - Gray and with a slight gasoline odor below about 18 feet. - Moist below about 20 feet.	15.0
Very dense, gray, trace to silty, gravelly, fine to medium SAND; wet; gasoline odor; (Advance Outwash) SP-SM/SP.	25.0
Very dense, gray, fine sandy SILT, trace of gravel; moist; with layers of slightly moist, hard, clayey SILT; ML. - Laminated below about 35 feet.	29.0
BOTTOM OF BORING COMPLETED 11/15/2002	44.3

Symbol | Samples | Ground Water | Depth, Ft.

Standard Penetration Resistance
(140 lb. weight, 30-inch drop)
▲ Blows per foot

0 20 40 60

5 10 15 20 25 30 35 40 45

Duration 24 hours

0 20 40 60

LEGEND

* Sample Not Recovered
G Grab Sample
Piezometer Screen and Sand Filter
Bentonite-Cement Grout
Bentonite Chips/Pellets
Bentonite Grout
Ground Water Level ATD
Ground Water Level in Well

● % Water Content
Plastic Limit ⊢●⊣ Liquid Limit
Natural Water Content

NOTES

1. The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual.
2. The discussion in the text of this report is necessary for a proper understanding of the nature of the subsurface maerials.
3. Groundwater level, if indicated above, is for the date specified and may vary.
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LOG OF BORING PW-9

January 2005 21-1-09644-010

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FIG. A-30

MASTER LOG2 21-09644.GPJ SHAN WIL.GDT 9/28/06 Log: PVH Rev: PVH Typ: LKD

SOIL DESCRIPTION Surface Elev.: Approx. 139.0 Ft. Datum:	Depth, Ft.	Symbol	Samples	Ground Water	Depth, Ft.	Standard Penetration Resistance (140 lb. weight, 30-inch drop) ▲ Blows per foot 0 20 40 60
Concrete sidewalk.	0.3					
Very dense, brown, gravelly, silty, fine SAND; moist; compact; (Till) SM.					5	
					10	
Very dense, brown, slightly silty, gravelly, fine to medium SAND; moist; (Advance Outwash) SP-SM.	14.0				15	
			1 G	11/25/2002	20	
Hard, gray, slightly clayey, slightly gravelly, sandy SILT; moist; ML.	25.0		2 G	During Drilling	25	
- Thin, moist to wet layer at about 28 feet. Interbedded below about 28 feet with moist, very dense, gray, silty, fine SAND and sandy SILT; SM/ML.					30	
					35	
- Moist to wet at about 38 to 40 feet.			3 G			
Hard, gray, clayey SILT; moist; laminated; ML.	40.0		4 G		40	
					45	
BOTTOM OF BORING COMPLETED 11/15/2002	47.0					

0 20 40 60

Log: PVH Rev: PVH Typ: LKD

LEGEND

- * Sample Not Recovered
- G Grab Sample
- Piezometer Screen and Sand Filter
- Bentonite-Cement Grout
- Bentonite Chips/Pellets
- Bentonite Grout
- Ground Water Level ATD
- Ground Water Level in Well

● % Water Content

Plastic Limit ⊢●⊣ Liquid Limit

Natural Water Content

NOTES

1. The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual.
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New Jail Building
Everett, Washington

LOG OF BORING PW-10

January 2005 21-1-09644-010

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FIG. A-31

MASTER LOG2 21-09644.GPJ SHAN WIL.GDT 9/28/06

SOIL DESCRIPTION Surface Elev.: Approx. 143.0 Ft. Datum:	Depth, Ft.	Symbol	Samples	Ground Water	Depth, Ft.	Standard Penetration Resistance (140 lb. weight, 30-inch drop) ▲ Blows per foot 0 20 40 60
Asphalt.	0.2					
Very dense, brown, gravelly, silty, fine to medium SAND; moist; scattered cobbles; compact; (Till).					5	
					10	
- Gray and with strong fuel odor below about 12 feet.					15	
- Gray-brown with strong fuel odor below about 16 feet.					20	
	18.0					
Very dense, gray-brown, slightly silty, gravelly, fine to medium SAND; moist; fuel odor; (Advance Outwash) SP-SM.	22.0			Dur1435/2002 ▼	25	
Very dense, gray, gravelly, fine to medium SAND, trace of silt; moist to wet; faint fuel odor; (Advance Outwash) SP.			1 G		30	
	34.0				35	
Very dense, gray, silty, fine SAND; wet; interbedded with hard silt layers; moist; (Advance Outwash) SM/ML.			2 G			
	40.0				40	
Very dense, gray, sandy SILT; moist to wet; ML.			3 G		45	
	49.0		4 G		50	
Hard, gray, clayey, sandy SILT; moist; ML.						
	52.2					
BOTTOM OF BORING COMPLETED 11/15/2002						

0 20 40 60

LEGEND

* Sample Not Recovered
G Grab Sample
Piezometer Screen and Sand Filter
Bentonite-Cement Grout
Bentonite Chips/Pellets
Bentonite Grout
▽ Ground Water Level ATD
▼ Ground Water Level in Well

● % Water Content
Plastic Limit ⊢●⊣ Liquid Limit
Natural Water Content

NOTES

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LOG OF BORING PW-11

January 2005 21-1-09644-010

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FIG. A-32

Log: PVH Rev: PVH Typ: LKD
MASTER LOG2 21-09644.GPJ SHAN WIL.GDT 9/28/06

SOIL DESCRIPTION Surface Elev.: Approx. 157.0 Ft. Datum:	Depth, Ft.	Symbol	Samples	Ground Water	Depth, Ft.	Standard Penetration Resistance (140 lb. weight, 30-inch drop) ▲ Blows per foot 0 20 40 60
Concrete sidewalk.	0.3					
Gray-brown, gravelly, fine to coarse SAND, trace to slightly silty; moist; (Fill) SW.						
Gray-brown, slightly silty to silty, gravelly, fine to medium SAND; moist; (Fill?) SP-SM/SM.	5.5					
Very dense, brown-gray, gravelly, silty, fine SAND; moist; scattered cobbles; compact; (Till) SM.	10.0					
- Gray and with a strong gasoline odor below about 17 feet.						
Very dense, gray-brown, slightly silty, gravelly, fine to medium SAND; moist; strong gasoline odor; (Advance Outwash) SP-SM.	23.0		1 G			
Very dense, brown-gray, trace to slightly silty, gravelly, fine to medium SAND; moist; strong gasoline odor; (Advance Outwash) SP/SP-SM.	30.0		2 G 3 G			
- Gray below about 38 feet.			4 G	During Drilling 11/25/2002		
Very dense, gray, gravelly, fine to medium SAND, trace of silt; wet; strong gasoline odor; (Advance Outwash) SP.	40.0		5 G			
Very dense, gray, interbedded silty, gravelly, fine to medium SAND and gravelly, fine to medium SAND, trace of silt; wet; slight	47.0					

CONTINUED NEXT SHEET

0 20 40 60

LEGEND

- * Sample Not Recovered
- G Grab Sample
- Piezometer Screen and Sand Filter
- Bentonite-Cement Grout
- Bentonite Chips/Pellets
- Bentonite Grout
- Ground Water Level ATD
- Ground Water Level in Well

● % Water Content

Plastic Limit ├──●──┤ Liquid Limit

Natural Water Content

NOTES

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New Jail Building
Everett, Washington

LOG OF BORING PW-12

January 2005 21-1-09644-010

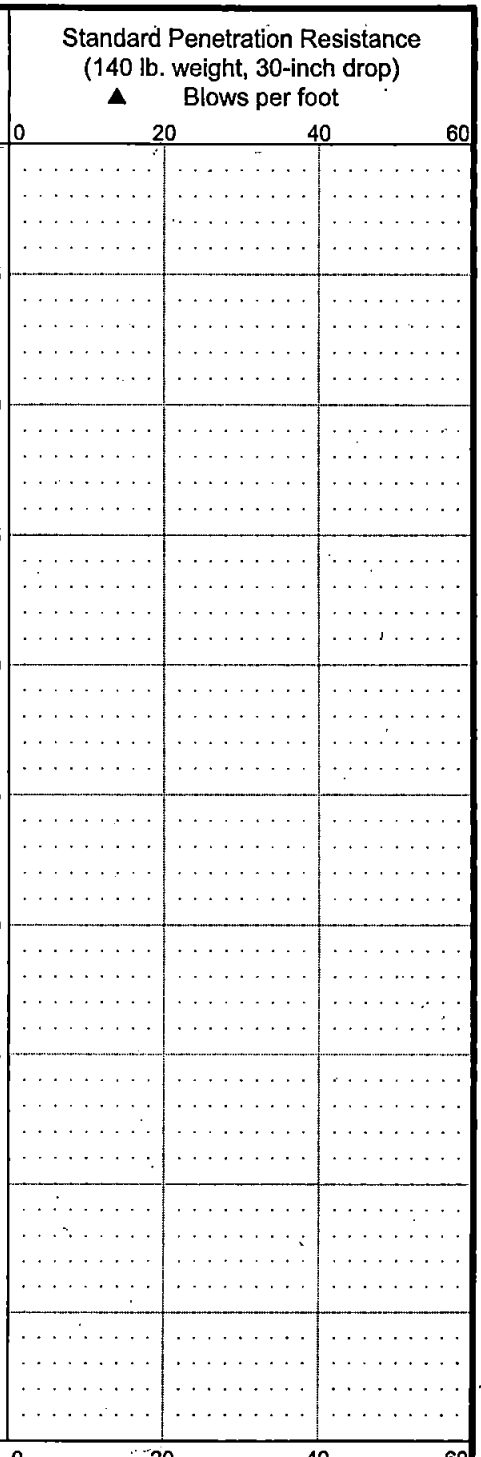
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Geotechnical and Environmental Consultants

FIG. A-33
Sheet 1 of 2

Log: PVH Rev: PVH Typ: LKD

MASTER LOG2 21-09644.GPJ SHAN WIL.GDT 9/28/06

SOIL DESCRIPTION Surface Elev.: Approx. 157.0 Ft. Datum:	Depth, Ft.	Symbol	Samples	Ground Water
gasoline odor; (Advance Outwash) SM/SP.				
Hard, gray, silty CLAY; moist; scattered sand seams and partings; CL.	53.0		6 G	
BOTTOM OF BORING COMPLETED 11/15/2002	56.0			



LEGEND

- * Sample Not Recovered
- G Grab Sample
- Piezometer Screen and Sand Filter
- Bentonite-Cement Grout
- Bentonite Chips/Pellets
- Bentonite Grout
- ▽ Ground Water Level ATD
- ▼ Ground Water Level in Well
- ● % Water Content
- Plastic Limit ⊢●⊣ Liquid Limit
- Natural Water Content

NOTES

1. The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual.
2. The discussion in the text of this report is necessary for a proper understanding of the nature of the subsurface maerials.
3. Groundwater level, if indicated above, is for the date specified and may vary.
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Everett, Washington

LOG OF BORING PW-12

January 2005 21-1-09644-010

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FIG. A-33
Sheet 2 of 2

Log: PVH Rev: PVH Typ: LKD

MASTER LOG2 21-09644.GPJ SHAN WIL.GDT 9/28/06

APPENDIX B

LABORATORY ANALYTICAL REPORTS PRE-EXCAVATION

APPENDIX B

LABORATORY ANALYTICAL REPORTS PRE-EXCAVATION

This appendix contains the data for soil and groundwater samples collected from geotechnical explorations and monitoring wells. The monitoring wells were installed for use during construction. These data are summarized in Table 1 in the main text of the report.

Laboratory reports may have been modified to include only samples collected at the Administration Building/Parking Garage/Rockefeller Ramp Sites; samples from the New Jail Site were removed.

The following reports are contained in this appendix:

Date	CCIAL Job Number	Number of Pages
3/12/2002	203025	5
5/21/2005	205079	3
6/28/2002	206099	4
7/12/2002	207024	6

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 3/12/02
CCIL JOB #: 203025
CCIL SAMPLE #: 2
DATE RECEIVED: 3/6/02
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-004 SNO CO
CLIENT SAMPLE ID: B-16, S-6 3/4/02 0951

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	91	MG/KG	3/7/02	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	3/6/02	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	3/6/02	LAH
TOLUENE	EPA-8021	0.07	MG/KG	3/6/02	LAH
ETHYLBENZENE	EPA-8021	0.1	MG/KG	3/6/02	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	3/6/02	LAH
TPH-SEMIVOLATILE RANGE	NWTPH-DX	ND	MG/KG	3/6/02	RAB
LEAD	EPA-6010	ND(<6)	MG/KG	3/7/02	CMH

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 6 MG/KG
DIESEL RANGE REPORTING LIMIT IS 25 MG/KG
LUBE OIL RANGE REPORTING LIMIT IS 50 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: CMH

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 3/12/02
CCIL JOB #: 203025
CCIL SAMPLE #: 3
DATE RECEIVED: 3/6/02
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-004 SNO CO
CLIENT SAMPLE ID: B-12, S-3 3/4/02 1148

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	38	MG/KG	3/6/02	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	3/6/02	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	3/6/02	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	3/6/02	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	3/6/02	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	3/6/02	LAH
TPH-SEMIVOLATILE RANGE	NWTPH-DX	ND	MG/KG	3/6/02	RAB
LEAD	EPA-6010	ND(<6)	MG/KG	3/7/02	CMH

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG
DIESEL RANGE REPORTING LIMIT IS 25 MG/KG
LUBE OIL RANGE REPORTING LIMIT IS 50 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: _____

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 3/12/02
CCIL JOB #: 203025
CCIL SAMPLE #: 4
DATE RECEIVED: 3/6/02
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-004 SNO CO
CLIENT SAMPLE ID: B-13, S-4 3/4/02 1348

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	3/11/02	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	3/11/02	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	3/11/02	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	3/11/02	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	3/11/02	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	3/11/02	LAH
TPH-SEMIVOLATILE RANGE	NWTPH-DX	ND	MG/KG	3/7/02	RAB
LEAD	EPA-6010	ND(<6)	MG/KG	3/7/02	CMH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG
DIESEL RANGE REPORTING LIMIT IS 25 MG/KG
LUBE OIL RANGE REPORTING LIMIT IS 50 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: _____

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CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 3/12/02
CCIL JOB #: 203025

DATE RECEIVED: 3/6/02
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-004 SNO CO

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
203025-01	NWTPH-GX	TFT	*
203025-01	EPA-8021	TFT	*
203025-01	NWTPH-DX	C25	78
203025-02	NWTPH-GX	TFT	60
203025-02	EPA-8021	TFT	87
203025-02	NWTPH-DX	C25	80
203025-03	NWTPH-GX	TFT	66
203025-03	EPA-8021	TFT	68
203025-03	NWTPH-DX	C25	65
203025-04	NWTPH-GX	TFT	83
203025-04	EPA-8021	TFT	85
203025-04	NWTPH-DX	C25	79

* SURROGATE DILUTED OUT OF CALIBRATION RANGE

APPROVED BY: _____

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CHAIN-OF-CUSTODY RECORD

Laboratory CCI Page 1 of 1
Attn:

SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

400 N. 34th Street, Suite 100
Seattle, WA 98103
(206) 632-8020
(206) 695-6777 Fax

11500 Olive Blvd., Suite 276
St. Louis, MO 63141
(314) 872-8170
(314) 872-8178 Fax

2055 Hill Road
Fairbanks, AK 99709
(907) 479-0600
(907) 479-5691 Fax

5430 Fairbanks Street, Suite 3
Anchorage, AK 99518
(907) 561-2120
(907) 561-4483 Fax

303 Wellsian Way
Richland, WA 99352
(509) 946-6309
(509) 946-6380 Fax

Analysis Parameters/Sample Container Description
(include preservative if used)

Sample Identity	Lab No.	Time	Date Sampled	Comp.	Grab	NWTPH-G/BTEX	NTWPH-Dx	Total Pb				Total Number of Containers	Remarks/Matrix
B-6, S-2	1	1352	2/11/02		X	X	X	X	RUSH THIS ONLY (*)			2	SOIL
B-16, S-6	2	0951	3/4/02		↓	↓	↓	↓				3	↓
B-12, S-3	3	1148	3/4/02		↓	↓	↓	↓				2	↓
B-13, S-4	4	1348	3/4/02		↓	↓ test from jar (1)	↓ test from jar (2)	↓				2	↓

Project Information

Project Number: 21-1-09644-00
Project Name: Sno Co
Contact: A TIRAO
Ongoing Project? Yes ☒ No ☐
Sampler: AT

Sample Receipt

Total Number of Containers:
COC Seals/Intact? Y/N/NA:
Received Good Cond./Cold:
Delivery Method:
(attach shipping bill, if any)

Relinquished By: 1
Signature: [signature] Time: 0930
Printed Name: AGNES TIRAO Date: 3/6/02
Company: S&W

Relinquished By: 2
Signature: Time:
Printed Name: Date:
Company:

Relinquished By: 3
Signature: Time:
Printed Name: Date:
Company:

Accepted By: 1
Signature: [signature] Time: 1030
Printed Name: Rick Bagan Date: 3/6/02
Company: CCIAL

Received By: 2
Signature: Time:
Printed Name: Date:
Company:

Received By: 3
Signature: Time:
Printed Name: Date:
Company:

Instructions

Requested Turnaround Time: STD – RUSH one (*) sample to meet hold times
Special Instructions: please provide copy of COC w/ final lab report

Distribution: White - w/shipment - returned to Shannon & Wilson w/ laboratory report
Yellow - w/shipment - for consignee files
Pink - Shannon & Wilson - Job File

F-19-91/UR

fax initial/draft results to A Tirao
don't rush Pb unless req'd by hold time

No.

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 5/21/02
CCIL JOB #: 205079
CCIL SAMPLE #: 1
DATE RECEIVED: 5/14/02
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-004
CLIENT SAMPLE ID: B16A-S2 5/6/02 1020

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	13	MG/KG	5/16/02	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	5/16/02	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	5/16/02	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	5/16/02	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	5/16/02	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	5/16/02	LAH
TPH-SEMIVOLATILE RANGE	NWTPH-DX	ND	MG/KG	5/16/02	AIB
LEAD	EPA-6010	ND(<5.1)	MG/KG	5/17/02	RAB

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG
DIESEL RANGE REPORTING LIMIT IS 25 MG/KG
LUBE OIL RANGE REPORTING LIMIT IS 50 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: _____

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CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 5/21/02
CCIL JOB #: 205079
DATE RECEIVED: 5/14/02
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-004

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
205079-01	NWTPH-GX	TFT	69
205079-01	EPA-8021	TFT	67
205079-01	NWTPH-DX	C25	82

APPROVED BY: _____

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CCI Analytical Laboratories, Inc.
8620 Holly Drive
Everett, WA 98208
Phone (425) 356-2600
(206) 292-9059 Seattle
(425) 356-2626 Fax

Chain Of Custody/ Laboratory Analysis Request

CCI Job# (Laboratory Use Only)

Date 5/13/2002 Page 1 Of 1

PROJECT ID: 21-1-09644-004
REPORT TO COMPANY: Shannon & Wilson Inc
PROJECT MANAGER: Agnes Tirao
ADDRESS: 400 N 34th St Ste. 100
Seattle WA 98103
PHONE: 206 632 8020 FAX: 206 695 6777
INVOICE TO COMPANY:
ATTENTION:
ADDRESS:
P.O. NUMBER CCI QUOTE:

SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-GX	BTEX	NWTPH-DX	NWTPH-HCID	EPA 8021 ☐ 602 ☐	EPA 8010 ☐ 601 ☐	EPA 8260 ☐ 624 ☐	EPA 8270 ☐ 625 ☐	EPA 8081/8082 ☐ 608 ☐ PCB only ☐ Pest only ☐	Metals Priority Pollutant ☐ RCRA ☐ TAL ☐	Metals Other (Specify) Pb only	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐	OTHER (Specify)	NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
1. B16A-S2	5/6/2002	1020	SOIL		X	X	X								X			1	
2.																			
3.																			
4.																			
5.																			
6.																			
7.																			
8.																			
9.																			
10.																			

SPECIAL INSTRUCTIONS

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: Agnes Tirao, S&W, 5/13/2002 1700
Received By: [signature] CCIAL 5/14/02 1436
2. Relinquished By:
Received By:

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis
10 (Standard) 5 3 2 1 SAME DAY

Fuels & Hydrocarbon Analysis
5 (Standard) 3 1 SAME DAY

OTHER:
Specify:

round *less th* *nd mar* *Rush Ch*

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N 34TH ST, SITE 100
SEATTLE, WA 98103

DATE: 6/28/02
CCIL JOB #: 206099
CCIL SAMPLE #: 1
DATE RECEIVED: 6/21/02
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-006
CLIENT SAMPLE ID: B-18, S-5 6/21/02 1144

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	6/25/02	ZMB
MTBE***	EPA-8021	ND(<0.1)	MG/KG	6/25/02	ZMB
BENZENE	EPA-8021	ND(<0.03)	MG/KG	6/25/02	ZMB
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	6/25/02	ZMB
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	6/25/02	ZMB
XYLENES	EPA-8021	ND(<0.2)	MG/KG	6/25/02	ZMB
TPH-SEMIVOLATILE RANGE	NWTPH-DX	ND	MG/KG	6/25/02	NST

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG
DIESEL RANGE REPORTING LIMIT IS 25 MG/KG
LUBE OIL RANGE REPORTING LIMIT IS 50 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: _____

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N 34TH ST, SITE 100
SEATTLE, WA 98103

DATE: 6/28/02
CCIL JOB #: 206099
CCIL SAMPLE #: 2
DATE RECEIVED: 6/21/02
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-006
CLIENT SAMPLE ID: B-18, S-6 6/21/02 1149

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	2900	MG/KG	6/26/02	ZMB
MTBE***	EPA-8021	ND(<10)	MG/KG	6/26/02	ZMB
BENZENE	EPA-8021	ND(<3)	MG/KG	6/26/02	ZMB
TOLUENE	EPA-8021	ND(<5)	MG/KG	6/26/02	ZMB
ETHYLBENZENE	EPA-8021	ND(<5)	MG/KG	6/26/02	ZMB
XYLENES	EPA-8021	ND(<20)	MG/KG	6/26/02	ZMB
TPH-SEMIVOLATILE RANGE	NWTPH-DX	ND	MG/KG	6/25/02	AIB

NOTES: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE
DIESEL RANGE REPORTING LIMIT RAISED DUE TO VOLATILE RANGE OVERLAP

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 300 MG/KG
DIESEL RANGE REPORTING LIMIT IS 130 MG/KG
LUBE OIL RANGE REPORTING LIMIT IS 50 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: _____

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CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N 34TH ST, SITE 100
SEATTLE, WA 98103

DATE: 6/28/02
CCIL JOB #: 206099

DATE RECEIVED: 6/21/02
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-006

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
206099-01	NWTPH-GX	TFT	105
206099-01	EPA-8021	TFT	99
206099-01	NWTPH-DX	C25	103
206099-02	NWTPH-GX	TFT	*
206099-02	EPA-8021	TFT	*
206099-02	NWTPH-DX	C25	104

* SURROGATE DILUTED OUT OF CALIBRATION RANGE

APPROVED BY: CJL

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI Analytical Laboratories, Inc.
8620 Holly Drive
Everett, WA 98208
Phone (425) 356-2600
(206) 292-9059 Seattle
(425) 356-2626 Fax

Chain Of Custody/ Laboratory Analysis Request

CCI Job# (Laboratory Use Only)

Date 6-21-02 Page 1 Of 1

PROJECT ID: 21-1-09644-006
REPORT TO COMPANY: Shannon & Wilson, Inc.
PROJECT MANAGER: Agnes Tirao
ADDRESS: 400 N 34th St, Ste 100
Seattle WA 98103
PHONE: 206-632-8020 FAX: 206-695-6777
INVOICE TO COMPANY:
ATTENTION:
ADDRESS:
P.O. NUMBER CCI QUOTE:

SAMPLE I.D.	DATE	TIME	TYPE	LAB#
1. B-18, S-5	6/21/02	1144	S	
2. B-18, S-6	6/21/02	1149	S	
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				

ANALYSIS REQUESTED

NWTPH-GX	BTEX	NWTPH-DX	NWTPH-HCID	EPA 8021 ☐ 602 ☐	EPA 8010 ☐ 601 ☐	EPA 8260 ☐ 624 ☐	EPA 8270 ☐ 625 ☐	EPA 8081/8082 ☐ 608 ☐ PCB only ☐ Pest only ☐	Metals Priority Pollutant ☐ RCRA ☐ TAL ☐	Metals Other (Specify)	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐
X	X	X									
X	X	X									

OTHER (Specify)

Call for required testing. (1402 D) - 4oz G	NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
1	1	
1	1	

SPECIAL INSTRUCTIONS (X) Added via FAX by A. Tirao 6/24/02

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: Paul L. Van Horne SFLW 6/21/02 1506
Received By: Jennifer Bowman CCIA 6/21/02 1506
2. Relinquished By:

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis
10 (Standard) 5 3 2 1 SAME DAY

Fuels & Hydrocarbon Analysis
5 (Standard) 3 1 SAME DAY

OTHER:
Specify:

*Turnaround requests less than standard may incur Rush Charges.

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 7/12/02
CCIL JOB #: 207024
CCIL SAMPLE #: 1
DATE RECEIVED: 7/3/02
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-006 SNOHOMISH COUNTY CAMPUS
CLIENT SAMPLE ID: TRIP BLANK 7/3/02 1200

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	UG/L	7/12/02	LAH
MTBE	EPA-8021	ND(<3)	UG/L	7/12/02	LAH
BENZENE	EPA-8021	ND(<1)	UG/L	7/12/02	LAH
TOLUENE	EPA-8021	ND(<1)	UG/L	7/12/02	LAH
ETHYLBENZENE	EPA-8021	ND(<1)	UG/L	7/12/02	LAH
XYLENES	EPA-8021	ND(<3)	UG/L	7/12/02	LAH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 50 UG/L

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY: _____

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 7/12/02
CCIL JOB #: 207024
CCIL SAMPLE #: 2
DATE RECEIVED: 7/3/02
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-006 SNOHOMISH COUNTY CAMPUS
CLIENT SAMPLE ID: B-17,GW-1 7/3/02 1316

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	UG/L	7/12/02	LAH
MTBE	EPA-8021	ND(<3)	UG/L	7/12/02	LAH
BENZENE	EPA-8021	ND(<1)	UG/L	7/12/02	LAH
TOLUENE	EPA-8021	ND(<1)	UG/L	7/12/02	LAH
ETHYLBENZENE	EPA-8021	ND(<1)	UG/L	7/12/02	LAH
XYLENES	EPA-8021	ND(<3)	UG/L	7/12/02	LAH
TPH-DIESEL RANGE	NWTPH-DX	ND	UG/L	7/12/02	AIB
TPH-OIL RANGE	NWTPH-DX	ND	UG/L	7/12/02	AIB

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 50 UG/L
DIESEL RANGE REPORTING LIMIT IS 130 UG/L
LUBE OIL RANGE REPORTING LIMIT IS 250 UG/L

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY: _____

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 7/19/02
CCIL JOB #: 207024
CCIL SAMPLE #: 3
DATE RECEIVED: 7/3/02
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-006 SNOHOMISH COUNTY CAMPUS
CLIENT SAMPLE ID: B-14,GW-1 7/3/02 1422

MTBE REPORT AMENDED TO INCLUDE EPA-8260

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	6800	UG/L	7/12/02	LAH
METHYL T-BUTYL ETHER	EPA-8260	ND(<2)	UG/L	7/16/02	PDC
BENZENE	EPA-8260	310	UG/L	7/18/02	PDC
TOLUENE	EPA-8260	74	UG/L	7/16/02	PDC
ETHYLBENZENE	EPA-8260	890	UG/L	7/18/02	PDC
M+P XYLENE	EPA-8260	670	UG/L	7/18/02	PDC
O-XYLENE	EPA-8260	13	UG/L	7/16/02	PDC
TPH-DIESEL RANGE	NWTPH-DX	ND	UG/L	7/12/02	AIB
TPH-OIL RANGE	NWTPH-DX	ND	UG/L	7/12/02	AIB

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY LIGHTLY WEATHERED GASOLINE

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 500 UG/L
DIESEL RANGE REPORTING LIMIT IS 130 UG/L
LUBE OIL RANGE REPORTING LIMIT IS 250 UG/L

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY: _____

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 7/19/02
CCIL JOB #: 207024
CCIL SAMPLE #: 4
DATE RECEIVED: 7/3/02
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-006 SNOHOMISH COUNTY CAMPUS
CLIENT SAMPLE ID: B-18,GW-1 7/3/02 1529

MTBE REPORT AMENDED TO INCLUDE EPA-8260

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	2900	UG/L	7/12/02	LAH
METHYL T-BUTYL ETHER	EPA-8260	ND(<2)	UG/L	7/16/02	PDC
BENZENE	EPA-8260	ND(<2)	UG/L	7/16/02	PDC
TOLUENE	EPA-8260	ND(<2)	UG/L	7/16/02	PDC
ETHYLBENZENE	EPA-8260	43	UG/L	7/16/02	PDC
M+P XYLENE	EPA-8260	51	UG/L	7/16/02	PDC
O-XYLENE	EPA-8260	2	UG/L	7/16/02	PDC
TPH-DIESEL RANGE	NWTPH-DX	ND	UG/L	7/12/02	AIB
TPH-OIL RANGE	NWTPH-DX	ND	UG/L	7/12/02	AIB

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY WEATHERED GASOLINE

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 250 UG/L
DIESEL RANGE REPORTING LIMIT IS 130 UG/L
LUBE OIL RANGE REPORTING LIMIT IS 250 UG/L

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY: _____

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CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 7/19/02
CCIL JOB #: 207024

DATE RECEIVED: 7/3/02
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-006 SNOHOMISH COUNTY CAMPUS

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
207024-01	NWTPH-GX	TFT	105
207024-01	EPA-8021	TFT	105
207024-02	NWTPH-GX	TFT	109
207024-02	EPA-8021	TFT	109
207024-02	NWTPH-DX	C25	59
207024-03	NWTPH-GX	TFT	108
207024-03 (BENZENE, ETHYLBENZENE, M,P-XYLENE)	EPA-8260	1,2-DCE-d4	92
207024-03 (METHYL T-BUTYL ETHER, TOLUENE, O-XYLENE)	EPA-8260	1,2-DCE-d4	106
207024-03	NWTPH-DX	C25	57
207024-04	NWTPH-GX	TFT	93
207024-04	EPA-8260	1,2-DCE-d4	96
207024-04	NWTPH-DX	C25	53

APPROVED BY: _____

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CHAIN-OF-CUSTODY RECORD

SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

400 N. 34th Street, Suite 100
Seattle, WA 98103
(206) 632-8020
(206) 695-6777 Fax

11500 Olive Blvd., Suite 276
St. Louis, MO 63141
(314) 872-8170
(314) 872-8178 Fax

2055 Hill Road
Fairbanks, AK 99709
(907) 479-0600
(907) 479-5691 Fax

5430 Fairbanks Street, Suite 3
Anchorage, AK 99518
(907) 561-2120
(907) 561-4483 Fax

303 Wellsian Way
Richland, WA 99352
(509) 946-6309
(509) 946-6380 Fax

Page 1 of 1

Laboratory CCI

Attn: Rick Bagan

Analysis Parameters/Sample Container Description
(Include preservative if used)

Sample Identity	Lab No.	Time	Date Sampled	Comp.	Grab	40ml GVOA/HCl NWTPH-Gx/BTEX	1/2 L AG NWTPH-Dx					Total Number of Containers	Remarks/Matrix
Trip Blank	1	1200	7-3-02		X	1						1	Iced/Water
B-17, GW-1	2	1316	↓		X	3	1					4	↓
B-14, GW-1	3	1422			X	3	2					5	
B-18, GW-1	4	1529	↓		X	3	2					5	

Project Information

Project Number: 21-1-09644-000
Project Name: Snohomish County Co...
Contact: Agnes Tirao
Ongoing Project? Yes ☐ No ☒
Sampler: Paul Van Horne

Sample Receipt

Total Number of Containers:
COC Seals/Intact? Y/N/NA:
Received Good Cond./Cold:
Delivery Method: Courier
(attach shipping bill, if any)

Turnaround

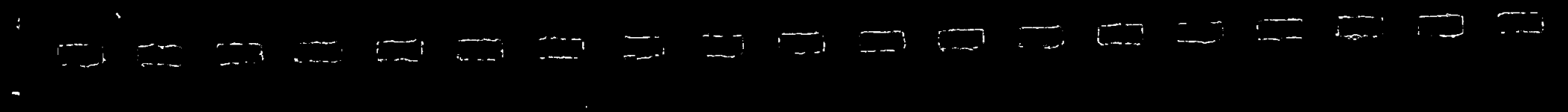
Requested Turnaround Time: By Next Friday 7/12/02
Special Instructions:

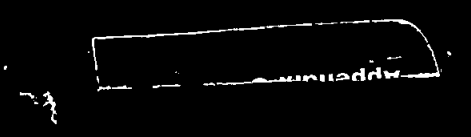
Relinquished By: 1	Relinquished By: 2	Relinquished By: 3
Signature: Time: 1615	Signature: Time:	Signature: Time:
Printed Name: Paul L. Van Horne Date: 7/3/02	Printed Name: Date:	Printed Name: Date:
Company: SHW	Company:	Company:
Received By: 1	**Received By: 2**	**Received By: 3**
Signature: Time: 1615	Signature: Time:	Signature: Time:
Printed Name: Date: 7-3-02	Printed Name: Date:	Printed Name: Date:
Company: CCI	Company:	Company:

Distribution: White - w/shipment - returned to Shannon & Wilson w/ laboratory report
Yellow - w/shipment - for consignee files
Pink - Shannon & Wilson - Job File

F-19-91/UR

No.





APPENDIX C

LABORATORY ANALYTICAL REPORTS
PARKING GARAGE EXCAVATION

APPENDIX C

LABORATORY ANALYTICAL REPORTS
PARKING GARAGE EXCAVATION

This appendix contains the data for soil samples collected during the installation of dewatering wells and the excavation of the Parking Garage Site. These data are summarized in Tables 2, 3, and 4 in the main text of the report.

Laboratory reports may have been modified to include only samples collected at the Parking Garage Site; samples from the Administration Building, Rockefeller Ramp, and New Jail Sites were removed.

The following reports are contained in this appendix:

Date	CCIAL Job Number	Number of Pages
11/15/2002	210049	2
11/18/2002	211057	3
11/18/2002	211064	3
12/5/2002	212007	3
12/6/2002	212016	4
12/11/2002	212042	3
12/17/2002	212063	7
12/18/2002	212069	5
12/19/2002	212080	6
12/23/2002	212097	4
12/27/2002	212103	3
12/30/2002	212105	6
12/30/2002	212113	7
12/31/2002	212117	4
1/3/2003	301001	3
1/6/2003	301006	3
1/6/2003	301010	5
1/10/2003	301029	7
1/14/2003	301045	4
1/20/2003	301056	4
1/20/2003	301068	3
1/20/2003	301074	4
2/14/2003	302046	6
2/20/2003	302071	8

Date	CCIAL Job Number	Number of Pages
2/24/2003	302074	3
1/10/2003	301017	4
1/15/2003	301046	3
1/20/2003	301051	7
1/27/2003	301083	5
1/27/2003	301089	4
1/29/2003	301105	8
1/31/2003	301122	8
2/4/2003	301128	6
2/4/2003	301139	7
2/11/2003	302015	5
2/11/2003	302020	5
2/10/2003	302028	3
2/18/2003	302057	3
3/5/2003	302129	6

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 11/15/02
CCIL JOB #: 210049
CCIL SAMPLE #: 1
DATE RECEIVED: 11/12/02
WDOE ACCREDITATION #: C142

CLIENT CONTACT: SCOTT GAULKE/AGNES TIRAO

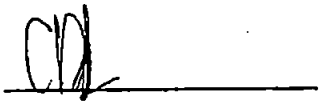
CLIENT PROJECT ID: 21-1-09644-011/SNOHOMISH COUNTY
CLIENT SAMPLE ID: COMPOSITE 11/12/02 11/12/02 1515

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
ARSENIC	EPA-6010	3.7	MG/KG	11/14/02	RAB
BARIUM	EPA-6010	34	MG/KG	11/14/02	RAB
CADMIUM	EPA-6010	ND(<0.49)	MG/KG	11/14/02	RAB
CHROMIUM	EPA-6010	20	MG/KG	11/14/02	RAB
LEAD	EPA-6010	ND(<5.8)	MG/KG	11/14/02	RAB
MERCURY	EPA-7471	ND(<0.02)	MG/KG	11/13/02	RAB
SELENIUM	EPA-6010	ND(<4.9)	MG/KG	11/14/02	RAB
SILVER	EPA-6010	ND(<0.68)	MG/KG	11/14/02	RAB

* "ND" INDICATES ANALYTE NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY: 

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI Analytical Laboratories, Inc.
8620 Holly Drive
Everett, WA 98208
Phone (425) 356-2600
(206) 292-9059 Seattle
(425) 356-2626 Fax

Chain Of Custody/ Laboratory Analysis Request

CCI Job# (Laboratory Use Only)

Date 11/12/2002 Page 1 Of 1

PROJECT ID: 21-1-09614-011 / Snohomish County
REPORT TO COMPANY: Shannon & Wilson, Inc.
PROJECT MANAGER: Scott Gaulke / Agnes Tirao
ADDRESS: 400 N. 34th St., Ste. 100
Seattle, WA 98103
PHONE: (206) 632-8020 FAX: (206) 695-6777
INVOICE TO COMPANY:
ATTENTION:
ADDRESS:
P.O. NUMBER CCI QUOTE:

ANALYSIS REQUESTED

OTHER (Specify)

SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-GX	BTEX	NWTPH-DX	NWTPH-HCID	EPA 8021 ☐ 602 ☐	EPA 8010 ☐ 601 ☐	EPA 8260 ☐ 624 ☐	EPA 8270 ☐ 625 ☐	EPA 8081/8082 ☐ 608 ☐ PCB only ☐ Pest only ☐	Metals Priority Pollutant ☐ RCRA ☐ TAL ☐	Metals Other (Specify)	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐	NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
1. Composite 11-12-02	11-12-02	1515	Soil											HBOT			1	Y
2.																		
3.																		
4.																		
5.																		
6.																		
7.																		
8.																		
9.																		
10.																		

SPECIAL INSTRUCTIONS

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: Paul L. Von Home S+W, 11-12-02, 1604
Received By: [signature] CCIAL 11/12/02 1604
2. Relinquished By:

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis
10 Standard | 5 | 3 | 2 | 1 | SAME DAY

Fuels & Hydrocarbon Analysis
5 Standard | 3 | 1 | SAME DAY

OTHER:
Specify:

* Turnaround request less than standard may incur Rush Charges

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ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 11/18/02
CCIL JOB #: 211057
CCIL SAMPLE #: 1
DATE RECEIVED: 11/14/02
WDOE ACCREDITATION #: C142

CLIENT CONTACT: SCOTT GAULKE/AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011/SNOHOMISH CO. ADMIN.
CLIENT SAMPLE ID: PW-12, S-5 11/14/02 1420

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	11/15/02	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	11/15/02	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	11/15/02	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	11/15/02	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	11/15/02	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	11/15/02	LAH

* "ND" INDICATES ANALYTE NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: _____

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 11/18/02
CCIL JOB #: 211057
DATE RECEIVED: 11/14/02
WDOE ACCREDITATION #: C142

CLIENT CONTACT: SCOTT GAULKE/AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011/SNOHOMISH CO. ADMIN.

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
211057-01	NWTPH-GX	TFT	82
211057-01	EPA-8021	TFT	68

APPROVED BY: _____

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CCI Analytical Laboratories, Inc.
8620 Holly Drive
Everett, WA 98208
Phone (425) 356-2600
(206) 292-9059 Seattle
(425) 356-2626 Fax

Chain Of Custody/ Laboratory Analysis Request

CCI Job# (Laboratory Use Only)

Date 11/14/02 Page 1 Of 1

PROJECT ID: 21-1-09644-.011 / Snohomish County Admin.
REPORT TO COMPANY: Shannon & Wilson, Inc.
PROJECT MANAGER: Scott Gaulke / Agnes Tirao
ADDRESS: 4100 N 34th St, Ste 100
Seattle WA 98103
PHONE: 206 632 8020 FAX: 206 695 6777
INVOICE TO COMPANY: same
ATTENTION:
ADDRESS:
P.O. NUMBER CCI QUOTE:

SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-GX	BTEX	NWTPH-DX	NWTPH-HCID	EPA 8021 ☐ 602 ☐	EPA 8010 ☐ 601 ☐	EPA 8260 ☐ 624 ☐	EPA 8270 ☐ 625 ☐	EPA 8081/8082 ☐ 608 ☐ PCB only ☐ Pest only ☐	Metals Priority Pollutant ☐ RCRA ☐ TAL ☐	Metals Other (Specify)	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐	OTHER (Specify)	NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
1. PW-12, S-5	11-14-02	1420	Soil		✓	✓												1	Y
2.																		14 02	GJ
3.																			
4.																			
5.																			
6.																			
7.																			
8.																			
9.																			
10.																			

SPECIAL INSTRUCTIONS

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: Paul J. VanHome SdW 11/14/02 1554
Received By: CCIAR 11/14/02 15:54
2. Relinquished By:

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis
10 Standard | 5 | 3 | 2 | 1 | SAME DAY

Fuels & Hydrocarbon Analysis
5 Standard | 3 | 1 | SAME DAY

OTHER:
Specify:

* Turnaround request less than standard may incur Rush Charges

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 11/18/02
CCIL JOB #: 211064
CCIL SAMPLE #: 1
DATE RECEIVED: 11/15/02
WDOE ACCREDITATION #: C142

CLIENT CONTACT: SCOTT GAULKE

CLIENT PROJECT ID: 21-1-09644-011/SNOHOMISH CO. ADMIN.
CLIENT SAMPLE ID: PW-8, S-2 11/15/02 0819

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	11/18/02	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	11/18/02	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	11/18/02	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	11/18/02	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	11/18/02	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	11/18/02	LAH

* "ND" INDICATES ANALYTE NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: CH

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 11/18/02
CCIL JOB #: 211064

DATE RECEIVED: 11/15/02
WDOE ACCREDITATION #: C142

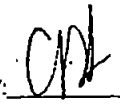
CLIENT CONTACT: SCOTT GAULKE

CLIENT PROJECT ID: 21-1-09644-011/SNOHOMISH CO. ADMIN.

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
211064-01	NWTPH-GX	TFT	90
211064-01	EPA-8021	TFT	75

APPROVED BY: 

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI Analytical Laboratories, Inc.
8620 Holly Drive
Everett, WA 98208
Phone (425) 356-2600
(206) 292-9059 Seattle
(425) 356-2626 Fax

Chain Of Custody/ Laboratory Analysis Request

CCI Job# (Laboratory Use Only)

Date 11/15/02 Page 1 Of 1

PROJECT ID: 21-1-09644-011 / Snohomish Co. Admin.
REPORT TO COMPANY: Shannon & Wilson, Inc.
PROJECT MANAGER: Scott Gaulke
ADDRESS: 400 N 34th St, Ste 100
Seattle, WA 98103
PHONE: 206-632-8020 FAX: 206-545-6777
INVOICE TO COMPANY: Same
ATTENTION:
ADDRESS:
P.O. NUMBER CCI QUOTE:

SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-GX	BTEX	NWTPH-DX	NWTPH-HCID	EPA 8021 ☐ 602 ☐	EPA 8010 ☐ 601 ☐	EPA 8260 ☐ 624 ☐	EPA 8270 ☐ 625 ☐	EPA 8081/8082 ☐ 608 ☐ PCB only ☐ Pest only ☐	Metals Priority Pollutant ☐ RCRA ☐ TAL ☐	Metals Other (Specify)	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐	OTHER (Specify)	NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
1. PW-8, S-2	11/15/02	0819	Soil		X	X												1-4oz	Y
2.																			
3.																			
4.																			
5.																			
6.																			
7.																			
8.																			
9.																			
10.																			

SPECIAL INSTRUCTIONS

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: Paul Van Horne S+W 11/15/02 1414
Received By: CCI 11-15-02 1445
2. Relinquished By:

TURNAROUND REQUESTED in Business Days* Call Scott Gaulke or Agnes Tirao

Organic, Metals & Inorganic Analysis
10 (Standard) 5 3 2 1 SAME DAY

Fuels & Hydrocarbon Analysis
5 (Standard) 3 1 SAME DAY

OTHER:
Specify:

* Turnaround request less than standard may incur Rush Charges

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 12/5/02
CCIL JOB #: 212007
CCIL SAMPLE #: 1
DATE RECEIVED: 12/2/02
WDOE ACCREDITATION #: C142

CLIENT CONTACT: SCOTT GAULKE/AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011
CLIENT SAMPLE ID: 09644-J.5-3.5-137 12/2/02 1600

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	12/3/02	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	12/3/02	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	12/3/02	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	12/3/02	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	12/3/02	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	12/3/02	LAH
TPH-DIESEL RANGE	NWTPH-DX	83	MG/KG	12/3/02	MJL
TPH-LUBE OIL RANGE	NWTPH-DX	63	MG/KG	12/3/02	MJL
ARSENIC	EPA-6010	ND(<3.0)	MG/KG	12/5/02	RAB
BARIUM	EPA-6010	36	MG/KG	12/5/02	RAB
CADMIUM	EPA-6010	ND(<0.50)	MG/KG	12/5/02	RAB
CHROMIUM	EPA-6010	13	MG/KG	12/5/02	RAB
LEAD	EPA-6010	ND(<5.9)	MG/KG	12/5/02	RAB
MERCURY	EPA-7471	0.02	MG/KG	12/4/02	RAB
SELENIUM	EPA-6010	ND(<5.0)	MG/KG	12/5/02	RAB
SILVER	EPA-6010	ND(<0.69)	MG/KG	12/5/02	RAB

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCTS WHICH ARE LIKELY DIESEL FUEL #2 AND LUBE OIL

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG
DIESEL RANGE REPORTING LIMIT IS 25 MG/KG
LUBE OIL RANGE REPORTING LIMIT IS 50 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: _____

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 12/3/02
CCIL JOB #: 212007

DATE RECEIVED: 12/2/02
WDOE ACCREDITATION #: C142

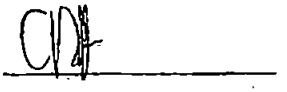
CLIENT CONTACT: SCOTT GAULKE/AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
212007-01	NWTPH-GX	TFT	77
212007-01	EPA-8021	TFT	80
212007-01	NWTPH-DX	C25	133

APPROVED BY: 

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CCI Analytical Laboratories, Inc.
8620 Holly Drive
Everett, WA 98208
Phone (425) 356-2600
(206) 292-9059 Seattle
(425) 356-2626 Fax

Chain Of Custody/ Laboratory Analysis Request

CCI Job# (Laboratory Use Only)

Date 12/2/02 Page 1 Of 1

PROJECT ID: 21-1-09644-011
REPORT TO COMPANY: S&W
PROJECT MANAGER: SCOTT GAULKE
ADDRESS: 400 N 34th St, Ste 100
Seattle WA 98103
PHONE: 206 695 6893 FAX 206 695 6777
INVOICE TO COMPANY:
ATTENTION:
ADDRESS:
P.O. NUMBER CCI QUOTE:

SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-GX	BTEX	NWTPH-DX	NWTPH-HCID	EPA 8021 ☐ 602 ☐	EPA 8010 ☐ 601 ☐	EPA 8260 ☐ 624 ☐	EPA 8270 ☐ 625 ☐	EPA 8081/8082 ☐ 608 ☐ PCB only ☐ Pest only ☐	Metals Priority Pollutant ☐ RCRA ☒ TAL ☐	Metals Other (Specify)	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐	NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
1. 09644-J5-3.5-13 (SCT 12/9/2002)	12/2/02	1600	SO		X	X	X											
2.																		
3.																		
4.																		
5.																		
6.																		
7.																		
8.																		
9.																		
10.																		

OTHER (Specify)

added by phone (ACT & RB) 12/4/2002 for ASAP turn

SPECIAL INSTRUCTIONS

S&Wnote – 30'E of (L) 15'N of (4)

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: S&W 12/2/02
Received By: CCTAL 12/3/02 11:30
2. Relinquished By:

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis: 10 (Standard) 5 3 2 1 SAME DAY

Fuels & Hydrocarbon Analysis: 5 (Standard) 3 1 SAME DAY

OTHER: Specify:

* Turnaround request less than standard may incur Rush Charges

CCI
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LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 12/6/02
CCIL JOB #: 212016
CCIL SAMPLE #: 1
DATE RECEIVED: 12/4/02
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 09644 SNOHOMISH CTY
CLIENT SAMPLE ID: 09644-~~NE CORNER-133~~ 12/4/02
M-1.3- 12/10/02

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-DIESEL RANGE	NWTPH-DX	1000	MG/KG	12/5/02	MJL
ARSENIC	EPA-6010	ND(<3.3)	MG/KG	12/5/02	RAB
BARIUM	EPA-6010	56	MG/KG	12/5/02	RAB
CADMIUM	EPA-6010	ND(<0.55)	MG/KG	12/5/02	RAB
CHROMIUM	EPA-6010	17	MG/KG	12/5/02	RAB
LEAD	EPA-6010	ND(<6.6)	MG/KG	12/5/02	RAB
MERCURY	EPA-7471	0.06	MG/KG	12/4/02	RAB
SELENIUM	EPA-6010	ND(<5.5)	MG/KG	12/5/02	RAB
SILVER	EPA-6010	ND(<0.77)	MG/KG	12/5/02	RAB

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY DIESEL FUEL #1

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
DIESEL RANGE REPORTING LIMIT IS 25 MG/KG
LUBE OIL RANGE REPORTING LIMIT IS 50 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY: CM

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CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 12/6/02
CCIL JOB #: 212016
CCIL SAMPLE #: 2
DATE RECEIVED: 12/4/02
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 09644 SNOHOMISH CTY
CLIENT SAMPLE ID: 09644-C-2.5-125 12/4/02

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	12/5/02	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	12/5/02	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	12/5/02	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	12/5/02	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	12/5/02	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	12/5/02	LAH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS: GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG .

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: _____

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CCI
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LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 12/6/02
CCIL JOB #: 212016

DATE RECEIVED: 12/4/02
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 09644 SNOHOMISH CTY

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
212016-01	NWTPH-DX	C25	90
212016-02	NWTPH-GX	TFT	96
212016-02	EPA-8021	TFT	80

APPROVED BY: 

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CHAIN OF CUSTODY RECORD

SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

400 N. 34th Street, Suite 100
Seattle, WA 98103
(206) 632-8020

11500 Olive Blvd., Suite 276
St. Louis, MO 63141
(314) 872-8170

2055 Hill Road
Fairbanks, AK 99709
(907) 479-0600

5430 Fairbanks Street, Suite 3
Anchorage, AK 99518
(907) 561-2120

303 Wellsian Way
Richland, WA 99352
(509) 946-6309

Page 1 of 1
Laboratory CCI
Attn:

Analysis Parameters/Sample Container Description
(include preservative if used)

Sample Identity	Lab No.	Time	Date Sampled	Comp.	Grab	GBTEX	D-XT	RCRA 8				Total Number of Containers	Remarks/Matrix
09644-MW-1.3-133			12/4				X	X					5-1
09644-C-2.5-125			"			X							1
CD?													

Project Information	
Project Number:	09644
Project Name:	Swanson Site CTy
Contact:	Agnes Tiew
Ongoing Project?	Yes ☐ No ☐
Sampler:	Brian Rezmick

Sample Receipt	
Total Number of Containers	2
COC Seals/Intact? Y/N/NA	N/A
Received Good Cond./Cold	yes
Delivery Method:	CCI Int
(attach shipping bill, if any)	

Instructions

Requested Turn Around Time: by Friday 1100 AM

Special Instructions:

Distribution: White - w/shipment - returned to Shannon & Wilson w/ Laboratory report
Yellow - w/shipment - for consignee files
Pink - Shannon & Wilson - Job File

Relinquished By: 1.	Relinquished By: 2.	Relinquished By: 3
Signature:	Signature:	Signature:
Time: 2:00 pm	Time:	Time:
Printed Name:	Printed Name:	Printed Name:
Date: 12/4/02	Date:	Date:
Company: Shannon & Wilson, Inc.	Company:	Company:

Received By: 1.	Received By: 2.	Received By: 3
Signature:	Signature:	Signature:
Time: 2:00	Time:	Time:
Printed Name: Rick Bagan	Printed Name:	Printed Name:
Date: 12/4/02	Date:	Date:
Company: CCIAL	Company:	Company:

F-19-91/UR

No. 25991

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 12/11/02
CCIL JOB #: 212042
CCIL SAMPLE #: 1
DATE RECEIVED: 12/10/02
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011 SNO CO
CLIENT SAMPLE ID: 09644-J-3.5-138 12/6/02 0830

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-DIESEL RANGE	NWTPH-DX	120	MG/KG	12/10/02	MJL
PCB-1016	EPA-8082 MOD	ND(<0.1)	MG/KG	12/11/02	LAH
PCB-1221	EPA-8082 MOD	ND(<0.1)	MG/KG	12/11/02	LAH
PCB-1232	EPA-8082 MOD	ND(<0.1)	MG/KG	12/11/02	LAH
PCB-1242	EPA-8082 MOD	ND(<0.1)	MG/KG	12/11/02	LAH
PCB-1248	EPA-8082 MOD	ND(<0.1)	MG/KG	12/11/02	LAH
PCB-1254	EPA-8082 MOD	ND(<0.1)	MG/KG	12/11/02	LAH
PCB-1260	EPA-8082 MOD	ND(<0.1)	MG/KG	12/11/02	LAH

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY DIESEL FUEL #2

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT, REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
DIESEL RANGE REPORTING LIMIT IS 25 MG/KG
LUBE OIL RANGE REPORTING LIMIT IS 50 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY: _____

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LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 12/11/02
CCIL JOB #: 212042

DATE RECEIVED: 12/10/02
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011 SNO CO

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
212042-01	NWTPH-DX	C25	111
212042-01	EPA-8082 MOD	TCMX	87
212042-01	EPA-8082 MOD	DBC	93

APPROVED BY: _____

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CHAIN-OF-CUSTODY RECORD

SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

400 N. 34th Street, Suite 100
Seattle, WA 98103
(206) 632-8020

2055 Hill Road
Fairbanks, AK 99709
(907) 479-0600

2255 S.W. Canyon Road
Portland, OR 97201-2498
(503) 223-6147

2043 Westport Center Drive
St. Louis, MO 63146-3564
(314) 392-0050

5430 Fairbanks Street, Suite 3
Anchorage, AK 99518
(907) 561-2120

1200 17th Street, Suite 1024
Denver, Co 80202
(303) 825-3800

303 Wellsian Way
Richland, WA 99352
(509) 946-6309

Laboratory CCIAL

Attn:

Analysis Parameters/Sample Container Description
(include preservative if used)

Sample Identity	Lab No.	Time	Date Sampled	Comp.	Grab	NWTPH-Dx	PCBs					Total Number of Containers	Remarks/Matrix
09644-J-3.5-138		0830	12/6/02		X	X	X					1	SOIL

Project Information		Sample Receipt	
Project Number:	21-1-09644-011	Total Number of Containers	
Project Name:	SinCo	COC Seals/Intact? Y/N/NA	
Contact:	A. TIRAC	Received Good Cond./Cold	
Ongoing Project?	Yes ☒ No ☐	Delivery Method:	
Sampler:	BGR	(attach shipping bill, if any)	

Relinquished By: 1.	Relinquished By: 2.	Relinquished By: 3.
Signature: Time: 1700	Signature: Time:	Signature: Time:
Printed Name: AGNES. TIRAC Date: 12/10/200?	Printed Name: Date:	Printed Name: Date:
Company: S&W	Company:	Company:
Received By: 1.	**Received By: 2.**	**Received By: 3.**
Signature: Time:	Signature: Time:	Signature: Time:
Printed Name: Date:	Printed Name: Date:	Printed Name: Date:
Company:	Company:	Company:

Instructions

Requested Turnaround Time: 2-DAY

Special Instructions:

Distribution: White - w/shipment - returned to Shannon & Wilson w/ laboratory report
Yellow - w/shipment - for consignee files
Pink - Shannon & Wilson - Job File

F-19-91/UR

No. 026375

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 12/11/02
CCIL JOB #: 212041
CCIL SAMPLE #: 1
DATE RECEIVED: 12/11/02
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011 SNOHO. COUNTY GARAGE
CLIENT SAMPLE ID: 09644-J-3-125 12/9/02 10:00AM

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	11	MG/KG	12/10/02	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	12/10/02	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	12/10/02	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	12/10/02	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	12/10/02	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	12/10/02	LAH

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: CAL

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 12/11/02
CCIL JOB #: 212041

DATE RECEIVED: 12/11/02
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011 SNOHO. COUNTY GARAGE

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
212041-01	NWTPH-GX	TFT	127
212041-01	EPA-8021	TFT	128

APPROVED BY: _____

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SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

CHAIN OF CUSTODY RECORD

Page 1 of 1
Laboratory
Attn:

400 N. 34th Street, Suite 100
Seattle, WA 98103
(206) 632-8020

11500 Olive Blvd., Suite 276
St. Louis, MO 63141
(314) 872-8170

2055 Hill Road
Fairbanks, AK 99709
(907) 479-0600

5430 Fairbanks Street, Suite 3
Anchorage, AK 99518
(907) 561-2120

303 Wellsian Way
Richland, WA 99352
(509) 946-6309

Analysis Parameters/Sample Container Description
(include preservative if used)

Sample Identity	Lab No.	Time	Date Sampled	Comp.	Grab	ERTEX						Total Number of Containers	Remarks/Matrix
090424-3-3-12		10 [illegible]	12 [illegible]			X							[illegible]

Project Information		Sample Receipt	
Project Number:	[illegible]	Total Number of Containers	1
Project Name:	[illegible]	COC Seals/Intact? Y/N/NA	N/A
Contact:	[illegible]	Received Good Cond./Cold	[illegible]
Ongoing Project?	Yes ☑ No ☐	Delivery Method:	[illegible]
Sampler:	[illegible]	(attach shipping bill, if any)	

Instructions

Requested Turn Around Time: 2 Day TAT Due Wed [illegible]

Special Instructions: [illegible]

Relinquished By: 1.	Relinquished By: 2.	Relinquished By: 3.
Signature: [illegible] Time: [illegible]	Signature: Time:	Signature: Time:
Printed Name: [illegible] Date: [illegible]	Printed Name: Date:	Printed Name: Date:
Company:	Company:	Company:
Received By: 1.	**Received By: 2.**	**Received By: 3.**
Signature: Time: [illegible]	Signature: Time:	Signature: Time:
Printed Name: R. G. Bryan Date: [illegible]	Printed Name: Date:	Printed Name: Date:
Company: CCIAL	Company:	Company:

Distribution: White - w/shipment - returned to Shannon & Wilson w/ Laboratory report
Yellow - w/shipment - for consignee files
Pink - Shannon & Wilson - Job File

F-19-91/UR

No. 25990

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 12/17/02
CCIL JOB #: 212063
CCIL SAMPLE #: 1
DATE RECEIVED: 12/16/02
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011 SNO CO
CLIENT SAMPLE ID: 09644-K.9-3.4-126 12/16/02

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-DIESEL RANGE	NWTPH-DX	ND	MG/KG	12/17/02	MJL

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
DIESEL RANGE REPORTING LIMIT IS 25 MG/KG
LUBE OIL RANGE REPORTING LIMIT IS 50 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY: _____

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CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 12/17/02
CCIL JOB #: 212063
CCIL SAMPLE #: 2
DATE RECEIVED: 12/16/02
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011 SNO CO
CLIENT SAMPLE ID: 09644-K-3.2-128 12/16/02

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-DIESEL RANGE	NWTPH-DX	ND	MG/KG	12/17/02	MJL

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
DIESEL RANGE REPORTING LIMIT IS 25 MG/KG
LUBE OIL RANGE REPORTING LIMIT IS 50 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY: _____

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CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 12/17/02
CCIL JOB #: 212063
CCIL SAMPLE #: 3
DATE RECEIVED: 12/16/02
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011 SNO CO
CLIENT SAMPLE ID: 09644-K.4-3.7-130 12/16/02

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-DIESEL RANGE	NWTPH-DX	ND	MG/KG	12/17/02	LAH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
DIESEL RANGE REPORTING LIMIT IS 25 MG/KG
LUBE OIL RANGE REPORTING LIMIT IS 50 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY: _____

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 12/17/02
CCIL JOB #: 212063
CCIL SAMPLE #: 4
DATE RECEIVED: 12/16/02
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011 SNO CO
CLIENT SAMPLE ID: 09644-J.2-3.3-130 12/16/02

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-DIESEL RANGE	NWTPH-DX	25	MG/KG	12/17/02	MJL

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY DIESEL

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
DIESEL RANGE REPORTING LIMIT IS 25 MG/KG
LUBE OIL RANGE REPORTING LIMIT IS 50 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY: CN

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CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 12/17/02
CCIL JOB #: 212063
CCIL SAMPLE #: 5
DATE RECEIVED: 12/16/02
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011 SNO CO
CLIENT SAMPLE ID: 09644-I.5-3.8-133 12/16/02

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-DIESEL RANGE	NWTPH-DX	ND	MG/KG	12/17/02	LAH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
DIESEL RANGE REPORTING LIMIT IS 25 MG/KG
LUBE OIL RANGE REPORTING LIMIT IS 50 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY: CM

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LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 12/17/02
CCIL JOB #: 212063

DATE RECEIVED: 12/16/02
WDOE ACCREDITATION #: C142

CLIENT CONTACT: . AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011 SNO CO

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
212063-01	NWTPH-DX	C25	118
212063-02	NWTPH-DX	C25	125
212063-03	NWTPH-DX	C25	106
212063-04	NWTPH-DX	C25	75
212063-05	NWTPH-DX	C25	85

APPROVED BY: _____

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CCI Analytical Laboratories, Inc.
8620 Holly Drive
Everett, WA 98208
Phone (425) 356-2600
(206) 292-9059 Seattle
(425) 356-2626 Fax

Chain Of Custody/ Laboratory Analysis Request

CCI Job# (Laboratory Use Only)

Date 12/16/02 Page 1 Of 1

PROJECT ID: 21-1-09644-011
REPORT TO COMPANY: Shannon & Wilson
PROJECT MANAGER: Agnes Tirao
ADDRESS: 400 N 34th St Ste 100
Seattle WA 98103
PHONE: 206 632 8020 FAX: 206 6956777
INVOICE TO COMPANY:
ATTENTION:
ADDRESS:
P.O. NUMBER CCI QUOTE:

SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-GX	BTEX	NWTPH-DX	NWTPH-HCID	EPA 8021 ☐ 602 ☐	EPA 8010 ☐ 601 ☐	EPA 8260 ☐ 624 ☐	EPA 8270 ☐ 625 ☐	EPA 8081/8082 ☐ 608 ☐ PCB only ☐ Pest only ☐	Metals Priority Pollutant ☐ RCRA ☐ TAL ☐	Metals Other (Specify)	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐	OTHER (Specify)	NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
1. D9644-K.9-3.4-126	12/16/02		S				X										RUSH (noon 12/17)	1	
2. -K-3.2-128																	RUSH (↓)		
3. -K.4-3.7-130																	STANDARD		
4. -J.2-3.3-130																	RUSH (noon 12/17)		
5. -I.5-3.8-133																	STANDARD		
6.																			
7.																			
8.																			
9.																			
10.																			

SPECIAL INSTRUCTIONS

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: [signature] S&W 12/16/02 1700
Received By: [signature] CCI/AL 12.16.02 1700
2. Relinquished By:

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis: 10 Standard | 5 | 3 | 2 | 1 | SAME DAY

Fuels & Hydrocarbon Analysis: 5 Standard | 3 | 1 | SAME DAY

OTHER: Specify: AS ABOVE

* Turnaround request less than standard may incur Rush Charges

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LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 12/18/02
CCIL JOB #: 212069
CCIL SAMPLE #: 1
DATE RECEIVED: 12/17/02
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011 SNO CO CRI
CLIENT SAMPLE ID: 09644-L-2.3-120 12/17/02 0804

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	430	MG/KG	12/17/02	LAH
MTBE***	EPA-8021	ND(<1)	MG/KG	12/17/02	LAH
BENZENE	EPA-8021	ND(<0.3)	MG/KG	12/17/02	LAH
TOLUENE	EPA-8021	ND(<0.5)	MG/KG	12/17/02	LAH
ETHYLBENZENE	EPA-8021	2.0	MG/KG	12/17/02	LAH
XYLENES	EPA-8021	3.2	MG/KG	12/17/02	LAH

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 30 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: _____

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ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 12/18/02
CCIL JOB #: 212069
CCIL SAMPLE #: 2
DATE RECEIVED: 12/17/02
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011 SNO CO CRI
CLIENT SAMPLE ID: 09644-J.4-2.8-125 12/17/02 0818

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	2800	MG/KG	12/18/02	LAH
MTBE***	EPA-8021	ND(<2.0)	MG/KG	12/17/02	LAH
BENZENE	EPA-8021	ND(<0.6)	MG/KG	12/17/02	LAH
TOLUENE	EPA-8021	ND(<1.0)	MG/KG	12/17/02	LAH
ETHYLBENZENE	EPA-8021	17	MG/KG	12/17/02	LAH
XYLENES	EPA-8021	31	MG/KG	12/17/02	LAH

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 300 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: CH

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CCI
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LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 12/18/02
CCIL JOB #: 212069
CCIL SAMPLE #: 3
DATE RECEIVED: 12/17/02
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011 SNO CO CRI
CLIENT SAMPLE ID: 09644-E.8-2.8-125 12/17/02 1246

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	12/18/02	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	12/17/02	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	12/17/02	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	12/17/02	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	12/17/02	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	12/17/02	LAH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: CH

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LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 12/18/02
CCIL JOB #: 212069

DATE RECEIVED: 12/17/02
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011 SNO CO CRI

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
212069-01	NWTPH-GX	TFT	*
212069-01	EPA-8021	TFT	*
212069-02	NWTPH-GX	TFT	*
212069-02	EPA-8021	TFT	*
212069-03	NWTPH-GX	TFT	87
212069-03	EPA-8021	TFT	95

* SURROGATE DILUTED OUT OF CALIBRATION RANGE

APPROVED BY: _____

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CHAIN-OF-CUSTODY RECORD

SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

400 N. 34th Street, Suite 100
Seattle, WA 98103
(206) 632-8020

~~2055 Hill Road~~
Fairbanks, AK 99709
(907) 479-0600

2255 S.W. Canyon Road
Portland, OR 97201-2498
(503) 223-6147

2043 Westport Center Drive
St. Louis, MO 63146-3564
(314) 392-0050

5430 Fairbanks Street, Suite 3
Anchorage, AK 99518
(907) 561-2120

1200 17th Street, Suite 1024
Denver, Co 80202
(303) 825-3800

303 Wellsian Way
Richland, WA 99352
(509) 946-6309

Laboratory CCIAL

Attn:

Analysis Parameters/Sample Container Description
(include preservative if used)

Sample Identity	Lab No.	Time	Date Sampled	Comp.	Grab	NWTPH-G BTEX						Total Number of Containers	Remarks/Matrix
09644-L-2.3-120		0804	12/7/02		X	X						1	SOIL
-J.4-2.8-125		0818			↓	↓						↓	↓
-E.8-2.8-125		1246	↓		↓	↓						↓	↓

Project Information	Sample Receipt
Project Number: 21-09644-011	Total Number of Containers
Project Name: Swlo CR1	COC Seals/Intact? Y/N/NA
Contact: A TIRAO	Received Good Cond./Cold
Ongoing Project? Yes ☒ No ☐	Delivery Method:
Sampler: AT	(attach shipping bill, if any)

Instructions	
Requested Turnaround Time:	by NOON 12/18
Special Instructions:	(confirmed by CR)

Relinquished By: 1.	Relinquished By: 2.	Relinquished By: 3.
Signature: Time: 1500	Signature: Time:	Signature: Time:
Printed Name: ARES TIRAO Date: 12/7/02	Printed Name: Date:	Printed Name: Date:
Company: S&W	Company:	Company:

Received By: 1.	Received By: 2.	Received By: 3.
Signature: Time:	Signature: Time:	Signature: Time:
Printed Name: Date:	Printed Name: Date:	Printed Name: Date:
Company:	Company:	Company:

Distribution: White - w/shipment - returned to Shannon & Wilson w/ laboratory report
Yellow - w/shipment - for consignee files
Pink - Shannon & Wilson - Job File

F-19-91/UR

No. 026376

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 12/19/02
CCIL JOB #: 212080
CCIL SAMPLE #: 1
DATE RECEIVED: 12/18/02
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011 SNO CO CRI
CLIENT SAMPLE ID: 09644-M-3.5-120 12/18/02 3:00

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	1100	MG/KG	12/19/02	LAH
MTBE***	EPA-8021	ND(<2)	MG/KG	12/19/02	LAH
BENZENE	EPA-8021	0.7	MG/KG	12/19/02	LAH
TOLUENE	EPA-8021	ND(<1.0)	MG/KG	12/19/02	LAH
ETHYLBENZENE	EPA-8021	4.3	MG/KG	12/19/02	LAH
XYLENES	EPA-8021	11	MG/KG	12/19/02	LAH

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 50 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: _____

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CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 12/19/02
CCIL JOB #: 212080
CCIL SAMPLE #: 2
DATE RECEIVED: 12/18/02
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011 SNO CO CRI
CLIENT SAMPLE ID: 09644-K-1.5-120 12/18/02 3:00

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	70	MG/KG	12/18/02	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	12/18/02	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	12/18/02	LAH
TOLUENE	EPA-8021	ND(<0.05	MG/KG	12/18/02	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05	MG/KG	12/18/02	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	12/18/02	LAH

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: CNL

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 12/19/02
CCIL JOB #: 212080
CCIL SAMPLE #: 3
DATE RECEIVED: 12/18/02
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011 SNO CO CRI
CLIENT SAMPLE ID: 09644-K-2.5-110 12/18/02 3:00

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	12/18/02	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	12/18/02	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	12/18/02	LAH
TOLUENE	EPA-8021	ND(<0.05	MG/KG	12/18/02	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05	MG/KG	12/18/02	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	12/18/02	LAH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: CVA

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CCI
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LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 12/19/02
CCIL JOB #: 212080
CCIL SAMPLE #: 4
DATE RECEIVED: 12/18/02
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011 SNO CO CRI
CLIENT SAMPLE ID: 09644-I-2.75-110 12/18/02 3:00

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	12/18/02	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	12/18/02	LAH
BENZENE	EPA-8021	0.07	MG/KG	12/18/02	LAH
TOLUENE	EPA-8021	ND(<0.05	MG/KG	12/18/02	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05	MG/KG	12/18/02	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	12/18/02	LAH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: CNL

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CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 12/19/02
CCIL JOB #: 212080

DATE RECEIVED: 12/18/02
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011 SNO CO CRI

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
212080-01	NWTPH-GX	TFT	*
212080-01	EPA-8021	TFT	*
212080-02	NWTPH-GX	TFT	112
212080-02	EPA-8021	TFT	106
212080-03	NWTPH-GX	TFT	79
212080-03	EPA-8021	TFT	71
212080-04	NWTPH-GX	TFT	81
212080-04	EPA-8021	TFT	71

* SURROGATE DILUTED OUT OF CALIBRATION RANGE

APPROVED BY: 

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

CHAIN-OF-CUSTODY RECORD

400 N. 34th Street, Suite 100
Seattle, WA 98103
(206) 632-8020

2043 Westport Center Drive
St. Louis, MO 63146-3564
(314) 392-0050

303 Wellsian Way
Richland, WA 99352
(509) 946-6309

2055 Hill Road
Fairbanks, AK 99709
(907) 479-0600

5430 Fairbanks Street, Suite 3
Anchorage, AK 99518
(907) 561-2120

2255 S.W. Canyon Road
Portland, OR 97201-2498
(503) 223-6147

1200 17th Street, Suite 1024
Denver, Co 80202
(303) 825-3800

Page 1 of 1

Laboratory Rake

Attn:

Analysis Parameters/Sample Container Description
(include preservative if used)

Sample Identity	Lab No.	Time	Date Sampled	Comp.	Grab	418.1 TPH	8260 BTEX					Total Number of Containers	Remarks/Matrix
OSGAA-M-2.5-120		3:00	12/18				X						Soil
OSGAA-K-1.5-120		3:00	12/18				X						Soil
OSGAA-K-2.5-110		3:00	12/18				X						Soil
OSGAA-I-2.75-110		3:00	12/18				X						Soil

Project Information		Sample Receipt	
Project Number:	21-99414-011	Total Number of Containers	4
Project Name:	Cook Park Comfort	COC Seals/Intact? Y/N/NA	N/A
Contact:	Steve Jones	Received Good Cond./Cold	Yes
Ongoing Project?	Yes ☒ No ☐	Delivery Method:	
Sampler:	Ryan Reed	(attach shipping bill, if any)	

Instructions
Requested Turnaround Time: 24 hrs
Special Instructions: Call asap

Relinquished By: 1.	Relinquished By: 2.	Relinquished By: 3.
Signature: Ryan Reed Time: 4:30pm	Signature: Time:	Signature: Time:
Printed Name: Ryan Reed Date: 12/18	Printed Name: Date:	Printed Name: Date:
Company: Fire and Water	Company:	Company:

Received By: 1.	Received By: 2.	Received By: 3.
Signature: Time: 4:30	Signature: Time:	Signature: Time:
Printed Name: Rick Bagan Date: 12/18/92	Printed Name: Date:	Printed Name: Date:
Company: CCIAL	Company:	Company:

Distribution: White - w/shipment - returned to Shannon & Wilson w/ laboratory report
Yellow - w/shipment - for consignee files
Pink - Shannon & Wilson - Job File

F-19-91/UR

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 12/23/02
CCIL JOB #: 212097
CCIL SAMPLE #: 1
DATE RECEIVED: 12/20/02
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011 SNOH0. PARK GAR.
CLIENT SAMPLE ID: 09644-C-2.5-125 12/20/02 3:30

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	12/20/02	CMH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	12/20/02	CMH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	12/20/02	CMH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	12/20/02	CMH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	12/20/02	CMH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	12/20/02	CMH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: CH

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
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CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 12/23/02
CCIL JOB #: 212097
CCIL SAMPLE #: 2
DATE RECEIVED: 12/20/02
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011 SNOH0. PARK GAR.
CLIENT SAMPLE ID: 09644-E-3.5-133 12/20/02 4:00

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	1200	MG/KG	12/21/02	CMH
MTBE***	EPA-8021	ND(<5)	MG/KG	12/21/02	CMH
BENZENE	EPA-8021	ND(<1.5)	MG/KG	12/21/02	CMH
TOLUENE	EPA-8021	ND(<2.5)	MG/KG	12/21/02	CMH
ETHYLBENZENE	EPA-8021	2.9	MG/KG	12/21/02	CMH
XYLENES	EPA-8021	ND(<10)	MG/KG	12/21/02	CMH

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 150 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: CVL

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CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 12/23/02
CCIL JOB #: 212097

DATE RECEIVED: 12/20/02
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011 SNOH0. PARK GAR.

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
212097-01	NWTPH-GX	TFT	99
212097-01	EPA-8021	TFT	90
212097-02	NWTPH-GX	TFT	*
212097-02	EPA-8021	TFT	*

* SURROGATE DILUTED OUT OF CALIBRATION RANGE

APPROVED BY: _____

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CHAIN-OF-CUSTODY RECORD

SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

400 N. 34th Street, Suite 100
Seattle, WA 98103
(206) 632-8020

2055 Hill Road
Fairbanks, AK 99709
(907) 479-0600

2255 S.W. Canyon Road
Portland, OR 97201-2498
(503) 223-6147

2043 Westport Center Drive
St. Louis, MO 63146-3564
(314) 392-0050

5430 Fairbanks Street, Suite 3
Anchorage, AK 99518
(907) 561-2120

1200 17th Street, Suite 1024
Denver, Co 80202
(303) 825-3800

303 Wellsian Way
Richland, WA 99352
(509) 946-6309

Laboratory CCI

Attn:

Analysis Parameters/Sample Container Description
(include preservative if used)

Sample Identity	Lab No.	Time	Date Sampled	Comp.	Grab	G/BTEX						Total Number of Containers	Remarks/Matrix
09644-C-2.5-125		~~3:30~~	12/20			X							Soil
09644-E-3.5-133		4:00	12/20			X							Soil

Project Information		Sample Receipt	
Project Number:	0221-1-09644-011	Total Number of Containers	2
Project Name:	Snoho. Park Gar.	COC Seals/Intact? Y/N/NA	N/A
Contact:	Agnes Tirao	Received Good Cond./Cold	Y
Ongoing Project?	Yes ☒ No ☐	Delivery Method:	drop off
Sampler:	Brian Reznick	(attach shipping bill, if any)	

Instructions

Requested Turnaround Time: 24 hrs (Monday noon)

Special Instructions: Contact Agnes w/ results

Relinquished By: 1.	Relinquished By: 2.	Relinquished By: 3.
Signature: Brian Reznick	Signature:	Signature:
Time: 4:30	Time:	Time:
Printed Name: Brian Reznick	Printed Name:	Printed Name:
Date: 12/20/02	Date:	Date:
Company: Shannon & Wilson	Company:	Company:

Received By: 1.	Received By: 2.	Received By: 3.
Signature:	Signature:	Signature:
Time: 9:30	Time:	Time:
Printed Name: Rick Bagan	Printed Name:	Printed Name:
Date: 12/20/02	Date:	Date:
Company: CCFAL	Company:	Company:

Distribution: White - w/shipment - returned to Shannon & Wilson w/ laboratory report
Yellow - w/shipment - for consignee files
Pink - Shannon & Wilson - Job File

F-19-91/UR

No.

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 12/27/02
CCIL JOB #: 212103
CCIL SAMPLE #: 1
DATE RECEIVED: 12/23/02
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011 SNO CO CRI
CLIENT SAMPLE ID: 09644-F-2.3-105 12/23/02 11:02

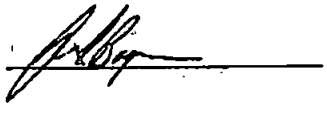
DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	12/26/02	CMH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	12/26/02	CMH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	12/26/02	CMH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	12/26/02	CMH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	12/26/02	CMH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	12/26/02	CMH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: 

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LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 12/27/02
CCIL JOB #: 212103

DATE RECEIVED: 12/23/02
WDOE ACCREDITATION #: C142

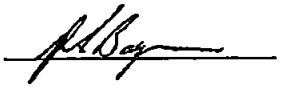
CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011 SNO CO CRI

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
212103-01	NWTPH-GX	TFT	96
212103-01	EPA-8021	TFT	81

APPROVED BY: 

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CHAIN-OF-CUSTODY RECORD

SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

400 N. 34th Street, Suite 100
Seattle, WA 98103
(206) 632-8020

2043 Westport Center Drive
St. Louis, MO 63146-3564
(314) 392-0050

303 Wellsian Way
Richland, WA 99352
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Fairbanks, AK 99709
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(907) 561-2120

2255 S.W. Canyon Road
Portland, OR 97201-2498
(503) 223-6147

1200 17th Street, Suite 1024
Denver, Co 80202
(303) 825-3800

Laboratory CCIAL

Attn:

Analysis Parameters/Sample Container Description (include preservative if used)

Sample Identity	Lab No.	Time	Date Sampled	Comp.	Grab	NWTPH-G/BTEX/40						Total Number of Containers	Remarks/Matrix
09644-F-2,3-105	-1	1102	12/23/02		X	X						1	SOIL

Project Information	
Project Number:	21-1-09644-011
Project Name:	SnoCo CR1
Contact:	A TIRAO
Ongoing Project?	Yes ☒ No ☐
Sampler:	ACT

Sample Receipt	
Total Number of Containers	
COC Seals/Intact? Y/N/NA	
Received Good Cond./Cold	
Delivery Method: (attach shipping bill, if any)	Co. Personnel

Instructions	
Requested Turnaround Time:	STANDARD
Special Instructions:	

Distribution: White - w/shipment - returned to Shannon & Wilson w/ laboratory report
Yellow - w/shipment - for consignee files
Pink - Shannon & Wilson - Job File

Relinquished By: 1.	Relinquished By: 2.	Relinquished By: 3.
Signature: Time: 1410	Signature: Time: 1646	Signature: Time:
Printed Name: AGNES TIRAO Date: 12/23/02	Printed Name: Paul L. Van Horne Date: 12/23/02	Printed Name: Date:
Company: S&W	Company: S&W	Company:
Received By: 1.	**Received By: 2.**	**Received By: 3.**
Signature: Paul L. Van Horne Time: 1410	Signature: Time: 1646	Signature: Time:
Printed Name: Paul L. Van Horne Date: 12/23/02	Printed Name: Date: 12/23/02	Printed Name: Date:
Company: S&W	Company: CCIAL	Company:

F-19-91/UR

No.

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 12/30/02
CCIL JOB #: 212105
CCIL SAMPLE #: 1
DATE RECEIVED: 12/26/02
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011
CLIENT SAMPLE ID: 09644-H-3.3-125 12/26/02 0942

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	12/26/02	CMH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	12/26/02	CMH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	12/26/02	CMH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	12/26/02	CMH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	12/26/02	CMH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	12/26/02	CMH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: CMH

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

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ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 12/30/02
CCIL JOB #: 212105
CCIL SAMPLE #: 2
DATE RECEIVED: 12/26/02
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011
CLIENT SAMPLE ID: 09644-I-3.3-125 12/26/02 0944

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	2000	MG/KG	12/26/02	CMH
MTBE***	EPA-8021	ND(<1)	MG/KG	12/26/02	CMH
BENZENE	EPA-8021	4.4	MG/KG	12/26/02	CMH
TOLUENE	EPA-8021	3.9	MG/KG	12/26/02	CMH
ETHYLBENZENE	EPA-8021	13	MG/KG	12/26/02	CMH
XYLENES	EPA-8021	25	MG/KG	12/26/02	CMH

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY WEATHERED GASOLINE

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 300 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: CMH

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CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 12/30/02
CCIL JOB #: 212105
CCIL SAMPLE #: 3
DATE RECEIVED: 12/26/02
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011
CLIENT SAMPLE ID: 09644-E-2.8-125 12/26/02 1014

DATA RESULTS

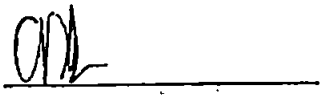
ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	96	MG/KG	12/26/02	CMH
MTBE***	EPA-8021	ND(<0.4)	MG/KG	12/26/02	CMH
BENZENE	EPA-8021	ND(<0.12)	MG/KG	12/26/02	CMH
TOLUENE	EPA-8021	ND(<0.2)	MG/KG	12/26/02	CMH
ETHYLBENZENE	EPA-8021	ND(<0.2)	MG/KG	12/26/02	CMH
XYLENES	EPA-8021	ND(<0.8)	MG/KG	12/26/02	CMH

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 12 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: 

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

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ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 12/30/02
CCIL JOB #: 212105
CCIL SAMPLE #: 4
DATE RECEIVED: 12/26/02
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011
CLIENT SAMPLE ID: 09644-H-2.6-120 12/26/02 1016

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	4	MG/KG	12/26/02	CMH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	12/26/02	CMH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	12/26/02	CMH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	12/26/02	CMH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	12/26/02	CMH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	12/26/02	CMH

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: _____

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ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 12/30/02
CCIL JOB #: 212105

DATE RECEIVED: 12/26/02
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
212105-01	NWTPH-GX	TFT	91
212105-01	EPA-8021	TFT	95
212105-02	NWTPH-GX	TFT	*
212105-02	EPA-8021	TFT	*
212105-03	NWTPH-GX	TFT	95
212105-03	EPA-8021	TFT	102
212105-04	NWTPH-GX	TFT	85
212105-04	EPA-8021	TFT	74

* SURROGATE DILUTED OUT OF CALIBRATION RANGE

APPROVED BY: _____

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI Analytical Laboratories, Inc.
8620 Holly Drive
Everett, WA 98208
Phone (425) 356-2600
(206) 292-9059 Seattle
(425) 356-2626 Fax

Chain Of Custody/ Laboratory Analysis Request

CCI Job# (Laboratory Use Only)

Date 12/26/02 Page 1 Of 1

PROJECT ID: 21-1-09644-011
REPORT TO COMPANY: S&W
PROJECT MANAGER:
ADDRESS:
PHONE: FAX:
INVOICE TO COMPANY:
ATTENTION:
ADDRESS:
P.O. NUMBER CCI QUOTE:

SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-GX	BTEX	NWTPH-DX	NWTPH-HCID	EPA 8021 ☐ 602 ☐	EPA 8010 ☐ 601 ☐	EPA 8260 ☐ 624 ☐	EPA 8270 ☐ 625 ☐	EPA 8081/8082 ☐ 608 ☐ PCB only ☐ Pest only ☐	Metals Priority Pollutant ☐ RCRA ☐ TAL ☐	Metals Other (Specify)	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐	OTHER (Specify)	NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
1. 09644-H-3.3-125	12/26/02	0942	S		X	X													
2. -I-3.3-125		0944																	
3. -E-2.8-125		1014																	
4. -H-2.6-120		1016																	
5.																			
6.																			
7.																			
8.																			
9.																			
10.																			

SPECIAL INSTRUCTIONS

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: [illegible] S&W 1043
Received By: [illegible] CCI 1045 12/26/02
2. Relinquished By:
Received By:

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis: 10 (Standard) 5 3 2 1 SAME DAY

Fuels & Hydrocarbon Analysis: 5 (Standard) 3 1 SAME DAY

OTHER:

Specify: by noon tom

* Turnaround request less than standard may incur Rush Charges

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 12/30/02
CCIL JOB #: 212113
CCIL SAMPLE #: 1
DATE RECEIVED: 12/27/02
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011
CLIENT SAMPLE ID: 09644-G.5-2.8-108 12/27/02 0912

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	12/30/02	CMH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	12/30/02	CMH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	12/30/02	CMH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	12/30/02	CMH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	12/30/02	CMH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	12/30/02	CMH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: CM

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 12/30/02
CCIL JOB #: 212113
CCIL SAMPLE #: 2
DATE RECEIVED: 12/27/02
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011
CLIENT SAMPLE ID: 09644-H.5-2.4-108 12/27/02 0914

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	12/30/02	CMH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	12/30/02	CMH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	12/30/02	CMH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	12/30/02	CMH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	12/30/02	CMH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	12/30/02	CMH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: CMH

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CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 12/30/02
CCIL JOB #: 212113
CCIL SAMPLE #: 3
DATE RECEIVED: 12/27/02
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011
CLIENT SAMPLE ID: 09644-I.5-3.5-125 12/27/02 1018

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	240	MG/KG	12/30/02	CMH
MTBE***	EPA-8021	ND(<1)	MG/KG	12/30/02	CMH
BENZENE	EPA-8021	ND(<0.3)	MG/KG	12/30/02	CMH
TOLUENE	EPA-8021	ND(<0.5)	MG/KG	12/30/02	CMH
ETHYLBENZENE	EPA-8021	ND(<0.5)	MG/KG	12/30/02	CMH
XYLENES	EPA-8021	ND(<2)	MG/KG	12/30/02	CMH

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 30 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: CMH

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ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 12/30/02
CCIL JOB #: 212113
CCIL SAMPLE #: 4
DATE RECEIVED: 12/27/02
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011
CLIENT SAMPLE ID: 09644-I-2-125 12/27/02 1127

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	12/30/02	CMH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	12/30/02	CMH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	12/30/02	CMH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	12/30/02	CMH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	12/30/02	CMH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	12/30/02	CMH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: _____

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CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 12/30/02
CCIL JOB #: 212113
CCIL SAMPLE #: 5
DATE RECEIVED: 12/27/02
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011
CLIENT SAMPLE ID: 09644-F-2-125 12/27/02 1129

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	12/30/02	CMH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	12/30/02	CMH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	12/30/02	CMH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	12/30/02	CMH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	12/30/02	CMH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	12/30/02	CMH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: CM

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CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 12/30/02
CCIL JOB #: 212113

DATE RECEIVED: 12/27/02
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
212113--01	NWTPH-GX	TFT	94
212113--01	EPA-8021	TFT	78
212113--02	NWTPH-GX	TFT	80
212113--02	EPA-8021	TFT	64
212113--03	NWTPH-GX	TFT	*
212113--03	EPA-8021	TFT	*
212113--04	NWTPH-GX	TFT	89
212113--04	EPA-8021	TFT	90
212113--05	NWTPH-GX	TFT	87
212113--05	EPA-8021	TFT	88

* SURROGATE DILUTED OUT OF CALIBRATION RANGE

APPROVED BY: _____

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CHAIN-OF-CUSTODY RECORD

SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

400 N. 34th Street, Suite 100
Seattle, WA 98103
(206) 632-8020

2043 Westport Center Drive
St. Louis, MO 63146-3564
(314) 392-0050

303 Wellsian Way
Richland, WA 99352
(509) 946-6309

2055 Hill Road
Fairbanks, AK 99709
(907) 479-0600

5430 Fairbanks Street, Suite 3
Anchorage, AK 99518
(907) 561-2120

2255 S.W. Canyon Road
Portland, OR 97201-2498
(503) 223-6147

1200 17th Street, Suite 1024
Denver, Co 80202
(303) 825-3800

Page 1 of 1

Laboratory CCIAL

Attn:

Analysis Parameters/Sample Container Description
(include preservative if used)

Sample Identity	Lab No.	Time	Date Sampled	Comp.	Grab	NWTPH-G/BTEX						Total Number of Containers	Remarks/Matrix
0944-G.5-2.8-108		0912	12/27/02		X	X						1	SOIL
-H.5-2.4-108		0914											
-I.5-3.5-125		1018											
-I-2-125		1127											
-F-2-125		1129											

Project Information		Sample Receipt	
Project Number:	21-09644-011	Total Number of Containers	
Project Name:	SnoCo CR1	COC Seals/Intact? Y/N/NA	
Contact:	A. TIRAD	Received Good Cond./Cold	
Ongoing Project?	Yes ☒ No ☐	Delivery Method:	
Sampler:	ACT	(attach shipping bill, if any)	

Instructions	
Requested Turnaround Time:	by TUES ("next day" RUSH) per ACT/RB phone conv.
Special Instructions:	

Distribution: White - w/shipment - returned to Shannon & Wilson w/ laboratory report
Yellow - w/shipment - for consignee files
Pink - Shannon & Wilson - Job File

Relinquished By: 1.	Relinquished By: 2.	Relinquished By: 3.
Signature: Agnes Tirad Time: 1330	Signature: Time:	Signature: Time:
Printed Name: AGNES TIRAD Date: 12/27/02	Printed Name: Date:	Printed Name: Date:
Company: SAW	Company:	Company:

Received By: 1.	Received By: 2.	Received By: 3.
Signature: Time: 1330	Signature: Time:	Signature: Time:
Printed Name: Kim Bacon Date: 12/27/02	Printed Name: Date:	Printed Name: Date:
Company: CCTAL	Company:	Company:

F-19-91/UR

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 12/31/02
CCIL JOB #: 212117
CCIL SAMPLE #: 1
DATE RECEIVED: 12/30/02
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011
CLIENT SAMPLE ID: 09644-I-2.75-112 12/30/02 1:00PM

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	12/30/02	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	12/30/02	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	12/30/02	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	12/30/02	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	12/30/02	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	12/30/02	LAH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: _____

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 12/31/02
CCIL JOB #: 212117
CCIL SAMPLE #: 2
DATE RECEIVED: 12/30/02
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011
CLIENT SAMPLE ID: 09644-I.5-2.25-112 12/30/02 1:00PM

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	12/30/02	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	12/30/02	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	12/30/02	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	12/30/02	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	12/30/02	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	12/30/02	LAH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: _____

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 12/31/02
CCIL JOB #: 212117
DATE RECEIVED: 12/30/02
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
212117-01	NWTPH-GX	TFT	78
212117-01	EPA-8021	TFT	79
212117-02	NWTPH-GX	TFT	79
212117-02	EPA-8021	TFT	79

APPROVED BY: _____

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CHAIN-OF-CUSTODY RECORD

SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

400 N. 34th Street, Suite 100
Seattle, WA 98103
(206) 632-8020

2043 Westport Center Drive
St. Louis, MO 63146-3564
(314) 392-0050

303 Wellsian Way
Richland, WA 99352
(509) 946-6309

2055 Hill Road
Fairbanks, AK 99709
(907) 479-0600

5430 Fairbanks Street, Suite 3
Anchorage, AK 99518
(907) 561-2120

2255 S.W. Canyon Road
Portland, OR 97201-2498
(503) 223-6147

1200 17th Street, Suite 1024
Denver, Co 80202
(303) 825-3800

Laboratory CCI

Attn:

Analysis Parameters/Sample Container Description
(include preservative if used)

Sample Identity	Lab No.	Time	Date Sampled	Comp.	Grab	G/BTEX						Total Number of Containers	Remarks/Matrix
09644-I-2.75-112		1:00 pm	12/30/02			X							Soil
09644-I.5-2.25-112		1:00 pm	12/30/02			X							Soil

Project Information		Sample Receipt	
Project Number:	21-1-09644-011	Total Number of Containers	2
Project Name:	Snoho. Pk. Garage	COC Seals/Intact? Y/N/NA	N/A
Contact:	Agnes Tirao	Received Good Cond./Cold	Yes
Ongoing Project?	Yes ☒ No ☐	Delivery Method:	dropped @ lab
Sampler:	Brian Reznick	(attach shipping bill, if any)	

Instructions

Requested Turnaround Time: Thurs. @ noon (1/2/03)

Special Instructions: Contact Agnes w/ results once determined

Relinquished By: 1.	Relinquished By: 2.	Relinquished By: 3.
Signature: Brian Reznick Time: 3:30 pm	Signature: Time:	Signature: Time:
Printed Name: Brian Reznick Date: 12/30/02	Printed Name: Date:	Printed Name: Date:
Company: Shannon & Wilson, Inc.	Company:	Company:
Received By: 1.	**Received By: 2.**	**Received By: 3.**
Signature: Time: 3:30	Signature: Time:	Signature: Time:
Printed Name: Rick Bagan Date: 12/30/02	Printed Name: Date:	Printed Name: Date:
Company: CCIAL	Company:	Company:

Distribution: White - w/shipment - returned to Shannon & Wilson w/ laboratory report
Yellow - w/shipment - for consignee files
Pink - Shannon & Wilson - Job File

F-19-91/UR

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 1/3/03
CCIL JOB #: 301001
CCIL SAMPLE #: 1
DATE RECEIVED: 1/2/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011
CLIENT SAMPLE ID: 09644-K.9-3.5-119 1/2/2003 1114

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	1/2/03	LAH
MTBE***	EPA-8021	ND(<0.2)	MG/KG	1/2/03	LAH
BENZENE	EPA-8021	ND(<0.06)	MG/KG	1/2/03	LAH
TOLUENE	EPA-8021	ND(<0.1)	MG/KG	1/2/03	LAH
ETHYLBENZENE	EPA-8021	ND(<0.1)	MG/KG	1/2/03	LAH
XYLENES	EPA-8021	ND(<0.4)	MG/KG	1/2/03	LAH
TPH-SEMIVOLATILE RANGE	NWTPH-DX	550	MG/KG	1/2/03	MJL

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY DIESEL FUEL #2

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 5 MG/KG
DIESEL RANGE REPORTING LIMIT IS 25 MG/KG
LUBE OIL RANGE REPORTING LIMIT IS 50 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: _____

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 1/3/03
CCIL JOB #: 301001

DATE RECEIVED: 1/2/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
301001-01	NWTPH-GX	TFT	77
301001-01	EPA-8021	TFT	84
301001-01	NWTPH-DX	C25	107

APPROVED BY: _____

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI Analytical Laboratories, Inc.
8620 Holly Drive
Everett, WA 98208
Phone (425) 356-2600
(206) 292-9059 Seattle
(425) 356-2626 Fax

Chain Of Custody/ Laboratory Analysis Request

CCI Job# (Laboratory Use Only)

Date 1/2/2003 Page 1 Of 1

PROJECT ID: 21-1-09644-011
REPORT TO COMPANY: Shannon & Wilson Inc.
PROJECT MANAGER:
ADDRESS:
PHONE: FAX:
INVOICE TO COMPANY:
ATTENTION:
ADDRESS:
P.O. NUMBER CCI QUOTE:

SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-GX	BTEX	NWTPH-DX	NWTPH-HCID	EPA 8021 ☐ 602 ☐	EPA 8010 ☐ 601 ☐	EPA 8260 ☐ 624 ☐	EPA 8270 ☐ 625 ☐	EPA 8081/8082 ☐ 608 ☐ PCB only ☐ Pest only ☐	Metals Priority Pollutant ☐ RCRA ☐ TAL ☐	Metals Other (Specify)	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐	OTHER (Specify)	NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
1. 09644-K.9-3.5-119	1/2/2003	1114	SO		X	X	▨												
2.																			
3.																			
4.																			
5.																			
6.																			
7.																			
8.																			
9.																			
10.																			

NWTPH-DX: added ~1525 1/2/03 via phone Conv w/ R. Bazan → RUSH TAT

SPECIAL INSTRUCTIONS

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: [signature] S&W 1/2/2003 1300
Received By: [signature] CCIAL 1.2.03 1315
2. Relinquished By:

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis
10 (Standard) 5 3 2 1 SAME DAY

Fuels & Hydrocarbon Analysis
5 (Standard) 3 1 SAME DAY

OTHER:
Specify: results by noon 1/3/03

* Turnaround request less than standard may incur Rush Charges

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 1/6/03
CCIL JOB #: 301006
CCIL SAMPLE #: 1
DATE RECEIVED: 1/3/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011
CLIENT SAMPLE ID: 09644-C.5-1.5-121 1/3/03 1254

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	1/6/03	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	1/6/03	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	1/6/03	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	1/6/03	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	1/6/03	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	1/6/03	LAH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: _____

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 1/6/03
CCIL JOB #: 301006

DATE RECEIVED: 1/3/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
301006-01	NWTPH-GX	TFT	75
301006-01	EPA-8021	TFT	65

APPROVED BY: _____

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CCI Analytical Laboratories, Inc.
8620 Holly Drive
Everett, WA 98208
Phone (425) 356-2600
(206) 292-9059 Seattle
(425) 356-2626 Fax

Chain Of Custody/ Laboratory Analysis Request

CCI Job# (Laboratory Use Only)

Date 1/3/2003 Page 1 Of 1

PROJECT ID: 2L1-09644-011
REPORT TO COMPANY: Shannon & Wilson
PROJECT MANAGER:
ADDRESS:
PHONE: FAX:
INVOICE TO COMPANY:
ATTENTION:
ADDRESS:
P.O. NUMBER CCI QUOTE:

SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-GX	BTEX	NWTPH-DX	NWTPH-HCID	EPA 8021 ☐ 602 ☐	EPA 8010 ☐ 601 ☐	EPA 8260 ☐ 624 ☐	EPA 8270 ☐ 625 ☐	EPA 8081/8082 ☐ 608 ☐ PCB only ☐ Pest only ☐	Metals Priority Pollutant ☐ RCRA ☐ TAL ☐	Metals Other (Specify)	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐	OTHER (Specify)	NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
1. 09644-C.5-1,5-121	1/3/2002	1254	SO		X	X													
2.																			
3.																			
4.																			
5.																			
6.																			
7.																			
8.																			
9.																			
10.																			

ANALYSIS REQUESTED

SPECIAL INSTRUCTIONS

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: [signature] S/W 1/3/2003 1540
Received By: [signature] CCIAL 1.3.03 1540
2. Relinquished By:

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis
10 Standard | 5 | 3 | 2 | 1 | SAME DAY

Fuels & Hydrocarbon Analysis
5 Standard | 3 | 1 | SAME DAY

OTHER:
Specify: results by end of day 1/6/03

* Turnaround request less than standard may incur Rush Charges

CCI
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LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 1/6/03
CCIL JOB #: 301010
CCIL SAMPLE #: 1
DATE RECEIVED: 1/6/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011
CLIENT SAMPLE ID: 09644-B.5-3-134 1/6/03 0810

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	1/6/03	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	1/6/03	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	1/6/03	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	1/6/03	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	1/6/03	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	1/6/03	LAH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: _____

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CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 1/6/03
CCIL JOB #: 301010
CCIL SAMPLE #: 2
DATE RECEIVED: 1/6/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011
CLIENT SAMPLE ID: 09644-B.3-2.7-121 1/6/03 1200

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	610	MG/KG	1/6/03	LAH
MTBE***	EPA-8021	ND(<1.0)	MG/KG	1/6/03	LAH
BENZENE	EPA-8021	ND(<0.3)	MG/KG	1/6/03	LAH
TOLUENE	EPA-8021	0.6	MG/KG	1/6/03	LAH
ETHYLBENZENE	EPA-8021	1.9	MG/KG	1/6/03	LAH
XYLENES	EPA-8021	3.6	MG/KG	1/6/03	LAH

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 30 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: _____

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ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 1/6/03
CCIL JOB #: 301010
CCIL SAMPLE #: 3
DATE RECEIVED: 1/6/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011
CLIENT SAMPLE ID: 09644-C-3.8-122 1/6/03 1420

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	1200	MG/KG	1/6/03	LAH
MTBE***	EPA-8021	ND(<1.0)	MG/KG	1/6/03	LAH
BENZENE	EPA-8021	1.4	MG/KG	1/6/03	LAH
TOLUENE	EPA-8021	3.1	MG/KG	1/6/03	LAH
ETHYLBENZENE	EPA-8021	3.3	MG/KG	1/6/03	LAH
XYLENES	EPA-8021	7.4	MG/KG	1/6/03	LAH

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 300 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: _____

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 1/6/03
CCIL JOB #: 301010

DATE RECEIVED: 1/6/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
301010-01	NWTPH-GX	TFT	97
301010-01	EPA-8021	TFT	80
301010-02	NWTPH-GX	TFT	*
301010-02	EPA-8021	TFT	*
301010-03	NWTPH-GX	TFT	*
301010-03	EPA-8021	TFT	*

* SURROGATE DILUTED OUT OF CALIBRATION RANGE

APPROVED BY: CP

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

301010

SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

CHAIN-OF-CUSTODY RECORD

Laboratory CCI Page 1 of 1
Attn:

400 N. 34th Street, Suite 100
Seattle, WA 98103
(206) 632-8020

2043 Westport Center Drive
St. Louis, MO 63146-3564
(314) 392-0050

303 Wellsian Way
Richland, WA 99352
(509) 946-6309

2055 Hill Road
Fairbanks, AK 99709
(907) 479-0600

5430 Fairbanks Street, Suite 3
Anchorage, AK 99518
(907) 561-2120

2255 S.W. Canyon Road
Portland, OR 97201-2498
(503) 223-6147

1200 17th Street, Suite 1024
Denver, Co 80202
(303) 825-3800

Analysis Parameters/Sample Container Description
(include preservative if used)

Sample Identity	Lab No.	Time	Date Sampled	Comp.	Grab	NWTPH-HCID					Total Number of Containers	Remarks/Matrix
09644-B.5-3-134	1	0810	1/6/03		X	X					1	SOIL
-B,3-2,7-121	2	1200										
-C-3.8-122	3	1420										

Project Information		Sample Receipt	
Project Number:	21-1-09644-011	Total Number of Containers	
Project Name:	SnoCo CR1	COC Seals/Intact? Y/N/NA	
Contact:	A TIRAO	Received Good Cond./Cold	
Ongoing Project?	Yes ☒ No ☐	Delivery Method:	
Sampler:	ACT	(attach shipping bill, if any)	

Relinquished By: 1.	Relinquished By: 2.	Relinquished By: 3.
Signature: Time: 1500	Signature: Time:	Signature: Time:
Printed Name: AGNES TIRAO Date: 1/6/03	Printed Name: Date:	Printed Name: Date:
Company: S&W	Company:	Company:

Received By: 1.	Received By: 2.	Received By: 3.
Signature: Time: 1500	Signature: Time:	Signature: Time:
Printed Name: R. de Bagon Date: 1/6/03	Printed Name: Date:	Printed Name: Date:
Company: CCIAL	Company:	Company:

Instructions	
Requested Turnaround Time:	Lay Wed 1/8 end o' day
Special Instructions:	

Distribution: White - w/shipment - returned to Shannon & Wilson w/ laboratory report
Yellow - w/shipment - for consignee files
Pink - Shannon & Wilson - Job File

F-19-91/JR

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 1/10/03
CCIL JOB #: 301029
CCIL SAMPLE #: 1
DATE RECEIVED: 1/9/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011 SNO CO CRI
CLIENT SAMPLE ID: 09644-G-4-137 1/8/03 1215

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	1300	MG/KG	1/10/03	LAH
MTBE***	EPA-8021	ND(<2)	MG/KG	1/10/03	LAH
BENZENE	EPA-8021	1	MG/KG	1/10/03	LAH
TOLUENE	EPA-8021	ND(<1)	MG/KG	1/10/03	LAH
ETHYLBENZENE	EPA-8021	9.1	MG/KG	1/10/03	LAH
XYLENES	EPA-8021	13	MG/KG	1/10/03	LAH

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 60 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: _____

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 1/10/03
CCIL JOB #: 301029
CCIL SAMPLE #: 2
DATE RECEIVED: 1/9/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011 SNO CO CRI
CLIENT SAMPLE ID: 09644-C.2-4-142 1/8/03 1530

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	4700	MG/KG	1/9/03	LAH
MTBE***	EPA-8021	ND(<10)	MG/KG	1/9/03	LAH
BENZENE	EPA-8021	ND(<3)	MG/KG	1/9/03	LAH
TOLUENE	EPA-8021	ND(<5)	MG/KG	1/9/03	LAH
ETHYLBENZENE	EPA-8021	ND(<5)	MG/KG	1/9/03	LAH
XYLENES	EPA-8021	ND(<20)	MG/KG	1/9/03	LAH

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 300 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: 

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 1/10/03
CCIL JOB #: 301029
CCIL SAMPLE #: 3
DATE RECEIVED: 1/9/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011 SNO CO CRI
CLIENT SAMPLE ID: 09644-F-3.6-127 1/9/03 1033

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	1/9/03	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	1/9/03	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	1/9/03	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	1/9/03	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	1/9/03	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	1/9/03	LAH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: _____

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 1/10/03
CCIL JOB #: 301029
CCIL SAMPLE #: 4
DATE RECEIVED: 1/9/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011 SNO CO CRI
CLIENT SAMPLE ID: 09644-F-3.6-124 1/9/03 1038

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	1/9/03	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	1/9/03	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	1/9/03	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	1/9/03	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	1/9/03	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	1/9/03	LAH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: _____

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 1/10/03
CCIL JOB #: 301029
CCIL SAMPLE #: 5
DATE RECEIVED: 1/9/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011 SNO CO CRI
CLIENT SAMPLE ID: 09644-B.2-1.8-119 1/9/03 1125

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	1/9/03	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	1/9/03	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	1/9/03	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	1/9/03	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	1/9/03	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	1/9/03	LAH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: _____

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CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 1/10/03
CCIL JOB #: 301029

DATE RECEIVED: 1/9/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011 SNO CO CRI

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
301029-01	NWTPH-GX	TFT	*
301029-01	EPA-8021	TFT	*
301029-02	NWTPH-GX	TFT	*
301029-02	EPA-8021	TFT	*
301029-03	NWTPH-GX	TFT	89
301029-03	EPA-8021	TFT	96
301029-04	NWTPH-GX	TFT	115
301029-04	EPA-8021	TFT	94
301029-05	NWTPH-GX	TFT	81
301029-05	EPA-8021	TFT	90

APPROVED BY: _____

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SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

Laboratory CCIAL

Attn:

400 N. 34th Street, Suite 100
Seattle, WA 98103
(206) 632-8020

2043 Westport Center Drive
St. Louis, MO 63146-3564
(314) 392-0050

303 Wellsian Way
Richland, WA 99352
(509) 946-6309

2055 Hill Road
Fairbanks, AK 99709
(907) 479-0600

5430 Fairbanks Street, Suite 3
Anchorage, AK 99518
(907) 561-2120

2255 S.W. Canyon Road
Portland, OR 97201-2498
(503) 223-6147

1200 17th Street, Suite 1024
Denver, Co 80202
(303) 825-3800

Analysis Parameters/Sample Container Description
(Include preservative if used)

Sample Identity	Lab No.	Time	Date Sampled	Comp.	Grab	NWTPH-G/BTEX						Total Number of Containers	Remarks/Matrix
09644-G-4-137	1	1215	1/8/03		X	X						1	SOIL
-C.2-4-142	2	1530	↓										
-F-3.6-127	3	1033	1/9/03										
-F-3.6-124	4	1038											
-B.2-1.8-119	5	1125	↓		↓	↓						↓	

Project Information		Sample Receipt	
Project Number:	21-1-09644-011	Total Number of Containers	
Project Name:	SnoCo CRI	COC Seals/Intact? Y/N/NA	
Contact:	A TIRAO	Received Good Cond./Cold	
Ongoing Project?	Yes ☒ No ☐	Delivery Method:	
Sampler:	ACT	(attach shipping bill, if any)	

Instructions

Requested Turnaround Time: by end of day FRI 1/10

Special Instructions:

Relinquished By: 1.	Relinquished By: 2.	Relinquished By: 3.
Signature: Time: 9:20	Signature: Time:	Signature: Time:
Printed Name: AGNES TIRAO Date: 1/9/2003	Printed Name: Date:	Printed Name: Date:
Company: S&W	Company:	Company:

Received By: 1.	Received By: 2.	Received By: 3.
Signature: Time: 1/9/03	Signature: Time:	Signature: Time:
Printed Name: Rick Bagan Date: 1.20	Printed Name: Date:	Printed Name: Date:
Company: CCIAL	Company:	Company:

Distribution: White - w/shipment - returned to Shannon & Wilson w/ laboratory report
Yellow - w/shipment - for consignee files
Pink - Shannon & Wilson - Job File

F-19-91/UR

No. 026378

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 1/14/03
CCIL JOB #: 301045
CCIL SAMPLE #: 1
DATE RECEIVED: 1/13/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011 SNO CO
CLIENT SAMPLE ID: 09644-OAKES AVE. ENTRANCE - 128 1/13/03 10:00AM

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	5000	MG/KG	1/14/03	LAH
MTBE***	EPA-8021	ND(<10)	MG/KG	1/14/03	LAH
BENZENE	EPA-8021	ND(<3)	MG/KG	1/14/03	LAH
TOLUENE	EPA-8021	140	MG/KG	1/14/03	LAH
ETHYLBENZENE	EPA-8021	93	MG/KG	1/14/03	LAH
XYLENES	EPA-8021	560	MG/KG	1/14/03	LAH

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY WEATHERED GASOLINE

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 300 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: 

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 1/14/03
CCIL JOB #: 301045
CCIL SAMPLE #: 2
DATE RECEIVED: 1/13/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011 SNO CO
CLIENT SAMPLE ID: 09644-D-3.3-121 1/13/03 3:00PM

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	90	MG/KG	1/14/03	LAH
MTBE***	EPA-8021	ND(<0.2)	MG/KG	1/14/03	LAH
BENZENE	EPA-8021	ND(<0.06)	MG/KG	1/14/03	LAH
TOLUENE	EPA-8021	ND(<0.1)	MG/KG	1/14/03	LAH
ETHYLBENZENE	EPA-8021	0.2	MG/KG	1/14/03	LAH
XYLENES	EPA-8021	0.9	MG/KG	1/14/03	LAH

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 6 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: 

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LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 1/14/03
CCIL JOB #: 301045

DATE RECEIVED: 1/13/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011 SNO CO

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
301045-01	NWTPH-GX	TFT	*
301045-01	EPA-8021	TFT	*
301045-02	NWTPH-GX	TFT	43**
301045-02	EPA-8021	TFT	29**

* SURROGATE DILUTED OUT OF CALIBRATION RANGE
** SURROGATE OUTSIDE OF CONTROL LIMITS OF 50-150% DUE TO MATRIX INTERFERENCE

APPROVED BY: _____

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CHAIN-OF-CUSTODY RECORD

Page 1 of 1

Laboratory CCI

Attn:

SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

400 N. 34th Street, Suite 100
Seattle, WA 98103
(206) 632-8020

2055 Hill Road
Fairbanks, AK 99709
(907) 479-0600

2255 S.W. Canyon Road
Portland, OR 97201-2498
(503) 223-6147

2043 Westport Center Drive
St. Louis, MO 63146-3564
(314) 392-0050

5430 Fairbanks Street, Suite 3
Anchorage, AK 99518
(907) 561-2120

1200 17th Street, Suite 1024
Denver, Co 80202
(303) 825-3800

303 Wellsian Way
Richland, WA 99352
(509) 946-6309

Analysis Parameters/Sample Container Description
(include preservative if used)

Sample Identity	Lab No.	Time	Date Sampled	Comp.	Grab.	GRTEX						Total Number of Containers	Remarks/Matrix
09644-Oakes Ave Entrance-128		10:00am	1/13/03			X							Soil
09644-D-3.3-121		3:00pm	1/13/03			X							Soil

Project Information

Project Number: 21-1-09644-011
Project Name: Snoho. County
Contact: Agnes Tiseo
Ongoing Project? Yes ☒ No ☐
Sampler: BSR

Sample Receipt

Total Number of Containers	2
COC Seals/Intact? Y/N/NA	N/A
Received Good Cond./Cold	Yes
Delivery Method:	dropped off by SSW
(attach shipping bill, if any)	

Relinquished By: 1

Signature: Brian Reznick Time: 7:00 pm
Printed Name: Brian Reznick Date: 1/13/03
Company: Shannon & Wilson

Relinquished By: 2

Signature: Time:
Printed Name: Date:
Company:

Relinquished By: 3

Signature: Time:
Printed Name: Date:
Company:

Instructions

Requested Turnaround Time: 24 hrs
Special Instructions: Contact Agnes w/ results as soon as known

Received By: 1

Signature: Time: 4:30
Printed Name: Rick Bagan Date: 1/13/03
Company: CCI NW

Received By: 2

Signature: Time:
Printed Name: Date:
Company:

Received By: 3

Signature: Time:
Printed Name: Date:
Company:

Distribution: White - w/shipment - returned to Shannon & Wilson w/ laboratory report
Yellow - w/shipment - for consignee files
Pink - Shannon & Wilson - Job File

F-19-91/UR

No. 026384

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CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 1/20/03
CCIL JOB #: 301056
CCIL SAMPLE #: 1
DATE RECEIVED: 1/15/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011 SNOH. CO.
CLIENT SAMPLE ID: 09644-J.9-4.2-129 1/15/03 1342

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	1/17/03	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	1/17/03	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	1/17/03	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	1/17/03	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	1/17/03	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	1/17/03	LAH
TPH-SEMIVOLATILE RANGE	NWTPH-DX	ND	MG/KG	1/16/03	MJL

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG
DIESEL RANGE REPORTING LIMIT IS 25 MG/KG
LUBE OIL RANGE REPORTING LIMIT IS 50 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: _____

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CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 1/16/03
CCIL JOB #: 301056
CCIL SAMPLE #: 2
DATE RECEIVED: 1/15/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011 SNOH. CO.
CLIENT SAMPLE ID: 09644-D.5-1.6-117 1/15/03

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	7300	MG/KG	1/16/03	LAH
MTBE***	EPA-8021	ND(<10)	MG/KG	1/16/03	LAH
BENZENE	EPA-8021	25	MG/KG	1/16/03	LAH
TOLUENE	EPA-8021	5.6	MG/KG	1/16/03	LAH
ETHYLBENZENE	EPA-8021	60	MG/KG	1/16/03	LAH
XYLENES	EPA-8021	150	MG/KG	1/16/03	LAH

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 600 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: CH

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CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 1/20/03
CCIL JOB #: 301056

DATE RECEIVED: 1/15/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011 SNOH. CO.

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
301056-01	NWTPH-GX	TFT	101
301056-01	EPA-8021	TFT	89
301056-01	NWTPH-DX	C25	112
301056-02	NWTPH-GX	TFT	*
301056-02	EPA-8021	TFT	*

* SURROGATE DILUTED OUT OF CALIBRATION RANGE

APPROVED BY: _____

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SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

CHAIN-OF-CUSTODY RECORD

400 N. 34th Street, Suite 100
Seattle, WA 98103
(206) 632-8020

2043 Westport Center Drive
St. Louis, MO 63146-3564
(314) 392-0050

303 Wellsian Way
Richland, WA 99352
(509) 946-6309

2055 Hill Road
Fairbanks, AK 99709
(907) 479-0600

5430 Fairbanks Street, Suite 3
Anchorage, AK 99518
(907) 561-2120

2255 S.W. Canyon Road
Portland, OR 97201-2498
(503) 223-6147

1200 17th Street, Suite 1024
Denver, Co 80202
(303) 825-3800

Laboratory CCT Page 1 of 1
Attn:

Analysis Parameters/Sample Container Description
(include preservative if used)

Sample Identity	Lab No.	Time	Date Sampled	Comp.	Grab	4oz GJ NWTPH-G/BTEX	4oz GJ NWTPH-G/BTEX NWTPH-DX				Total Number of Containers	Remarks/Matrix
09644-J.9-4.2-129		1342	1-15-03		X		X ← Standard TAT				1	Iced/Soil
09644-D.5-1.6-117			↓		X	X	← Rush TAT				1	↓

Project Information

Project Number: 21-1-09644-011
Project Name: Such. Co.
Contact: Agnes Tirao
Ongoing Project? Yes ☒ No ☐
Sampler: Paul VanHorne

Sample Receipt

Total Number of Containers:
COC Seals/Intact? Y/N/NA:
Received Good Cond./Cold:
Delivery Method: Co. Personnel (attach shipping bill, if any)

Instructions

Requested Turnaround Time:
Special Instructions:

Relinquished By: 1	Relinquished By: 2	Relinquished By: 3
Signature: Paul L. VanHorne	Signature: Brian Reznick	Signature:
Time: 1535	Time: 1605	Time:
Printed Name: Paul L. VanHorne	Printed Name: Brian S. Reznick	Printed Name:
Date: 1/15/03	Date: 1/15/03	Date:
Company: S+W	Company: S+W	Company:

Received By: 1	Received By: 2	Received By: 3
Signature: Brian Reznick	Signature: Rick Bagan	Signature:
Time: 1535	Time: 1605	Time:
Printed Name: Brian S. Reznick	Printed Name: Rick Bagan	Printed Name:
Date: 1/15/03	Date: 1/15/03	Date:
Company: S+W	Company: ECOL	Company:

Distribution: White - w/shipment - returned to Shannon & Wilson w/ laboratory report
Yellow - w/shipment - for consignee files
Pink - Shannon & Wilson - Job File

F-19-91/UR

No: _____

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CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 1/20/03
CCIL JOB #: 301068
CCIL SAMPLE #: 1
DATE RECEIVED: 1/16/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011 SNOH. CO.
CLIENT SAMPLE ID: 09644-L.8-1.3-123 1/16/03 1525

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	1/17/03	LAH
MTBE***	EPA-8021	ND(<1.0)	MG/KG	1/17/03	LAH
BENZENE	EPA-8021	ND(<0.3)	MG/KG	1/17/03	LAH
TOLUENE	EPA-8021	ND(<0.5)	MG/KG	1/17/03	LAH
ETHYLBENZENE	EPA-8021	ND(<0.5)	MG/KG	1/17/03	LAH
XYLENES	EPA-8021	ND(<2.0)	MG/KG	1/17/03	LAH
TPH-SEMIVOLATILE RANGE	NWTPH-DX	1100	MG/KG	1/20/03	MJL

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY DIESEL FUEL #1

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 25 MG/KG
DIESEL RANGE REPORTING LIMIT IS 130 MG/KG
LUBE OIL RANGE REPORTING LIMIT IS 250 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: CM

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CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 1/20/03
CCIL JOB #: 301068

DATE RECEIVED: 1/16/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011 SNOH. CO.

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
301068-01	NWTPH-GX	TFT	*
301068-01	EPA-8021	TFT	*
301068-01	NWTPH-DX	C25	*

* SURROGATE DILUTED OUT OF CALIBRATION RANGE

APPROVED BY: _____

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CHAIN-OF-CUSTODY RECORD

SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

400 N. 34th Street, Suite 100
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2043 Westport Center Drive
St. Louis, MO 63146-3564
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Fairbanks, AK 99709
(907) 479-0600

5430 Fairbanks Street, Suite 3
Anchorage, AK 99518
(907) 561-2120

2255 S.W. Canyon Road
Portland, OR 97201-2498
(503) 223-6147

1200 17th Street, Suite 1024
Denver, Co 80202
(303) 825-3800

Laboratory CCI

Attn:

Analysis Parameters/Sample Container Description
(include preservative if used)

Sample Identity	Lab No.	Time	Date Sampled	Comp.	Grab	40zGT NWTPH-DX	NWTPH-G/BTEX					Total Number of Containers	Remarks/Matrix
09644-L.8-1.3-123		1525	1-16-03		X	X						1	Iced/Soil

Project Information		Sample Receipt	
Project Number:	09644-011	Total Number of Containers	1
Project Name:	Snoh. Co.	COC Seals/Intact? Y/N/NA	NA
Contact:	Agnes Tirao	Received Good Cond./Cold	Y
Ongoing Project?	Yes ☒ No ☐	Delivery Method:	Co. Personnel
Sampler:	Paul Van Hoeve	(attach shipping bill, if any)	

Instructions

Requested Turnaround Time: Monday AM - call Agnes Tirao

Special Instructions:

Distribution: White - w/shipment - returned to Shannon & Wilson w/ laboratory report
Yellow - w/shipment - for consignee files
Pink - Shannon & Wilson - Job File

Relinquished By: 1	Relinquished By: 2	Relinquished By: 3
Signature: Paul L. Van Hoeve	Signature:	Signature:
Time: 1634	Time:	Time:
Printed Name: Paul L. Van Hoeve	Printed Name:	Printed Name:
Date: 1/16/03	Date:	Date:
Company: SHW	Company:	Company:

Received By: 1	Received By: 2	Received By: 3
Signature:	Signature:	Signature:
Time: 1725	Time:	Time:
Printed Name: Chris Pardi	Printed Name:	Printed Name:
Date: 1-16-03	Date:	Date:
Company: CCI	Company:	Company:

F-19-91/UR

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ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 1/20/03
CCIL JOB #: 301074
CCIL SAMPLE #: 1
DATE RECEIVED: 1/17/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011 SNO CO
CLIENT SAMPLE ID: 09644-B.3-2.4-113 1/17/03 0924

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	1/17/03	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	1/17/03	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	1/17/03	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	1/17/03	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	1/17/03	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	1/17/03	LAH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: CN

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CCI
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LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 1/20/03
CCIL JOB #: 301074
CCIL SAMPLE #: 2
DATE RECEIVED: 1/17/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011 SNO CO
CLIENT SAMPLE ID: 09644-H-1.8-115 1/17/03 1235

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	1/17/03	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	1/17/03	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	1/17/03	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	1/17/03	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	1/17/03	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	1/17/03	LAH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: _____

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LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 1/20/03
CCIL JOB #: 301074

DATE RECEIVED: 1/17/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011 SNO CO

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
301074-01	NWTPH-GX	TFT	99
301074-01	EPA-8021	TFT	89
301074-02	NWTPH-GX	TFT	97
301074-02	EPA-8021	TFT	86

APPROVED BY: _____

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CCI Analytical Laboratories, Inc.
8620 Holly Drive
Everett, WA 98208
Phone (425) 356-2600
(206) 292-9059 Seattle
(425) 356-2626 Fax

Chain Of Custody/ Laboratory Analysis Request

CCI Job# (Laboratory Use Only)

Date 1/17/2003 Page 1 Of 1

PROJECT ID: 21-1-09644-011
REPORT TO COMPANY: Shannon & Wilson
PROJECT MANAGER:
ADDRESS:
PHONE: FAX:
INVOICE TO COMPANY:
ATTENTION:
ADDRESS:
P.O. NUMBER CCI QUOTE:

SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-GX	BTEX	NWTPH-DX	NWTPH-HCID	EPA 8021 ☐ 602 ☐	EPA 8010 ☐ 601 ☐	EPA 8260 ☐ 624 ☐	EPA 8270 ☐ 625 ☐	EPA 8081/8082 ☐ 608 ☐ PCB only ☐ Pest only ☐	Metals Priority Pollutant ☐ RCRA ☐ TAL ☐	Metals Other (Specify)	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐	OTHER (Specify)	NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
1. 09644-B.3-2.4-113	1/17/03	0924	SO		X	X												1	
2. 09644-11-1.8-115	↓	1235	↓		↓	↓												↓	
3.																			
4.																			
5.																			
6.																			
7.																			
8.																			
9.																			
10.																			

SPECIAL INSTRUCTIONS

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: [signature] S&W 1/17/03 1430
Received By: [signature] CCIC 1/17/03 14.30
2. Relinquished By:

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis
10 Standard | 5 | 3 | 2 | 1 | SAME DAY

Fuels & Hydrocarbon Analysis
5 Standard | 3 | 1 | SAME DAY

OTHER:
Specify: results by end of day Tues 1/21/03

* Turnaround request less than standard may incur Rush Charges

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/14/03
CCIL JOB #: 302046
CCIL SAMPLE #: 1
DATE RECEIVED: 2/10/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-012 SNOH.CO.CAMPUS
CLIENT SAMPLE ID: 09644-M-1.3-110 2/10/03 1505

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	2/12/03	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	2/12/03	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	2/12/03	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	2/12/03	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	2/12/03	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	2/12/03	LAH
TPH-SEMIVOLATILE RANGE	NWTPH-DX	ND	MG/KG	2/13/03	DAT

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG
DIESEL RANGE REPORTING LIMIT IS 25 MG/KG
LUBE OIL RANGE REPORTING LIMIT IS 50 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: _____

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/14/03
CCIL JOB #: 302046
CCIL SAMPLE #: 2
DATE RECEIVED: 2/10/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-012 SNOH.CO.CAMPUS
CLIENT SAMPLE ID: 09644-M-2.1-110 2/10/03 1515

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	2/12/03	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	2/12/03	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	2/12/03	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	2/12/03	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	2/12/03	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	2/12/03	LAH
TPH-SEMIVOLATILE RANGE	NWTPH-DX	ND	MG/KG	2/13/03	DAT

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
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DIESEL RANGE REPORTING LIMIT IS 25 MG/KG
LUBE OIL RANGE REPORTING LIMIT IS 50 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: CW

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CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/14/03
CCIL JOB #: 302046
CCIL SAMPLE #: 3
DATE RECEIVED: 2/10/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-012 SNOH.CO.CAMPUS
CLIENT SAMPLE ID: 09644-M-2.9-109 2/10/03 1525

DATA RESULTS.

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	2/12/03	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	2/12/03	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	2/12/03	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	2/12/03	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	2/12/03	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	2/12/03	LAH
TPH-SEMIVOLATILE RANGE	NWTPH-DX	ND	MG/KG	2/13/03	DAT

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
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LUBE OIL RANGE REPORTING LIMIT IS 50 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: _____

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ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/14/03
CCIL JOB #: 302046
CCIL SAMPLE #: 4
DATE RECEIVED: 2/10/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-012 SNOH.CO.CAMPUS
CLIENT SAMPLE ID: 09644-M.1-3.5-109 2/10/03 1535

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	2/12/03	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	2/12/03	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	2/12/03	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	2/12/03	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	2/12/03	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	2/12/03	LAH
TPH-SEMIVOLATILE RANGE	NWTPH-DX	ND	MG/KG	2/13/03	DAT

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
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APPROVED BY: _____

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ANALYTICAL
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CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/14/03
CCIL JOB #: 302046

DATE RECEIVED: 2/10/03
WDOE ACCREDITATION #: C142

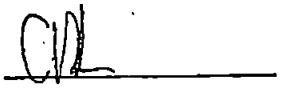
CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-012 SNOH.CO.CAMPUS

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
302046-01	NWTPH-GX	TFT	103
302046-01	EPA-8021	TFT	79
302046-01	NWTPH-DX	C25	104
302046-02	NWTPH-GX	TFT	97
302046-02	EPA-8021	TFT	76
302046-02	NWTPH-DX	C25	95
302046-03	NWTPH-GX	TFT	102
302046-03	EPA-8021	TFT	79
302046-03	NWTPH-DX	C25	112
302046-04	NWTPH-GX	TFT	102
302046-04	EPA-8021	TFT	79
302046-04	NWTPH-DX	C25	79

APPROVED BY: 

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RB

SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

400 N. 34th Street, Suite 100, Seattle, WA 98103, (206) 632-8020
2043 Westport Center Drive, St. Louis, MO 63146-3564, (314) 392-0050
303 Wellsian Way, Richland, WA 99352, (509) 946-6309
2055 Hill Road, Fairbanks, AK 99709, (907) 479-0600
5430 Fairbanks Street, Suite 3, Anchorage, AK 99518, (907) 561-2120
2255 S.W. Canyon Road, Portland, OR 97201-2498, (503) 223-5147
1200 17th Street, Suite 1024, Denver, Co 80202, (303) 825-3800

CHAIN-OF-CUSTODY RECORD

Laboratory CCL
Attn:

Analysis Parameters/Sample Container Description
(Include preservative if used)

Sample Identity	Lab No.	Time	Date Sampled	Comp.	Grab	NWTPH-Dx	NWTPH-G/BTEX				Total Number of Containers 40z. GJ.	Remarks/Matrix
09644-M-1.3-110	1	1505	2/10/03		✓	✓	✓				1	Iced/Soil
09644-M-2.1-110	2	1515	"		✓	✓	✓				1	"
09644-M-2.9-109	3	1525	"		✓	✓	✓				1	"
09644-M.1-3.5-109	4	1535	"		✓	✓	✓				1	"

Project Information		Sample Receipt	
Project Number:	21-1-09644-012	Total Number of Containers	4
Project Name:	Sunh. Co. Campus	COC Seals/Intact? Y/N/NA	
Contact:	Agnus Tirao	Received Good Cond./Cold	
Ongoing Project?	Yes ☐ No ☐	Delivery Method:	Co. Personnel
Sampler:	Paul VanHorne	(attach shipping bill, if any)	

Instructions	
Requested Turnaround Time:	Standard
Special Instructions:	

Distribution: White - w/shipment - returned to Shannon & Wilson w/ laboratory report
Yellow - w/shipment - for consignee files
Pink - Shannon & Wilson - Job File

Relinquished By: 1.	Relinquished By: 2.	Relinquished By: 3.
Signature: Paul VanHorne Time: 1640	Signature: Time:	Signature: Time:
Printed Name: Paul VanHorne Date: 2/10/03	Printed Name: Date:	Printed Name: Date:
Company: S+W	Company:	Company:
Received By: 1.	**Received By: 2.**	**Received By: 3.**
Signature: Rick Bagan Time: 1645	Signature: Time:	Signature: Time:
Printed Name: Rick Bagan Date: 2/10/03	Printed Name: Date:	Printed Name: Date:
Company: CCIAL	Company:	Company:

F-19-91/UR

No.

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ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/20/03
CCIL JOB #: 302071
CCIL SAMPLE #: 1
DATE RECEIVED: 2/14/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-012 SNOHOMISH CAMPUS
CLIENT SAMPLE ID: 09644-K.5-3.7-107 2/14/03 11:00

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	2/17/03	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	2/17/03	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	2/17/03	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	2/17/03	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	2/17/03	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	2/17/03	LAH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: _____

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/20/03
CCIL JOB #: 302071
CCIL SAMPLE #: 2
DATE RECEIVED: 2/14/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-012 SNOHOMISH CAMPUS
CLIENT SAMPLE ID: 09644-C-3.5-104 2/14/03 12:30

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	2/18/03	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	2/18/03	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	2/18/03	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	2/18/03	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	2/18/03	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	2/18/03	LAH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

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APPROVED BY: _____

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CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/20/03
CCIL JOB #: 302071
CCIL SAMPLE #: 3
DATE RECEIVED: 2/14/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-012 SNOHOMISH CAMPUS
CLIENT SAMPLE ID: 09644-E.5-1.3-103 2/14/03 12:00

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	2/18/03	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	2/18/03	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	2/18/03	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	2/18/03	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	2/18/03	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	2/18/03	LAH

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APPROVED BY: 

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CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/20/03
CCIL JOB #: 302071
CCIL SAMPLE #: 4
DATE RECEIVED: 2/14/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-012 SNOHOMISH CAMPUS
CLIENT SAMPLE ID: 09644-B.7-1.7-101 2/14/03 12:15

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	2/18/03	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	2/18/03	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	2/18/03	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	2/18/03	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	2/18/03	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	2/18/03	LAH

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*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: _____

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/20/03
CCIL JOB #: 302071
CCIL SAMPLE #: 5
DATE RECEIVED: 2/14/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-012 SNOHOMISH CAMPUS
CLIENT SAMPLE ID: 09644-K-1.3-102 2/14/03 11:45

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	2/18/03	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	2/18/03	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	2/18/03	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	2/18/03	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	2/18/03	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	2/18/03	LAH

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APPROVED BY: CWL

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LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/20/03
CCIL JOB #: 302071
CCIL SAMPLE #: 6
DATE RECEIVED: 2/14/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-012 SNOHOMISH CAMPUS
CLIENT SAMPLE ID: 09644-H.5-3.5-108 2/14/03 10:50

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	2/18/03	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	2/18/03	LAH
BENZENE	EPA-8021	0.05	MG/KG	2/18/03	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	2/18/03	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	2/18/03	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	2/18/03	LAH

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CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/20/03
CCIL JOB #: 302071

DATE RECEIVED: 2/14/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-012 SNOHOMISH CAMPUS

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
302071-01	NWTPH-GX	TFT	77
302071-01	EPA-8021	TFT	87
302071-02	NWTPH-GX	TFT	71
302071-02	EPA-8021	TFT	81
302071-03	NWTPH-GX	TFT	73
302071-03	EPA-8021	TFT	83
302071-04	NWTPH-GX	TFT	102
302071-04	EPA-8021	TFT	81
302071-05	NWTPH-GX	TFT	90
302071-05	EPA-8021	TFT	71
302071-06	NWTPH-GX	TFT	96
302071-06	EPA-8021	TFT	75

APPROVED BY: CDL

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CHAIN-OF-CUSTODY RECORD

SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

400 N. 34th Street, Suite 100
Seattle, WA 98103
(206) 632-8020

2043 Westport Center Drive
St. Louis, MO 63146-3564
(314) 392-0050

303 Wellsian Way
Richland, WA 99352
(509) 946-6309

2055 Hill Road
Fairbanks, AK 99709
(907) 479-0600

5430 Fairbanks Street, Suite 3
Anchorage, AK 99518
(907) 561-2120

2255 S.W. Canyon Road
Portland, OR 97201-2498
(503) 223-6147

1200 17th Street, Suite 1024
Denver, Co 80202
(303) 825-3800

Laboratory CCT
Attn:

Analysis Parameters/Sample Container Description
(include preservative if used)

	Sample Identity	Lab No.	Time	Date Sampled	Comp.	Grab	GBTX						Total Number of Containers	Remarks/Matrix
1	09644-K.5-3.7-107		11:00	2/14/03			X							Soil
2	09644-C-3.5-104		12:30	↓			X							↓
3	09644-E.5-1.3-103		12:00				X							
4	09644-B.7-1.7-101		12:15				X							
5	09644-K-1.3-102		11:45				X							
6	09644-H.5-3.5-108		10:50	↓			X							

Project Information		Sample Receipt	
Project Number:	21-1-09644-012	Total Number of Containers	6
Project Name:	Snohomish Complex	COC Seals/Intact? Y/N/NA	N/a
Contact:	Agnes Ticco	Received Good Cond./Cold	Yes
Ongoing Project?	Yes ☒ No ☐	Delivery Method:	
Sampler:	Agnes / Brian	(attach shipping bill, if any)	

Instructions

Requested Turnaround Time: Standard

Special Instructions:
Please contact Agnes when results known

Distribution: White - w/shipment - returned to Shannon & Wilson w/ laboratory report
Yellow - w/shipment - for consignee files
Pink - Shannon & Wilson - Job File

Relinquished By: 1.	Relinquished By: 2.	Relinquished By: 3.
Signature: Brian Rosnick Time: 3:33pm	Signature: Time:	Signature: Time:
Printed Name: Brian Rosnick Date: 2/14/03	Printed Name: Date:	Printed Name: Date:
Company: Shannon & Wilson, Inc	Company:	Company:
Received By: 1.	**Received By: 2.**	**Received By: 3.**
Signature: Hooke Forman Time: 3:33pm	Signature: Time:	Signature: Time:
Printed Name: Hooke Forman Date: 2/14/03	Printed Name: Date:	Printed Name: Date:
Company: CCT Analytical	Company:	Company:

F-19-91/UR

No. 026385

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/24/03
CCIL JOB #: 302074
CCIL SAMPLE #: 1
DATE RECEIVED: 2/17/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-012 SNOHOMISH CAMPUS
CLIENT SAMPLE ID: 09644-H-1.7-102 2/17/03 1157

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	2/19/03	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	2/19/03	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	2/19/03	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	2/19/03	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	2/19/03	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	2/19/03	LAH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: _____

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/24/03
CCIL JOB #: 302074

DATE RECEIVED: 2/17/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-012 SNOHOMISH CAMPUS

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
302074-01	NWTPH-GX	TFT	87
302074-01	EPA-8021	TFT	66

APPROVED BY: _____

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CCI Analytical Laboratories, Inc.
8620 Holly Drive
Everett, WA 98208
Phone (425) 356-2600
(206) 292-9059 Seattle
(425) 356-2626 Fax
http://www.ccilabs.com

Chain of Custody / Laboratory Analysis Request

CC ... ory ...

Date 2/17/2003 Page 1 Of 1

PROJECT ID: 21-1-09644-012
REPORT TO COMPANY: Shannon & Wilson
PROJECT MANAGER: Agnes Tirado
ADDRESS:
PHONE: FAX:
P.O. NUMBER: E-MAIL:
INVOICE TO COMPANY:
ATTENTION:
ADDRESS:

SAMPLE I.D.	DATE	TIME	TYPE	LAB#
1. 09644-H-1.7-102	2/17/03	1175 / 1137	SO	
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				

ANALYSIS REQUESTED

NWTPH-HCID	NWTPH-DX	NWTPH-GX	BTEX by EPA-8021	MTBE by EPA-8021 ☐ EPA-8260 ☐	Halogenated Volatiles by EPA 8260	Volatile Organic Compounds by EPA 8260	Ethylene dibromide (EDB) by EPA-8260 ☐ EPA-504.1 ☐	1,2 Dichloroethene (EDC) by EPA-8260	Semivolatile Organic Compounds by EPA 8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA-8270 SIM ☐	PCB ☐ Pesticides ☐ by EPA 8081/8082	Metals-MTCA-5 ☐ RCRA-8 ☐ Pri Pol ☐ TAL ☐	Metals Other (Specify)	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐	OTHER (Specify)	NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
		X	X												1	

REPORT COPY

SPECIAL INSTRUCTIONS

CCI Analytical Laboratories, Inc accepts and processes this request on the terms and conditions set forth on the reverse side. By its signature hereon, Customer accepts these terms and conditions.

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: [illegible] SAW 2/17/03 1330
Received By: [illegible] CCI 2/17/03 1330
2. Relinquished By:

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis: 10 (Standard) 5 3 2 1 SAME DAY

Fuels & Hydrocarbon Analysis: 5 (Standard) 3 1 SAME DAY

OTHER:

Specify:

* Turnaround request less than standard may incur Rush Charges

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 1/10/03
CCIL JOB #: 301017
CCIL SAMPLE #: 1
DATE RECEIVED: 1/8/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011
CLIENT SAMPLE ID: 09644-C-4-146(WALL) 1/7/03 1:00PM

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	19	MG/KG	1/8/03	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	1/8/03	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	1/8/03	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	1/8/03	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	1/8/03	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	1/8/03	LAH

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY EXTREMELY WEATHERED GASOLINE

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: _____

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CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 1/10/03
CCIL JOB #: 301017
CCIL SAMPLE #: 2
DATE RECEIVED: 1/8/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011
CLIENT SAMPLE ID: 09644-J-4-135(WALL) 1/7/03 3:00PM

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-SEMIVOLATILE RANGE	NWTPH-DX	ND	MG/KG	1/9/03	MJL

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
DIESEL RANGE REPORTING LIMIT IS 25 MG/KG
LUBE OIL RANGE REPORTING LIMIT IS 50 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY: _____

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CCI
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LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 1/10/03
CCIL JOB #: 301017

DATE RECEIVED: 1/8/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
301017-01	NWTPH-GX	TFT	91
301017-01	EPA-8021	TFT	98
301017-02	NWTPH-DX	C25	91

APPROVED BY: 

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CHAIN-OF-CUSTODY RECORD

SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

400 N. 34th Street, Suite 100
Seattle, WA 98103
(206) 632-8020

2055 Hill Road
Fairbanks, AK 99709
(907) 479-0600

2255 S.W. Canyon Road
Portland, OR 97201-2498
(503) 223-6147

2043 Westport Center Drive
St. Louis, MO 63146-3564
(314) 392-0050

5430 Fairbanks Street, Suite 3
Anchorage, AK 99518
(907) 561-2120

1200 17th Street, Suite 1024
Denver, Co 80202
(303) 825-3800

303 Wellsian Way
Richland, WA 99352
(509) 946-6309

Laboratory CCI Page 1 of 1
Attn:

Analysis Parameters/Sample Container Description
(Include preservative if used)

Sample Identity	Lab No.	Time	Date Sampled	Comp.	Grab	GIBTEX	DX					Total Number of Containers	Remarks/Matrix
09644-C-4-146 (wall)		1:00 pm	1/7/03			X							Soil
09644-J-4-135 (wall)		3:00 pm	1/7/03				X						Soil

Project Information	Sample Receipt	
Project Number: 21-1-09644-011	Total Number of Containers	2
Project Name: Snoho. County Prk.	COC Seals/Intact? Y/N/NA	n/a
Contact: Agnes Tirao	Received Good Cond./Cold	Yes
Ongoing Project? Yes ☐ No ☐	Delivery Method:	Pick up
Sampler: Brian Rezmierski	(attach shipping bill, if any)	on 1/8/03

Instructions

Requested Turnaround Time: Standard

Special Instructions: Contact Agnes when results are known

Distribution: White - w/shipment - returned to Shannon & Wilson w/ laboratory report
Yellow - w/shipment - for consignee files
Pink - Shannon & Wilson - Job File

Relinquished By: 1.	Relinquished By: 2.	Relinquished By: 3.
Signature: Brian Rezmierski Time: 10:00	Signature: Time:	Signature: Time:
Printed Name: Brian Rezmierski Date: 1/8/03	Printed Name: Date:	Printed Name: Date:
Company: Shannon & Wilson Inc	Company:	Company:
Received By: 1.	**Received By: 2.**	**Received By: 3.**
Signature: Time: 1000	Signature: Time:	Signature: Time:
Printed Name: Rick Bagan Date: 1/8/03	Printed Name: Date:	Printed Name: Date:
Company: CCIAL	Company:	Company:

F-19-91/UR

No. 026383

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 1/15/03
CCIL JOB #: 301046
CCIL SAMPLE #: 1
DATE RECEIVED: 1/13/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011 SNOHO PARKING
CLIENT SAMPLE ID: 09644-A-3.3-136(WALL) 1/13 1:15PM

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	1/14/03	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	1/14/03	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	1/14/03	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	1/14/03	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	1/14/03	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	1/14/03	LAH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: CAF

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 1/15/03
CCIL JOB #: 301046

DATE RECEIVED: 1/13/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011 SNOHO PARKING

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
301046-01	NWTPH-GX	TFT	87
301046-01	EPA-8021	TFT	90

APPROVED BY: CH

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

400 N. 34th Street, Suite 100
Seattle, WA 98103
(206) 632-8020

11500 Olive Blvd., Suite 276
St. Louis, MO 63141
(314) 872-8170

2055 Hill Road
Fairbanks, AK 99709
(907) 479-0600

5430 Fairbanks Street, Suite 3
Anchorage, AK 99518
(907) 561-2120

303 Wellsian Way
Richland, WA 99352
(509) 946-6309

CHAIN OF CUSTODY RECORD

Page 1 of 1
Laboratory
Attn:

Analysis Parameters/Sample Container Description
(include preservative if used)

Sample Identity	Lab No.	Time	Date Sampled	Comp.	Grab	BTEX						Total Number of Containers	Remarks/Matrix
0904A-A-3.5-136 (wall)		1:[illegible]	1/13			X							Soil
													Soil

Project Information	
Project Number:	
Project Name:	
Contact:	
Ongoing Project? Yes ☒ No ☐	
Sampler: P. Pruitt	

Sample Receipt	
Total Number of Containers	1
COC Seals/intact? Y/N/NA	
Received Good Cond./Cold	Yes
Delivery Method: (attach shipping bill, if any)	Hand Delivered

Instructions

Requested Turn Around Time: Standard

Special Instructions:

Relinquished By: 1.	Relinquished By: 2.	Relinquished By: 3.
Signature: Brian Rezmack Time: 4:[illegible]	Signature: Time:	Signature: Time:
Printed Name: Brian Rezmack Date: 1/13/12	Printed Name: Date:	Printed Name: Date:
Company: [illegible]	Company:	Company:

Received By: 1.	Received By: 2.	Received By: 3.
Signature: Time: 4:[illegible]	Signature: Time:	Signature: Time:
Printed Name: Rick Bagan Date: 1/13/12	Printed Name: Date:	Printed Name: Date:
Company: CETAL	Company:	Company:

Distribution: White - w/shipment - returned to Shannon & Wilson w/ Laboratory report
Yellow - w/shipment - for consignee files
Pink - Shannon & Wilson - Job File

F-19-911UR

No. 25989

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 1/20/03
CCIL JOB #: 301051
CCIL SAMPLE #: 1
DATE RECEIVED: 1/14/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011 SNOH. CO. CAMPUS PARKING GARAGE
CLIENT SAMPLE ID: 09644-A-3.5-134 1/14/03 1218

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	1/15/03	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	1/15/03	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	1/15/03	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	1/15/03	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	1/15/03	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	1/15/03	LAH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: CM

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 1/20/03
CCIL JOB #: 301051
CCIL SAMPLE #: 2
DATE RECEIVED: 1/14/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011 SNOH. CO. CAMPUS PARKING GARAGE
CLIENT SAMPLE ID: 09644-C.4-4-134 1/14/03 1250

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	4800	MG/KG	1/15/03	LAH
MTBE***	EPA-8021	7.0	MG/KG	1/15/03	LAH
BENZENE	EPA-8021	9.6	MG/KG	1/15/03	LAH
TOLUENE	EPA-8021	13	MG/KG	1/15/03	LAH
ETHYLBENZENE	EPA-8021	10	MG/KG	1/15/03	LAH
XYLENES	EPA-8021	8.7	MG/KG	1/15/03	LAH

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS: GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 300 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: CH

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CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 1/20/03
CCIL JOB #: 301051
CCIL SAMPLE #: 3
DATE RECEIVED: 1/14/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011 SNOH. CO. CAMPUS PARKING GARAGE
CLIENT SAMPLE ID: 09644-D.6-4.2-135 1/14/03 1317

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	4700	MG/KG	1/15/03	LAH
MTBE***	EPA-8021	8.0	MG/KG	1/15/03	LAH
BENZENE	EPA-8021	ND(<6)	MG/KG	1/15/03	LAH
TOLUENE	EPA-8021	13	MG/KG	1/15/03	LAH
ETHYLBENZENE	EPA-8021	23	MG/KG	1/15/03	LAH
XYLENES	EPA-8021	34	MG/KG	1/15/03	LAH

NOTES: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE
BENZENE REPORTING LIMIT RAISED DUE TO MATRIX INTERFERENCE

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 30 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: _____

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CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 1/20/03
CCIL JOB #: 301051
CCIL SAMPLE #: 4
DATE RECEIVED: 1/14/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011 SNOH. CO. CAMPUS PARKING GARAGE
CLIENT SAMPLE ID: 09644-B.4-4-137 1/14/03 1403

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	1400	MG/KG	1/16/03	LAH
MTBE***	EPA-8021	ND(<2.0)	MG/KG	1/16/03	LAH
BENZENE	EPA-8021	ND(<0.6)	MG/KG	1/16/03	LAH
TOLUENE	EPA-8021	ND(<1.0)	MG/KG	1/16/03	LAH
ETHYLBENZENE	EPA-8021	3.8	MG/KG	1/16/03	LAH
XYLENES	EPA-8021	4.5	MG/KG	1/16/03	LAH

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 60 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: CNF

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LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 1/20/03
CCIL JOB #: 301051
CCIL SAMPLE #: 5
DATE RECEIVED: 1/14/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011 SNOH. CO. CAMPUS PARKING GARAGE
CLIENT SAMPLE ID: 09644-A.1-4-140 1/14/03 1423

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	1/16/03	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	1/16/03	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	1/16/03	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	1/16/03	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	1/16/03	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	1/16/03	LAH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: CA

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CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 1/20/03
CCIL JOB #: 301051

DATE RECEIVED: 1/14/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011 SNOH. CO. CAMPUS PARKING GARAGE

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
301051-01	NWTPH-GX	TFT	95
301051-01	EPA-8021	TFT	71
301051-02	NWTPH-GX	TFT	*
301051-02	EPA-8021	TFT	*
301051-03	NWTPH-GX	TFT	*
301051-03	EPA-8021	TFT	*
301051-04	NWTPH-GX	TFT	*
301051-04	EPA-8021	TFT	*
301051-05	NWTPH-GX	TFT	77
301051-05	EPA-8021	TFT	82

* SURROGATE DILUTED OUT OF CALIBRATION RANGE

APPROVED BY: _____

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Everett, WA 98208
Phone (425) 356-2600
(206) 292-9059 Seattle
(425) 356-2626 Fax

Chain Of Custody/ Laboratory Analysis Request

CCI Job# (Laboratory Use Only)

Date 1-14-2003 Page 1 Of 1

PROJECT ID: 21-1-09644-011 / Snohomish County Campus - Parking Garage
REPORT TO COMPANY: Shannon & Wilson, Inc.
PROJECT MANAGER: Agnes Tirao
ADDRESS: 400 N 34th St, Ste 100
Seattle, WA 98103
PHONE: 206-695-6881 FAX: 206-695-6777
INVOICE TO COMPANY: Same
ATTENTION:
ADDRESS:
P.O. NUMBER CCI QUOTE:

SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-GX	BTEX	NWTPH-DX	NWTPH-HCID	EPA 8021 ☐ 602 ☐	EPA 8010 ☐ 601 ☐	EPA 8260 ☐ 624 ☐	EPA 8270 ☐ 625 ☐	EPA 8081/8082 ☐ 608 ☐ PCB only ☐ Pest only ☐	Metals Priority Pollutant ☐ RCRA ☐ TAL ☐	Metals Other (Specify)	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐	NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
1. 09644-A-3.5-134	1-14-03	1218	Soil (402GJ)		✓	✓											1	
2. 09644-C.4-4-134		1250			✓	✓											1	
3. 09644-D.6-4.2-135		1317			✓	✓											1	
4. 09644-B.4-4-137		1403			✓	✓											1	
5. 09644-A.1-4-140		1423			✓	✓											1	
6.																		
7.																		
8.																		
9.																		
10.																		

ANALYSIS REQUESTED | OTHER (Specify)

SPECIAL INSTRUCTIONS STANDARD TAT

SIGNATURES (Name, Company, Date, Time):
1. Relinquished By: Frank Van Haren, S+W, 1-14-03, 1640
Received By: CCIAL 1/14/03 1610
2. Relinquished By:

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis: 10 Standard | 5 | 3 | 2 | 1 | SAME DAY

Fuels & Hydrocarbon Analysis: 5 Standard | 3 | 1 | SAME DAY

OTHER:
Specify:

* Turnaround request less than standard may incur Rush Charges

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 1/27/03
CCIL JOB #: 301083
CCIL SAMPLE #: 1
DATE RECEIVED: 1/20/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011 SNO CO CAMPUS PARKING GARAGE
CLIENT SAMPLE ID: 09644-E.5-4-131 1/20/03 1331

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	3500	MG/KG	1/21/03	LAH
MTBE***	EPA-8021	ND(<5)	MG/KG	1/22/03	LAH
BENZENE	EPA-8021	ND(<1.5)	MG/KG	1/22/03	LAH
TOLUENE	EPA-8021	ND(<2.5)	MG/KG	1/22/03	LAH
ETHYLBENZENE	EPA-8021	30	MG/KG	1/22/03	LAH
XYLENES	EPA-8021	65	MG/KG	1/22/03	LAH

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 300 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: _____

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CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 1/27/03
CCIL JOB #: 301083
CCIL SAMPLE #: 2
DATE RECEIVED: 1/20/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011 SNO CO CAMPUS PARKING GARAGE
CLIENT SAMPLE ID: 09644-G-4-125 1/20/03 1353

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	1400	MG/KG	1/21/03	LAH
MTBE***	EPA-8021	ND(<2)	MG/KG	1/21/03	LAH
BENZENE	EPA-8021	ND(<0.6)	MG/KG	1/21/03	LAH
TOLUENE	EPA-8021	ND(<1.0)	MG/KG	1/21/03	LAH
ETHYLBENZENE	EPA-8021	9.3	MG/KG	1/21/03	LAH
XYLENES	EPA-8021	28	MG/KG	1/21/03	LAH

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 60 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: _____

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CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 1/27/03
CCIL JOB #: 301083
CCIL SAMPLE #: 3
DATE RECEIVED: 1/20/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011 SNO CO CAMPUS PARKING GARAGE
CLIENT SAMPLE ID: 09644-H.5-4-127 1/20/03 1400

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	69	MG/KG	1/21/03	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	1/21/03	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	1/21/03	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	1/21/03	LAH
ETHYLBENZENE	EPA-8021	0.3	MG/KG	1/21/03	LAH
XYLENES	EPA-8021	0.8	MG/KG	1/21/03	LAH

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 12 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: CN

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CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 1/27/03
CCIL JOB #: 301083

DATE RECEIVED: 1/20/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011 SNO CO CAMPUS PARKING GARAGE

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
301083-01	NWTPH-GX	TFT	*
301083-01	EPA-8021	TFT	*
301083-02	NWTPH-GX	TFT	*
301083-02	EPA-8021	TFT	*
301083-03	NWTPH-GX	TFT	69
301083-03	EPA-8021	TFT	98

* SURROGATE DILUTED OUT OF CALIBRATION RANGE

APPROVED BY: _____

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Everett, WA 98208
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(206) 292-9059 Seattle
(425) 356-2626 Fax

Chain Of Custody/ Laboratory Analysis Request

CCI Job# (Laboratory Use Only)

Date 1-20-2003 Page 1 Of 1

PROJECT ID: Snohomish County Campus Parking Garage
REPORT TO COMPANY: Shannon & Wilson, Inc.
PROJECT MANAGER: Agnes Tirao
ADDRESS: 400 N 34th St, Ste 100
Seattle, WA 98103
PHONE: 206-695-6881 FAX: 206-695-6777
INVOICE TO COMPANY: Same
ATTENTION:
ADDRESS:
P.O. NUMBER 21-1-09644-011 CCI QUOTE:

SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-GX	BTEX	NWTPH-DX	NWTPH-HCID	EPA 8021 ☐ 602 ☐	EPA 8010 ☐ 601 ☐	EPA 8260 ☐ 624 ☐	EPA 8270 ☐ 625 ☐	EPA 8081/8082 ☐ 608 ☐ PCB only ☐ Pest only ☐	Metals Priority Pollutant ☐ RCRA ☐ TAL ☐	Metals Other (Specify)	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐	NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
1. 09644-E.5-4-131	1-20-03	1331	Soil 1467 GJ		✓	✓											1	
2. 09644-G-4-125	↓	1353	↓		✓	✓											1	
3. 09644-H.5-4-127	↓	1400	↓		✓	✓											1	
4.																		
5.																		
6.																		
7.																		
8.																		
9.																		
10.																		

ANALYSIS REQUESTED | OTHER (Specify)

SPECIAL INSTRUCTIONS

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: Paul Van Hemert, SFW, 1/20/03 1613
Received By: [illegible] BCIAL 1/20/03 1613
2. Relinquished By:

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis: 10 Standard | 5 | 3 | 2 | 1 | SAME DAY

Fuels & Hydrocarbon Analysis: 5 Standard | 3 | 1 | SAME DAY

OTHER: Specify:

* Turnaround request less than standard may incur Rush Charges

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LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 1/27/03
CCIL JOB #: 301089
CCIL SAMPLE #: 1
DATE RECEIVED: 1/21/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011 SNO CO CAMPUS PARKING GARAGE
CLIENT SAMPLE ID: 09644-N-1.3-129 1/21/03 1127

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-SEMIVOLATILE RANGE	NWTPH-DX	ND	MG/KG	1/23/03	CMH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
DIESEL RANGE REPORTING LIMIT IS 25 MG/KG
LUBE OIL RANGE REPORTING LIMIT IS 50 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY: CMH

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CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 1/27/03
CCIL JOB #: 301089
CCIL SAMPLE #: 2
DATE RECEIVED: 1/21/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011 SNO CO CAMPUS PARKING GARAGE
CLIENT SAMPLE ID: 09644-M-1-130 1/21/03 1130

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-SEMIVOLATILE RANGE	NWTPH-DX	ND	MG/KG	1/23/03	CMH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
DIESEL RANGE REPORTING LIMIT IS 25 MG/KG
LUBE OIL RANGE REPORTING LIMIT IS 50 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY: CM

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CCI
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LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 1/27/03
CCIL JOB #: 301089

DATE RECEIVED: 1/21/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-011 SNO CO CAMPUS PARKING GARAGE

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
301089-01	NWTPH-DX	C25	72
301089-02	NWTPH-DX	C25	88

APPROVED BY: _____

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Everett, WA 98208
Phone (425) 356-2600
(206) 292-9059 Seattle
(425) 356-2626 Fax

Chain Of Custody/ Laboratory Analysis Request

CCI Job# (Laboratory Use Only)

Date 1-21-03 Page 1 Of 1

PROJECT ID: Snohomish County Campus Parking Garage
REPORT TO COMPANY: Shannon & Wilson Inc.
PROJECT MANAGER: Agnes Tirao
ADDRESS: 400 N 34th St, Ste 100
Seattle, WA 98103
PHONE: 206-695-6881 FAX: 206-695-6777
INVOICE TO COMPANY: Same
ATTENTION:
ADDRESS:
P.O. NUMBER 21-1-09644-011 CCI QUOTE:

SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-GX	BTEX	NWTPH-DX 4 or 6 J	NWTPH-HCID	EPA 8021 ☐ 602 ☐	EPA 8010 ☐ 601 ☐	EPA 8260 ☐ 624 ☐	EPA 8270 ☐ 625 ☐	EPA 8081/8082 ☐ 608 ☐ PCB only ☐ Pest only ☐	Metals Priority Pollutant ☐ RCRA ☐ TAL ☐	Metals Other (Specify)	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐	NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
1. 09644-N-1.3-129	1-21-03	1127	Soil				X										1	
2. 09644-M-1-130	↓	1130	↓				X										1	
3.																		
4.																		
5.																		
6.																		
7.																		
8.																		
9.																		
10.																		

SPECIAL INSTRUCTIONS

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: Paul Van Hemert, SHW, 1-21-03, 1544
Received By: CCI CCIL 1/21/03 1544
2. Relinquished By:

TURNAROUND REQUESTED In Business Days*

Organic, Metals & Inorganic Analysis: 10 Standard | 5 | 3 | 2 | 1 | SAME DAY

Fuels & Hydrocarbon Analysis: 5 Standard | 3 | 1 | SAME DAY

OTHER:
Specify:

* Turnaround request less than standard may incur Rush Charges

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 1/29/03
CCIL JOB #: 301105
CCIL SAMPLE #: 1
DATE RECEIVED: 1/23/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: SNOHOMISH CO - CAMPUS
CLIENT SAMPLE ID: 09644-A-2.7-124 1/23/03 1111

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	140	MG/KG	1/23/03	LAH
MTBE***	EPA-8021	ND(<0.2)	MG/KG	1/24/03	LAH
BENZENE	EPA-8021	ND(<0.06)	MG/KG	1/24/03	LAH
TOLUENE	EPA-8021	ND(<0.1)	MG/KG	1/24/03	LAH
ETHYLBENZENE	EPA-8021	0.5	MG/KG	1/24/03	LAH
XYLENES	EPA-8021	0.8	MG/KG	1/24/03	LAH

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 12 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: _____

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CCI
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CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 1/29/03
CCIL JOB #: 301105
CCIL SAMPLE #: 2
DATE RECEIVED: 1/23/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: SNOHOMISH CO - CAMPUS
CLIENT SAMPLE ID: 09644-A-3.2-123 1/23/03 1131

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	550	MG/KG	1/24/03	LAH
MTBE***	EPA-8021	ND(<1.0)	MG/KG	1/24/03	LAH
BENZENE	EPA-8021	ND(<0.3)	MG/KG	1/24/03	LAH
TOLUENE	EPA-8021	1.0	MG/KG	1/24/03	LAH
ETHYLBENZENE	EPA-8021	2.2	MG/KG	1/24/03	LAH
XYLENES	EPA-8021	5.7	MG/KG	1/24/03	LAH

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 30 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: _____

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CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 1/24/03
CCIL JOB #: 301105
CCIL SAMPLE #: 3
DATE RECEIVED: 1/23/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: SNOHOMISH CO - CAMPUS
CLIENT SAMPLE ID: 09644-A-3.6-122 1/23/03 1144

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	1/23/03	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	1/23/03	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	1/23/03	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	1/23/03	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	1/23/03	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	1/23/03	LAH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: CNL

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CCI
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LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 1/29/03
CCIL JOB #: 301105
CCIL SAMPLE #: 4
DATE RECEIVED: 1/23/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: SNOHOMISH CO - CAMPUS
CLIENT SAMPLE ID: 09644-C-4-127 1/23/03 1523

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	8400	MG/KG	1/29/03	LAH
MTBE***	EPA-8021	18	MG/KG	1/24/03	LAH
BENZENE	EPA-8021	3.5	MG/KG	1/24/03	LAH
TOLUENE	EPA-8021	70	MG/KG	1/29/03	LAH
ETHYLBENZENE	EPA-8021	57	MG/KG	1/29/03	LAH
XYLENES	EPA-8021	270	MG/KG	1/29/03	LAH

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 750 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

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LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 1/29/03
CCIL JOB #: 301105
CCIL SAMPLE #: 5
DATE RECEIVED: 1/23/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: SNOHOMISH CO - CAMPUS
CLIENT SAMPLE ID: 09644-A-4-127 1/23/03 1527

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	39	MG/KG	1/24/03	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	1/24/03	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	1/24/03	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	1/24/03	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	1/24/03	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	1/24/03	LAH

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY EXTREMELY WEATHERED GASOLINE OR EARLY SEMIVOLATILE RANGE PRODUCT

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: CDL

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LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 1/24/03
CCIL JOB #: 301105
CCIL SAMPLE #: 6
DATE RECEIVED: 1/23/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: SNOHOMISH CO - CAMPUS
CLIENT SAMPLE ID: 09644-D.3-3-115 1/23/03 1549

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	1/23/03	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	1/23/03	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	1/23/03	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	1/23/03	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	1/23/03	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	1/23/03	LAH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: _____

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CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 1/29/03
CCIL JOB #: 301105

DATE RECEIVED: 1/23/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: SNOHOMISH CO - CAMPUS

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
301105-01	NWTPH-GX	TFT	72
301105-01	EPA-8021	TFT	109
301105-02	NWTPH-GX	TFT	*
301105-02	EPA-8021	TFT	*
301105-03	NWTPH-GX	TFT	77
301105-03	EPA-8021	TFT	86
301105-04	NWTPH-GX	TFT	*
301105-04	EPA-8021	TFT	*
301105-05	NWTPH-GX	TFT	69
301105-05	EPA-8021	TFT	102
301105-06	NWTPH-GX	TFT	53
301105-06	EPA-8021	TFT	63

* SURROGATE DILUTED OUT OF CALIBRATION RANGE

APPROVED BY: _____

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CCI Analytical Laboratories, Inc.
8620 Holly Drive
Everett, WA 98208
Phone (425) 356-2600
(206) 292-9059 Seattle
(425) 356-2626 Fax

Chain Of Custody/ Laboratory Analysis Request

CCI Job# (Laboratory Use Only)

Date 1/23/03 Page 1 Of 1

PROJECT ID: Snohomish Co. Campus
REPORT TO COMPANY: Shannon & Wilson
PROJECT MANAGER: Agnes Tirao
ADDRESS: 400 N 34th St Ste 100
Seattle WA 98103
PHONE: 206-632-8020 FAX: 206-695-6777
INVOICE TO COMPANY: Same
ATTENTION:
ADDRESS:
P.O. NUMBER 21-1-09644-011 CCI QUOTE:

SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-GX	BTEX	NWTPH-DX	NWTPH-HCID	EPA 8021 ☐ 602 ☐	EPA 8010 ☐ 601 ☐	EPA 8260 ☐ 624 ☐	EPA 8270 ☐ 625 ☐	EPA 8081/8082 ☐ 608 ☐ PCB only ☐ Pest only ☐	Metals Priority Pollutant ☐ RCRA ☐ TAL ☐	Metals Other (Specify)	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐	OTHER (Specify)	NUMBER OF CONTAINERS 4oz GJ	RECEIVED IN GOOD CONDITION?
1. 09644-A-2.7-124	1/23/03	1111	Soil		✓	✓												1	
2. 09644-A-3.2-123		1131			✓	✓												1	
3. C9644-A-3.6-122		1144			✓	✓												1	
4. 09644-C-4-127		1523			✓	✓												1	
5. 09644-A-4-127		1527			✓	✓												1	
6. 09644-D.3-3-115	↓	1549	↓		✓	✓												1	
7.																			
8.																			
9.																			
10.																			

Standard

← Rush (Next Day)

SPECIAL INSTRUCTIONS

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: [signature] STW, 1/23/03, 1614
Received By: [signature] CCIAL 1/23/03 1614
2. Relinquished By:

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis
10 Standard | 5 | 3 | 2 | 1 | SAME DAY

Fuels & Hydrocarbon Analysis
5 Standard | 3 | 1 | SAME DAY

OTHER:
Specify:

* Turnaround request less than standard may incur Rush Charges

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LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 1/31/03
CCIL JOB #: 301122
CCIL SAMPLE #: 1
DATE RECEIVED: 1/27/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-012 SNOHO.CTY PAK. GAR.
CLIENT SAMPLE ID: 09644-M-1-116 1/27

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	1/28/03	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	1/28/03	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	1/28/03	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	1/28/03	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	1/28/03	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	1/28/03	LAH
TPH-SEMIVOLATILE RANGE	NWTPH-DX	ND	MG/KG	1/29/03	CMH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG
DIESEL RANGE REPORTING LIMIT IS 25 MG/KG
LUBE OIL RANGE REPORTING LIMIT IS 50 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: CH

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CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 1/31/03
CCIL JOB #: 301122
CCIL SAMPLE #: 2
DATE RECEIVED: 1/27/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-012 SNOHO.CTY PAK. GAR.
CLIENT SAMPLE ID: 09644-K,S-1-116 1/27
5 ~~1~~

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	1/28/03	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	1/28/03	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	1/28/03	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	1/28/03	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	1/28/03	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	1/28/03	LAH
TPH-SEMIVOLATILE RANGE	NWTPH-DX	ND	MG/KG	1/29/03	CMH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG
DIESEL RANGE REPORTING LIMIT IS 25 MG/KG
LUBE OIL RANGE REPORTING LIMIT IS 50 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: CM

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CCI
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LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 1/31/03
CCIL JOB #: 301122
CCIL SAMPLE #: 3
DATE RECEIVED: 1/27/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-012 SNOHO.CTY PAK. GAR.
CLIENT SAMPLE ID: 09644-J-1-118 1/27

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	69	MG/KG	1/29/03	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	1/29/03	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	1/29/03	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	1/29/03	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	1/29/03	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	1/29/03	LAH
TPH-SEMIVOLATILE RANGE	NWTPH-DX	ND	MG/KG	1/29/03	CMH

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG
DIESEL RANGE REPORTING LIMIT IS 25 MG/KG
LUBE OIL RANGE REPORTING LIMIT IS 50 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: _____

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LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 1/31/03
CCIL JOB #: 301122
CCIL SAMPLE #: 4
DATE RECEIVED: 1/27/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-012 SNOHO.CTY PAK. GAR.
CLIENT SAMPLE ID: 09644-N-1.5-119 1/27

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	1/29/03	LAH
MTBE***	EPA-8021	ND(<1)	MG/KG	1/29/03	LAH
BENZENE	EPA-8021	ND(<0.3)	MG/KG	1/29/03	LAH
TOLUENE	EPA-8021	ND(<0.5)	MG/KG	1/29/03	LAH
ETHYLBENZENE	EPA-8021	ND(<0.5)	MG/KG	1/29/03	LAH
XYLENES	EPA-8021	ND(<2)	MG/KG	1/29/03	LAH
TPH-SEMIVOLATILE RANGE	NWTPH-DX	2800	MG/KG	1/30/03	LAH

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY DIESEL#2
NWTPH-GX AND EPA-8021 REPORTING LIMITS RAISED DUE TO MATRIX INTERFERENCE

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 30 MG/KG
DIESEL RANGE REPORTING LIMIT IS 50 MG/KG
LUBE OIL RANGE REPORTING LIMIT IS 100 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: _____

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LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 1/31/03
CCIL JOB #: 301122
CCIL SAMPLE #: 5
DATE RECEIVED: 1/27/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-012 SNOHO.CTY PAK. GAR.
CLIENT SAMPLE ID: 09644-A-3.5-119 1/27

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	1/29/03	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	1/29/03	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	1/29/03	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	1/29/03	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	1/29/03	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	1/29/03	LAH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: CM

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LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 1/31/03
CCIL JOB #: 301122
CCIL SAMPLE #: 6
DATE RECEIVED: 1/27/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-012 SNOHO.CTY PAK. GAR.
CLIENT SAMPLE ID: 09644-A-2.5-119 1/27

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	1/31/03	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	1/31/03	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	1/31/03	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	1/31/03	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	1/31/03	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	1/31/03	LAH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: _____

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ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 1/31/03
CCIL JOB #: 301122

DATE RECEIVED: 1/27/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-012 SNOHO.CTY PAK. GAR.

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
301122-01	NWTPH-GX	TFT	108
301122-01	EPA-8021	TFT	85
301122-01	NWTPH-DX	C25	89
301122-02	NWTPH-GX	TFT	115
301122-02	EPA-8021	TFT	91
301122-02	NWTPH-DX	C25	82
301122-03	NWTPH-GX	TFT	102
301122-03	EPA-8021	TFT	77
301122-03	NWTPH-DX	C25	103
301122-04	NWTPH-GX	TFT	*
301122-04	EPA-8021	TFT	*
301122-04	NWTPH-DX	C25	74
301122-05	NWTPH-GX	TFT	89
301122-05	EPA-8021	TFT	65
301122-06	NWTPH-GX	TFT	97
301122-06	EPA-8021	TFT	80

* SURROGATE DILUTED OUT OF CALIBRATION RANGE

APPROVED BY: _____

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SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

400 N. 34th Street, Suite 100
Seattle, WA 98103
(206) 632-8020

11500 Olive Blvd., Suite 276
St. Louis, MO 63141
(314) 872-8170

2055 Hill Road
Fairbanks, AK 99709
(907) 479-0600

5430 Fairbanks Street, Suite 3
Anchorage, AK 99518
(907) 561-2120

303 Wellsian Way
Richland, WA 99352
(509) 946-6309

CHAIN OF CUSTODY RECORD

Page 1 of 1
Laboratory CCIL
Attn:

Analysis Parameters/Sample Container Description
(include preservative if used)

Sample Identity	Lab No.	Time	Date Sampled	Comp.	Grab	G/BTEX	DX					Total Number of Containers	Remarks/Matrix
09644- M-1-116	1		1/27			X	X						Soil
09644- K.5-1-116	2		1/27			X	X						Soil
09644- S-1-118	3		1/27			X	X						Soil
09644- N-1.5-119	4		1/27			X	X						Soil
09644- A-3.5-119	5		1/27			X							Soil
09644- A-2.5-119	6		1/27			X							Soil
09644-			1/27										Soil

Project Information		Sample Receipt	
Project Number:	24-09644-012	Total Number of Containers	7
Project Name:	Subd. City Park Gar.	COC Seals/Intact? Y/N/NA	N/A
Contact:	Agnes Torao	Received Good Cond./Cold	
Ongoing Project?	Yes ☒ No ☐	Delivery Method:	
Sampler:	B. Reznick	(attach shipping bill, if any)	

Instructions

Requested Turn Around Time: Standard

Special Instructions: Contact Agnes w/ results.

Relinquished By: 1.	Relinquished By: 2.	Relinquished By: 3.
Signature: Brian Reznick Time: 4:30pm	Signature: Time:	Signature: Time:
Printed Name: Brian Reznick Date: 1/27/03	Printed Name: Date:	Printed Name: Date:
Company: Shannon & Wilson, Inc.	Company:	Company:
Received By: 1.	**Received By: 2.**	**Received By: 3.**
Signature: Hille J. Kwast Time: 4:30pm	Signature: Time:	Signature: Time:
Printed Name: Hille J. Kwast Date: 1/27/03	Printed Name: Date:	Printed Name: Date:
Company: CCIAL	Company:	Company:

Distribution: White - w/shipment - returned to Shannon & Wilson w/ Laboratory report
Yellow - w/shipment - for consignee files
Pink - Shannon & Wilson - Job File

F-19-91/UR

No. 25987

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/4/03
CCIL JOB #: 301128
CCIL SAMPLE #: 1
DATE RECEIVED: 1/28/03
WDOE ACCREDITATION #. C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-012 SNOHO.CTY PAK. GAR.
CLIENT SAMPLE ID: 09644-C-1-119 1/28/03 1020

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	2/1/03	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	2/1/03	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	2/1/03	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	2/1/03	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	2/1/03	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	2/1/03	LAH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS.
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: CM

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CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/4/03
CCIL JOB #: 301128
CCIL SAMPLE #: 2
DATE RECEIVED: 1/28/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-012 SNOHO.CTY PAK. GAR.
CLIENT SAMPLE ID: 09644-D.8-1-118 1/28/03 1027

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	1/31/03	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	1/31/03	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	1/31/03	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	1/31/03	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	1/31/03	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	1/31/03	LAH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: CN

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CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/4/03
CCIL JOB #: 301128
CCIL SAMPLE #: 3
DATE RECEIVED: 1/28/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-012 SNOHO.CTY PAK. GAR.
CLIENT SAMPLE ID: 09644-B.5-4-123 1/28/03 1205

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	3900	MG/KG	2/3/03	LAH
MTBE***	EPA-8021	ND(<2)	MG/KG	2/1/02	LAH
BENZENE	EPA-8021	ND(<0.6)	MG/KG	2/1/03	LAH
TOLUENE	EPA-8021	9	MG/KG	2/3/03	LAH
ETHYLBENZENE	EPA-8021	39	MG/KG	2/3/03	LAH
XYLENES	EPA-8021	140	MG/KG	2/3/03	LAH

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 600 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: _____

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CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/4/03
CCIL JOB #: 301128
CCIL SAMPLE #: 4
DATE RECEIVED: 1/28/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-012 SNOHO.CTY PAK. GAR.
CLIENT SAMPLE ID: 09644-C-4-119 1/28/03 1207

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	6500	MG/KG	2/3/03	LAH
MTBE***	EPA-8021	ND(<2)	MG/KG	2/1/02	LAH
BENZENE	EPA-8021	ND(<0.6)	MG/KG	2/1/03	LAH
TOLUENE	EPA-8021	80	MG/KG	2/3/03	LAH
ETHYLBENZENE	EPA-8021	73	MG/KG	2/3/03	LAH
XYLENES	EPA-8021	300	MG/KG	2/3/03	LAH

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 600 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: CH

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CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/4/03
CCIL JOB #: 301128

DATE RECEIVED: 1/28/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-012 SNOHO.CTY PAK. GAR.

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
301128-01	NWTPH-GX	TFT	73
301128-01	EPA-8021	TFT	82
301128-02	NWTPH-GX	TFT	83
301128-02	EPA-8021	TFT	68
301128-03	NWTPH-GX	TFT	*
301128-03	EPA-8021	TFT	*
301128-04	NWTPH-GX	TFT	*
301128-04	EPA-8021	TFT	*

* SURROGATE DILUTED OUT OF CALIBRATION RANGE

APPROVED BY: _____

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CHAIN-OF-CUSTODY RECORD

SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

400 N. 34th Street, Suite 100
Seattle, WA 98103
(206) 632-8020
(206) 695-6777 Fax

11500 Olive Blvd., Suite 276
St. Louis, MO 63141
(314) 872-8170
(314) 872-8178 Fax

2055 Hill Road
Fairbanks, AK 99709
(907) 479-0600
(907) 479-5691 Fax

5430 Fairbanks Street, Suite 3
Anchorage, AK 99518
(907) 561-2120
(907) 561-4483 Fax

303 Wellsian Way
Richland, WA 99352
(509) 946-6309
(509) 946-6580 Fax

Page 1 of 1

Laboratory CCI

Attn:

Analysis Parameters/Sample Container Description
(include preservative if used)

Sample Identity	Lab No.	Time	Date Sampled	Comp.	Grab	40Z GT NWTPH-G/BTEX						Total Number of Containers	Remarks/Matrix
09644-C-1-119		1020	1-30-03		X	✓						1	Soil/Soil
09644-D8-1-118		1027	↓		X	✓						1	↓
09644-B5-4-123		1205	↓		X	✓						1	↓
09644-C-4-119		1207	↓		X	✓						1	↓

Project Information		Sample Receipt	
Project Number:	21.1.09644.012	Total Number of Containers	
Project Name:	Snoh. Co. Campus	COC Seals/Intact? Y/N/NA	
Contact:	Andy Tinio	Received Good Cond./Cold	
Ongoing Project?	Yes ☒ No ☐	Delivery Method:	Co. Courier
Sampler:	Paul Van Hanne	(attach shipping bill, if any)	

Instructions	
Requested Turnaround Time:	Standard
Special Instructions:	

Relinquished By: 1.	Relinquished By: 2.	Relinquished By: 3.
Signature: Paul Van Hanne	Signature:	Signature:
Time: 1523	Time:	Time:
Printed Name: Paul Van Hanne	Printed Name:	Printed Name:
Date: 1/30/03	Date:	Date:
Company: S+W	Company:	Company:

Received By: 1.	Received By: 2.	Received By: 3.
Signature:	Signature:	Signature:
Time:	Time:	Time:
Printed Name:	Printed Name:	Printed Name:
Date:	Date:	Date:
Company:	Company:	Company:

Distribution: White - w/shipment - returned to Shannon & Wilson w/ laboratory report
Yellow - w/shipment - for consignee files
Pink - Shannon & Wilson - Job File

F-19-91/UR

No.

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/4/03
CCIL JOB #: 301139
CCIL SAMPLE #: 1
DATE RECEIVED: 1/29/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-012 SNOHO.CTY PAK. GAR.
CLIENT SAMPLE ID: 09644-F-4-118 1/29/03 1256

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	1100	MG/KG	2/1/03	LAH
MTBE***	EPA-8021	ND(<2.0)	MG/KG	2/1/03	LAH
BENZENE	EPA-8021	ND(<0.6)	MG/KG	2/1/03	LAH
TOLUENE	EPA-8021	2.5	MG/KG	2/1/03	LAH
ETHYLBENZENE	EPA-8021	7.0	MG/KG	2/1/03	LAH
XYLENES	EPA-8021	37	MG/KG	2/1/03	LAH

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 60 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: _____

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/4/03
CCIL JOB #: 301139
CCIL SAMPLE #: 2
DATE RECEIVED: 1/29/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-012 SNOHO.CTY PAK. GAR.
CLIENT SAMPLE ID: 09644-H-4-118 1/29/03 1248

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	240	MG/KG	2/3/03	LAH
MTBE***	EPA-8021	ND(<0.4)	MG/KG	2/4/03	LAH
BENZENE	EPA-8021	ND(<0.1)	MG/KG	2/4/03	LAH
TOLUENE	EPA-8021	ND(<0.2)	MG/KG	2/4/03	LAH
ETHYLBENZENE	EPA-8021	0.6	MG/KG	2/3/03	LAH
XYLENES	EPA-8021	35	MG/KG	2/3/03	LAH

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS: GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 30 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: _____

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CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/4/03
CCIL JOB #: 301139
CCIL SAMPLE #: 3
DATE RECEIVED: 1/29/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-012 SNOHO.CTY PAK. GAR.
CLIENT SAMPLE ID: 09644-I-4-119 1/29/03 1244

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	2/3/03	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	2/3/03	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	2/3/03	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	2/3/03	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	2/3/03	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	2/3/03	LAH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: _____

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LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/4/03
CCIL JOB #: 301139
CCIL SAMPLE #: 4
DATE RECEIVED: 1/29/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-012 SNOHO.CTY PAK. GAR.
CLIENT SAMPLE ID: 09644-J-4-125 1/29/03 1459

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	300	MG/KG	2/1/03	LAH
MTBE***	EPA-8021	ND(<0.4)	MG/KG	2/1/03	LAH
BENZENE	EPA-8021	ND(<0.1)	MG/KG	2/1/03	LAH
TOLUENE	EPA-8021	ND(<0.2)	MG/KG	2/1/03	LAH
ETHYLBENZENE	EPA-8021	1.7	MG/KG	2/1/03	LAH
XYLENES	EPA-8021	5.4	MG/KG	2/1/03	LAH
TPH-SEMIVOLATILE RANGE	NWTPH-DX	1900	MG/KG	1/31/03	CMH

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCTS WHICH ARE LIKELY HIGHLY WEATHERED GASOLINE AND DIESEL. GX RESULT BIASED HIGH DUE TO DIESEL RANGE OVERLAP

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 12 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: _____

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/4/03
CCIL JOB #: 301139
CCIL SAMPLE #: 5
DATE RECEIVED: 1/29/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-012 SNOHO.CTY PAK. GAR.
CLIENT SAMPLE ID: 09644-K-4-122.5 1/29/03 1510

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	1700	MG/KG	2/3/03	LAH
MTBE***	EPA-8021	ND(<2.0)	MG/KG	2/1/03	LAH
BENZENE	EPA-8021	ND(<0.6)	MG/KG	2/1/03	LAH
TOLUENE	EPA-8021	2.4	MG/KG	2/1/03	LAH
ETHYLBENZENE	EPA-8021	5.6	MG/KG	2/3/03	LAH
XYLENES	EPA-8021	26	MG/KG	2/3/03	LAH
TPH-SEMIVOLATILE RANGE	NWTPH-DX	12000	MG/KG	1/31/03	CMH

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCTS WHICH ARE LIKELY HIGHLY WEATHERED GASOLINE AND DIESEL. GX RESULT BIASED HIGH DUE TO DIESEL RANGE OVERLAP

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 150 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: _____

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CCI
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LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/4/03
CCIL JOB #: 301139

DATE RECEIVED: 1/29/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-012 SNOHO.CTY PAK. GAR.

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
301139-01	NWTPH-GX	TFT	*
301139-01	EPA-8021	TFT	*
301139-02	NWTPH-GX	TFT	*
301139-02 E-BENZ, XYLENE ONLY	EPA-8021	TFT	*
301139-02 MTBE,BENZ,TOL ONLY	EPA-8021	TFT	99
301139-03	NWTPH-GX	TFT	95
301139-03	EPA-8021	TFT	80
301139-04	NWTPH-GX	TFT	82
301139-04	EPA-8021	TFT	84
301139-04	NWTPH-DX	C25	90
301139-05	NWTPH-GX	TFT	*
301139-05	EPA-8021	TFT	*
301139-05	NWTPH-DX	C25	*

* SURROGATE DILUTED OUT OF CALIBRATION RANGE

APPROVED BY: _____

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CHAIN-OF-CUSTODY RECORD

SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

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2055 Hill Road
Fairbanks, AK 99709
(907) 479-0600
(907) 479-5691 Fax

5430 Fairbanks Street, Suite 3
Anchorage, AK 99518
(907) 561-2120
(907) 561-4483 Fax

303 Wellsian Way
Richland, WA 99352
(509) 946-6309
(509) 946-6580 Fax

Laboratory CCF

Attn:

Analysis Parameters/Sample Container Description
(include preservative if used)

Sample Identity	Lab No.	Time	Date Sampled	Comp.	Grab	NWTPH-G/BTEX	NWTPH-Dx					Total Number of Containers	Remarks/Matrix
09644-F-4-119		1256	1/29/03		X	✓						1	Soil/Soil
09644-H-4-119		1248	"		X	✓						1	
09644-I-4-119		1244	"		X	✓						1	
C9644-J-4-125		1459	"		X	✓	✓					1	
C9644-K-4-122.5		1510	↓		X	✓	✓					1	

Project Information		Sample Receipt	
Project Number:	21-C9644-02	Total Number of Containers	
Project Name:	Sauk Co. Campus	COC Seals/Intact? Y/N/NA	
Contact:	Aaron Tyree	Received Good Cond./Cold	
Ongoing Project?	Yes ☒ No ☐	Delivery Method:	Client Pickup
Sampler:	Paul VanHorne	(attach shipping bill, if any)	

Instructions	
Requested Turnaround Time:	Standard
Special Instructions:	

Relinquished By: 1.	Relinquished By: 2.	Relinquished By: 3.
Signature: [signature] Time: 16:17	Signature: Time:	Signature: Time:
Printed Name: Paul L. VanHorne Date: 1/29/03	Printed Name: Date:	Printed Name: Date:
Company: S&W	Company:	Company:

Received By: 1.	Received By: 2.	Received By: 3.
Signature: [signature] Time: 16:17	Signature: Time:	Signature: Time:
Printed Name: C. Bruce Date: 1/29/03	Printed Name: Date:	Printed Name: Date:
Company: CCF	Company:	Company:

Distribution: White - w/shipment - returned to Shannon & Wilson w/ laboratory report
Yellow - w/shipment - for consignee files
Pink - Shannon & Wilson - Job File

F-19-91/UR

No. _____

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/11/03
CCIL JOB #: 302015
CCIL SAMPLE #: 1
DATE RECEIVED: 2/4/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-012 SNO. CO. CAMPUS
CLIENT SAMPLE ID: 09644-K.8-1-117 2/4/03 1537

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	23	MG/KG	2/7/03	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	2/7/03	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	2/7/03	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	2/7/03	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	2/7/03	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	2/7/03	LAH
TPH-SEMIVOLATILE RANGE	NWTPH-DX	ND	MG/KG	2/6/03	LAH

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG
DIESEL RANGE REPORTING LIMIT IS 25 MG/KG
LUBE OIL RANGE REPORTING LIMIT IS 50 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: _____

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/11/03
CCIL JOB #: 302015
CCIL SAMPLE #: 2
DATE RECEIVED: 2/4/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-012 SNO. CO. CAMPUS
CLIENT SAMPLE ID: 09644-E-1-117 2/4/03 1628

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	2/7/03	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	2/7/03	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	2/7/03	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	2/7/03	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	2/7/03	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	2/7/03	LAH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: CVH

9620 Valley Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/11/03
CCIL JOB #: 302015
CCIL SAMPLE #: 3
DATE RECEIVED: 2/4/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-012 SNO. CO. CAMPUS
CLIENT SAMPLE ID: 09644-G-1-117 2/4/03 1638

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	2/7/03	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	2/7/03	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	2/7/03	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	2/7/03	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	2/7/03	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	2/7/03	LAH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: _____

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CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/11/03
CCIL JOB #: 302015

DATE RECEIVED: 2/4/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-012 SNO. CO. CAMPUS

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
302015-01	NWTPH-GX	TFT	87
302015-01	EPA-8021	TFT	103
302015-01	NWTPH-DX	C25	96
302015-02	NWTPH-GX	TFT	93
302015-02	EPA-8021	TFT	101
302015-03	NWTPH-GX	TFT	94
302015-03	EPA-8021	TFT	99

APPROVED BY: _____

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CHAIN-OF-CUSTODY RECORD

SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

400 N. 34th Street, Suite 100
Seattle, WA 98103
(206) 632-8020

2055 Hill Road
Fairbanks, AK 99709
(907) 479-0600

2255 S.W. Canyon Road
Portland, OR 97201-2498
(503) 223-6147

2043 Westport Center Drive
St. Louis, MO 63146-3564
(314) 392-0050

5430 Fairbanks Street, Suite 3
Anchorage, AK 99518
(907) 561-2120

1200 17th Street, Suite 1024
Denver, Co 80202
(303) 825-3800

303 Wellsian Way
Richland, WA 99352
(509) 946-6309

Page 1 of 1

Laboratory CCF

Attn:

Sample Identity	Lab No.	Time	Date Sampled	Comp.	Grab	NWTPH-Dx	NWTPH-G/BTEX					Total Number of Containers 4oz GJ	Remarks/Matrix
						Analysis Parameters/Sample Container Description (include preservative if used)							
09644-K.8-1-117	1	1537	2/4/03		✓	✓	✓					1	Jar/Soil
09644-E-1-117	2	1628	↓		✓		✓					1	↓
09644-G-1-117	3	1638	↓		✓		✓					1	↓

Project Information		Sample Receipt	
Project Number:	21-1-09644-012	Total Number of Containers	3
Project Name:	Snoh. Co. Campus	COC Seals/Intact? Y/N/NA	NA
Contact:	Agnes Tirao	Received Good Cond./Cold	
Ongoing Project?	Yes ☒ No ☐	Delivery Method:	Co Personnel
Sampler:	Paul Van Horne	(attach shipping bill, if any)	

Instructions	
Requested Turnaround Time:	Standard
Special Instructions:	

Relinquished By: 1.	Relinquished By: 2.	Relinquished By: 3.
Signature: Paul L. VanHorne	Signature:	Signature:
Time: 1719	Time:	Time:
Printed Name: Paul L. VanHorne	Printed Name:	Printed Name:
Date: 2/4/03	Date:	Date:
Company: S+W	Company:	Company:

Received By: 1.	Received By: 2.	Received By: 3.
Signature:	Signature:	Signature:
Time: 1716	Time:	Time:
Printed Name: C. Reed	Printed Name:	Printed Name:
Date: 2-4-03	Date:	Date:
Company: CCI	Company:	Company:

Distribution: White - w/shipment - returned to Shannon & Wilson w/ laboratory report
Yellow - w/shipment - for consignee files
Pink - Shannon & Wilson - Job File

F-19-91/UR

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/11/03
CCIL JOB #: 302020
CCIL SAMPLE #: 1
DATE RECEIVED: 2/5/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-012 SNO. CO. CAMPUS
CLIENT SAMPLE ID: 09644-N-1.2-119 2/5/03 1208

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	2/7/03	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	2/7/03	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	2/7/03	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	2/7/03	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	2/7/03	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	2/7/03	LAH
TPH-SEMIVOLATILE RANGE	NWTPH-DX	ND	MG/KG	2/6/03	CMH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG
DIESEL RANGE REPORTING LIMIT IS 25 MG/KG
LUBE OIL RANGE REPORTING LIMIT IS 50 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: _____

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CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/11/03
CCIL JOB #: 302020
CCIL SAMPLE #: 2
DATE RECEIVED: 2/5/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-012 SNO. CO. CAMPUS
CLIENT SAMPLE ID: 09644-N-1.8-119 2/5/03 1241

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	2/7/03	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	2/7/03	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	2/7/03	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	2/7/03	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	2/7/03	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	2/7/03	LAH
TPH-SEMIVOLATILE RANGE	NWTPH-DX	ND	MG/KG	2/7/03	CMH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG
DIESEL RANGE REPORTING LIMIT IS 25 MG/KG
LUBE OIL RANGE REPORTING LIMIT IS 50 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: _____

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CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/11/03
CCIL JOB #: 302020
CCIL SAMPLE #: 3
DATE RECEIVED: 2/5/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-012 SNO. CO. CAMPUS
CLIENT SAMPLE ID: 09644-N-3-119 2/5/03 1303

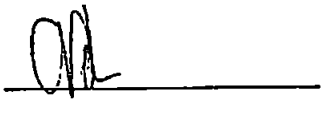
DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	2/7/03	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	2/7/03	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	2/7/03	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	2/7/03	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	2/7/03	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	2/7/03	LAH
TPH-SEMIVOLATILE RANGE	NWTPH-DX	ND	MG/KG	2/7/03	CMH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG
DIESEL RANGE REPORTING LIMIT IS 25 MG/KG
LUBE OIL RANGE REPORTING LIMIT IS 50 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: 

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/11/03
CCIL JOB #: 302020

DATE RECEIVED: 2/5/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-012 SNO. CO. CAMPUS

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
302020-01	NWTPH-GX	TFT	89
302020-01	EPA-8021	TFT	106
302020-01	NWTPH-DX	C25	91
302020-02	NWTPH-GX	TFT	86
302020-02	EPA-8021	TFT	106
302020-02	NWTPH-DX	C25	84
302020-03	NWTPH-GX	TFT	89
302020-03	EPA-8021	TFT	107
302020-03	NWTPH-DX	C25	100

APPROVED BY: _____

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CHAIN-OF-CUSTODY RECORD

SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

400 N. 34th Street, Suite 100
Seattle, WA 98103
(206) 632-8020
(206) 695-6777 Fax

11500 Olive Blvd., Suite 276
St. Louis, MO 63141
(314) 872-8170
(314) 872-8178 Fax

2055 Hill Road
Fairbanks, AK 99709
(907) 479-0600
(907) 479-5691 Fax

5430 Fairbanks Street, Suite 3
Anchorage, AK 99518
(907) 561-2120
(907) 561-4483 Fax

303 Wellsian Way
Richland, WA 99352
(509) 946-6309
(509) 946-6580 Fax

Laboratory CCI Page 1 of 1
Attn:

Analysis Parameters/Sample Container Description
(include preservative if used)

Sample Identity	Lab No.	Time	Date Sampled	Comp.	Grab	NWTPH-Dx	NWTPH-G/BTEX					Total Number of Containers 40z CJ	Remarks/Matrix
09644-N-1.2-119	1	1208	2/5/03		X	✓	✓					1	Iced / Soil
09644-N-1.8-119	2	1241			X	✓	✓					1	
09644-N-3-119	3	1303	↓		X	✓	✓					1	↓

Project Information		Sample Receipt	
Project Number:	21-1-09644-012	Total Number of Containers	3
Project Name:	Smith Co. Campus	COC Seals/Intact? Y/N/NA	NA
Contact:	Agnes Tirado	Received Good Cond./Cold	
Ongoing Project?	Yes ☑ No ☐	Delivery Method:	CC. Personal
Sampler:	Paul Van Horne	(attach shipping bill, if any)	

Instructions

Requested Turnaround Time: Standard

Special Instructions:

Distribution: White - w/shipment - returned to Shannon & Wilson w/ laboratory report
Yellow - w/shipment - for consignee files
Pink - Shannon & Wilson - Job File

Relinquished By: 1.	Relinquished By: 2.	Relinquished By: 3.
Signature: Paul L. Van Horne Time: 1442	Signature: Time:	Signature: Time:
Printed Name: Paul L. Van Horne Date: 2/5/03	Printed Name: Date:	Printed Name: Date:
Company: SW	Company:	Company:

Received By: 1.	Received By: 2.	Received By: 3.
Signature: Cathy Hacker Time: 1442	Signature: Time:	Signature: Time:
Printed Name: Cathy HACKER Date: 2.5.03	Printed Name: Date:	Printed Name: Date:
Company: CC I	Company:	Company:

F-19-91/UR

No.

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/10/03
CCIL JOB #: 302028
CCIL SAMPLE #: 1
DATE RECEIVED: 2/6/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-012
CLIENT SAMPLE ID: 09644-J.5.4-114 2/6/03 1241

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	2/7/03	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	2/7/03	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	2/7/03	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	2/7/03	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	2/7/03	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	2/7/03	LAH
TPH-SEMIVOLATILE RANGE	NWTPH-DX	ND	MG/KG	2/7/03	CMH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG
DIESEL RANGE REPORTING LIMIT IS 25 MG/KG
LUBE OIL RANGE REPORTING LIMIT IS 50 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: _____

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CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/10/03
CCIL JOB #: 302028

DATE RECEIVED: 2/6/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-012

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
302028-01	NWTPH-GX	TFT	75
302028-01	EPA-8021	TFT	95
302028-01	NWTPH-DX	C25	111

APPROVED BY: _____

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI Analytical Laboratories, Inc.
8620 Holly Drive
Everett, WA 98208
Phone (425) 356-2600
(206) 292-9059 Seattle
(425) 356-2626 Fax
http://www.ccilabs.com

Chain Of Custody/ Laboratory Analysis Request

CCI Job# (Laboratory Use Only)

Date 2/6/03 Page 1 Of 1

PROJECT ID:	21-1-09644-012
REPORT TO COMPANY:	Shannon & Wilson
PROJECT MANAGER:	Agnes Trao
ADDRESS:	400 N 34th St, Ste 100
	Seattle WA 98103
PHONE:	FAX:
P.O. NUMBER:	E-MAIL:
INVOICE TO COMPANY:	
ATTENTION:	
ADDRESS:	

ANALYSIS REQUESTED

SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-HCID	NWTPH-DX	NWTPH-GX	BTEX by EPA-8021	MTBE by EPA-8021 ☐ EPA-8260 ☐	Halogenated Volatiles by EPA 8260	Volatile Organic Compounds by EPA 8260	Ethylene dibromide (EDB) by EPA-8260 ☐ EPA-504.1 ☐	1,2 Dichloroethene (EDC) by EPA-8260	Semivolatile Organic Compounds by EPA 8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA-8270 SIM ☐	PCB ☐ Pesticides ☐ by EPA 8081/8082	Metals-MTCA-5 ☐ RCRA-8 ☐ Pri Pol ☐ TAL ☐	Metals Other (Specify)	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐	OTHER (Specify)	NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
1. 09644-J.5.4-114	2/6/03	1241	SO			X	X	X													1	
2.																						
3.																						
4.																						
5.																						
6.																						
7.																						
8.																						
9.																						
10.																						

REPORT COPY

SPECIAL INSTRUCTIONS

CCI Analytical Laboratories, Inc accepts and processes this request on the terms and conditions set forth on the reverse side. By its signature hereon, Customer accepts these terms and conditions.

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: Agnes Trao S&W 2/6/03 1457
   Received By: [signature] CCIAL 2/6/03 1457
2. Relinquished By:

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis: 10 (Standard) 5 3 2 1 SAME DAY

Fuels & Hydrocarbon Analysis: 5 (Standard) 3 1 SAME DAY

OTHER:

Specify: 2-DAY TAT

* Turnaround request less than standard may incur Rush Charges

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/18/03
CCIL JOB #: 302057
CCIL SAMPLE #: 1
DATE RECEIVED: 2/12/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-012 SNOHO.CTY PAK. GAR.
CLIENT SAMPLE ID: 09644-K.8-1-109 2/12/03 1432

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	2/14/03	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	2/14/03	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	2/14/03	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	2/14/03	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	2/14/03	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	2/14/03	LAH
TPH-SEMIVOLATILE RANGE	NWTPH-DX	ND	MG/KG	2/13/03	DAT

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG
DIESEL RANGE REPORTING LIMIT IS 25 MG/KG
LUBE OIL RANGE REPORTING LIMIT IS 50 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: 

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/18/03
CCIL JOB #: 302057

DATE RECEIVED: 2/12/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-012 SNOHO.CTY PAK. GAR.

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
302057-01	NWTPH-GX	TFT	106
302057-01	EPA-8021	TFT	84
302057-01	NWTPH-DX	C25	121

APPROVED BY: _____

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CCI Analytical Laboratories, Inc.
8620 Holly Drive
Everett, WA 98208
Phone (425) 356-2600
(206) 292-9059 Seattle
(425) 356-2626 Fax
http://www.ccilabs.com

Chain Of Custody/ Laboratory Analysis Request

Job# | Labor | Due Ont

Date 2/12/03 Page ____ Of 1

PROJECT ID:	21-1-09644-012
REPORT TO COMPANY:	Shannon & Wilson, Inc.
PROJECT MANAGER:	Agnes Tirao
ADDRESS:	400 N 34th St Ste 100
	Seattle WA 98103
PHONE: 206-632-8020	FAX: 206-695-6777
P.O. NUMBER:	E-MAIL: act@shanwil.com
INVOICE TO COMPANY:	S+W
ATTENTION:	ACT
ADDRESS:	Same

ANALYSIS REQUESTED

OTHER (Specify)

SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-HCID	NWTPH-DX	NWTPH-GX	BTEX by EPA-8021	MTBE by EPA-8021 ☐ EPA-8260 ☐	Halogenated Volatiles by EPA 8260	Volatile Organic Compounds by EPA 8260	Ethylene dibromide (EDB) by EPA-8260 ☐ EPA-504.1 ☐	1,2 Dichloroethene (EDC) by EPA-8260	Semivolatile Organic Compounds by EPA 8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA-8270 SIM ☐	PCB ☐ Pesticides ☐ by EPA 8081/8082	Metals-MTCA-5 ☐ RCRA-8 ☐ Pri Pol ☐ TAL ☐	Metals Other (Specify)	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐	NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
1. 0961/4.K.8-1-109	2/12/03	1432	Soil			X	X	X												1	
2.																					
3.																					
4.																					
5.																					
6.																					
7.																					
8.																					
9.																					
10.																					

REPORT COPY

SPECIAL INSTRUCTIONS

CCI Analytical Laboratories, Inc accepts and processes this request on the terms and conditions set forth on the reverse side. By its signature hereon, Customer accepts these terms and conditions.

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: Paul Hanna, S+W, 2/12/03, 1635
   Received By: [illegible] CCTAL 2/12/03 1635
2. Relinquished By: ____

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis: 10 Standard | 5 | 3 | 2 | 1 | SAME DAY

Fuels & Hydrocarbon Analysis: 5 Standard | 3 | 1 | SAME DAY

OTHER: Specify: ____

* Turnaround request less than standard may incur Rush Charges

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 3/5/03
CCIL JOB #: 302129
CCIL SAMPLE #: 1
DATE RECEIVED: 2/27/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-012 SNOHO. COUNTY CRI
CLIENT SAMPLE ID: 09644-B.7-4-107 2/27/03 9:15AM

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	3/3/03	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	3/3/03	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	3/3/03	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	3/3/03	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	3/3/03	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	3/3/03	LAH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

** UNITS FOR ALL NON-LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: _____

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CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 3/5/03
CCIL JOB #: 302129
CCIL SAMPLE #: 2
DATE RECEIVED: 2/27/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-012 SNOHO. COUNTY CRI
CLIENT SAMPLE ID: 09644-D.5-4-111 2/27/03 9:20AM

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	3/3/03	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	3/3/03	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	3/3/03	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	3/3/03	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	3/3/03	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	3/3/03	LAH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: _____

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CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 3/5/03
CCIL JOB #: 302129
CCIL SAMPLE #: 3
DATE RECEIVED: 2/27/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-012 SNOHO. COUNTY CRI
CLIENT SAMPLE ID: 09644-G-4-110 2/27/03 8:55AM

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	3/3/03	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	3/3/03	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	3/3/03	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	3/3/03	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	3/3/03	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	3/3/03	LAH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: _____

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ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 3/5/03
CCIL JOB #: 302129
CCIL SAMPLE #: 4
DATE RECEIVED: 2/27/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-012 SNOHO. COUNTY CRI
CLIENT SAMPLE ID: 09644-I-4-110 2/27/03 9:05AM

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	3/3/03	LAH
MTBE***	EPA-8021	ND(<0.1)	MG/KG	3/3/03	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	3/3/03	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	3/3/03	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	3/3/03	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	3/3/03	LAH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ANY POSITIVE MTBE RESULT SHOULD BE CONFIRMED BY GC/MS ANALYSIS

APPROVED BY: CVF

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CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 3/5/03
CCIL JOB #: 302129

DATE RECEIVED: 2/27/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-012 SNOHO. COUNTY CRI

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
302129-01	NWTPH-GX	TFT	82
302129-01	EPA-8021	TFT	84
302129-02	NWTPH-GX	TFT	91
302129-02	EPA-8021	TFT	80
302129-03	NWTPH-GX	TFT	72
302129-03	EPA-8021	TFT	76
302129-04	NWTPH-GX	TFT	98
302129-04	EPA-8021	TFT	80

APPROVED BY: _____

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

400 N. 34th Street, Suite 100
Seattle, WA 98103
(206) 632-8020

2055 Hill Road
Fairbanks, AK 99709
(907) 479-0600

2255 S.W. Canyon Road
Portland, OR 97201-2498
(503) 223-6147

2043 Westport Center Drive
St. Louis, MO 63146-3564
(314) 392-0050

5430 Fairbanks Street, Suite 3
Anchorage, AK 99518
(907) 561-2120

1200 17th Street, Suite 1024
Denver, Co 80202
(303) 825-3600

303 Wellsian Way
Richland, WA 99352
(509) 946-6309

CHAIN-OF-CUSTODY RECORD

Laboratory: CCI Labs

Attn:

Analysis Parameters/Sample Container Description
(include preservative if used)

Sample Identity	Lab No.	Time	Date Sampled	Comp.	Grab	GRTEX						Total Number of Containers	Remarks/Matrix
09644-B.7-4-107	1	9:15 am	2/27/03			X							Soil
09644-D.5-4-111	2	9:20 am	2/27/03			X							Soil
09644-G-4-110	3	8:55 am	2/27/03			X							Soil
09644-I-4-110	4	9:05 am	2/27/03			X							Soil

Project Information		Sample Receipt	
Project Number:	21-1-09644-012	Total Number of Containers	4
Project Name:	Snoho. County CRI	COC Seals/Intact? Y/N/NA	N/A
Contact:	Agnes Tirao	Received Good Cond./Cold	
Ongoing Project?	Yes ☒ No ☐	Delivery Method:	Drop off to lab.
Sampler:	B. Reznick	(attach shipping bill, if any)	

Instructions

Requested Turnaround Time: Standard

Special Instructions:
Contact Agnes w/ results when known.

Distribution: White - w/shipment - returned to Shannon & Wilson w/ laboratory report
Yellow - w/shipment - for consignee files
Pink - Shannon & Wilson - Job File

Relinquished By: 1.	Relinquished By: 2.	Relinquished By: 3.
Signature: Brian Reznick Time: 4:00 PM	Signature: Time:	Signature: Time:
Printed Name: Brian Reznick Date: 2/27/03	Printed Name: Date:	Printed Name: Date:
Company: Shannon & Wilson, Inc	Company:	Company:
Received By: 1.	**Received By: 2.**	**Received By: 3.**
Signature: Time: 9:30	Signature: Time:	Signature: Time:
Printed Name: Rick Bagon Date: 2/28/03	Printed Name: Date:	Printed Name: Date:
Company: CCI AL	Company:	Company:

F-19-91/UR

No.

Appendix D



APPENDIX D

LABORATORY ANALYTICAL REPORTS
ROCKEFELLER RAMP EXCAVATION

APPENDIX D

LABORATORY ANALYTICAL REPORTS
ROCKEFELLER RAMP EXCAVATION

This appendix contains the data for soil samples collected during the installation of soldier piles and the excavation of the Rockefeller Ramp Site. These data are summarized in Tables 2 and 4 in the main text of the report.

Laboratory reports may have been modified to include only samples collected at the Rockefeller Ramp Site; samples from the Administration Building Addition, Parking Garage, and New Jail Sites were removed.

The following reports are contained in this appendix:

Date	CCIAL Job Number	Number of Pages
2/11/2004	402027	5
2/11/2004	402037	5
2/17/2004	402036	5
2/19/2004	402044	5
2/20/2004	402049	6
4/2/2004	403123	3
4/2/2004	403129	3
4/7/2004	403146	5
4/12/2004	404017	3
4/13/2004	404020	4
4/14/2004	404027	4
4/14/2004	404039	3
4/16/2004	404054	3
4/16/2004	404063	4
4/22/2004	404087	3

Date	NVLLI Batch Number	Number of Pages
3/3/2004	2402747.00	3
3/5/2004	2402921.00	3
3/12/2004	2402722.00	3

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/11/04
CCIL JOB #: 402027
CCIL SAMPLE #: 1
DATE RECEIVED: 2/6/04
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO/PAUL VAN HORNE

CLIENT PROJECT ID: 21-1-12132-001
CLIENT SAMPLE ID: W7-131 2/6/04 1346

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	4	MG/KG	2/6/04	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	2/6/04	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	2/6/04	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	2/6/04	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	2/6/04	LAH

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY:

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/11/04
CCIL JOB #: 402027
CCIL SAMPLE #: 2
DATE RECEIVED: 2/6/04
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO/PAUL VAN HORNE

CLIENT PROJECT ID: 21-1-12132-001
CLIENT SAMPLE ID: W7-127 2/6/04 1352

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	2/6/04	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	2/6/04	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	2/6/04	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	2/6/04	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	2/6/04	LAH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY: CM

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CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/11/04
CCIL JOB #: 402027
CCIL SAMPLE #: 3
DATE RECEIVED: 2/6/04
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO/PAUL VAN HORNE

CLIENT PROJECT ID: 21-1-12132-001
CLIENT SAMPLE ID: W8-132 2/6/04 1331

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	2/6/04	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	2/6/04	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	2/6/04	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	2/6/04	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	2/6/04	LAH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY:

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CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/11/04
CCIL JOB #: 402027

DATE RECEIVED: 2/6/04
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO/PAUL VAN HORNE

CLIENT PROJECT ID: 21-1-12132-001

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
402027-01	NWTPH-GX	TFT	95
402027-01	EPA-8021	TFT	86
402027-02	NWTPH-GX	TFT	92
402027-02	EPA-8021	TFT	83
402027-03	NWTPH-GX	TFT	97
402027-03	EPA-8021	TFT	87

APPROVED BY:

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI Analytical Laboratories, Inc.
8620 Holly Drive
Everett, WA 98208
Phone (425) 356-2600
(206) 292-9059 Seattle
(425) 356-2626 Fax
http://www.ccilabs.com

Chain of Custody, Laboratory Analysis Request

CCI Laboratory Use: 402027

Date 2/6/2004 Page 1 Of 1

PROJECT ID:	21.1.12132-001
REPORT TO COMPANY:	Stu
PROJECT MANAGER:	Agnes Timao
ADDRESS:	400 N 34th St, Ste 100
	Seattle WA 98103
PHONE:	206-632-8020 FAX: 206-695-6777
P.O. NUMBER:	E-MAIL: act@shannonwil.com
INVOICE TO COMPANY:	Same
ATTENTION:	
ADDRESS:	

ANALYSIS REQUESTED

OTHER (Specify)

SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-HCID	NWTPH-DX	NWTPH-GX (4oz GJ) / BTEX	BTEX by EPA-8021	MTBE by EPA-8021 ☐ EPA-8260 ☐	Halogenated Volatiles by EPA 8260	Volatile Organic Compounds by EPA 8260	Ethylene dibromide (EDB) by EPA-8260 ☐ EPA-504.1 ☐	1,2 Dichloroethane (EDC) by EPA-8260	Semivolatile Organic Compounds by EPA 8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA-8270 SIM ☐	PCB ☐ Pesticides ☐ by EPA 8081/8082	Metals-MTCA-5 ☐ RCRA-8 ☐ Pri Pol ☐ TAL ☐	Metals Other (Specify)	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐	NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
1. W7-131	2/6/04	1346	S	1			✓													1	
2. W7-127	↓	1352	S	2			✓													1	
3. W8-132	↓	1331	S	3			✓	←	Rush											1	
4.																					
5.																					
6.																					
7.																					
8.																					
9.																					
10.																					

REPORT COPY

SPECIAL INSTRUCTIONS

CCI Analytical Laboratories, Inc accepts and processes this request on the terms and conditions set forth on the reverse side. By its signature hereon, Customer accepts these terms and conditions.

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: Lian Vu-Hume, STU, 2/6/04 1620
   Received By: Jack Boyer CCIAL 2/6/04 16:20
2. Relinquished By:

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis: 10 Standard | 5 | 3 | 2 | 1 | SAME DAY

Fuels & Hydrocarbon Analysis: 5 Standard | 3 | X | SAME DAY

Others → T

OTHER:
Specify: Verbal results to Paul Van Herus Monday 2/9/04. 206-300-0780

T → #W8-132

* Turnaround request less than standard may incur Rush Charges

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/11/04
CCIL JOB #: 402037
CCIL SAMPLE #: 1
DATE RECEIVED: 2/10/04
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-12132-001
CLIENT SAMPLE ID: E4-26' 2/9/04

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	2/11/04	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	2/11/04	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	2/11/04	LAH
ETHYLBENZENE	EPA-8021	0.06	MG/KG	2/11/04	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	2/11/04	LAH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY: CWL

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/11/04
CCIL JOB #: 402037
CCIL SAMPLE #: 3
DATE RECEIVED: 2/10/04
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-12132-001
CLIENT SAMPLE ID: E2-22' 2/9/04

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	2/11/04	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	2/11/04	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	2/11/04	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	2/11/04	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	2/11/04	LAH

NOTE: SAMPLE CHROMATOGRAM SHOWS HIGH CONCENTRATION OF PRODUCT WHICH IS LIKELY DIESEL RANGE

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 6 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY:

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CCI
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LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/11/04
CCIL JOB #: 402037
CCIL SAMPLE #: 4
DATE RECEIVED: 2/10/04
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-12132-001
CLIENT SAMPLE ID: E2-33' 2/9/04

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	2/11/04	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	2/11/04	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	2/11/04	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	2/11/04	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	2/11/04	LAH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY: CNL

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/11/04
CCIL JOB #: 402037

DATE RECEIVED: 2/10/04
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-12132-001

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
402037-01	NWTPH-GX	TFT	94
402037-01	EPA-8021	TFT	85
402037-03	NWTPH-GX	TFT	90
402037-03	EPA-8021	TFT	82
402037-04	NWTPH-GX	TFT	93
402037-04	EPA-8021	TFT	84

APPROVED BY:

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CHAIN-OF-CUSTODY RECORD

SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

400 N. 34th Street, Suite 100
Seattle, WA 98103
(206) 632-8020

2055 Hill Road
Fairbanks, AK 99709
(907) 479-0600

2255 S.W. Canyon Road
Portland, OR 97201-2498
(503) 223-6147

2043 Westport Center Drive
St. Louis, MO 63146-3564
(314) 392-0050

5430 Fairbanks Street, Suite 3
Anchorage, AK 99518
(907) 561-2120

1200 17th Street, Suite 1024
Denver, Co 80202
(303) 825-3800

303 Wellsian Way
Richland, WA 99352
(509) 946-8309

Laboratory CCIAL

Attn:

Analysis Parameters/Sample Container Description
(include preservative if used)

Sample Identity	Lab No.	Time	Date Sampled	Comp.	Grab	NWTPH-G BTEX						Total Number of Containers	Remarks/Matrix
E4-26'			2/9/2004		X	X						1	SOIL 4oz jar
E4-32'			↓		↓							↓	↓
E2-22'						(X) — 2-DAY TAT							
E2-33'			↓		↓	X						↓	↓

Project Information		Sample Receipt	
Project Number:	21-1-12132-003	Total Number of Containers	
Project Name:	ShoCo Pac Ramp	COC Seals/Intact? Y/N/NA	
Contact:	A TIRAD	Received Good Cond./Cold	
Ongoing Project?	Yes ☒ No ☐	Delivery Method:	
Sampler:	ACT	(attach shipping bill, if any)	

Instructions	
Requested Turnaround Time:	2-STANDARD
Special Instructions:	1-2day

Relinquished By: 1.	Relinquished By: 2.	Relinquished By: 3.
Signature: Time:	Signature: Time:	Signature: Time:
Printed Name: AGNES TIRAD Date: 2/9/04	Printed Name: Date:	Printed Name: Date:
Company: S&W	Company:	Company:
Received By: 1.	**Received By: 2.**	**Received By: 3.**
Signature: Time: 1:30	Signature: Time:	Signature: Time:
Printed Name: Rick Bagan Date: 2/10/04	Printed Name: Date:	Printed Name: Date:
Company: CCI	Company:	Company:

Distribution: White - w/shipment - returned to Shannon & Wilson w/ laboratory report
Yellow - w/shipment - for consignee files
Pink - Shannon & Wilson - Job File

F-19-91/UR

No. 026128

CCI
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LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/17/04
CCIL JOB #: 402036
CCIL SAMPLE #: 1
DATE RECEIVED: 2/10/04
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-12132
CLIENT SAMPLE ID: W11-25.5' 2/10/04 1100

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	440	MG/KG	2/11/04	LAH
BENZENE	EPA-8021	0.2	MG/KG	2/11/04	LAH
TOLUENE	EPA-8021	0.6	MG/KG	2/11/04	LAH
ETHYLBENZENE	EPA-8021	1.3	MG/KG	2/11/04	LAH
XYLENES	EPA-8021	2.3	MG/KG	2/11/04	LAH

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 30 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY:

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/17/04
CCIL JOB #: 402036
CCIL SAMPLE #: 2
DATE RECEIVED: 2/10/04
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-12132
CLIENT SAMPLE ID: W12-18' 2/10/04 1141

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	2/11/04	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	2/11/04	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	2/11/04	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	2/11/04	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	2/11/04	LAH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY: CM

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CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/17/04
CCIL JOB #: 402036
CCIL SAMPLE #: 3
DATE RECEIVED: 2/10/04
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-12132
CLIENT SAMPLE ID: W14-19' 2/10/04 1312

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	2/11/04	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	2/11/04	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	2/11/04	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	2/11/04	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	2/11/04	LAH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY: CWL

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CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/17/04
CCIL JOB #: 402036

DATE RECEIVED: 2/10/04
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-12132

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
402036-01	NWTPH-GX	TFT	*
402036-01	EPA-8021	TFT	100
402036-02	NWTPH-GX	TFT	91
402036-02	EPA-8021	TFT	92
402036-03	NWTPH-GX	TFT	95
402036-03	EPA-8021	TFT	94

* SURROGATE DILUTED OUT OF CALIBRATION RANGE

APPROVED BY:

CCI Analytical Laboratories, Inc.
8620 Holly Drive
Everett, WA 98208
Phone (425) 356-2600
(206) 292-9059 Seattle
(425) 356-2626 Fax
http://www.ccilabs.com

Chain of Custody/ Laboratory Analysis Request

CCI [illegible] ory Use

Date 2/10/04 Page 1 Of 1

PROJECT ID:	21-1-12132
REPORT TO COMPANY:	Shannon & Wilson
PROJECT MANAGER:	A Tirao
ADDRESS:	400 N 34th St Ste 100 Seattle WA 98103
PHONE:	206 632 8020 FAX: 206 695 6777
P.O. NUMBER:	E-MAIL: aet@shanwil.com
INVOICE TO COMPANY:	
ATTENTION:	A Tirao
ADDRESS:	

ANALYSIS REQUESTED

OTHER (Specify)

SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-HCID	NWTPH-DX	NWTPH-GX	BTEX by EPA-8021	MTBE by EPA-8021 ☐ EPA-8260 ☐	Halogenated Volatiles by EPA 8260	Volatile Organic Compounds by EPA 8260	Ethylene dibromide (EDB) by EPA-8260 ☐ EPA-504.1 ☐	1,2 Dichloroethene (EDC) by EPA-8260	Semivolatile Organic Compounds by EPA 8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA-8270 SIM ☐	PCB ☐ Pesticides ☐ by EPA 8081/8082	Metals-MTCA-5 ☐ RCRA-8 ☐ Pri Pol ☐ TAL ☐	Metals Other (Specify)	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐	NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
1. W11-25.5'	2/10/04	1100	SO	1			X	X												1	
2. W12-18'	"	1141	"	2			"	"												"	
3. W14-19'	"	1312	"	3			"	"												"	
4.																					
5.																					
6.																					
7.																					
8.																					
9.																					
10.																					

REPORT COPY

SPECIAL INSTRUCTIONS

CCI Analytical Laboratories, Inc accepts and processes this request on the terms and conditions set forth on the reverse side. By its signature hereon, Customer accepts these terms and conditions.

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: [signature] S&W 2/10/04 1430
   Received By: [signature] 2/10/04 1430
2. Relinquished By: _____
   Received By: _____

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis: 10 Standard | 5 | 3 | 2 | 1 | SAME DAY

Fuels & Hydrocarbon Analysis: 5 Standard | 3 | 1 | SAME DAY

OTHER:

Specify: _____

* Turnaround request less than standard may incur Rush Charges

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/19/04
CCIL JOB #: 402044
CCIL SAMPLE #: 1
DATE RECEIVED: 2/12/04
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-12132-001
CLIENT SAMPLE ID: W16-22' 2/11/04 1027

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	23	MG/KG	2/13/04	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	2/13/04	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	2/13/04	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	2/13/04	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	2/13/04	LAH

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY: CM

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/19/04
CCIL JOB #: 402044
CCIL SAMPLE #: 2
DATE RECEIVED: 2/12/04
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-12132-001
CLIENT SAMPLE ID: W18-18' 2/11/04 1159

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	2/13/04	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	2/13/04	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	2/13/04	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	2/13/04	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	2/13/04	LAH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY: CIL

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/19/04
CCIL JOB #: 402044
CCIL SAMPLE #: 4
DATE RECEIVED: 2/12/04
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-12132-001
CLIENT SAMPLE ID: W18-36' 2/11/04 1312

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	28	MG/KG	2/13/04	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	2/13/04	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	2/13/04	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	2/13/04	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	2/13/04	LAH

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY: 

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/19/04
CCIL JOB #: 402044

DATE RECEIVED: 2/12/04
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-12132-001

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
402044-01	NWTPH-GX	TFT	92
402044-01	EPA-8021	TFT	81
402044-02	NWTPH-GX	TFT	96
402044-02	EPA-8021	TFT	88
402044-03	NWTPH-GX	TFT	*
402044-03	EPA-8021	TFT	97
402044-04	NWTPH-GX	TFT	90
402044-04	EPA-8021	TFT	82

* SURROGATE DILUTED OUT OF CALIBRATION RANGE

APPROVED BY: CWL

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

402044

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

Laboratory CCIAL

Attn:

SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

400 N. 34th Street, Suite 100, Seattle, WA 98103, (206) 632-8020
2055 Hill Road, Fairbanks, AK 99709, (907) 479-0600
2255 S.W. Canyon Road, Portland, OR 97201-2498, (503) 223-6147
2043 Westport Center Drive, St. Louis, MO 63146-3564, (314) 392-0050
5430 Fairbanks Street, Suite 3, Anchorage, AK 99518, (907) 561-2120
1200 17th Street, Suite 1024, Denver, Co 80202, (303) 825-3800
303 Wellsian Way, Richland, WA 99352, (509) 946-6309

Analysis Parameters/Sample Container Description
(include preservative if used)

Sample Identity	Lab No.	Time	Date Sampled	Comp.	Grab	NWTPH-G/BTEX					Total Number of Containers	Remarks/Matrix
W16-22'		1027	2/11/2004		X	X					01	SOIL 1-4oz jar
W18-18'		1159	↓		↓	//					↓	↓
W18-25'		1302				//						
W18-36'		1312				//	—	—	—	—		

— 10 DAY TAT

Project Information		Sample Receipt	
Project Number:	21-1-12132-001	Total Number of Containers	
Project Name:	SnoCo Ramp	COC Seals/Intact? Y/N/NA	
Contact:	A Tirao	Received Good Cond./Cold	
Ongoing Project?	Yes ☑ No ☐	Delivery Method:	
Sampler:	ACT	(attach shipping bill, if any)	

Instructions	
Requested Turnaround Time:	STANDARD - 3 samples
Special Instructions:	10 DAY - 1 sample for TPH

Relinquished By: 1.	Relinquished By: 2.	Relinquished By: 3.
Signature: Agnes Tirao Time: 1730	Signature: Time:	Signature: Time:
Printed Name: AGNES TIRAO Date: 2/11/04	Printed Name: Date:	Printed Name: Date:
Company: S+W	Company:	Company:

Received By: 1.	Received By: 2.	Received By: 3.
Signature: Time: 1750	Signature: Time:	Signature: Time:
Printed Name: Rick Bryan Date: 2/11/04	Printed Name: Date:	Printed Name: Date:
Company: CCIAL	Company:	Company:

Distribution: White - w/shipment - returned to Shannon & Wilson w/ laboratory report
Yellow - w/shipment - for consignee files
Pink - Shannon & Wilson - Job File

F-19-91/UR

cell 206-300-0780

No. 026130

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/20/04
CCIL JOB #: 402049
CCIL SAMPLE #: 1
DATE RECEIVED: 2/13/04
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-12132-001 SNOH.CO.ROCK.RAMP
CLIENT SAMPLE ID: W20-129.5 2/12/04 1228

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	53	MG/KG	2/17/04	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	2/17/04	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	2/17/04	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	2/17/04	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	2/17/04	LAH

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY:

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/20/04
CCIL JOB #: 402049
CCIL SAMPLE #: 2
DATE RECEIVED: 2/13/04
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-12132-001 SNOH.CO.ROCK.RAMP
CLIENT SAMPLE ID: W20-130.5 2/12/04 1233

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	590	MG/KG	2/19/04	LAH
BENZENE	EPA-8021	ND(<0.12)	MG/KG	2/17/04	LAH
TOLUENE	EPA-8021	ND(<0.2)	MG/KG	2/17/04	LAH
ETHYLBENZENE	EPA-8021	0.9	MG/KG	2/17/04	LAH
XYLENES	EPA-8021	1.9	MG/KG	2/17/04	LAH

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 30 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY:

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ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/20/04
CCIL JOB #: 402049
CCIL SAMPLE #: 3
DATE RECEIVED: 2/13/04
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-12132-001 SNOH.CO.ROCK.RAMP
CLIENT SAMPLE ID: W21-129.5 2/13/04 1340

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	1300	MG/KG	2/19/04	LAH
BENZENE	EPA-8021	ND(<0.3)	MG/KG	2/17/04	LAH
TOLUENE	EPA-8021	ND(<0.5)	MG/KG	2/17/04	LAH
ETHYLBENZENE	EPA-8021	2.2	MG/KG	2/17/04	LAH
XYLENES	EPA-8021	4.0	MG/KG	2/17/04	LAH

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT; REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 60 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY:

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/20/04
CCIL JOB #: 402049
CCIL SAMPLE #: 4
DATE RECEIVED: 2/13/04
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-12132-001 SNOH.CO.ROCK.RAMP
CLIENT SAMPLE ID: W21-124.5 2/13/04 1416

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	71	MG/KG	2/19/04	LAH
BENZENE	EPA-8021	ND(<0.12)	MG/KG	2/19/04	LAH
TOLUENE	EPA-8021	ND(<0.2)	MG/KG	2/19/04	LAH
ETHYLBENZENE	EPA-8021	ND(<0.2)	MG/KG	2/19/04	LAH
XYLENES	EPA-8021	ND(<0.8)	MG/KG	2/19/04	LAH

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 60 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY:

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CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/20/04
CCIL JOB #: 402049

DATE RECEIVED: 2/13/04
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-12132-001 SNOH.CO.ROCK.RAMP

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
402049-01	NWTPH-GX	TFT	88
402049-01	EPA-8021	TFT	84
402049-02	NWTPH-GX	TFT	*
402049-02	EPA-8021	TFT	80
402049-03	NWTPH-GX	TFT	*
402049-03	EPA-8021	TFT	*
402049-04	NWTPH-GX	TFT	74
402049-04	EPA-8021	TFT	76

* SURROGATE DILUTED OUT OF CALIBRATION RANGE

APPROVED BY:

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CHAIN-OF-CUSTODY RECORD

SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

400 N. 34th Street, Suite 100
Seattle, WA 98103
(206) 632-8020
(206) 695-6777 Fax

11500 Olive Blvd., Suite 276
St. Louis, MO 63141
(314) 872-8170
(314) 872-8178 Fax

2055 Hill Road
Fairbanks, AK 99709
(907) 479-0600
(907) 479-5691 Fax

5430 Fairbanks Street, Suite 3
Anchorage, AK 99518
(907) 561-2120
(907) 561-4483 Fax

303 Wellsian Way
Richland, WA 99352
(509) 946-6309
(509) 946-6380 Fax

Laboratory CCI Page 1 of 1
Attn: Rick or Chuck

Analysis Parameters/Sample Container Description
(include preservative if used)

Sample Identity	Lab No.	Time	Date Sampled	Comp.	Grab	40z GJ NWTPH-Gx/BTEX						Total Number of Containers	Remarks/Matrix
W20-129.5		1228	2/12/04		X	~~Hold~~ ✓						1	Iced/Soil
W20-130.5		1233	↓		X	~~Hold~~ ✓						1	↓
W21-129.5		1340	2/13/04		X	✓ ~~(Rush PVH)~~						1	
W21-124.5		1416	↓		X	✓						1	↓

Project Information		Sample Receipt	
Project Number:	21-1-12132-001	Total Number of Containers	
Project Name:	Such. Co. Rock. Ramp	COC Seals/Intact? Y/N/NA	
Contact:	Agnes Tirado	Received Good Cond./Cold	
Ongoing Project?	Yes ☑ No ☐	Delivery Method:	C.O. Personnel
Sampler:	Paul Van Horne	(attach shipping bill, if any)	

Instructions

Requested Turnaround Time:

Special Instructions:

Relinquished By: 1.	Relinquished By: 2.	Relinquished By: 3.
Signature: Paul Van Horne Time: 1610	Signature: Time:	Signature: Time:
Printed Name: Paul Van Horne Date: 2/13/04	Printed Name: Date:	Printed Name: Date:
Company: SAW	Company:	Company:
Received By: 1.	**Received By: 2.**	**Received By: 3.**
Signature: Time: 1610	Signature: Time:	Signature: Time:
Printed Name: Rick Bagan Date: 2/13/04	Printed Name: Date:	Printed Name: Date:
Company: CCIAC	Company:	Company:

Distribution: White - w/shipment - returned to Shannon & Wilson w/ laboratory report
Yellow - w/shipment - for consignee files
Pink - Shannon & Wilson - Job File

F-19-91/UR

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ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 4/2/04
CCIL JOB #: 403123
CCIL SAMPLE #: 1
DATE RECEIVED: 3/26/04
WDOE ACCREDITATION #: C142

CLIENT CONTACT: PAUL VAN HORNE

CLIENT PROJECT ID: 21-1-12132-001
CLIENT SAMPLE ID: E5+2.5, 139.5 3/26/04 1345

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	2600	MG/KG	3/30/04	LAH
BENZENE	EPA-8021	ND(<0.75)	MG/KG	3/30/04	LAH
TOLUENE	EPA-8021	ND(<2.5)	MG/KG	3/30/04	LAH
ETHYLBENZENE	EPA-8021	7.1	MG/KG	3/30/04	LAH
XYLENES	EPA-8021	ND(<10)	MG/KG	3/30/04	LAH

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 150 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY:

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 4/2/04
CCIL JOB #: 403123

DATE RECEIVED: 3/26/04
WDOE ACCREDITATION #: C142

CLIENT CONTACT: PAUL VAN HORNE

CLIENT PROJECT ID: 21-1-12132-001

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
403123-01	NWTPH-GX	TFT	*
403123-01	EPA-8021	TFT	*

* SURROGATE DILUTED OUT OF CALIBRATION RANGE

APPROVED BY:

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI Analytical Laboratories, Inc.
8620 Holly Drive
Everett, WA 98208
Phone (425) 356-2600
(206) 292-9059 Seattle
(425) 356-2626 Fax
http://www.ccilabs.com

Chain Of Custody/ Laboratory Analysis Request

Date 3/26/04 Page 1 Of 1

PROJECT ID:	21-1-12-132-001
REPORT TO COMPANY:	SLR
PROJECT MANAGER:	Paul Van Hoorne
ADDRESS:	400 N 34th St, Ste 100
	Seattle WA 98103
PHONE:	206-695-6840 FAX: 206-695-6777
P.O. NUMBER:	E-MAIL: PVH@CHANWIL.COM
INVOICE TO COMPANY:	Same
ATTENTION:	
ADDRESS:	

ANALYSIS REQUESTED

OTHER (Specify)

SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-HCID	NWTPH-DX	NWTPH-GX / BTEX (4or 6)	BTEX by EPA-8021	MTBE by EPA-8021 ☐ EPA-8260 ☐	Halogenated Volatiles by EPA 8260	Volatile Organic Compounds by EPA 8260	Ethylene dibromide (EDB) by EPA-8260 ☐ EPA-504.1 ☐	1,2 Dichloroethene (EDC) by EPA-8260	Semivolatile Organic Compounds by EPA 8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA-8270 SIM ☐	PCB ☐ Pesticides ☐ by EPA 8081/8082	Metals-MTCA-5 ☐ RCRA-8 ☐ Pri Pol ☐ TAL ☐	Metals Other (Specify)	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐	NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
1. ES+2.5, 139.5	3/26/04	1345	Soil				✓													1	
2.																					
3.																					
4.																					
5.																					
6.																					
7.																					
8.																					
9.																					
10.																					

REPORT COPY

SPECIAL INSTRUCTIONS

CCI Analytical Laboratories, Inc accepts and processes this request on the terms and conditions set forth on the reverse side. By its signature hereon, Customer accepts these terms and conditions.

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: Paul Van Hoorne, SLR, 3/26/04, 1542
   Received By: Jeff Bayer CCIAL 3/26/04 1542
2. Relinquished By:

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis: 10 Standard | 5 | 3 | 2 | 1 | SAME DAY

Fuels & Hydrocarbon Analysis: 5 Standard | 3 | 1 | SAME DAY

OTHER:

Specify:

* Turnaround request less than standard may incur Rush Charges

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 4/2/04
CCIL JOB #: 403129
CCIL SAMPLE #: 1
DATE RECEIVED: 3/29/04
WDOE ACCREDITATION #: C142

CLIENT CONTACT: PAUL VAN HORNE

CLIENT PROJECT ID: 21-1-12132-001
CLIENT SAMPLE ID: W20+4,134 3/29/04 0936

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	410	MG/KG	3/30/04	LAH
BENZENE	EPA-8021	ND(<0.12)	MG/KG	4/1/04	LAH
TOLUENE	EPA-8021	ND(<0.2)	MG/KG	4/1/04	LAH
ETHYLBENZENE	EPA-8021	0.3	MG/KG	4/1/04	LAH
XYLENES	EPA-8021	ND(<0.8)	MG/KG	4/1/04	LAH

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 30 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY: CIL

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 4/2/04
CCIL JOB #: 403129

DATE RECEIVED: 3/29/04
WDOE ACCREDITATION #: C142

CLIENT CONTACT: PAUL VAN HORNE

CLIENT PROJECT ID: 21-1-12132-001

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
403129-01	NWTPH-GX	TFT	*
403129-01	EPA-8021	TFT	93

* SURROGATE DILUTED OUT OF CALIBRATION RANGE

APPROVED BY:

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CHAIN-OF-CUSTODY RECORD

SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

400 N. 34th Street, Suite 100
Seattle, WA 98103
(206) 632-8020

2043 Westport Center Drive
St. Louis, MO 63146-3564
(314) 392-0050

303 Wellsian Way
Richland, WA 99352
(509) 946-6309

2055 Hill Road
Fairbanks, AK 99709
(907) 479-0600

5430 Fairbanks Street, Suite 3
Anchorage, AK 99518
(907) 561-2120

2255 S.W. Canyon Road
Portland, OR 97201-2498
(503) 223-6147

1200 17th Street, Suite 1024
Denver, Co 80202
(303) 825-3800

Laboratory CCI Page 1 of 1
Attn: Rick Bagan

Analysis Parameters/Sample Container Description
(include preservative if used)

Sample Identity	Lab No.	Time	Date Sampled	Comp.	Grab	NWTPH-G(BTEX (402 GJ)						Total Number of Containers	Remarks/Matrix
W20+4,134		0936	3-29-04		✓	✓						1	Iced/Soil

Project Information		Sample Receipt	
Project Number:	21-1-12132-001	Total Number of Containers	
Project Name:	Snoh. Co. Ramp	COC Seals/Intact? Y/N/NA	
Contact:	Paul VanHorne	Received Good Cond./Cold	
Ongoing Project?	Yes ☒ No ☐	Delivery Method:	Co. Personnel
Sampler:	Paul VanHorne	(attach shipping bill, if any)	

Instructions

Requested Turnaround Time: Standard

Special Instructions: Call w/ verbal result
206-300-0780

Distribution: White - w/shipment - returned to Shannon & Wilson w/ laboratory report
Yellow - w/shipment - for consignee files
Pink - Shannon & Wilson - Job File

Relinquished By: 1.	Relinquished By: 2.	Relinquished By: 3.
Signature: Paul L VanHorne Time: 1523	Signature: Time:	Signature: Time:
Printed Name: Paul L. VanHorne Date: 3/29/04	Printed Name: Date:	Printed Name: Date:
Company: S+W	Company:	Company:
Received By: 1.	**Received By: 2.**	**Received By: 3.**
Signature: Lucy Hoelscher Time: 3:23pm	Signature: Time:	Signature: Time:
Printed Name: Date: 3-29-04	Printed Name: Date:	Printed Name: Date:
Company: CCI Analytical Labs	Company:	Company:

F-19-91/UR

No. 026137

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 4/7/04
CCIL JOB #: 403146
CCIL SAMPLE #: 1
DATE RECEIVED: 3/31/04
WDOE ACCREDITATION #: C142

CLIENT CONTACT: PAUL VAN HORNE

CLIENT PROJECT ID: 21-1-12132-001 SNOH.CO.RAMP
CLIENT SAMPLE ID: W14+3,139 3/31/04 1416

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	4/2/04	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	4/2/04	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	4/2/04	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	4/2/04	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	4/2/04	LAH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY: CH

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 4/7/04
CCIL JOB #: 403146
CCIL SAMPLE #: 2
DATE RECEIVED: 3/31/04
WDOE ACCREDITATION #: C142

CLIENT CONTACT: PAUL VAN HORNE

CLIENT PROJECT ID: 21-1-12132-001 SNOH.CO.RAMP
CLIENT SAMPLE ID: W16+6.5,135 3/31/04 1446

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	15	MG/KG	4/5/04	LAH
BENZENE	EPA-8021	ND(<0.03)	MG/KG	4/5/04	LAH
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	4/5/04	LAH
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	4/5/04	LAH
XYLENES	EPA-8021	ND(<0.2)	MG/KG	4/5/04	LAH

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY: CNL

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 4/7/04
CCIL JOB #: 403146
CCIL SAMPLE #: 3
DATE RECEIVED: 3/31/04
WDOE ACCREDITATION #: C142

CLIENT CONTACT: PAUL VAN HORNE

CLIENT PROJECT ID: 21-1-12132-001 SNOH.CO.RAMP
CLIENT SAMPLE ID: W17+6.5,134.5 3/31/04 1604

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	2200	MG/KG	4/6/04	LAH
BENZENE	EPA-8021	ND(<0.6)	MG/KG	4/5/04	LAH
TOLUENE	EPA-8021	ND(<1.0)	MG/KG	4/5/04	LAH
ETHYLBENZENE	EPA-8021	2.9	MG/KG	4/5/04	LAH
XYLENES	EPA-8021	6.1	MG/KG	4/5/04	LAH

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 150 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY:

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 4/7/04
CCIL JOB #: 403146

DATE RECEIVED: 3/31/04
WDOE ACCREDITATION #: C142

CLIENT CONTACT: PAUL VAN HORNE

CLIENT PROJECT ID: 21-1-12132-001 SNOH.CO.RAMP

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
403146-01	NWTPH-GX	TFT	88
403146-01	EPA-8021	TFT	78
403146-02	NWTPH-GX	TFT	82
403146-02	EPA-8021	TFT	77
403146-03	NWTPH-GX	TFT	*
403146-03	EPA-8021	TFT	*

* SURROGATE DILUTED OUT OF CALIBRATION RANGE

APPROVED BY: CN

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CHAIN-OF-CUSTODY RECORD

SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

400 N. 34th Street, Suite 100
Seattle, WA 98103
(206) 632-8020

2055 Hill Road
Fairbanks, AK 99709
(907) 479-0600

2255 S.W. Canyon Road
Portland, OR 97201-2498
(503) 223-6147

2043 Westport Center Drive
St. Louis, MO 63146-3564
(314) 392-0050

5430 Fairbanks Street, Suite 3
Anchorage, AK 99518
(907) 561-2120

1200 17th Street, Suite 1024
Denver, Co 80202
(303) 825-3800

303 Wellsian Way
Richland, WA 99352
(509) 946-6309

Laboratory CCI
Attn: Rick Bagan

Analysis Parameters/Sample Container Description
(include preservative if used)

Sample Identity	Lab No.	Time	Date Sampled	Comp.	Grab	40z GJ NwTPH-Gx/BTEX						Total Number of Containers	Remarks/Matrix
W14+3, 139		1416	3-31-04		X	✓						1	Iced/Soil
W16 +6.5, 135		1446	↓		X	✓						1	↓
W17 +6.5, 134.5		1604	↓		X	✓						1	↓

Project Information	
Project Number:	21-1-12132-001
Project Name:	Snoh. Co. Ramp
Contact:	Paul VanHorne
Ongoing Project?	Yes ☐ No ☐
Sampler:	Paul VanHorne

Sample Receipt	
Total Number of Containers	
COC Seals/Intact? Y/N/NA	
Received Good Cond./Cold	
Delivery Method: (attach shipping bill, if any)	Co. Personnel

Instructions	
Requested Turnaround Time:	Standard
Special Instructions:	

Relinquished By: 1.	Relinquished By: 2.	Relinquished By: 3.
Signature: Paul VanHorne	Signature:	Signature:
Time: 1702	Time:	Time:
Printed Name: Paul VanHorne	Printed Name:	Printed Name:
Date: 3/31/04	Date:	Date:
Company: SHW	Company:	Company:

Received By: 1.	Received By: 2.	Received By: 3.
Signature:	Signature:	Signature:
Time: 1704	Time:	Time:
Printed Name: C Pierce	Printed Name:	Printed Name:
Date: 3-31-04	Date:	Date:
Company: CCIAL	Company:	Company:

Distribution: White - w/shipment - returned to Shannon & Wilson w/ laboratory report
Yellow - w/shipment - for consignee files
Pink - Shannon & Wilson - Job File

F-19-91/UR

No. 026138

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 4/12/04
CCIL JOB #: 404017
CCIL SAMPLE #: 1
DATE RECEIVED: 4/5/04
WDOE ACCREDITATION #: C142

CLIENT CONTACT: PAUL VAN HORNE

CLIENT PROJECT ID: 21-1-12132-001
CLIENT SAMPLE ID: E6+5.5,141 4/5/04 1032

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	2500	MG/KG	4/8/04	LAH
BENZENE	EPA-8021	ND(<0.3)	MG/KG	4/8/04	LAH
TOLUENE	EPA-8021	2.0	MG/KG	4/8/04	LAH
ETHYLBENZENE	EPA-8021	9.1	MG/KG	4/8/04	LAH
XYLENES	EPA-8021	23	MG/KG	4/8/04	LAH

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY WEATHERED GASOLINE

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 150 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY:

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 4/12/04
CCIL JOB #: 404017

DATE RECEIVED: 4/5/04
WDOE ACCREDITATION #: C142

CLIENT CONTACT: PAUL VAN HORNE

CLIENT PROJECT ID: 21-1-12132-001

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
404017-01	NWTPH-GX	TFT	*
404017-01	EPA-8021	TFT	*

* SURROGATE DILUTED OUT OF CALIBRATION RANGE

APPROVED BY:

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CCI Analytical Laboratories, Inc.
8620 Holly Drive
Everett, WA 98208
Phone (425) 356-2600
(206) 292-9059 Seattle
(425) 356-2626 Fax
http://www.ccilabs.com

Chain Of Custody/ Laboratory Analysis Request

CCI Job# (Laboratory Use Only) 404017

Date 4/5/04 Page 1 Of 1

PROJECT ID: 21-1-12132-001
REPORT TO COMPANY: S+W
PROJECT MANAGER: Paul Van Horne
ADDRESS: 4100 N 34th St, Ste 100
Seattle WA 98103
PHONE: 206-695-6840 FAX: 206-695-6777
P.O. NUMBER: E-MAIL: PVH@SHANWIL.COM
INVOICE TO COMPANY: Same
ATTENTION:
ADDRESS:

ANALYSIS REQUESTED

SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-HCID	NWTPH-DX	NWTPH-GX	BTEX by EPA-8021	MTBE by EPA-8021 ☐ EPA-8260 ☐	Halogenated Volatiles by EPA 8260	Volatile Organic Compounds by EPA 8260	Ethylene dibromide (EDB) by EPA-8260 ☐ EPA-504.1 ☐	1,2 Dichloroethene (EDC) by EPA-8260	Semivolatile Organic Compounds by EPA 8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA-8270 SIM ☐	PCB ☐ Pesticides ☐ by EPA 8081/8082	Metals-MTCA-5 ☐ RCRA-8 ☐ Pri Pol ☐ TAL ☐	Metals Other (Specify)	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐	OTHER (Specify)	NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
1. EG+5.5, 141	4-5-04	1032	Soil	1			✓	✓													1	
2.																						
3.																						
4.																						
5.																						
6.																						
7.																						
8.																						
9.																						
10.																						

REPORT COPY

SPECIAL INSTRUCTIONS

CCI Analytical Laboratories, Inc accepts and processes this request on the terms and conditions set forth on the reverse side. By its signature hereon, Customer accepts these terms and conditions.

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: Paul VanHorne S+W 4-5-04 1530
   Received By: Lucy Hoelscher, CCIAL, 4-5-04, 1530
2. Relinquished By:

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis: [10 Standard] [5] [3] [2] [1] [SAME DAY]

Fuels & Hydrocarbon Analysis: [10 Standard] [3] [1] [SAME DAY]

OTHER:

Specify:

* Turnaround request less than standard may incur Rush Charges

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 4/13/04
CCIL JOB #: 404020
CCIL SAMPLE #: 1
DATE RECEIVED: 4/6/04
WDOE ACCREDITATION #: C142

CLIENT CONTACT: PAUL VAN HORNE

CLIENT PROJECT ID: 21-1-12132-001
CLIENT SAMPLE ID: E1+4,136.5 4/6/04 0908

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	3100	MG/KG	4/8/04	LAH
BENZENE	EPA-8021	ND(<0.06)	MG/KG	4/8/04	LAH
TOLUENE	EPA-8021	1.3	MG/KG	4/8/04	LAH
ETHYLBENZENE	EPA-8021	3.8	MG/KG	4/8/04	LAH
XYLENES	EPA-8021	2.2	MG/KG	4/8/04	LAH

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 150 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY:

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 4/13/04
CCIL JOB #: 404020
CCIL SAMPLE #: 2
DATE RECEIVED: 4/6/04
WDOE ACCREDITATION #: C142

CLIENT CONTACT: PAUL VAN HORNE

CLIENT PROJECT ID: 21-1-12132-001
CLIENT SAMPLE ID: E3+3.5,134.5 4/6/04 0915

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	240	MG/KG	4/8/04	LAH
BENZENE	EPA-8021	ND(<0.6)	MG/KG	4/8/04	LAH
TOLUENE	EPA-8021	ND(<1.0)	MG/KG	4/8/04	LAH
ETHYLBENZENE	EPA-8021	2.9	MG/KG	4/8/04	LAH
XYLENES	EPA-8021	ND(<4.0)	MG/KG	4/8/04	LAH

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 60 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY: CN

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 4/13/04
CCIL JOB #: 404020

DATE RECEIVED: 4/6/04
WDOE ACCREDITATION #: C142

CLIENT CONTACT: PAUL VAN HORNE

CLIENT PROJECT ID: 21-1-12132-001

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
404020-01	NWTPH-GX	TFT	*
404020-01	EPA-8021	TFT	95
404020-02	NWTPH-GX	TFT	*
404020-02	EPA-8021	TFT	*

* SURROGATE DILUTED OUT OF CALIBRATION RANGE

APPROVED BY:

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CCI Analytical Laboratories, Inc.
8620 Holly Drive
Everett, WA 98208
Phone (425) 356-2600
(206) 292-9059 Seattle
(425) 356-2626 Fax
http://www.ccilabs.com

Chain Of Custody/ Laboratory Analysis Request

CCI Job# (Laboratory Use Only)

Date 4-6-2004 Page 1 Of 1

PROJECT ID: 21-1-12137-001
REPORT TO COMPANY: Shannon & Wilson, Inc.
PROJECT MANAGER: Paul Van Horne
ADDRESS: 400 N 34th St, Ste 100
Seattle WA 98103
PHONE: 206-695-6840 FAX: 206-695-6777
P.O. NUMBER: E-MAIL: PVH@SHANWIL.COM
INVOICE TO COMPANY: Same
ATTENTION:
ADDRESS:

ANALYSIS REQUESTED

SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-HCID	NWTPH-DX	NWTPH-GX	BTEX by EPA-8021	MTBE by EPA-8021 ☐ EPA-8260 ☐	Halogenated Volatiles by EPA 8260	Volatile Organic Compounds by EPA 8260	Ethylene dibromide (EDB) by EPA-8260 ☐ EPA-504.1 ☐	1,2 Dichloroethene (EDC) by EPA-8260	Semivolatile Organic Compounds by EPA 8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA-8270 SIM ☐	PCB ☐ Pesticides ☐ by EPA 8081/8082	Metals-MTCA-5 ☐ RCRA-8 ☐ Pri Pol ☐ TAL ☐	Metals Other (Specify)	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Past ☐ Herbs ☐	OTHER (Specify)	NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
1. E1+4, 136.5	4-6-04	0908	Soil	1			✓	✓													1	
2. E3+3.5, 134.5	4-6-04	0915	Soil	2			✓	✓													1	
3.																						
4.																						
5.																						
6.																						
7.																						
8.																						
9.																						
10.																						

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SPECIAL INSTRUCTIONS

CCI Analytical Laboratories, Inc accepts and processes this request on the terms and conditions set forth on the reverse side. By its signature hereon, Customer accepts these terms and conditions.

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: Paul Van Horne, SHW, 4/6/04, 1520
   Received By: Lucy Hebert-Cline, CCIAL, 4-6-04, 1526
2. Relinquished By:
   Received By:

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis: 10 Standard | 5 | 3 | 2 | 1 | SAME DAY

Fuels & Hydrocarbon Analysis: ~~5~~ Standard | 3 | 1 | SAME DAY

OTHER:

Specify:

* Turnaround request less than standard may incur Rush Charges

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 4/14/04
CCIL JOB #: 404027
CCIL SAMPLE #: 1
DATE RECEIVED: 4/7/04
WDOE ACCREDITATION #: C142

CLIENT CONTACT: PAUL VAN HORNE

CLIENT PROJECT ID: 21-1-12132-001
CLIENT SAMPLE ID: E8+5, 136 4/7/04 0932

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	1500	MG/KG	4/9/04	DLC
BENZENE	EPA-8021	ND(<0.6)	MG/KG	4/13/04	DLC
TOLUENE	EPA-8021	ND(<1.0)	MG/KG	4/13/04	DLC
ETHYLBENZENE	EPA-8021	3.0	MG/KG	4/13/04	DLC
XYLENES	EPA-8021	3.7	MG/KG	4/13/04	DLC

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 300 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY: CVL

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 4/14/04
CCIL JOB #: 404027
CCIL SAMPLE #: 2
DATE RECEIVED: 4/7/04
WDOE ACCREDITATION #: C142

CLIENT CONTACT: PAUL VAN HORNE

CLIENT PROJECT ID: 21-1-12132-001
CLIENT SAMPLE ID: E1-12, 137 4/7/04 1433

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	2000	MG/KG	4/13/04	DLC
BENZENE	EPA-8021	ND(<0.12)	MG/KG	4/9/04	DLC
TOLUENE	EPA-8021	0.9	MG/KG	4/9/04	DLC
ETHYLBENZENE	EPA-8021	1.8	MG/KG	4/9/04	DLC
XYLENES	EPA-8021	6.3	MG/KG	4/9/04	DLC

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 150 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY: CW

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 4/14/04
CCIL JOB #: 404027

DATE RECEIVED: 4/7/04
WDOE ACCREDITATION #: C142

CLIENT CONTACT: PAUL VAN HORNE

CLIENT PROJECT ID: 21-1-12132-001

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
404027-01	NWTPH-GX	TFT	*
404027-01	EPA-8021	TFT	*
404027-02	NWTPH-GX	TFT	*
404027-02	EPA-8021	TFT	*

* SURROGATE DILUTED OUT OF CALIBRATION RANGE

APPROVED BY: CAL

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI Analytical Laboratories, Inc.
8620 Holly Drive
Everett, WA 98208
Phone (425) 356-2600
(206) 292-9059 Seattle
(425) 356-2626 Fax
http://www.ccilabs.com

Chain Of Custody/ Laboratory Analysis Request

CCI Job# (Laboratory Use Only)

Date 4/7/04 Page 1 Of 1

PROJECT ID: 21-1-12132-001
REPORT TO COMPANY: SHW
PROJECT MANAGER: PAUL VAN HORNE
ADDRESS: 400 N 34th St, Ste 100
Seattle WA 98103
PHONE: 206-695-6840 FAX: 206-695-6777
P.O. NUMBER: E-MAIL: PVH@SHANNWIL.COM
INVOICE TO COMPANY: Same
ATTENTION:
ADDRESS:

SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-HCID	NWTPH-DX	NWTPH-GX	BTEX by EPA-8021	MTBE by EPA-8021 ☐ EPA-8260 ☐	Halogenated Volatiles by EPA 8260	Volatile Organic Compounds by EPA 8260	Ethylene dibromide (EDB) by EPA-8260 ☐ EPA-504.1 ☐	1,2 Dichloroethene (EDC) by EPA-8260	Semivolatile Organic Compounds by EPA 8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA-8270 SIM ☐	PCB ☐ Pesticides ☐ by EPA 8081/8082	Metals-MTCA-5 ☐ RCRA-8 ☐ Pri Poll ☐ TAL ☐	Metals Other (Specify)	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐	OTHER (Specify)	NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
1. E8+5, 136	4/7/04	0932	Soil				✓	✓													1	
2. E1-12, 137	↓	1433	↓				✓	✓													1	
3.																						
4.																						
5.																						
6.																						
7.																						
8.																						
9.																						
10.																						

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SPECIAL INSTRUCTIONS

CCI Analytical Laboratories, Inc accepts and processes this request on the terms and conditions set forth on the reverse side. By its signature hereon, Customer accepts these terms and conditions.

SIGNATURES (Name, Company, Date, Time):
1. Relinquished By: Paul Van Horne, SHW, 4/7/04, 1555
Received By: Linda Lamon CCIAL 4/7/04 1555
2. Relinquished By:

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis: 10 Standard | 5 | 3 | 2 | 1 | SAME DAY

Fuels & Hydrocarbon Analysis: 5 Standard | 3 | 1 | SAME DAY

OTHER:
Specify:

* Turnaround request less than standard may incur Rush Charges

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 4/14/04
CCIL JOB #: 404039
CCIL SAMPLE #: 1
DATE RECEIVED: 4/8/04
WDOE ACCREDITATION #: C142

CLIENT CONTACT: PAUL VAN HORNE

CLIENT PROJECT ID: 21-1-12132-001
CLIENT SAMPLE ID: W21+12, 135.5 4/8/04 1459

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	1800	MG/KG	4/13/04	LAH
BENZENE	EPA-8021	ND(<1.5)	MG/KG	4/13/04	LAH
TOLUENE	EPA-8021	ND(<2.5)	MG/KG	4/13/04	LAH
ETHYLBENZENE	EPA-8021	7.5	MG/KG	4/13/04	LAH
XYLENES	EPA-8021	ND(<10)	MG/KG	4/13/04	LAH

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 150 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY:

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 4/14/04
CCIL JOB #: 404039

DATE RECEIVED: 4/8/04
WDOE ACCREDITATION #: C142

CLIENT CONTACT: PAUL VAN HORNE

CLIENT PROJECT ID: 21-1-12132-001

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
404039-01	NWTPH-GX	TFT	*
404039-01	EPA-8021	TFT	*

* SURROGATE DILUTED OUT OF CALIBRATION RANGE

APPROVED BY: CDL

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CCI Analytical Laboratories, Inc.
8620 Holly Drive
Everett, WA 98208
Phone (425) 356-2600
(206) 292-9059 Seattle
(425) 356-2626 Fax
http://www.ccilabs.com

Chain Of Custody/ Laboratory Analysis Request

CCI [redacted] (Laboratory Use Only)

Date 4/8/04 Page 1 Of 1

PROJECT ID: 21-1-12132-001
REPORT TO COMPANY: STW
PROJECT MANAGER: Paul Van Horne
ADDRESS: 400 N 34th St. Ste 100
Seattle WA 98103
PHONE: FAX:
P.O. NUMBER: E-MAIL:
INVOICE TO COMPANY: Same
ATTENTION:
ADDRESS:

SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-HCID	NWTPH-DX	NWTPH-GX	BTEX by EPA-8021	MTBE by EPA-8021 ☐ EPA-8260 ☐	Halogenated Volatiles by EPA 8260	Volatile Organic Compounds by EPA 8260	Ethylene dibromide (EDB) by EPA-8260 ☐ EPA-504.1 ☐	1,2 Dichloroethene (EDC) by EPA-8260	Semivolatile Organic Compounds by EPA 8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA-8270 SIM ☐	PCB ☐ Pesticides ☐ by EPA 8081/8082	Metals-MTCA-5 ☐ RCRA-8 ☐ Pri Pol ☐ TAL ☐	Metals Other (Specify)	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐	OTHER (Specify)	NUMBER OF CONTAINERS 4oz GJ	RECEIVED IN GOOD CONDITION?
1. W21+12, 135S	4/8/04	1459	Soil				✓	✓													1	
2.																						
3.																						
4.																						
5.																						
6.																						
7.																						
8.																						
9.																						
10.																						

REPORT COPY

SPECIAL INSTRUCTIONS

CCI Analytical Laboratories, Inc accepts and processes this request on the terms and conditions set forth on the reverse side. By its signature hereon, Customer accepts these terms and conditions.

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: Paul Van Horne / STW / 4-8-04 / 1543
   Received By: Jennifer Duncan CCI 4/8/04 1543
2. Relinquished By:

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis: 10 Standard | 5 | 3 | 2 | 1 | SAME DAY

Fuels & Hydrocarbon Analysis: Standard | 3 | 1 | SAME DAY

OTHER:
Specify:

* Turnaround request less than standard may incur Rush Charges

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 4/16/04
CCIL JOB #: 404054
CCIL SAMPLE #: 1
DATE RECEIVED: 4/12/04
WDOE ACCREDITATION #: C142

CLIENT CONTACT: PAUL VAN HORNE

CLIENT PROJECT ID: 21-1-12132-001 SNOH.CO-RAMP
CLIENT SAMPLE ID: E6+3, TRENCH, 129.5 4/12/04 1430

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	610	MG/KG	4/14/04	DLC
BENZENE	EPA-8021	ND(<0.3)	MG/KG	4/14/04	DLC
TOLUENE	EPA-8021	ND(<0.5)	MG/KG	4/14/04	DLC
ETHYLBENZENE	EPA-8021	1.6	MG/KG	4/14/04	DLC
XYLENES	EPA-8021	2.0	MG/KG	4/14/04	DLC

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS: GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 30 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY:

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CCI
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LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 4/16/04
CCIL JOB #: 404054

DATE RECEIVED: 4/12/04
WDOE ACCREDITATION #: C142

CLIENT CONTACT: PAUL VAN HORNE

CLIENT PROJECT ID: 21-1-12132-001 SNOH.CO-RAMP

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
404054-01	NWTPH-GX	TFT	*
404054-01	EPA-8021	TFT	*

* SURROGATE DILUTED OUT OF CALIBRATION RANGE

APPROVED BY:

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SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

400 N. 34th Street, Suite 100
Seattle, WA 98103
(206) 632-8020

2043 Westport Center Drive
St. Louis, MO 63146-3564
(314) 392-0050

303 Wellsian Way
Richland, WA 99352
(509) 946-6309

2055 Hill Road
Fairbanks, AK 99709
(907) 479-0600

5430 Fairbanks Street, Suite 3
Anchorage, AK 99518
(907) 561-2120

2255 S.W. Canyon Road
Portland, OR 97201-2498
(503) 223-6147

1200 17th Street, Suite 1024
Denver, Co 80202
(303) 825-3800

CHAIN-OF-CUSTODY RECORD

Laboratory: CCI
Attn: Rick or Chuck

Sample Identity	Lab No.	Time	Date Sampled	Comp.	Grab	4oz GJ NWTPH-Gx/BTEX						Total Number of Containers	Remarks/Matrix
E643, Trench, 129.5		1430	4/12/04		X	✓						1	Iced/Soil

Analysis Parameters/Sample Container Description
(include preservative if used)

Project Information	
Project Number: 21-1-12132-001	
Project Name: Snoh. Co-Ramp	
Contact: Paul VanHorne	
Ongoing Project? Yes ☒ No ☐	
Sampler: Paul VanHorne	

Sample Receipt	
Total Number of Containers	
COC Seals/Intact? Y/N/NA	
Received Good Cond./Cold	
Delivery Method: (attach shipping bill, if any)	Co. Personnel

Instructions	
Requested Turnaround Time:	Standard
Special Instructions:	

Relinquished By: 1.	Relinquished By: 2.	Relinquished By: 3.
Signature: Paul L. VanHorne	Signature:	Signature:
Time: 1535	Time:	Time:
Printed Name: Paul L. VanHorne	Printed Name:	Printed Name:
Date: 4/12/04	Date:	Date:
Company: STW	Company:	Company:

Received By: 1.	Received By: 2.	Received By: 3.
Signature:	Signature:	Signature:
Time: 1535	Time:	Time:
Printed Name: C Kenyon	Printed Name:	Printed Name:
Date: 4-12-04	Date:	Date:
Company: CCINL	Company:	Company:

Distribution: White - w/shipment - returned to Shannon & Wilson w/ laboratory report
Yellow - w/shipment - for consignee files
Pink - Shannon & Wilson - Job File

F-19-91/UR

No. 026215

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 4/16/04
CCIL JOB #: 404063
CCIL SAMPLE #: 1
DATE RECEIVED: 4/13/04
WDOE ACCREDITATION #: C142

CLIENT CONTACT: PAUL VAN HORNE

CLIENT PROJECT ID: 21-1-12132-001 SNOH.CO.RAMP
CLIENT SAMPLE ID: W21, TRENCH, 127 4/13/04 1021

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	4/15/04	DLC
BENZENE	EPA-8021	ND(<0.03)	MG/KG	4/15/04	DLC
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	4/15/04	DLC
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	4/15/04	DLC
XYLENES	EPA-8021	ND(<0.2)	MG/KG	4/15/04	DLC

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY: 

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 4/16/04
CCIL JOB #: 404063
CCIL SAMPLE #: 2
DATE RECEIVED: 4/13/04
WDOE ACCREDITATION #: C142

CLIENT CONTACT: PAUL VAN HORNE

CLIENT PROJECT ID: 21-1-12132-001 SNOH.CO.RAMP
CLIENT SAMPLE ID: E2, TRENCH, 134 4/13/04 1210

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	1300	MG/KG	4/15/04	DLC
BENZENE	EPA-8021	ND(<0.3)	MG/KG	4/14/04	DLC
TOLUENE	EPA-8021	1.1	MG/KG	4/14/04	DLC
ETHYLBENZENE	EPA-8021	2.0	MG/KG	4/14/04	DLC
XYLENES	EPA-8021	ND(<2.0)	MG/KG	4/14/04	DLC

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 60 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY:

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CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 4/16/04
CCIL JOB #: 404063

DATE RECEIVED: 4/13/04
WDOE ACCREDITATION #: C142

CLIENT CONTACT: PAUL VAN HORNE

CLIENT PROJECT ID: 21-1-12132-001 SNOH.CO.RAMP

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
404063-01	NWTPH-GX	TFT	100
404063-01	EPA-8021	TFT	104
404063-02	NWTPH-GX	TFT	*
404063-02	EPA-8021	TFT	*

* SURROGATE DILUTED OUT OF CALIBRATION RANGE

APPROVED BY:

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CHAIN-OF-CUSTODY RECORD

SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

400 N. 34th Street, Suite 100
Seattle, WA 98103
(206) 632-8020

2055 Hill Road
Fairbanks, AK 99709
(907) 479-0600

2255 S.W. Canyon Road
Portland, OR 97201-2498
(503) 223-6147

2043 Westport Center Drive
St. Louis, MO 63146-3564
(314) 392-0050

5430 Fairbanks Street, Suite 3
Anchorage, AK 99518
(907) 561-2120

1200 17th Street, Suite 1024
Denver, Co 80202
(303) 825-3800

303 Wellsian Way
Richland, WA 99352
(509) 946-6309

Laboratory CCI Page 1 of 1
Attn: Chuck or Rick

Analysis Parameters/Sample Container Description
(include preservative if used)

Sample Identity	Lab No.	Time	Date Sampled	Comp.	Grab	(4 oz GJ) NWTPH-Gx/BTEX						Total Number of Containers	Remarks/Matrix
W21, Trench, 127		1021	4-13-04		X	✓						1	Iced/Soil
E2, Trench, 134		1210	↓		X	✓						1	↓

Project Information	Sample Receipt
Project Number: 21-1-12132-00	Total Number of Containers
Project Name: Snoh. Co. Ramp	COC Seals/Intact? Y/N/NA
Contact: Paul Van Horne	Received Good Cond./Cold
Ongoing Project? Yes ☒ No ☐	Delivery Method: Co. Personnel
Sampler: Paul Van Horne	(attach shipping bill, if any)

Instructions	
Requested Turnaround Time:	Standard
Special Instructions:	

Relinquished By: 1.	Relinquished By: 2.	Relinquished By: 3.
Signature: Paul Van Horne Time: 1506	Signature: Time:	Signature: Time:
Printed Name: Paul Van Horne Date: 4/13/04	Printed Name: Date:	Printed Name: Date:
Company: SHW	Company:	Company:
Received By: 1.	**Received By: 2.**	**Received By: 3.**
Signature: Time: 1506	Signature: Time:	Signature: Time:
Printed Name: Halle J. Kunst Date: 4/13/04	Printed Name: Date:	Printed Name: Date:
Company: CCIHL	Company:	Company:

Distribution: White - w/shipment - returned to Shannon & Wilson w/ laboratory report
Yellow - w/shipment - for consignee files
Pink - Shannon & Wilson - Job File

19-91/UR

No. 026217

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 4/22/04
CCIL JOB #: 404087
CCIL SAMPLE #: 1
DATE RECEIVED: 4/16/04
WDOE ACCREDITATION #: C142

CLIENT CONTACT: PAUL VAN HORNE

CLIENT PROJECT ID: 21-1-12132-001
CLIENT SAMPLE ID: W21+13, WW+9.5, 130.5 4/16/04 1046

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	2700	MG/KG	4/21/04	DLC
BENZENE	EPA-8021	ND(<0.6)	MG/KG	4/19/04	DLC
TOLUENE	EPA-8021	ND(<1.0)	MG/KG	4/19/04	DLC
ETHYLBENZENE	EPA-8021	14	MG/KG	4/19/04	DLC
XYLENES	EPA-8021	32	MG/KG	4/19/04	DLC

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 300 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY:

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 4/22/04
CCIL JOB #: 404087

DATE RECEIVED: 4/16/04
WDOE ACCREDITATION #: C142

CLIENT CONTACT: PAUL VAN HORNE

CLIENT PROJECT ID: 21-1-12132-001

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
404087-01	NWTPH-GX	TFT	*
404087-01	EPA-8021	TFT	*

* SURROGATE DILUTED OUT OF CALIBRATION RANGE

APPROVED BY:

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CCI Analytical Laboratories, Inc.
8620 Holly Drive
Everett, WA 98208
Phone (425) 356-2600
(206) 292-9059 Seattle
(425) 356-2626 Fax
http://www.ccilabs.com

Chain Of Custody/ Laboratory Analysis Request

Date 4/16/04 Page 1 Of 1

PROJECT ID: 21-1-12132-001
REPORT TO COMPANY: S+W
PROJECT MANAGER: Paul VanHouse
ADDRESS: 400 N 34th St Ste 100
Seattle WA 98103
PHONE 206-695-6840 FAX: 206-695-6777
P.O. NUMBER: E-MAIL: PVH@SHANWIL.COM
INVOICE TO COMPANY: Same
ATTENTION:
ADDRESS:

SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-HCID	NWTPH-DX	NWTPH-GX	BTEX by EPA-8021	MTBE by EPA-8021 ☐ EPA-8260 ☐	Halogenated Volatiles by EPA 8260	Volatile Organic Compounds by EPA 8260	Ethylene dibromide (EDB) by EPA-8260 ☐ EPA-504.1 ☐	1,2 Dichloroethene (EDC) by EPA-8260	Semivolatile Organic Compounds by EPA 8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA-8270 SIM ☐	PCB ☐ Pesticides ☐ by EPA 8081/8082	Metals-MTCA-5 ☐ RCRA-8 ☐ Pri Pol ☐ TAL ☐	Metals Other (Specify)	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐	NUMBER OF CONTAINERS 4oz GJ	RECEIVED IN GOOD CONDITION?
1. W21H13, WW+9.5, 130.5	4-16-04	1046	Soil				✓	✓												1	
2.																					
3.																					
4.																					
5.																					
6.																					
7.																					
8.																					
9.																					
10.																					

REPORT COPY

SPECIAL INSTRUCTIONS

CCI Analytical Laboratories, Inc accepts and processes this request on the terms and conditions set forth on the reverse side. By its signature hereon, Customer accepts these terms and conditions.

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: Paul VanHouse, S+W, 4-16-04, 15:45
   Received By: Lucy Hollcher, CCIAL, 4-16-04 15:45
2. Relinquished By:

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis: 10 Standard | 5 | 3 | 2 | 1 | SAME DAY

Fuels & Hydrocarbon Analysis: 5 Standard | 3 | 1 | SAME DAY

OTHER:

Specify:

* Turnaround request less than standard may incur Rush Charges

NVL™ LABS & HAZARDOUS MATERIALS SERVICES

March 3, 2004

Cody Johnson
Shannon & Wilson, Inc.
400 North 34th Street
Suite 100
Seattle, WA 98103

RE: Bulk Asbestos Fiber Analysis; NVL Batch # 2402747.00

Dear Mr. Johnson,

Enclosed please find test results for the bulk samples submitted to our laboratory for analysis. Examination of these samples was conducted for the presence of identifiable asbestos fibers using polarized light microscopy (PLM) with dispersion staining in accordance with U.S. EPA/600/R-93/116 Test Method.

NVLAP Lab #: 102063

For samples containing more than one separable layer of materials, the report will include findings for each layer (labeled Layer 1 and Layer 2, etc. for each individual layer). The asbestos concentration in the sample is determined by visual estimation.

AIHA Environmental Lead and Industrial Hygiene ACCREDITED LABORATORY

For those samples with asbestos concentrations between 1 and 10 percent based on visual estimation, the EPA recommends a procedure known as point counting (NESHAPS, 40 CFR Part 61). Point counting is a statistically more accurate means of quantification for samples with low concentrations of asbestos. If you would like us to further refine the concentration estimates of asbestos in these samples using point counting, please let me know.

This report is considered highly confidential and will not be released without your approval. Samples are archived for two weeks following analysis. Samples that are not retrieved by the client are discarded after two weeks.

Thank you for using our laboratory services. Please do not hesitate to call if there is anything further we can assist you with.

Sincerely,

Nick Ly, Technical Director

Enc.: Sample Results

N LABORATORIES, INC
4 3 AURORA AVE N
SEATTLE. WA 98103.6516
T 206.547.0100
F 206.634.1936
nvllabs@nvllabs.com

www.nvllabs.com
1.888.NVL.LABS (685.5227)

NVL Laboratories, Inc.
4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.634.1936
www.nvllabs.com

NVLAP #102063

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Shannon & Wilson, Inc.
Address: 400 North 34th Street
Seattle, WA 98103
Attention: Mr. Cody Johnson
Project Location: SnoCo Campus

Batch #: 2402747.00
Client Project #:21-1-12132-00
Samples Received: 2
Samples Analyzed: 2
Method: EPA/600R-93/116

Lab ID : 24014977 Client Sample #: PI1-1
Location: SnoCo Campus

Layer 1 of 1 Description: Tan fibrous material

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler	Glass fibers 80%	**None Detected ND**

Lab ID : 24014978 Client Sample #: PI1-2
Location: SnoCo Campus

Layer 1 of 2 Description: Tan fibrous material

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler	Glass fibers 80%	**None Detected ND**

Layer 2 of 2 Description: Gray fibrous material

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler	Cellulose 20%	**Chrysotile 55%**

Sampled by: Client
Analyzed by: Wei Long Tai **Date:** 03/03/2004
Reviewed by: Nick Ly **Date:** 03/03/2004

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using EPA 600/R-93/116 Method with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government.

NVL Laboratories, Inc.
4708 Aurora Ave N, Seattle, WA 98103
Tel: 206.547.0100 Emerg.Pager: 206.344.1878
Fax: 206.634.1936 1.888.NVL.LABS (685.5227)

CHAIN of CUSTODY SAMPLE LOG

NVL LABS HAZARDOUS MATERIALS SERVICES

Client: Shannon & Wilson
Street: 400 N 34th Ste 100
Seattle WA 98103
Project Manager: Cody Johnson
Project Location: Sno Co Campus

NVL Batch Number: 24027407
Client Job Number: 21-1-12132-001
Total Samples: 2
Turn Around Time: ☒ 1-Hr ☐ 24-Hrs ☐ 4 Days ☐ 2-Hrs ☐ 2 Days ☐ 5 Days ☐ 4-Hrs ☐ 3 Days ☐ 6 to 10 Days
Please call for TAT less than 24 Hrs

Phone: 206-695-6677 Fax: 206-695-6777
Email address: CMJ@shanwil.com

☐ Asbestos Air | ☐ PCM (NIOSH 7400) ☐ TEM (NIOSH 7402) ☐ TEM (AHERA) ☐ TEM (EPA Level II) ☐ Other

☒ Asbestos Bulk | ☒ PLM (EPA/600/R-93/116) ☐ PLM (EPA Point Count) ☐ PLM (EPA Gravimetry) ☐ TEM Bulk

METALS	Det. Limit	Matrix	RCRA Metals	Other Metals
☐ Total Metals ☐ TCLP	☐ ppm (AAS) ☐ ppb (GFAA)	☐ Air Filter ☐ Drinking water ☐ Dust/wipe (Area) ☐ Soil ☐ Paint Chips in % ☐ Paint Chips in cm ☐ Waste Water ☐ Other	☐ Arsenic (As) ☐ Barium (Ba) ☐ Cadmium (Cd) ☐ Chromium (Cr) ☐ Lead (Pb) ☐ All 8 ☐ Mercury (Hg) ☐ Selenium (Se) ☐ Silver (Ag)	☐ All 3 ☐ Copper (Cu) ☐ Nickel (Ni) ☐ Zinc (Zn)

☐ Other Types of Analysis | ☐ Fiberglass ☐ Nuisance Dust ☐ Other (Specify) ☐ Silica ☐ Respirable Dust

Condition of Package: ☐ Good ☐ Damaged (no spillage) ☐ Severe damage (spillage)

Seq. #	Lab ID	Client Sample Number	Comments (e.g Sample are, Sample Volume, etc)	A/R
1		PI1-1		
2		PI1-2		
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

	Print Below	Sign Below	Company	Date	Time
Sampled by					
Relinquished by	Cody Johnson	CJ	S&W	3/3/04	945
Received by					
Analyzed by					
Results Called by					
Results Faxed by					

Special Instructions: Unless requested in writing, all samples will be disposed of two (2) weeks after analysis.

Call Cody Johnson @ 206-818-8018 (cell)
or 206 695-6677 (office) w/results

NVL™ LABS & HAZARDOUS MATERIALS SERVICES

March 5, 2004

Paul Van Horne
Shannon & Wilson, Inc.
400 North 34th Street
Suite 100
Seattle, WA 98103

RE: Bulk Asbestos Fiber Analysis; NVL Batch # 2402921.00

Dear Mr. Van Horne,

Enclosed please find test results for the bulk samples submitted to our laboratory for analysis. Examination of these samples was conducted for the presence of identifiable asbestos fibers using polarized light microscopy (PLM) with dispersion staining in accordance with U.S. EPA/600/R-93/116 Test Method.

NVLAP Lab Code #:102063

For samples containing more than one separable layer of materials, the report will include findings for each layer (labeled Layer 1 and Layer 2, etc. for each individual layer). The asbestos concentration in the sample is determined by visual estimation.

AIHA Environmental Lead and Industrial Hygiene ACCREDITED LABORATORY

For those samples with asbestos concentrations between 1 and 10 percent based on visual estimation, the EPA recommends a procedure known as point counting (NESHAPS, 40 CFR Part 61). Point counting is a statistically more accurate means of quantification for samples with low concentrations of asbestos. If you would like us to further refine the concentration estimates of asbestos in these samples using point counting, please let me know.

This report is considered highly confidential and will not be released without your approval. Samples are archived for two weeks following analysis. Samples that are not retrieved by the client are discarded after two weeks.

Thank you for using our laboratory services. Please do not hesitate to call if there is anything further we can assist you with.

Sincerely,

Nick Ly, Technical Director

Enc.: Sample Results

LABORATORIES, INC
4708 AURORA AVE N
SEATTLE, WA 98103.6516
T 206.547.0100
F 206.634.1936
nvllabs@nvllabs.com

www.nvllabs.com
1.888.NVL.LABS (685.5227)

NVL Laboratories, Inc.
4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.634.1936
www.nvllabs.com

NVLAP #102063

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Shannon & Wilson, Inc.
Address: 400 North 34th Street
Seattle, WA 98103
Attention: Mr. Paul Van Horne
Project Location: Snohomish County - Rockefeller Ramp

Batch #: 2402921.00
Client Project #:21-1-12132-001
Samples Received: 2
Samples Analyzed: 2
Method: EPA/600R-93/116

Lab ID : 24015872 Client Sample #: PI2-1
Location: Snohomish County - Rockefeller Ramp

Layer 1 of 1 **Description:** Brown and white muddy fibrous material

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Sand,Fine particles	Cellulose 2%	**Chrysotile 75%**

Lab ID : 24015873 Client Sample #: PI3-1
Location: Snohomish County - Rockefeller Ramp

Layer 1 of 2 **Description:** Brown and white muddy fibrous material

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Sand,Fine particles	Cellulose 1%	**Chrysotile 75%**

Layer 2 of 2 **Description:** Black and brown hard brittle material

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler	None Detected ND	**Chrysotile 35%**

Sampled by: Client
Analyzed by: Nick Ly **Date:** 03/05/2004
Reviewed by: Nick Ly **Date:** 03/05/2004

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using EPA 600/R-93/116 Method with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government.

NVL Laboratories, Inc.
4708 Aurora Ave N, Seattle, WA 98103
Tel: 206.547.0100 Emerg.Pager: 206.344.1878
Fax: 206.634.1936 1.888.NVL.LABS (685.5227)

CHAIN of CUSTODY SAMPLE LOG

NVL LABS HAZARDOUS MATERIALS SERVICES

Client Shannon & Wilson
Street
Project Manager Paul Van Horne
Project Location Snohomish County - Rockefeller Ramp

NVL Batch Number 24-02921
Client Job Number 21-1-12132-001
Total Samples 2
Turn Around Time ☑ 1-Hr ☐ 24-Hrs ☐ 4 Days ☐ 2-Hrs ☐ 2 Days ☐ 5 Days ☐ 4-Hrs ☐ 3 Days ☐ 6 to 10 Days
Please call for TAT less than 24 Hrs
Email address

Phone: Fax:

☐ Asbestos Air ☐ PCM (NIOSH 7400) ☐ TEM (NIOSH 7402) ☐ TEM (AHERA) ☐ TEM (EPA Level II) ☐ Other

☒ Asbestos Bulk ☐ PLM (EPA/600/R-93/116) ☐ PLM (EPA Point Count) ☐ PLM (EPA Gravimetry) ☐ TEM Bulk

METALS	Det. Limit	Matrix	RCRA Metals	Other Metals
☐ Total Metals ☐ TCLP	☐ ppm (AAS) ☐ ppb (GFAA)	☐ Air Filter ☐ Drinking water ☐ Dust/wipe (Area) ☐ Soil ☐ Paint Chips in % ☐ Paint Chips in cm ☐ Waste Water ☐ Other	☐ All 8 ☐ Arsenic (As) ☐ Barium (Ba) ☐ Cadmium (Cd) ☐ Chromium (Cr) ☐ Lead (Pb) ☐ Mercury (Hg) ☐ Selenium (Se) ☐ Silver (Ag)	☐ All 3 ☐ Copper (Cu) ☐ Nickel (Ni) ☐ Zinc (Zn)

☐ Other Types of Analysis ☐ Fiberglass ☐ Nuisance Dust ☐ Other (Specify) ☐ Silica ☐ Respirable Dust

Condition of Package: ☒ Good ☐ Damaged (no spillage) ☐ Severe damage (spillage)

Seq. #	Lab ID	Client Sample Number	Comments (e.g Sample are, Sample Volume, etc)	A/R
1		PI2-1		
2		PI3-1		
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

	Print Below	Sign Below	Company	Date	Time
Sampled by	Paul Van Horne	Paul Van Horne	S+W	3/5/04	1602
Relinquished by					
Received by	NICK LY		NVL	3/5/04	1602
Analyzed by	↓	↓	↓	↓	↓
Results Called by	↓	↓	↓	↓	↓
Results Faxed by					

Special Instructions: Unless requested in writing, all samples will be disposed of two (2) weeks after analysis.

Call 206-300-0780 (CC)

HAZARDOUS MATERIALS
MANAGEMENT • TRAINING • LAB SERVICES

March 2, 2004

NVL LABS
HAZARDOUS MATERIALS SERVICES

Paul Van Horne
Shannon & Wilson, Inc.
400 North 34th Street
Suite 100
Seattle, WA 98103

RE: Bulk Asbestos Fiber Analysis; NVL Batch # 2402722.00

Dear Mr. Van Horne,

Enclosed please find test results for the bulk samples submitted to our laboratory for analysis. Examination of these samples was conducted for the presence of identifiable asbestos fibers using polarized light microscopy (PLM) with dispersion staining in accordance with U.S. EPA/600/R-93/116 Test Method.

NVLAP Lab #: 102063

For samples containing more than one separable layer of materials, the report will include findings for each layer (labeled Layer 1 and Layer 2, etc. for each individual layer). The asbestos concentration in the sample is determined by visual estimation.

AIHA Environmental Lead and Industrial Hygiene ACCREDITED LABORATORY

For those samples with asbestos concentrations between 1 and 10 percent based on visual estimation, the EPA recommends a procedure known as point counting (NESHAPS, 40 CFR Part 61). Point counting is a statistically more accurate means of quantification for samples with low concentrations of asbestos. If you would like us to further refine the concentration estimates of asbestos in these samples using point counting, please let me know.

This report is considered highly confidential and will not be released without your approval. Samples are archived for two weeks following analysis. Samples that are not retrieved by the client are discarded after two weeks.

Thank you for using our laboratory services. Please do not hesitate to call if there is anything further we can assist you with.

Sincerely,

Nick Ly, Technical Director

Enc.: Sample Results

LABORATORIES, INC
[illegible]8 AURORA AVE N
SEATTLE, WA 98103.6516
t 206.547.0100
f 206.634.1936
nvllabs@nvllabs.com

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NVL Laboratories, Inc.

4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.634.1936
www.nvllabs.com

NVLAP #102063

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Shannon & Wilson, Inc.
Address: 400 North 34th Street
Seattle, WA 98103
Attention: Mr. Paul Van Horne
Project Location: Snohomish County

Batch #: 2402722.00
Client Project #:21-1-12132-001
Samples Received: 1
Samples Analyzed: 1
Method: EPA/600R-93/116

Lab ID : 24014843 Client Sample #: PIPE-W19
Location: Snohomish County

Layer 1 of 1 **Description:** White loose-fill fibrous material

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Glass shots & debris	Fibrous glass 65%	**None Detected ND**

Sampled by: Client
Analyzed by: Nick Ly **Date:** 03/02/2004
Reviewed by: Nick Ly **Date:** 03/02/2004

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using EPA 600/R-93/116 Method with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government.

NVL Laboratories, Inc.

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Tel: 206.547.0100 Emerg.Pager: 206.344.1878
Fax: 206.634.1936 1.888.NVL.LABS (685.5227)

CHAIN of CUSTODY SAMPLE LOG

NVL LABS HAZARDOUS MATERIALS SERVICES

Client: Shannon & Wilson, Inc.
Street: 400 N 34th St, Ste 100
Seattle WA 98103
Project Manager: Paul Van Horne
Project Location: Snohomish Co.

NVL Batch Number: 24-02722
Client Job Number: 21-1-12132-001
Total Samples: 1
Turn Around Time: ☑ 1-Hr ☐ 24-Hrs ☐ 4 Days ☐ 2-Hrs ☐ 2 Days ☐ 5 Days ☐ 4-Hrs ☐ 3 Days ☐ 6 to 10 Days
Please call for TAT less than 24 Hrs
Email address: pvh@shanwil.com

Phone: 206-300-0780 Fax: 206-695-6777

☐ Asbestos Air ☐ PCM (NIOSH 7400) ☐ TEM (NIOSH 7402) ☐ TEM (AHERA) ☐ TEM (EPA Level II) ☐ Other

☒ Asbestos Bulk ☒ PLM (EPA/600/R-93/116) ☐ PLM (EPA Point Count) ☐ PLM (EPA Gravimetry) ☐ TEM Bulk

METALS	Det. Limit	Matrix	RCRA Metals	Other Metals
☐ Total Metals ☐ TCLP	☐ ppm (AAS) ☐ ppb (GFAA)	☐ Air Filter ☐ Drinking water ☐ Dust/wipe (Area) ☐ Soil ☐ Paint Chips in % ☐ Paint Chips in cm ☐ Waste Water ☐ Other	☐ All 8 ☐ Arsenic (As) ☐ Barium (Ba) ☐ Cadmium (Cd) ☐ Chromium (Cr) ☐ Lead (Pb) ☐ Mercury (Hg) ☐ Selenium (Se) ☐ Silver (Ag)	☐ All 3 ☐ Copper (Cu) ☐ Nickel (Ni) ☐ Zinc (Zn)

☐ Other Types of Analysis ☐ Fiberglass ☐ Nuisance Dust ☐ Other (Specify) _____
☐ Silica ☐ Respirable Dust

Condition of Package: ☒ Good ☐ Damaged (no spillage) ☐ Severe damage (spillage)

Seq. #	Lab ID	Client Sample Number	Comments (e.g Sample are, Sample Volume, etc)	A/R
1		Pipe-W19		
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

	Print Below	Sign Below	Company	Date	Time
Sampled by	Paul L. Van Horne	Paul L. Van Horne	S&W	3/2/04	1557
Relinquished by	↓	↓	↓	↓	
Received by	NICK LY		NVL	3/2/04	4pm
Analyzed by	↓	↓	↓	↓	↓
Results Called by	↓	↓	↓	↓	↓
Results Faxed by					4:33pm

Special Instructions: Unless requested in writing, all samples will be disposed of two (2) weeks after analysis.

APPENDIX E

LABORATORY ANALYTICAL REPORTS
ADMINISTRATION BUILDING ADDITION

APPENDIX E

LABORATORY ANALYTICAL REPORTS
ADMINISTRATION BUILDING ADDITION

This appendix contains the data for soil samples collected during the excavation of the Administration Building Addition Site. These data are summarized in Table 4 in the main text of the report.

Laboratory reports may have been modified to include only samples collected at the Administration Building Addition Site; samples from the Parking Garage, Rockefeller Ramp, and New Jail Sites were removed.

The following reports are contained in this appendix:

Date	CCIAL Job Number	Number of Pages
2/5/2004	402013	3
2/10/2004	402021	5
2/12/2004	402038	4

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/5/04
CCIL JOB #: 402013
CCIL SAMPLE #: 1
DATE RECEIVED: 2/4/04
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO/PAUL VAN HORNE

CLIENT PROJECT ID: 21-1-12132-003
CLIENT SAMPLE ID: AB+6, A1-16, 132 2/4/04 1508

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-DIESEL RANGE	NWTPH-DX	3100	MG/KG	2/5/04	DLC
TPH-LUBE OIL RANGE	NWTPH-DX	ND	MG/KG	2/5/04	DLC

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY DIESEL FUEL

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
DIESEL RANGE REPORTING LIMIT IS 50 MG/KG
LUBE OIL RANGE REPORTING LIMIT IS 100 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY:

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/5/04
CCIL JOB #: 402013

DATE RECEIVED: 2/4/04
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO/PAUL VAN HORNE

CLIENT PROJECT ID: 21-1-12132-003

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
402013-01	NWTPH-DX	C25	142

APPROVED BY:

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CCI Analytical Laboratories, Inc.
8620 Holly Drive
Everett, WA 98208
Phone (425) 356-2600
(206) 292-9059 Seattle
(425) 356-2626 Fax
http://www.ccilabs.com

Chain Of Custody/ Laboratory Analysis Request

CCI Job# (Laboratory Use Only)

Date 2/4/04 Page 1 Of 1

PROJECT ID: 21-1-12132-003
REPORT TO COMPANY: SLW
PROJECT MANAGER: Agnes Tirao / Paul Van Hoeve
ADDRESS: 400 N 34th St Suite 100
Seattle WA 98103
PHONE: 206-632-8020 FAX: 206-695-6777
P.O. NUMBER: E-MAIL: act@slrwil.com pvh@slrwil.com
INVOICE TO COMPANY: Same
ATTENTION:
ADDRESS:

ANALYSIS REQUESTED

SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-HCID	NWTPH-DX	NWTPH-GX	BTEX by EPA-8021	MTBE by EPA-8021 ☐ EPA-8260 ☐	Halogenated Volatiles by EPA 8260	Volatile Organic Compounds by EPA 8260	Ethylene dibromide (EDB) by EPA-8260 ☐ EPA-504.1 ☐	1,2 Dichloroethene (EDC) by EPA-8260	Semivolatile Organic Compounds by EPA 8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA-8270 SIM ☐	PCB ☐ Pesticides ☐ by EPA 8081/8082	Metals-MTCA-5 ☐ RCRA-8 ☐ Pri Pol ☐ TAL ☐	Metals Other (Specify)	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐	OTHER (Specify)							NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
1. AB+6, 21-16,132	2/4/04	1508	S			X																					4	
2.																												
3.																												
4.																												
5.																												
6.																												
7.																												
8.																												
9.																												
10.																												

REPORT COPY

SPECIAL INSTRUCTIONS

CCI Analytical Laboratories, Inc accepts and processes this request on the terms and conditions set forth on the reverse side. By its signature hereon, Customer accepts these terms and conditions.

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: Paul Van Hoeve, SLW 2/4/04, 1619
Received By: CCI 2/4/04 1617
2. Relinquished By:

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis
10 Standard | 5 | 3 | 2 | 1 | SAME DAY

Fuels & Hydrocarbon Analysis
5 Standard | 3 | 1 | SAME DAY

OTHER:
Specify: Call Paul Van Hoeve ASAP w/ verbal results
206-300-0780 ©

* Turnaround request less than standard may incur Rush Charges

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/10/04
CCIL JOB #: 402021
CCIL SAMPLE #: 1
DATE RECEIVED: 2/5/04
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-12132-003
CLIENT SAMPLE ID: AB+32.5,A1-18,131.5 2/5/04 1420

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-DIESEL RANGE	NWTPH-DX	230	MG/KG	2/9/04	DLC
TPH-LUBE OIL RANGE	NWTPH-DX	ND	MG/KG	2/9/04	DLC

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY DIESEL FUEL

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
DIESEL RANGE REPORTING LIMIT IS 25 MG/KG
LUBE OIL RANGE REPORTING LIMIT IS 50 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY: CVL

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/10/04
CCIL JOB #: 402021
CCIL SAMPLE #: 2
DATE RECEIVED: 2/5/04
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-12132-003
CLIENT SAMPLE ID: AB+22,A1-3,134.5 2/5/04 1430

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-DIESEL RANGE	NWTPH-DX	2200	MG/KG	2/9/04	DLC
TPH-LUBE OIL RANGE	NWTPH-DX	ND	MG/KG	2/9/04	DLC

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY DIESEL FUEL

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
DIESEL RANGE REPORTING LIMIT IS 50 MG/KG
LUBE OIL RANGE REPORTING LIMIT IS 100 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY:

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/10/04
CCIL JOB #: 402021
CCIL SAMPLE #: 3
DATE RECEIVED: 2/5/04
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-12132-003
CLIENT SAMPLE ID: AB+32,A1-3,134.5 2/5/04 1510

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-DIESEL RANGE	NWTPH-DX	ND	MG/KG	2/6/04	DLC
TPH-LUBE OIL RANGE	NWTPH-DX	ND	MG/KG	2/6/04	DLC

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
DIESEL RANGE REPORTING LIMIT IS 25 MG/KG
LUBE OIL RANGE REPORTING LIMIT IS 50 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY:

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CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/10/04
CCIL JOB #: 402021

DATE RECEIVED: 2/5/04
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-12132-003

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
402021-01	NWTPH-DX	C25	83
402021-02	NWTPH-DX	C25	138
402021-03	NWTPH-DX	C25	110

APPROVED BY:

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CCI Analytical Laboratories, Inc.
8620 Holly Drive
Everett, WA 98208
Phone (425) 356-2600
(206) 292-9059 Seattle
(425) 356-2626 Fax
http://www.ccilabs.com

Chain Of Custody/ Laboratory Analysis Request

CCI Job# (Laboratory Use Only)

Date 2/5/04 Page 1 Of 1

PROJECT ID:	21-1-12132-003
REPORT TO COMPANY:	Stw
PROJECT MANAGER:	Agnes Tirao
ADDRESS:	400 N 34th St, Ste 100
	Seattle WA 98103
PHONE:	206 632-8020 FAX: 206-695-6777
P.O. NUMBER:	E-MAIL: act@stewart.com
INVOICE TO COMPANY:	Same
ATTENTION:	
ADDRESS:	

SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-HCID	NWTPH-DX (w/ GJ)	NWTPH-GX	BTEX by EPA-8021	MTBE by EPA-8021 ☐ EPA-8260 ☐	Halogenated Volatiles by EPA 8260	Volatile Organic Compounds by EPA 8260	Ethylene dibromide (EDB) by EPA-8260 ☐ EPA-504.1 ☐	1,2 Dichloroethene (EDC) by EPA-8260	Semivolatile Organic Compounds by EPA 8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA-8270 SIM ☐	PCB ☐ Pesticides ☐ by EPA 8081/8082	Metals-MTCA-5 ☐ RCRA-8 ☐ Pri Pol ☐ TAL ☐	Metals Other (Specify)	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐	OTHER (Specify)	NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
1. AB+32.5, A1-18, 131.5	2/5/04	1420	S	1		✓															1	
2. AB+22, A1-3, 134.5	↓	1430	S	2		✓															1	
3. AB+32, A1-3, 134.5	↓	1510	S	3		✓															1	
4.																						
5.																						
6.																						
7.																						
8.																						
9.																						
10.																						

REPORT COPY

SPECIAL INSTRUCTIONS

CCI Analytical Laboratories, Inc accepts and processes this request on the terms and conditions set forth on the reverse side. By its signature hereon, Customer accepts these terms and conditions.

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: Jan VanHorne, Stw, 2/5/04, 15:55
   Received By: [illegible]
2. Relinquished By:

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis: 10 (Standard) 5 3 2 1 SAME DAY

Fuels & Hydrocarbon Analysis: 5 (Standard) 3 1 SAME DAY

OTHER: Specify:

* Turnaround request less than standard may incur Rush Charges

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/12/04
CCIL JOB #: 402038
CCIL SAMPLE #: 1
DATE RECEIVED: 2/9/04
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

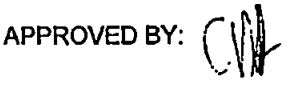
CLIENT PROJECT ID: 21-1-12132-003 SNOH.CO.ADMIN
CLIENT SAMPLE ID: AB+19,A1+7,134 2/7/04 1440

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-DIESEL RANGE	NWTPH-DX	ND	MG/KG	2/11/04	DLC
TPH-LUBE OIL RANGE	NWTPH-DX	ND	MG/KG	2/11/04	DLC

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
DIESEL RANGE REPORTING LIMIT IS 25 MG/KG
LUBE OIL RANGE REPORTING LIMIT IS 50 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY: 

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/12/04
CCIL JOB #: 402038
CCIL SAMPLE #: 2
DATE RECEIVED: 2/9/04
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-12132-003 SNOH.CO.ADMIN
CLIENT SAMPLE ID: AB+3,A1+6,134.5 2/7/04 1445

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-DIESEL RANGE	NWTPH-DX	ND	MG/KG	2/11/04	DLC
TPH-LUBE OIL RANGE	NWTPH-DX	ND	MG/KG	2/11/04	DLC

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
DIESEL RANGE REPORTING LIMIT IS 25 MG/KG
LUBE OIL RANGE REPORTING LIMIT IS 50 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY:

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 2/12/04
CCIL JOB #: 402038

DATE RECEIVED: 2/9/04
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-12132-003 SNOH.CO.ADMIN

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
402038-01	NWTPH-DX	C25	103
402038-02	NWTPH-DX	C25	95

APPROVED BY:

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CHAIN-OF-CUSTODY RECORD

SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

400 N. 34th Street, Suite 100
Seattle, WA 98103
(206) 632-8020
(206) 695-6777 Fax

11500 Olive Blvd., Suite 276
St. Louis, MO 63141
(314) 872-8170
(314) 872-8178 Fax

2055 Hill Road
Fairbanks, AK 99709
(907) 479-0600
(907) 479-5691 Fax

5430 Fairbanks Street, Suite 3
Anchorage, AK 99518
(907) 561-2120
(907) 561-4483 Fax

303 Wellsian Way
Richland, WA 99352
(509) 946-6309
(509) 946-6580 Fax

Laboratory CCI
Attn: Rich or Chuck

Analysis Parameters/Sample Container Description
(include preservative if used)

Sample Identity	Lab No.	Time	Date Sampled	Comp.	Grab	NWTPH-Dx 4oz GJ						Total Number of Containers	Remarks/Matrix
AB+19, A1+7, 134		1440	2/7/04		X	✓						1	Iced/Soil
AB+3, A1+6, 134.5		1445	2/7/04		X	✓						1	↓

Project Information	Sample Receipt
Project Number: 21-1-12132-003	Total Number of Containers
Project Name: Snoh. Co. Admin	COC Seals/Intact? Y/N/NA
Contact: Agnes Tirao	Received Good Cond./Cold
Ongoing Project? Yes ☒ No ☐	Delivery Method:
Sampler: Paul Van Horne	(attach shipping bill, if any)

Instructions

Requested Turnaround Time: Standard

Special Instructions:

Relinquished By: 1.	Relinquished By: 2.	Relinquished By: 3.
Signature: Paul Van Horne Time: 1800	Signature: Agnes Tirao Time:	Signature: Time:
Printed Name: Paul Van Horne Date: 2/9/04	Printed Name: AGNES TIRAO Date: 2/9/04	Printed Name: Date:
Company: S+W	Company: S+W	Company:

Received By: 1.	Received By: 2.	Received By: 3.
Signature: Agnes Tirao Time: 1800	Signature: Rick Baga Time: 1:30	Signature: Time:
Printed Name: AGNES TIRAO Date: 2/9/04	Printed Name: Rick Baga Date: 2/10/04	Printed Name: Date:
Company: S+W	Company: CCI AK	Company:

Distribution: White - w/shipment - returned to Shannon & Wilson w/ laboratory report
Yellow - w/shipment - for consignee files
Pink - Shannon & Wilson - Job File

F-19-91/UR

No.

Appendix F

APPENDIX F

SOIL DISPOSAL SUMMARY

APPENDIX F

SOIL DISPOSAL SUMMARY

This appendix contains a summary of the quantities of soil excavated from the site that was disposed of at Rinker Materials (Rinker). The table indicates the location from which soil originated (Parking Garage or Ramp), and whether the material was considered a Class 2 or Class 3 soil. From the Parking Garage excavation, approximately 63,300 tons of Class 2 soil and 63,200 tons of Class 3 soil were taken to Rinker. Contaminated soil removed from the Rockefeller Ramp excavation totaled approximately 800 tons of Class 2 material and 1,900 tons of Class 3 material.

Because of the volume of material disposed from the Snohomish County Campus, individual disposal tickets are not provided herein. Disposal paperwork is on file with Snohomish County.

TABLE F
SOIL DISPOSAL SUMMARY TABLE

Date of Work	Class 2 (tons)	Class 3 (tons)			
ADMINISTRATION PARKING GARAGE					
12/16/2002	1,483.43	2,075.26			
12/17/2002	1,487.32				
12/18/2002	1,414.78	774.44			
12/19/2002		1,880.98			
12/26/2002	745.74	1,577.00			
12/27/2002	1,214.29				
12/27/2002		1,183.83			
12/30/2002	575.90	564.53			
1/6/2003	864.50				
1/6/2003		1,314.80			
1/7/2003		2,144.39			
1/9/2003		2,553.05			
1/10/2003	288.42				
1/10/2003		3,158.75			
1/13/2003	64.53				
1/13/2003		1,799.88			
1/14/2003		4,391.93			
1/14/2003	364.81				
1/15/2003		3,012.84			
1/16/2003		3,201.92			
1/16/2003	474.49				
1/17/2003		1,929.47			
1/17/2003	1,359.48				
1/20/2003	462.60				
1/20/2003		2,476.39			
1/21/2003		3,278.06			
1/22/2003		4,069.86			
1/22/2003	454.27				
1/23/2003		3,700.63			
1/27/2003	1,766.23				
1/28/2003	1,241.71				
1/28/2003		2,273.29			
1/29/2003		3,351.46			
1/30/2003	1,879.19				
1/30/2003		1,412.17			
1/31/2003	2,583.67				
1/31/2003		451.20			
2/3/2003	957.72				
2/3/2003		2,905.32			
2/4/2003	1,661.82				
2/4/2003		1,629.45			
2/5/2003	3,823.75				
2/5/2003		338.75			
2/6/2003	1,237.70				
2/6/2003		2,543.98			
2/7/2003	1,551.40				
2/7/2003		2,057.14			
2/10/2003	3,401.18				
2/10/2003		238.14			
2/11/2003	228.79				
2/11/2003		290.01			
2/13/2003	417.17				
2/14/2003	1,562.65				
2/17/2003	3,113.24				

TABLE F
SOIL DISPOSAL SUMMARY TABLE

Date of Work	Class 2 (tons)	Class 3 (tons)		
ADMINISTRATION PARKING GARAGE				
2/18/2003	3,452.80			
2/19/2003	3,270.66			
2/20/2003	2,868.47			
2/21/2003	1,986.17			
2/21/2003	40.50			
2/24/2003	2,752.95			
2/25/2003	1,964.09			
2/26/2003	2,175.23			
2/27/2003	1,855.59			
3/3/2003	255.23			
3/5/2003	85.21			
3/6/2003	2,582.72			
3/7/2003	3,234.97			
7/7/2003		32.65		
7/9/2003		35.42		
12/23/2003		163.99		
1/5/2004		433.40		
12/29/2003	100.85			
TOTAL	**63306.22**	**63244.38**	**126551**	**TONS**
ROCKEFELLER RAMP				
2/9/2004	243.75			
2/6/2004	30.98			
2/9/2004	29.86			
2/10/2004		30.31		
2/16/2004		86.57		
3/1/2004	67.41			
3/2/2004	99.25			
3/5/2004	91.51			
3/8/2004	28.65			
3/9/2004		57.62		
3/12/2004	141.03			
3/12/2004		94.40		
3/16/2004	31.59			
3/17/2004		116.22		
3/25/2004		226.17		
3/26/2004		104.59		
3/27/2004	104.31			
3/27/2004		111.11		
3/29/2004		78.60		
4/1/2004		143.73		
4/5/2004		213.96		
4/6/2004		44.63		
4/7/2004		81.48		
4/8/2004		112.19		
4/9/2004		160.59		
4/10/2004		89.26		
4/12/2004		86.93		
4/12/2004		32.10		
4/13/2004		56.16		
4/14/2004	15.50			
TOTAL	**883.84**	**1926.62**	**2810**	**TONS**

Appendix G

Appendix G

APPENDIX G

WATER ANALYTICAL TESTING DATA AND CITY OF EVERTT DISCHARGE AUTHORIZATION PARKING GARAGE EXCAVATION

APPENDIX G

WATER ANALYTICAL TESTING DATA AND CITY OF EVERETT DISCHARGE AUTHORIZATION PARKING GARAGE EXCAVATION

This appendix contains the data for water samples collected during the operation of the construction dewatering and permanent drainage systems at the Parking Garage Site. These data are summarized in Table 5 in the main text of the report.

The following information and reports are contained in this appendix:

Date	Description	Number of Pages
10/30/2002	Discharge Authorization Cover Letter, Malcolm Drilling	1
10/28/2002	Discharge Authorization Cover Letter, City of Everett	1
10/25/2002	Industrial Waste Discharge Permit	22

Date	CCIAL Job Number	Number of Pages
11/26/2002	211095	2
1/2/2003	212102	2
1/29/2003	301119	2
3/19/2003	303023	2
4/7/2003	304002	2
5/9/2003	305014	2
6/16/2003	306007	2
3/29/2004	403088	2
7/1/2004	406081	2
9/21/2004	409036	2
1/3/2005	412110	2

Date	NCAI Work Order	Number of Pages
2/20/2003	B3B0352	11

1st copy

MALCOLM DRILLING CO., INC.
NORTHWEST DIVISION
7808 So. 207th Court • Kent, Washington 98032-1352
Tel. (253) 395-3300 Fax (253) 395-3312
License No MALCOD*263BS

October 30, 2002

M. A. Mortenson Company
3117 Rockefeller
P. O. Box 1006
Everett, WA 98206

RECEIVED
OCT 31 2002
M.A. Mortenson Job #027003

FAX: 1-425-259-2658

Attention: Ron Chilson

Reference: Snohomish County CRI Project
Downtown Everett, WA
MDCI Job No. 22-459

Subject: **DISCHARGE AUTHORIZATION**

Dear Sir:

Included herein please find a copy of the Discharge Authorization issued to Malcolm Drilling Co., Inc. by the City of Everett, Public Works, Department of Industrial Pretreatment for the referenced project.

A copy of the Authorization will be maintained on-site in our tool shed.

Sincerely,

Michael Pollock
Vice President and
Project Manager

cc: John M. Malcolm
Barry Kannon
Al Rasband
Chron File
Job File #22-459

PUBLIC WORKS
EVERETT

October 28, 2002

RECEIVED
OCT 30 2002
M DRILLING
ENT, WA

Michael Pollock
Malcolm Drilling Co., Inc.
7808 South 207th Court
Kent, WA 98032

Dear Mr. Pollock:

Attached is the Discharge Authorization for the construction dewatering for the Snohomish County Campus Redevelopment Initiative Project. This Discharge Authorization has some sampling and reporting requirements that you will need to comply with.

If you have any questions or concerns about these requirements, feel free to contact me at 425/257-8240.

Sincerely,

Gene D. Bennett,
Industrial Waste Inspector

Enc: DA #204
Pretreatment Ordinance

c: Doug Knutson, WDOE
Michael D. Robinson, EWPCF
Chron File (1)
IPT File (1)

S:\WCommon\ipt\WORD\DA\DA 204 letter.doc

PUBLIC WORKS

Issuance Date: November 1, 2002
Expiration Date: October 31, 2003

CITY OF EVERETT
INDUSTRIAL WASTE DISCHARGE AUTHORIZATION

In compliance with the provisions of The Federal Clean Water Act,
The State of Washington Water Pollution Control Law, as amended
(Chapter 90.48 Revised Code of Washington) and
The City of Everett Industrial Pretreatment Ordinance No. 2034-95
(as amended by Ordinance #2247-97).
An Industrial Waste Discharge Authorization is Issued to:

Malcolm Drilling Co., Inc.
7808 South 207th Court
Kent, WA 98032

Authorization Number:	**204**
Authorized Rep:	**Michael Pollock**
Facility Location:	**Snohomish County Campus Redevelopment Initiative Wall and Oakes**
Receiving Water:	**Everett Water Pollution Control Facility**
Industry Type:	**Construction Dewatering**
Discharge Location:	**Storm drain, corner of Oakes Ave. and Wall St.**
Sample Site:	**Tank outlet**

Malcolm Drilling Co., Inc. is authorized to discharge construction dewatering wastewater to the City of Everett sewer system in compliance with the City's Ordinance, any applicable provisions of Federal or State law or regulation, and in accordance with discharge point(s), effluent limitations, monitoring requirements, and other conditions set forth herein.

This authorization is granted in accordance with the application form filed in the office of the City of Everett Department of Public Works, and in conformity with plans, specifications, and other data submitted to the City in support of the above data disclosure form.

Jeff Kerwin
Pretreatment Program Manager

10/25/02
Date

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- B. Spill To A Storm Drain or Waters Of The State

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- B. Sample Site/Dilution
- C. Footnotes

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- B. Accidental Spill Prevention Plan
- C. (Reserved)
- D. Notification of Hazardous Waste Discharges
- E. Notification of New Hazardous Waste Discharges
- F. O & M Manual
- G. Self Monitoring Report
- H. Notification of Violation
- I. Changes To Discharge
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- L. Engineering Report

IV. REPORTING REQUIREMENTS/10
- A. Final Compliance Report/90 Day Report
- B. Accidental Spill Prevention Plan
- C. Notification of Hazardous Waste Discharges
- D. Notification of New Hazardous Wastes
- E. Operation and Maintenance Manual
- F. Self Monitoring Reports
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- R. Modification or Revision of the Authorization
- S. Analytical Requirements

I. EMERGENCY NOTIFICATION

A. In the event that a petroleum or other hazardous material spill reaches the sewer system, the Everett Water Pollution Control Facility shall be notified immediately.

Hours 7:30 AM to 4:00 PM Monday - Friday	(425) 257-8240
After Hours, Weekends and Holidays	(425) 257-8821

B. In the event that a spill of oil or hazardous material reaches the storm sewer or the waters of the State, Everett Surface Water Management and the Department of Ecology shall be notified immediately.

Everett Surface Water Management Hours 7:30 AM to 4:00 PM Monday - Friday	(425) 257-8800
After Hours, Weekends and Holidays	(425) 257-8821
Washington State Dept. of Ecology 24 hours	(425) 649-7000

II. EFFLUENT LIMITS AND MONITORING REQUIREMENTS

A. Limitations and Monitoring Requirements

After issuance and lasting through midnight October 31, 2003, the Permittee is authorized to discharge treated industrial wastewater to the City of Everett sanitary sewerage system subject to the following limitations and monitoring requirements.

Sample location: Tank outlet

	EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
Parameter	Daily[a] Maximum		Daily Minimum	Minimum[c] Frequency	Sample Type
NON CONVENTIONALS					
Cadmium (T)	0.24	mg/L[k]	½ poly w/ HNO3	1/quarter	Composite[b]
Chromium (T)	5.00	mg/L		1/quarter	Composite
Copper(T)	3.0	mg/L		1/quarter	Composite
Lead (T)	1.89	mg/L		1/quarter	Composite
Nickel (T)	2.83	mg/L		1/quarter	Composite
Zinc (T)	4.00	mg/L		1/quarter	Composite
Mercury (T)	0.1	mg/L		1/quarter	Composite
Arsenic (T)	0.5	mg/L		1/quarter	Composite
Silver (T)	0.49	mg/L		1/quarter	Composite
Cyanide (T)	0.65	mg/L	→ ½ L poly, NaOH	1/quarter	Composite[b]
Process Flow	300 GPM			Daily Maximum	Metered
CONVENTIONALS					
pH	10.0[e,k]		5.0[e,k] ← ½ poly (same bottle)	1/Week	Grab
TSS	NA[m]			1/month	Composite
Total FOG	NA[l]		1L AG w/HCl (EPA 1664)	1/month	Grab[o]
FOG/Nonpolar	200	mg/L[k]	(same bottle)	1/month	Grab[o]
Closed Cup Flashpoint			140 °F[l]	1/quarter	Grab[p]

Orion 250 A pH

II. EFFLUENT LIMITS AND MONITORING REQUIREMENTS (continued)

B. Sample Site/Dilution

All samples shall be collected at an approved sample site at the point of discharge from the treatment system, prior to mixing with any other dilution stream. The effluent limits apply to industrial wastewater prior to dilution with wastewaters other than those generated by the regulated process. The Permittee shall not use dilution to meet the limitations. See Sections VI.H. and VI.I.

C. Footnotes

a. The daily maximum is defined as the greatest allowable value for any calendar day.

b. The monthly average is defined as the arithmetic mean of samples collected during a calendar month.

c. The City may reduce or increase the frequency of sampling based on compliance history, including analytical results. The Permittee may choose to monitor more frequently than is required by this authorization, with the understanding that all sampling and analytical data shall be submitted with the monthly report.

d. NA means not applicable.

e. pH is measured in standard units. See Section V.C.

f. If Total FOG (fats, oils and grease) is greater than 50 mg/L, the Permittee will be surcharged as part of the monthly sewerage bill for the additional costs of treatment. If the discharged FOG interferes with the collection and/or treatment systems, then the City may take enforcement action, as well as surcharge, the Permittee for the cost of treatment.

g. Composite shall mean a flow-proportioned sample taken during the hours of discharge using an automatic sampler approved by the City or at least four grab samples taken in accordance with City of Everett Sampling Guidelines and composited according to flow. See Section V.D.

h. Each of four (4) grab samples for cyanide shall be immediately preserved with NaOH to a pH of >12.0 then combined and refrigerated until analyzed. Analysis shall occur within fourteen (14) days of taking the sample.

i. (Reserved)

j. (Reserved)

k. These limits based upon local limitations contained in Everett City Ordinance No. 2034-95 (as amended by Ordinance #2247-97).

II. EFFLUENT LIMITS AND MONITORING REQUIREMENTS

C. **Footnotes** (continued)

l. Any wastewater with a closed cup flash point of less than 140°F or 60° Celsius using the test methods specified in 40 CFR 261.21 is prohibited from discharge. See Section VII.A.3.

m. If TSS (Total Suspended Solids) or BOD_5 (5-day Biochemical Oxygen Demand) exceeds 250 mg/L, the Permittee will be surcharged as part of the monthly sewerage bill for the additional costs of treatment. If the discharged TSS or BOD_5 interferes with the collection and/or treatment systems, then the City may take enforcement action, as well as surcharge the Permittee for the cost of treatment and any additional maintenance costs incurred by the City.

n. (Reserved)

o. A minimum of four individual grab samples to be taken during the sampling event for FOG. The samples are to be taken and contained in separate containers and not to be composited or split.

p. A single separate grab sample must be taken and analyzed for Flash Point.

III. SUMMARY OF REPORTS

The Permittee shall submit reports to the City according to the schedule listed below.

A. Not Applicable

B. Not Applicable

C. Not Applicable

D. Notification of Hazardous Waste Discharges

Frequency:	Once only for each hazardous waste (HW)
Due Date:	Within 90 day of authorization issuance
Content:	HW name, EPA HW Number & type of discharge. See Section IV.C.

E. Notification of New Hazardous Waste Discharges

Frequency:	Whenever new regulations designate wastes or constituents as hazardous.
Due Date:	Within 90 days of the effective date of the published regulation.
Content:	See Section IV.D. and 40 CFR 403.12(p).

F. Not Applicable

III. SUMMARY OF REPORTS (continued)

G. Self Monitoring Report

Frequency:	Once per month.
Due Date:	Commencing on date of Authorization issuance. To be submitted no later than the last day of each month following self monitoring.
Content:	Data required in Section II.A or, if appropriate, a notification that no discharge has occurred. See Section IV.F.

H. Notification of Violation

Frequency:	As needed.
Due Date:	Notify the City within 24 hrs. of discovery and submit a written report within 5 days.
Content:	Reason for violation and corrective action taken. See Section IV.G.

I. Changes To Discharge

Frequency:	As needed.
Due Date:	90 days prior to changes in discharge that result in altered wastewater pollutants.
Content:	See Section IV.H.

J. Not Applicable

K. Upset Report

Frequency:	As needed
Due Date:	Notify the City within 24 hrs of discovery and submit a written report within 5 days.
Content:	Characteristics of and reason for noncompliance, and corrective action taken. See Section IV.J.

L. Not Applicable

IV. REPORTING REQUIREMENTS

The Permittee shall monitor their discharge to the sanitary sewer as specified in Section II of this authorization. The Permittee shall also submit to the City of Everett, Department of Public Works, all of the reports according to the following schedule and content requirements.

A. Not Applicable

B. Not Applicable

C. Notification of Hazardous Waste Discharges

The Permittee shall notify the City, the EPA RCRA Director and State Dangerous Wastes Director, in writing within 90 days of the effective date of this authorization, of any discharge of a substance, which, if otherwise disposed of, would be a hazardous waste under 40 CFR 261. Such notification must include the name of the hazardous waste as set forth in 40 CFR 261, the EPA hazardous waste number, and the type of discharge (continuous, batch, or other).

Notification need be submitted only once for each hazardous waste discharged. The notification requirement in this section does not apply to pollutants already reported under the self-monitoring requirements in Section II of this authorization. The Permittee shall certify that it has a program in place to reduce the volume and toxicity of hazardous wastes generated.

D. Notification of New Hazardous Wastes

Whenever the EPA publishes new RCRA rules identifying additional hazardous wastes or new characteristics of hazardous wastes, the Permittee must notify the City, EPA RCRA Director and State Hazardous Wastes Director if any of these wastes are discharged to the City's treatment system. The notification must occur within 90 days of the effective date of the published regulation.

IV. REPORTING REQUIREMENTS (continued)

E. Not Applicable

F. Self Monitoring Reports

The Permittee shall monitor the parameters specified in Section II.A of this authorization. All monitoring results obtained during the month shall be summarized and reported on a form approved by the City, to be submitted no later than the last day of the month following the completed reporting period. The Permittee shall include the daily pH highs and lows and daily flows. The report shall be signed and certified in accordance with the requirements of Section VII.B. and submitted to the following address:

City of Everett
Department of Public Works
Industrial Pretreatment Program
3200 Cedar St.
Everett, WA. 98201
Attn.: Gene Bennett

In the event that **additional monitoring** (other than that required in Section II.A) is conducted, the Permittee shall report **all** results in the report.

G. Notification of Violation

If self monitoring data indicates that a discharge limit has been exceeded, the Permittee shall notify the City within 24 hours of becoming aware of the violation. The Permittee shall repeat the sampling and submit the analysis to the City within 30 days after becoming aware of the violation. Formal written notification discussing circumstances and remedies shall be submitted to the City within five (5) days of becoming aware of the violation or as required.

H. Notification of Changed Discharge

The Permittee shall notify the City 90 days prior to the introduction of new wastewater pollutants, changes in manufacturing operations or any substantial change in the volume or character of pollutants in their discharge, including the listed or characteristic hazardous wastes for which the Permittee has submitted initial notification under 40 CFR 403.12(p). The Permittee shall obtain approval from the City prior to any substantial change in their discharge.

IV. REPORTING REQUIREMENTS (continued)

I. Spill/Slug Discharge Reports

The Permittee shall notify the City immediately, either in person or by phone (see Section I Emergency Notification), upon accidental spill or slug discharge to the sanitary sewer. Formal written notification discussing circumstances and remedies shall be submitted to the City within five (5) days of the occurrence or as required.

J. Upset Reporting

1. Definition

For the purpose of this section, "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with applicable pretreatment standards because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance or careless or improper operation.

2. Effect of an Upset

An upset shall constitute an affirmative defense to action brought for noncompliance with applicable pretreatment standards if the requirements of paragraph 3 are met.

3. Conditions Necessary for a Demonstration of Upset:

A Permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed contemporaneous operating logs or other relevant evidence that:

a. an upset occurred and the authorizationtees can identify the specific cause(s) of the upset;

b. the facility was, at the time, being operated in a prudent and workman-like manner and in compliance with applicable operation and maintenance procedures; and

c. the Permittee has submitted the following information to the City within 24 hours of becoming aware of the upset (if this information is provided verbally a written submission must be provided within five days):

(1) a description of the discharge and cause of noncompliance;
(2) the period of noncompliance, including exact dates and times or, if not corrected, the anticipated time the noncompliance is expected to be corrected; and
(3) steps being taken and/or planned to reduce, eliminate and prevent recurrence of the noncompliance.

IV. REPORTING REQUIREMENTS (continued)

J. Upset Reporting (continued)

4. Burden of Proof

In any enforcement proceeding the Permittee seeking to establish the occurrence of an upset shall have the burden of proof.

5. Permittee Responsibility in Case of Upset

The Permittee shall control production or all discharges to the extent necessary to maintain compliance with applicable pretreatment standards upon reduction, loss or failure of its treatment facility until the facility is restored or an alternative method of treatment is provided. This requirement applies in the situation where, among other things, the primary source of power of the treatment facility is reduced, lost or fails.

K. Not Applicable

V. SPECIAL CONDITIONS/COMPLIANCE SCHEDULES

A. Batch Discharge Log

The Permittee shall maintain a log containing the date and time of discharge, contents, and the volume and number of batches discharged per day.

B. Effluent Meter Device

The Permittee shall install and maintain a continuous flow meter, monitoring flow through the discharge/sample site.

C. pH Requirements

The Permittee shall sample for pH weekly using the grab method and shall record the values. Any discharge without a pH record shall be considered a violation of this authorization.

The Permittee shall maintain a log that includes a record of calibration for the instrument used with: the date; time; name of the person doing the calibration; and the method used. The chart shall be dated and initialed on working days.

E. (Reserved)

VI. OPERATIONS AND MAINTENANCE

The Permittee shall at all times properly operate and maintain all facilities and systems of collection, treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this authorization. Proper operation and maintenance includes, but is not limited to, effective performance, adequate funding, adequate operator staffing and training and adequate laboratory and process controls, including appropriate quality assurance procedures. The Permittee shall keep and maintain an operation and maintenance log on all facilities and systems of treatment and control.

A. Not Applicable

B. Not Applicable

C. Required Process Changes

The Permittee shall make the process changes required and/or install whatever pretreatment equipment is necessary to meet the discharge conditions of this authorization.

D. Shutoff Devices

The Permittee shall provide a functional shutoff device downstream of the pretreatment system.

E. Not Applicable

F. Not Applicable

G. Flowmeter

The Permittee shall maintain a water or sewer meter which provides accurate information regarding industrial process wastewater discharges to the sewer. The Permittee shall maintain a daily log of flowmeter readings and daily flows.

H. Dilution

Excess water usage shall be minimized to prevent dilution. No Industrial User shall increase the use of potable or process water, or, in any way, attempt to dilute a discharge as a partial or complete substitute for adequate treatment to achieve compliance with the limitations contained in this authorization.

I. Sample Site

An approved sampling site shall be maintained downstream of the final pretreatment system and upstream of any mixing with unregulated flows for the monitoring of the industrial discharge. City personnel shall have access to the sample site during normal business hours and in the event of an emergency. All process wastewater shall flow through the sampling point. All process wastewater shall be hard-piped to the sampling point. All wastewater monitoring samples shall be collected from the approved sample site. Sample sites are to remain unobstructed at all times to allow access. All sample sites shall have a suitable, City approved, primary device installed for the purpose of monitoring industrial discharge flow to the Sanitary Sewer.

VII. GENERAL CONDITIONS

A. Compliance

1. All discharges to the City sanitary sewer system shall be in accordance with the requirements and ordinances of the City.

2. All discharges and activities authorized by this authorization shall be consistent with the terms and conditions of this authorization. The discharge of any pollutant more frequently than or at a level in excess of that authorized by this authorization shall constitute a violation of the terms and conditions of this authorization.

3. The Permittee shall comply with all the general prohibitive discharge standards in Ordinance 2034-95 and is responsible to take whatever steps are necessary to ensure discharge requirements of this authorization are met.

4. Nothing in this authorization shall be construed as excusing the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

5. All applicable requirements of 40 CFR 403 "General Pretreatment Regulations" are incorporated into this authorization by reference.

6. Sanitary sewage shall be disposed of in accordance with the requirements of the Snohomish County Health District.

B. Signatory Requirements

All reports and information submitted to the City shall be signed by an executive officer, or his/her designated official, testifying to the accuracy of the results and representativeness of the sample by making the following statement:

"I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

C. Confidential Information

Except for data determined to be confidential under Section 7 of the City's Industrial Pretreatment Ordinance (No. 2034-95, as amended), all reports required by this authorization shall be available for public inspection at the office of the City of Everett, Department of Public Works.

VII. GENERAL CONDITIONS (continued)

D. Records Retention

The Permittee shall retain for a minimum of three years all records of monitoring activities and results, including all reports of recordings from continuous monitoring instrumentation. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by the City.

E. Recording of Results

For each measurement or sample taken, the Permittee shall record the following information:

1. the date, exact place, person collecting the sample, and time of sampling;
2. the date the analyses were performed;
3. who performed the analyses;
4. the analytical techniques or methods used;
5. the results of all the analyses; and
6. provide certification of representativeness.

F. Representative Sampling

Samples and measurements taken to meet the requirements of this condition shall be representative of the volume and the nature of the monitored discharge.

G. Test Procedures

All sampling and analytical methods used to meet the monitoring requirements specified in this authorization shall, unless approved otherwise in writing by the City, conform to the Guidelines Establishing Test Procedures for the Analysis of Pollutants, contained in 40 CFR 136. Where 40 CFR 136 does not include a sampling or analytical technique for the pollutant in question, sampling and analyses shall be performed in accordance with any other sampling and analysis procedure approved by the EPA Administrator.

H. Bypass

The intentional bypass of wastes from all or any portion of a treatment works to the extent that authorization effluent limitations cannot be met is prohibited unless the following four conditions are met:

1. Bypass is:

   (a) unavoidable to prevent loss of life, personal injury, or severe property damage; or

   (b) necessary to perform construction or maintenance related activities essential to meet the requirements of the Clean Water Act and authorized by administrative order;

VII. GENERAL CONDITIONS (continued)

H. Bypass (continued)

2. There are no feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, maintenance during normal periods of equipment down time, or temporary reduction or termination of production;

3. The Permittee submits notice of an anticipated bypass in accordance with Section IV.H. Where the Permittee knows or should have known in advance of the need for a bypass, this prior notification shall be submitted for approval to the City, if possible, at least 10 days before the date of bypass; and

4. This bypass is allowed under conditions determined to be necessary by the City to minimize any adverse effects. The public shall be notified and be given the opportunity to comment on bypass incidents of significant duration, to the extent feasible.

"Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic impact caused by delays in production.

After consideration of the factors above and the adverse effects of the proposed bypass, the City may approve the request.

I. Right of Entry

The Permittee shall allow an authorized representative of the City, upon the presentation of credentials and such other documents as may be required by law and at reasonable hours:

1. To enter the Permittee's premises where a discharge source is located or where any records must be kept under the terms and conditions of the authorization;

2. To have access to and copy any records that must be kept under terms and conditions of the authorization;

3. To inspect any monitoring equipment or method required in the authorization;

4. To inspect any collection, treatment, pollution management, or discharge facilities required under the authorization;

5. To sample any discharge of pollutants (sampling sites are to remain unobstructed at all times); and

VII. GENERAL CONDITIONS (continued)

I. Right of Entry (continued)

6. Where a user has security measures in force which require proper identification and clearance before entry into its premises, the user shall make necessary arrangements with its security guards so that, upon presentation of suitable identification, the Director will be authorizationted to enter without delay for the purposes of performing specific responsibilities. Unreasonable delays in allowing the Director access to the user's premises shall be a violation of this Authorization.

J. Severability

The provisions of this authorization are severable, and if any provision of this authorization, or the application of any provision of this authorization to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this authorization shall not be affected thereby.

K. Property rights

The issuance of this authorization does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any invasion of personal rights, nor any infringement of Federal, State, or Local regulations.

L. Falsifying Information or Tampering With Monitoring Equipment

Knowingly making any false statement on any report or other document required by this authorization or knowingly rendering any monitoring device or method inaccurate, may result in punishment under the criminal laws of the City, as well as being subject to civil penalties and relief.

M. Enforcement Provision

The City may seek any or all of the remedies or penalties (including civil and judicial action) provided in City ordinances, including recovering costs incurred by the City, in response to the following:

1. Any violation by the Permittee of the provision of the Industrial Wastewater Discharge Authorization;

2. Any violation by the Permittee of the provisions of the City Code; or

3. Any violation by the Permittee of any order of the Director with respect to provisions set forth in this Industrial Wastewater Discharge Authorization or the City Code.

VII. GENERAL CONDITIONS (continued)

M. Enforcement Provision (continued)

The range or severity of remedial actions taken against the Permittee may include, but not be limited to, notices of violation, compliance schedules, fines of up to $10,000 per day per violation, show cause hearings and/or cease discharge notices and be determined, in part, by the nature, duration and frequency of the violation (including significant non-compliance status).

N. Duty to Reapply

The City shall notify the Permittee 180 days prior to the expiration of the Permitee's authorization. Within 90 days of the notification, the Permittee shall apply for reissuance of the authorization on a form provided by the City.

O. New or Supplemental Application for Changes

The City may require the Permittee to submit a new application or supplement to the previous application where facility expansions, production increases, or process modifications will result in:

1. New or substantially increased discharges of pollutants;

2. A substantial increase in flow; or

3. Violation of the terms and conditions of the existing authorization.

The Permittee shall notify the City 60 days prior to such changes. Formal written notification shall follow within 30 days. Submission of such an application does not relieve the discharger of the duty to comply with the existing authorization until it is modified or reissued.

P. Limitation of Authorization Transfer

Permits are issued to a specific User for a specific operation and are not assignable to another User or transferable to any other location without the prior written approval of the City. Sale of a User shall obligate the purchaser to seek prior written approval from the City for continued discharge to the POTW.

VII. GENERAL CONDITIONS (continued)

Q. Emergency Suspension of Service and Revocation of Authorization

The City may, without advance notice, order the suspension of the wastewater treatment service and revoke the Industrial Waste Discharge Authorization from a Permittee when it appears to the City that an actual or threatened discharge:

1. presents or threatens an imminent or substantial danger to the health or welfare of persons or substantial danger to the environment; or

2. threatens to interfere with the operation of the POTW, or violate any pretreatment limits.

Any Permittee notified of the City's suspension order shall immediately cease all discharges. In the event of failure of the Permittee to comply with a suspension order, the City may immediately take all necessary steps to halt or prevent any further discharge by such Permittee into the POTW. See Ordinance 2034-95 section 9.7.

R. Modification or Revision of the Authorization

This authorization may be modified, terminated, or revoked during its term for:

1. Failure of the Permittee to disclose fully all relevant facts or the misrepresentation of any relevant facts by the Permittee in the application or during the authorization issuance process;

2. A violation of any term or condition of the authorization;

3. EPA promulgating a new federal pretreatment standard;

4. A change in any condition that requires either a temporary or a permanent reduction or elimination of any discharge controlled by the authorization;

5. Information indicating that the authorizationted discharge poses a threat to human health or welfare;

6. A change in ownership or control of the source;

7. A change in City Ordinances or other just cause; or

8. Incorporating special conditions resulting from the issuance of a special order.

VII. GENERAL CONDITIONS (continued)

R. Modification or Revision of the Authorization (continued)

Authorization transfer fee shall be $500.00

Authorization modification fee shall be $500.00. Authorization modification fees will only be charged in a case where changes in the user's operation require the modification, or when the user requests a modification.

Any authorization modification which results in new conditions in the authorization will include a reasonable time schedule for compliance, if necessary. Authorization modification, revocation and reissuance, or termination may be initiated by the City or requested by any interested person.

S. Analytical Requirements

All analyses performed to establish compliance and used in compliance reporting shall be performed by a laboratory accredited by the Quality Assurance Division of the Washington State Department of Ecology in accordance with WAC 173-50. Laboratories must be accredited for the analyses that they are performing.

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 11/26/02
CCIL JOB #: 211095
CCIL SAMPLE #: 1
DATE RECEIVED: 11/25/02
WDOE ACCREDITATION #: C142

CLIENT CONTACT: SCOTT GAULKE/PAUL VAN HORN

CLIENT PROJECT ID: 21-1-09644-011/SNOHOMISH COUNTY PARKING GARAGE
CLIENT SAMPLE ID: TANK 1 11/25/02 0910

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TOTAL FATS, OILS, GREASES	EPA-1664	ND(<1)	MG/L	11/25/02	HJK
NON POLAR FATS, OILS, GREASES	EPA-1664	ND(<1)	MG/L	11/25/02	HJK
TOTAL SUSPENDED SOLIDS	EPA-160.2	ND(<5)	MG/L	11/26/02	HJK
FLASH POINT	EPA-1010	>200	DEG F	11/26/02	HJK
CYANIDE	EPA-335.2	ND(<0.05)	MG/L	11/26/02	HJK
ARSENIC	EPA-7060	ND(<0.03)	MG/L	11/26/02	RAB
CADMIUM	EPA-6010	ND(<0.005)	MG/L	11/26/02	RAB
CHROMIUM	EPA-6010	0.01	MG/L	11/26/02	RAB
COPPER	EPA-6010	ND(<0.006)	MG/L	11/26/02	RAB
LEAD	EPA-6010	ND(<0.06)	MG/L	11/26/02	RAB
MERCURY	EPA-7470	ND(<.0002)	MG/L	11/25/02	RAB
NICKEL	EPA-6010	ND(<0.02)	MG/L	11/26/02	RAB
SILVER	EPA-6010	ND(<0.007)	MG/L	11/26/02	RAB
ZINC	EPA-6010	0.023	MG/L	11/26/02	RAB

* "ND" INDICATES ANALYTE NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY: 

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

Laboratory CCI

Attn:

400 N. 34th Street, Suite 100
Seattle, WA 98103
(206) 632-8020

2043 Westport Center Drive
St. Louis, MO 63146-3564
(314) 392-0050

303 Wellsian Way
Richland, WA 99352
(509) 946-6309

2055 Hill Road
Fairbanks, AK 99709
(907) 479-0600

5430 Fairbanks Street, Suite 3
Anchorage, AK 99518
(907) 561-2120

2255 S.W. Canyon Road
Portland, OR 97201-2498
(503) 223-6147

1200 17th Street, Suite 1024
Denver, Co 80202
(303) 825-3800

Analysis Parameters/Sample Container Description
(include preservative if used)

Sample Identity	Lab No.	Time	Date Sampled	Comp.	Grab	1L AG w/HCl Total FOG and FOG/Nonpolar	1/2L poly FOG	1/2L clear cup FP < 140°F flashpoint TSS	1/2L poly w/HNO3 Total Metals *	1/2L poly w/NaOH Cyanide			Total Number of Containers	Remarks/Matrix
Tank 1		0910	11-25-02		X	1	1	1	1				4	Iced/Water

Project Information

Project Number: 21-1-09644-020

Project Name: Snoh. Co. Parking Garage

Contact: Scott Gaulke/Paul Vaulkhe

Ongoing Project? Yes ☒ No ☐

Sampler: Paul VanHorne

Sample Receipt

Total Number of Containers:

COC Seals/Intact? Y/N/NA: (NA)

Received Good Cond./Cold:

Delivery Method: Co. Personnel
(attach shipping bill, if any)

Instructions

Requested Turnaround Time: Tuesday

Special Instructions: * Cd, Cr, Cu, Pb, Ni, Zn, Hg, As, Ag

Distribution: White - w/shipment - returned to Shannon & Wilson w/ laboratory report
Yellow - w/shipment - for consignee files
Pink - Shannon & Wilson - Job File

Relinquished By: 1.	Relinquished By: 2.	Relinquished By: 3.
Signature: Paul L. VanHorne Time: 0956	Signature: Time:	Signature: Time:
Printed Name: Paul L. VanHorne Date: 11/25/02	Printed Name: Date:	Printed Name: Date:
Company: S&W	Company:	Company:

Received By: 1.	Received By: 2.	Received By: 3.
Signature: Time: 1050	Signature: Time:	Signature: Time:
Printed Name: Rick Bagan Date: 11/25/02	Printed Name: Date:	Printed Name: Date:
Company: CCIAL	Company:	Company:

F-19-91/UR

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 1/2/03
CCIL JOB #: 212102
CCIL SAMPLE #: 1
DATE RECEIVED: 12/23/02
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

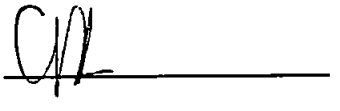
CLIENT PROJECT ID: 21-1-09644-011 SNOHOMISH CO. PARKING GARAGE
CLIENT SAMPLE ID: DISCHARGE1 12/23/02 1611

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TOTAL FATS, OILS, GREASES	EPA-1664	ND(<1)	MG/L	12/30/02	HJK
TOTAL SUSPENDED SOLIDS	EPA-160.2	28	MG/L	12/31/02	HJK

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY: 

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CHAIN-OF-CUSTODY RECORD

SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

400 N. 34th Street, Suite 100
Seattle, WA 98103
(206) 632-8020
(206) 695-6777 Fax

11500 Olive Blvd., Suite 276
St. Louis, MO 63141
(314) 872-8170
(314) 872-8178 Fax

2055 Hill Road
Fairbanks, AK 99709
(907) 479-0600
(907) 479-5691 Fax

5430 Fairbanks Street, Suite 3
Anchorage, AK 99518
(907) 561-2120
(907) 561-4483 Fax

303 Wellsian Way
Richland, WA 99352
(509) 946-6309
(509) 946-6580 Fax

Laboratory CCT

Attn:

Analysis Parameters/Sample Container Description
(include preservative if used)

Sample Identity	Lab No.	Time	Date Sampled	Comp.	Grab	1L AG w/HCl Total and Nonpolar	Fecal 1/2L Poly TSS					Total Number of Containers	Remarks/Matrix
Discharge 1		1611	12/23/02	X		4	1					5	Iced/Water

Project Information

Project Number: 21-1-09644-011
Project Name: Snohomish Co. Parking Garage
Contact: Agues Tirao
Ongoing Project? Yes ☒ No ☐
Sampler: Paul VanHorne

Sample Receipt

Total Number of Containers:
COC Seals/Intact? Y/N/NA:
Received Good Cond./Cold:
Delivery Method: Co. personnel
(attach shipping bill, if any)

Instructions

Requested Turnaround Time: Standard
Special Instructions: Samples were collected at 1612 on 12/22/02, and at 1003, 1315, and 1611 on 12/23/02. Composite per Everett Public Works

Distribution: White - w/shipment - returned to Shannon & Wilson w/ laboratory report
Yellow - w/shipment - for consignee files
Pink - Shannon & Wilson - Job File

Relinquished By: 1.	Relinquished By: 2.	Relinquished By: 3.
Signature: Paul L. VanHorne Time: 1646	Signature: Time:	Signature: Time:
Printed Name: Paul L. VanHorne Date: 12/23/02	Printed Name: Date:	Printed Name: Date:
Company: S+W	Company:	Company:

Received By: 1.	Received By: 2.	Received By: 3.
Signature: Time: 1646	Signature: Time:	Signature: Time:
Printed Name: Date: 12-27-02	Printed Name: Date:	Printed Name: Date:
Company: CCTL	Company:	Company:

F-19-91/UR

No.

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 1/29/03
CCIL JOB #: 301119
CCIL SAMPLE #: 1
DATE RECEIVED: 1/27/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-012 SNOH-CO. CAMPUS
CLIENT SAMPLE ID: DISCHARGE 2 1/26-1/27/03

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
POLAR FATS, OILS, GREASES	EPA-1664	ND(<1)	MG/L	1/27/03	HJK
NON-POLAR FATS, OILS, GREASES	EPA-1664	3	MG/L	1/27/03	HJK
TOTAL SUSPENDED SOLIDS	EPA-160.2	11	MG/L	1/28/03	HJK

* "ND" INDICATES ANALYTE NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY: _____

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

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(206) 695-6777 Fax

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(907) 561-2120
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303 Wellsian Way
Richland, WA 99352
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(509) 946-6580 Fax

CHAIN-OF-CUSTODY RECORD

Laboratory CCI

Attn:

Analysis Parameters/Sample Container Description (include preservative if used)

Sample Identity	Lab No.	Time	Date Sampled	Comp.	Grab	TSS 1/2L Poly	Total & Nonpolar FOG 1L AG w/ HCl					Total Number of Containers	Remarks/Matrix
DISCHARGE 2		✱	1/26-1/27/03	X		1	4					5	4 grabs for FOG → 4 bottles 4 grabs for TSS → 1 bottle

Project Information	Sample Receipt
Project Number: 21-1-09644-012	Total Number of Containers
Project Name: Snoh. Co. Campus	COC Seals/Intact? Y/N/NA
Contact: Agnes Tirao	Received Good Cond./Cold
Ongoing Project? Yes ☒ No ☐	Delivery Method: Co. Personnel
Sampler: Paul VanHorne	(attach shipping bill, if any)

Instructions

Requested Turnaround Time: Standard

Special Instructions: Analyze For City of Everett Sanitary sewer standards.
✱ 1/26/03 @ 1404, 1724. 1/27/03 @ 1005, 1353.

Distribution: White - w/shipment - returned to Shannon & Wilson w/ laboratory report
Yellow - w/shipment - for consignee files
Pink - Shannon & Wilson - Job File

Relinquished By: 1.	Relinquished By: 2.	Relinquished By: 3.
Signature: Paul L. VanHorne Time: 1412	Signature: Time:	Signature: Time:
Printed Name: Paul L. VanHorne Date: 1/27/03	Printed Name: Date:	Printed Name: Date:
Company: SW	Company:	Company:

Received By: 1.	Received By: 2.	Received By: 3.
Signature: Halle Kunst Time: 1412	Signature: Time:	Signature: Time:
Printed Name: Halle Kunst Date: 1/27/03	Printed Name: Date:	Printed Name: Date:
Company: CCIAL	Company:	Company:

F-19-91/UR

No

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20 February 2003

Richard Martin
Shannon and Wilson - Seattle
400 N 34th St, Suite 100
Seattle, WA/USA 98103
RE: Snohomish County Campus

Enclosed are the results of analyses for samples received by the laboratory on 02/19/03 15:46. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Emanuel Hignutt
PM

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Shannon and Wilson - Seattle	Project: Snohomish County Campus	
400 N 34th St, Suite 100	Project Number: 21-1-09644-012	**Reported:**
Seattle WA/USA, 98103	Project Manager: Richard Martin	02/20/03 13:19

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Discharge 3	B3B0352-01	Water	02/19/03 15:03	02/19/03 15:46

North Creek Analytical - Bothell

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Shannon and Wilson - Seattle	Project: Snohomish County Campus	
400 N 34th St, Suite 100	Project Number: 21-1-09644-012	**Reported:**
Seattle WA/USA, 98103	Project Manager: Richard Martin	02/20/03 13:19

Volatile Organic Compounds by EPA Method 8260B

North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Discharge 3 (B3B0352-01) Water Sampled: 02/19/03 15:03 Received: 02/19/03 15:46									
Bromodichloromethane	ND	1.00	ug/l	1	3B20005	02/19/03	02/19/03	EPA 8260B	
Bromoform	ND	1.00	"	"	"	"	"	"	
Chloroform	ND	1.00	"	"	"	"	"	"	
Dibromochloromethane	ND	1.00	"	"	"	"	"	"	
Surrogate: 1,2-DCA-d4	*99.0 %*	*70-130*			"	"	"	"	
Surrogate: Toluene-d8	*97.2 %*	*70-130*			"	"	"	"	
Surrogate: 4-BFB	*98.5 %*	*70-130*			"	"	"	"	

North Creek Analytical - Bothell

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Shannon and Wilson - Seattle	Project: Snohomish County Campus	
400 N 34th St, Suite 100	Project Number: 21-1-09644-012	**Reported:**
Seattle WA/USA, 98103	Project Manager: Richard Martin	02/20/03 13:19

Conventional Chemistry Parameters by APHA/EPA Methods
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Discharge 3 (B3B0352-01) Water Sampled: 02/19/03 15:03 Received: 02/19/03 15:46									
Chlorine Residual	ND	0.400	mg/l	20	3B19037	02/19/03	02/19/03	SM 4500-Cl G	A-01, Q-31
Fluoride	ND	0.100	"	1	3B19045	"	"	EPA 340.2	

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400 N 34th St, Suite 100	Project Number: 21-1-09644-012	**Reported:**
Seattle WA/USA, 98103	Project Manager: Richard Martin	02/20/03 13:19

Volatile Organic Compounds by EPA Method 8260B - Quality Control
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3B20005: Prepared 02/19/03 Using EPA 5030B										
Blank (3B20005-BLK1)										
Acetone	ND	25.0	ug/l							
Benzene	ND	1.00	"							
Bromobenzene	ND	1.00	"							
Bromochloromethane	ND	1.00	"							
Bromodichloromethane	ND	1.00	"							
Bromoform	ND	1.00	"							
Bromomethane	ND	2.00	"							
2-Butanone	ND	10.0	"							
n-Butylbenzene	ND	1.00	"							
sec-Butylbenzene	ND	1.00	"							
tert-Butylbenzene	ND	1.00	"							
Carbon disulfide	ND	1.00	"							
Carbon tetrachloride	ND	1.00	"							
Chlorobenzene	ND	1.00	"							
Chloroethane	ND	1.00	"							
Chloroform	ND	1.00	"							
Chloromethane	ND	5.00	"							
2-Chlorotoluene	ND	1.00	"							
4-Chlorotoluene	ND	1.00	"							
Dibromochloromethane	ND	1.00	"							
1,2-Dibromo-3-chloropropane	ND	5.00	"							
1,2-Dibromoethane	ND	1.00	"							
Dibromomethane	ND	1.00	"							
1,2-Dichlorobenzene	ND	1.00	"							
1,3-Dichlorobenzene	ND	1.00	"							
1,4-Dichlorobenzene	ND	1.00	"							
Dichlorodifluoromethane	ND	1.00	"							
1,1-Dichloroethane	ND	1.00	"							
1,2-Dichloroethane	ND	1.00	"							
1,1-Dichloroethene	ND	1.00	"							
cis-1,2-Dichloroethene	ND	1.00	"							
trans-1,2-Dichloroethene	ND	1.00	"							
1,2-Dichloropropane	ND	1.00	"							

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Shannon and Wilson - Seattle	Project: Snohomish County Campus	
400 N 34th St, Suite 100	Project Number: 21-1-09644-012	**Reported:**
Seattle WA/USA, 98103	Project Manager: Richard Martin	02/20/03 13:19

Volatile Organic Compounds by EPA Method 8260B - Quality Control
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3B20005: Prepared 02/19/03 Using EPA 5030B										
Blank (3B20005-BLK1)										
1,3-Dichloropropane	ND	1.00	ug/l							
2,2-Dichloropropane	ND	1.00	"							
1,1-Dichloropropene	ND	1.00	"							
cis-1,3-Dichloropropene	ND	1.00	"							
trans-1,3-Dichloropropene	ND	1.00	"							
Ethylbenzene	ND	1.00	"							
Hexachlorobutadiene	ND	1.00	"							
2-Hexanone	ND	10.0	"							
Isopropylbenzene	ND	1.00	"							
p-Isopropyltoluene	ND	1.00	"							
Methylene chloride	ND	5.00	"							
4-Methyl-2-pentanone	ND	10.0	"							
Naphthalene	ND	1.00	"							
n-Propylbenzene	ND	1.00	"							
Styrene	ND	1.00	"							
1,1,1,2-Tetrachloroethane	ND	1.00	"							
1,1,2,2-Tetrachloroethane	ND	1.00	"							
Tetrachloroethene	ND	1.00	"							
Toluene	ND	1.00	"							
1,2,3-Trichlorobenzene	ND	1.00	"							
1,2,4-Trichlorobenzene	ND	1.00	"							
1,1,1-Trichloroethane	ND	1.00	"							
1,1,2-Trichloroethane	ND	1.00	"							
Trichloroethene	ND	1.00	"							
Trichlorofluoromethane	ND	1.00	"							
1,2,3-Trichloropropane	ND	1.00	"							
1,2,4-Trimethylbenzene	ND	1.00	"							
1,3,5-Trimethylbenzene	ND	1.00	"							
Vinyl chloride	ND	1.00	"							
m,p-Xylene	ND	2.00	"							
o-Xylene	ND	1.00	"							
Surrogate: 1,2-DCA-d4	*76.7*		"	*80.0*		*95.9*	*70-130*			
Surrogate: Toluene-d8	*72.0*		"	*80.0*		*90.0*	*70-130*			
Surrogate: 4-BFB	*71.1*		"	*80.0*		*88.9*	*70-130*			

North Creek Analytical - Bothell

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Seattle WA/USA, 98103	Project Manager: Richard Martin	02/20/03 13:19

Volatile Organic Compounds by EPA Method 8260B - Quality Control
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3B20005: Prepared 02/19/03 Using EPA 5030B										
LCS (3B20005-BS1)										
Benzene	19.5	1.00	ug/l	20.0		97.5	80-120			
Chlorobenzene	19.4	1.00	"	20.0		97.0	77-120			
1,1-Dichloroethene	19.9	1.00	"	20.0		99.5	80-120			
Toluene	19.2	1.00	"	20.0		96.0	80-120			
Trichloroethene	19.4	1.00	"	20.0		97.0	80-120			
Surrogate: 1,2-DCA-d4	*40.1*		"	*40.0*		*100*	*70-130*			
Surrogate: Toluene-d8	*39.3*		"	*40.0*		*98.2*	*70-130*			
Surrogate: 4-BFB	*38.9*		"	*40.0*		*97.2*	*70-130*			
LCS Dup (3B20005-BSD1)										
Benzene	19.1	1.00	ug/l	20.0		95.5	80-120	2.07	20	
Chlorobenzene	18.6	1.00	"	20.0		93.0	77-120	4.21	20	
1,1-Dichloroethene	18.8	1.00	"	20.0		94.0	80-120	5.68	20	
Toluene	18.3	1.00	"	20.0		91.5	80-120	4.80	20	
Trichloroethene	18.5	1.00	"	20.0		92.5	80-120	4.75	20	
Surrogate: 1,2-DCA-d4	*40.0*		"	*40.0*		*100*	*70-130*			
Surrogate: Toluene-d8	*39.3*		"	*40.0*		*98.2*	*70-130*			
Surrogate: 4-BFB	*39.9*		"	*40.0*		*99.8*	*70-130*			

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Emanuel Hignutt, PM

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Shannon and Wilson - Seattle	Project: Snohomish County Campus	
400 N 34th St, Suite 100	Project Number: 21-1-09644-012	**Reported:**
Seattle WA/USA, 98103	Project Manager: Richard Martin	02/20/03 13:19

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3B19037: Prepared 02/19/03 Using General Preparation										
Blank (3B19037-BLK1)										
Chlorine Residual	ND	0.0200	mg/l							
LCS (3B19037-BS1)										
Chlorine Residual	0.0474	0.0200	mg/l	0.0498		95.2	80-120			
LCS Dup (3B19037-BSD1)										
Chlorine Residual	0.0483	0.0200	mg/l	0.0498		97.0	80-120	1.88	20	
Duplicate (3B19037-DUP1)					**Source: B3B0352-01**					
Chlorine Residual	ND	0.400	mg/l		0.106			8.76	20	
Matrix Spike (3B19037-MS1)					**Source: B3B0352-01**					
Chlorine Residual	ND	0.400	mg/l	0.399	0.106	48.1	80-120			Q-01
Batch 3B19045: Prepared 02/19/03 Using General Preparation										
Blank (3B19045-BLK1)										
Fluoride	ND	0.100	mg/l							
LCS (3B19045-BS1)										
Fluoride	1.05	0.100	mg/l	1.00		105	90-110			
LCS Dup (3B19045-BSD1)										
Fluoride	1.04	0.100	mg/l	1.00		104	90-110	0.957	20	
Duplicate (3B19045-DUP1)					**Source: B3B0345-01**					
Fluoride	ND	0.100	mg/l		0.0894			5.40	25	

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Shannon and Wilson - Seattle	Project: Snohomish County Campus	
400 N 34th St, Suite 100	Project Number: 21-1-09644-012	**Reported:**
Seattle WA/USA, 98103	Project Manager: Richard Martin	02/20/03 13:19

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3B19045: Prepared 02/19/03 Using General Preparation										
Matrix Spike (3B19045-MS1)					**Source: B3B0345-01**					
Fluoride	1.21	0.100	mg/l	1.00	0.0894	112	75-125			

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Shannon and Wilson - Seattle	Project: Snohomish County Campus	
400 N 34th St, Suite 100	Project Number: 21-1-09644-012	**Reported:**
Seattle WA/USA, 98103	Project Manager: Richard Martin	02/20/03 13:19

Notes and Definitions

A-01	This sample was diluted due to matrix interference.
Q-01	The spike recovery for this QC sample is outside of established control limits. Review of associated batch QC indicates the recovery for this analyte does not represent an out-of-control condition for the batch.
Q-31	Possible bias; Analysis not performed in field.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

North Creek Analytical, Inc.
Environmental Laboratory Network
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20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 (541) 383-9310 FAX 382-7588

CHAIN OF CUSTODY REPORT

Work Order #: B3B0352

CLIENT: Shannon & Wilson, Inc.	INVOICE TO:
REPORT TO: Richard Martin	
ADDRESS: c/o Shannon & Wilson, Inc. 400 N 34th St, Ste. 100 Seattle, WA 98103	
PHONE: 206-695-6787 FAX: 206-695-6777	P.O. NUMBER: 21-1-09644-012
PROJECT NAME: Snohomish County Campus	
PROJECT NUMBER: 21-1-09644-012	
SAMPLED BY: Paul Van Horne	

TURNAROUND REQUEST in Business Days*

Organic & Inorganic Analyses: 10 | 7 | 5 | 4 | 3 | 2 | X | <1 (STD.)

Petroleum Hydrocarbon Analyses: 5 | 4 | 3 | 2 | 1 | <1 (STD.)

OTHER — Please Specify

*Turnaround Requests less than standard may incur Rush Charges.

	CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	THs (Hand WGAW/HCl)	Residual Chlorine Fluoride (Val Poly, unpres)	MATRIX (W, S, O)	# OF CONT.	COMMENTS	NCA WO ID
1.	Discharge 3	2-19-03/1503	4	1	W	5	24-hr TAT	01
2.								
3.								
4.								
5.								
6.								
7.								
8.								
9.								
10.								
11.								
12.								
13.								
14.								
15.								

RELINQUISHED BY: Paul Van Horne	DATE: 2/19/03	RECEIVED BY:	DATE: 2/19/03
PRINT NAME: Paul Van Horne FIRM: STW	TIME: 1546	PRINT NAME: NCA	TIME: 1546
RELINQUISHED BY:	DATE:	RECEIVED BY:	DATE:
PRINT NAME: FIRM:	TIME:	PRINT NAME: FIRM:	TIME:

ADDITIONAL REMARKS: c/o

TEMP: 9.2

COC REV 3/99

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 3/19/03
CCIL JOB #: 303023
CCIL SAMPLE #: 1
DATE RECEIVED: 3/5/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-012 SNOHOMISH COUNTY
CLIENT SAMPLE ID: DISCHARGE 4 3/3 TO 3/4/03 1837

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TOTAL FATS, OILS, GREASES	EPA-1664	2	MG/L	3/7/03	HJK
NON-POLAR FATS, OILS, GREASES	EPA-1664	ND(<1)	MG/L	3/7/03	HJK
TOTAL SUSPENDED SOLIDS	EPA-160.2	27	MG/L	3/7/03	HJK
CYANIDE	EPA-335.2	ND(<0.05)	MG/L	3/7/03	HJK
FLASH POINT	EPA-1010	>200	DEG F	3/7/03	HJK
ARSENIC	EPA-200.7	ND(<0.03)	MG/L	3/6/03	RAB
CADMIUM	EPA-200.7	ND(<0.005)	MG/L	3/6/03	RAB
CHROMIUM	EPA-200.7	0.02	MG/L	3/6/03	RAB
COPPER	EPA-200.7	ND(<0.006)	MG/L	3/6/03	RAB
LEAD	EPA-200.7	ND(<0.06)	MG/L	3/6/03	RAB
MERCURY	EPA-245.1	ND(<.0002)	MG/L	3/11/03	RAB
NICKEL	EPA-200.7	ND(<0.02)	MG/L	3/6/03	RAB
SILVER	EPA-200.7	ND(<0.007)	MG/L	3/6/03	RAB
ZINC	EPA-200.7	0.027	MG/L	3/6/03	RAB

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY: _____

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CHAIN-OF-CUSTODY RECORD

SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

400 N. 34th Street, Suite 100
Seattle, WA 98103
(206) 632-8020
(206) 695-6777 Fax

11500 Olive Blvd., Suite 276
St. Louis, MO 63141
(314) 872-8170
(314) 872-8178 Fax

2055 Hill Road
Fairbanks, AK 99709
(907) 479-0600
(907) 479-5691 Fax

5430 Fairbanks Street, Suite 3
Anchorage, AK 99518
(907) 561-2120
(907) 561-4483 Fax

303 Wellsian Way
Richland, WA 99352
(509) 946-6309
(509) 946-6580 Fax

Laboratory CCT
Attn: Rick Bagan

Analysis Parameters/Sample Container Description
(include preservative if used)

Sample Identity	Lab No.	Time	Date Sampled	Comp.	Grab	TSS (1/2 L poly)	Closed cup Flashpoint (1/2 L poly)	Total Metals** (1/2 L poly w/HNO3)	Cyanide (Total) (1/2 L poly w/NaOH)	Total and Nonpolar FOG (2 oz GT w/HCl)		Total Number of Containers	Remarks/Matrix
Discharge 4		*	3/3 to 3/4/03	X		1		1	1	4		7	Iced/Water
Discharge 4		1837	3/4/03		X		1					1	↓

Project Information

Project Number:	21-109644-012
Project Name:	Snohomish County
Contact:	Agnes Tirao
Ongoing Project?	Yes ☑ No ☐
Sampler:	Paul Van Horne

Sample Receipt

Total Number of Containers	
COC Seals/Intact? Y/N/NA	
Received Good Cond./Cold	
Delivery Method: (attach shipping bill, if any)	CCI Pickup

Instructions

Requested Turnaround Time: Standard

Special Instructions: *Composite grabs collected on 3/3/03 at 1838 and 2010 and on 3/4/03 at 0905 and 1837.

Distribution: White - w/shipment - returned to Shannon & Wilson w/ laboratory report
Yellow - w/shipment - for consignee files
Pink - Shannon & Wilson - Job File

Relinquished By: 1.	Relinquished By: 2.	Relinquished By: 3.
Signature: Paul Van Horne Time: 11:00	Signature: Time:	Signature: Time:
Printed Name: Paul Van Horne Date: 3/5/03	Printed Name: Date:	Printed Name: Date:
Company: SHW	Company:	Company:

Received By: 1.	Received By: 2.	Received By: 3.
Signature: Rick Bagan Time: 11:00	Signature: Time:	Signature: Time:
Printed Name: Rick Bagan Date: 3/5/03	Printed Name: Date:	Printed Name: Date:
Company: CCIAL	Company:	Company:

F-19-91/UR

** Cd, Cr, Cu, Pb, Ni, Zn, Hg, As, Ag
Detection limits are for City of Everett industrial wastewater.

No.

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 4/7/03
CCIL JOB #: 304002
CCIL SAMPLE #: 1
DATE RECEIVED: 4/1/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-012 SNOHOMISH COUNTY CAMPUS
CLIENT SAMPLE ID: DISCHARGE 5 3/31 TO 4/1/03

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TOTAL FATS, OILS, GREASES	EPA-1664	ND(<1)	MG/L	4/7/03	HJK
NON-POLAR FATS, OILS, GREASES	EPA-1664	ND(<1)	MG/L	4/7/03	HJK
TOTAL SUSPENDED SOLIDS	EPA-160.2	110	MG/L	4/1/03	HJK

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY: _____

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

Chain of Custody Record

Shannon & Wilson, Inc.

400 N. 34th Street, Suite 100
Seattle, WA 98103
(206) 632-8020

11500 Olive Blvd., Suite 276
St. Louis, MO 63141
(314) 872-8170

2055 Hill Road
Fairbanks, AK 99707
(907) 479-0600

5430 Fairbanks Street, Suite 3
Anchorage, AK 99518
(907) 561-2120

Page 1 of 1
Laboratory CCI
Attn:

Analysis Parameters/Sample Container Description
(include preservative if used)

Sample Identity	Lab No.	Time	Date Sampled	Comp.	Grab	80z GT w/HCl Total & Nonpolar FOG	1/2 L poly TSS					Total Number of Containers	Remarks/Matrix
DISCHARGE 5		1120, 1338, 1750, 1119	3-31 to 4-1-03	X		4	1					5	Iced/Water

Project Information		Sample Receipt	
Project Number:	21-1-09644-01	Total Number of Containers	5
Project Name:	Snoh. Co. Campus	COC Seals/Intact? Y/N/NA	NA
Contact:	Agnes Tirao	Received Good Cond./Cold	
Ongoing Project?	Yes ☐ No ☒	Delivery Method:	Co Personnel
Sampler:	Paul Van Horne	(attach shipping bill, if any)	

Instructions

Requested Turn Around Time: Standard

Special Instructions:

Distribution: White - w/shipment - returned to Shannon & Wilson w/ Laboratory report
Yellow - w/shipment - for consignee files
Pink - Shannon & Wilson - Job File

Relinquished By: 1.	Relinquished By: 2.	Relinquished By: 3.
Signature: Paul Van Horne	Signature:	Signature:
Time: 1141	Time:	Time:
Printed Name: Paul Van Horne	Printed Name:	Printed Name:
Date: 4/1/03	Date:	Date:
Company: S&W	Company:	Company:

Received By: 1.	Received By: 2.	Received By: 3.
Signature: Rick Bogan	Signature:	Signature:
Time: 1141	Time:	Time:
Printed Name: Rick Bogan	Printed Name:	Printed Name:
Date: 4/1/03	Date:	Date:
Company: CCIAL	Company:	Company:

F-19-91/UR

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 5/9/03
CCIL JOB #: 305014
CCIL SAMPLE #: 1
DATE RECEIVED: 5/6/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

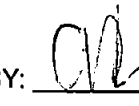
CLIENT PROJECT ID: 21-1-09644-012/SNOH.CO.CAMPUS
CLIENT SAMPLE ID: DISCHARGE 6 5/4 TO 5/5/03

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TOTAL FATS, OILS, GREASES	EPA-1664	1.	MG/L	5/6/03	HJK
NON-POLAR FATS, OILS, GREASES	EPA-1664	ND(<1)	MG/L	5/6/03	HJK
TOTAL SUSPENDED SOLIDS	EPA-160.2	43	MG/L	5/7/03	HJK

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY: 

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C lytic rator
8620 Holly Drive
Everett, WA 98208
Phone (425) 356-2600
(206) 292-9059 Seattle
(425) 356-2626 Fax
http://www.ccilabs.com

ir. C..od,
Laboratory Analysis Request

b# porat Only

Date 5-6-03 Page 1 Of 1

PROJECT ID:	21-1-09644-012 / Snoh. Co. Campus
REPORT TO COMPANY:	Shannon & Wilson
PROJECT MANAGER:	Agnes Tirao
ADDRESS:	400 N 34th St, Ste 100
	Seattle WA 98133
PHONE: 206-695-6881	FAX: 206-695-6777
P.O. NUMBER:	E-MAIL: act@shanwil.com
INVOICE TO COMPANY:	
ATTENTION:	
ADDRESS:	

ANALYSIS REQUESTED / OTHER (Specify)

SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-HCID	NWTPH-DX	NWTPH-GX	BTEX by EPA-8021	MTBE by EPA-8021 ☐ EPA-8260 ☐	Halogenated Volatiles by EPA 8260	Volatile Organic Compounds by EPA 8260	Ethylene dibromide (EDB) by EPA-8260 ☐ EPA-504.1 ☐	1,2 Dichloroethene (EDC) by EPA-8260	Semivolatile Organic Compounds by EPA 8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA-8270 SIM ☐	PCB ☐ Pesticides ☐ by EPA 8081/8082	Metals-MTCA-5 ☐ RCRA-8 ☐ Pri Pol ☐ TAL ☐	Metals Other (Specify)	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐	TSS (1/2 L poly)	Total + Non-polar FOG (80z GJ w/HCl)						NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
1. DISCHARGE 6	5/4-5/5/03	*	W	1																1	4					5	
2.																											
3.																											
4.																											
5.																											
6.																											
7.																											
8.																											
9.																											
10.																											

REPORT COPY

SPECIAL INSTRUCTIONS * 5-4-03: 1749, 2000 / 5-5-03: 1400, 1748

CCI Analytical Laboratories, Inc accepts and processes this request on the terms and conditions set forth on the reverse side. By its signature hereon, Customer accepts these terms and conditions.

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: Teal Van Loan, S+W, 5-6-03, 0844

Received By: CCIAL 5/6/03 8:44

2. Relinquished By:

Received By:

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis: (10 Standard) 5 3 2 1 SAME DAY

Fuels & Hydrocarbon Analysis: 5 Standard 3 1 SAME DAY

OTHER: Specify:

* Turnaround request less than standard may incur Rush Charges

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 6/16/03
CCIL JOB #: 306007
CCIL SAMPLE #: 1
DATE RECEIVED: 6/3/03
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-09644-012
CLIENT SAMPLE ID: DISCHARGE 7 6/2 TO 6/3/03

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TOTAL FATS, OILS, GREASES	EPA-1664	2	MG/L	6/9/03	HJK
NON-POLAR FATS, OILS, GREASES	EPA-1664	1	MG/L	6/9/03	HJK
TOTAL SUSPENDED SOLIDS	EPA-160.2	98	MG/L	6/3/03	HJK
CYANIDE	EPA-335.2	ND(<0.05)	MG/L	6/4/03	HJK
FLASH POINT	EPA-1010	>200	DEG F	6/3/03	HJK
ARSENIC	EPA-200.7	ND(<0.03)	MG/L	6/3/03	RAB
CADMIUM	EPA-200.7	ND(<0.005)	MG/L	6/3/03	RAB
CHROMIUM	EPA-200.7	ND(<0.01)	MG/L	6/3/03	RAB
COPPER	EPA-200.7	ND(<0.006)	MG/L	6/3/03	RAB
LEAD	EPA-200.7	ND(<0.06)	MG/L	6/3/03	RAB
MERCURY	EPA-245.1	ND(<.0002)	MG/L	6/11/03	RAB
NICKEL	EPA-200.7	ND(<0.02)	MG/L	6/3/03	RAB
SILVER	EPA-200.7	ND(<0.007)	MG/L	6/3/03	RAB
ZINC	EPA-200.7	ND(<0.007)	MG/L	6/3/03	RAB

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY: 

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

C lytic rator
8620 Holly Drive
Everett, WA 98208
Phone (425) 356-2600
(206) 292-9059 Seattle
(425) 356-2626 Fax
http://www.ccilabs.com

Chain Of Custody/ Laboratory Analysis Request

lab# boral Only

Date 6/3/2003 Page 1 Of 1

PROJECT ID:	21-1-09644-012
REPORT TO COMPANY:	Shannon & Wilson, Inc.
PROJECT MANAGER:	Agnes Tirao
ADDRESS:	400 N 34th st, ste 100
	Seattle WA 98103
PHONE: 206-632-8020	FAX: 206-695-6777
P.O. NUMBER: 21-1-09644-012	E-MAIL: act@shanwil.com
INVOICE TO COMPANY:	Shannon & Wilson, Inc.
ATTENTION:	Agnes Tirao
ADDRESS:	400 N 34th st, ste 100
	Seattle, WA 98103

ANALYSIS REQUESTED

SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-HCID	NWTPH-DX	NWTPH-GX	BTEX by EPA-8021	MTBE by EPA-8021 ☐ EPA-8260 ☐	Halogenated Volatiles by EPA 8260	Volatile Organic Compounds by EPA 8260	Ethylene dibromide (EDB) by EPA-8260 ☐ EPA-504.1 ☐	1,2 Dichloroethene (EDC) by EPA-8260	Semivolatile Organic Compounds by EPA 8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA-8270 SIM ☐	PCB ☐ Pesticides ☐ by EPA 8081/8082	Metals-MTCA-5 ☐ RCRA-8 ☐ Pri Pol ☐ TAL ☐	Metals Other (Specify) Cd, Cr, Cu, Pb, Ni, Zn, Hg, As, Ag (½L poly or Hydr.)	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐	OTHER (Specify) Cyanide (½L poly w/ NaOH)	Total & Non-polar FOG (8070 Jar/HCl)	Closed Cup Flashpoint (½L poly)	TSS (½L poly)				NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
1. Discharge 7	6/2-6/3/03	*	W															1		1	4	1	1				8	
2.																												
3.																												
4.																												
5.																												
6.																												
7.																												
8.																												
9.																												
10.																												

SPECIAL INSTRUCTIONS * Grab 1 @ 1007 6/2/03 (includes flashpoint). Grab 2 @ 1207 6/2/03. Grab 3 @ 1428 6/2/03. Grab 4 @ 1006 6/3/03.

CCI Analytical Laboratories, Inc accepts and processes this request on the terms and conditions set forth on the reverse side. By its signature hereon, Customer accepts these terms and conditions.

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: [signature] S&W 6/3/03 1034
Received By: [signature] CCIAL 6/3/03 1034
2. Relinquished By:
Received By:

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis: (10 Standard) 5 3 2 1 SAME DAY

Fuels & Hydrocarbon Analysis: (5 Standard) 3 1 SAME DAY

OTHER:
Specify: Detection limits applicable to City of Everett effluent limits

* Turnaround request less than standard may incur Rush Charges

REPORT COPY

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 3/29/04
CCIL JOB #: 403088
CCIL SAMPLE #: 1
DATE RECEIVED: 3/19/04
WDOE ACCREDITATION #: C142

CLIENT CONTACT: PAUL VAN HORNE

CLIENT PROJECT ID: SNOHOMISH COUNTY 21-1-12132-005
CLIENT SAMPLE ID: SUMP-3-2004 3/18-3/19/04

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TOTAL FATS, OILS, GREASES	EPA-1664	ND(<1)	MG/L	3/19/04	HJK
NON-POLAR FATS, OILS, GREASES	EPA-1664	ND(<1)	MG/L	3/19/04	HJK
TOTAL SUSPENDED SOLIDS	EPA-160.2	ND(<5)	MG/L	3/24/04	HJK
CYANIDE	EPA-335.2	ND(<0.05)	MG/L	3/22/04	HJK
FLASH POINT	EPA-1010	>200	DEG F	3/24/04	HJK
ARSENIC	EPA-200.7	ND(<0.04)	MG/L	3/22/04	RAB
CADMIUM	EPA-200.7	ND(<0.005)	MG/L	3/22/04	RAB
CHROMIUM	EPA-200.7	ND(<0.007)	MG/L	3/22/04	RAB
COPPER	EPA-200.7	ND(<0.005)	MG/L	3/22/04	RAB
LEAD	EPA-200.7	ND(<0.04)	MG/L	3/22/04	RAB
MERCURY	EPA-245.1	ND(<0.0002)	MG/L	3/25/04	RAB
NICKEL	EPA-200.7	ND(<0.02)	MG/L	3/22/04	RAB
SILVER	EPA-200.7	ND(<0.03)	MG/L	3/22/04	RAB
ZINC	EPA-200.7	0.11	MG/L	3/22/04	RAB

* "ND" INDICATES ANALYTE NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY: CDL

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CHAIN-OF-CUSTODY RECORD

SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

400 N. 34th Street, Suite 100
Seattle, WA 98103
(206) 632-8020

2043 Westport Center Drive
St. Louis, MO 63146-3564
(314) 392-0050

303 Wellsian Way
Richland, WA 99352
(509) 946-6309

2055 Hill Road
Fairbanks, AK 99709
(907) 479-0600

5430 Fairbanks Street, Suite 3
Anchorage, AK 99518
(907) 561-2120

2255 S.W. Canyon Road
Portland, OR 97201-2498
(503) 223-6147

1200 17th Street, Suite 1024
Denver, Co 80202
(303) 825-3800

Laboratory CCI
Attn: Rick or Chuck

Analysis Parameters/Sample Container Description
(include preservative if used)

Sample Identity	Lab No.	Time	Date Sampled	Comp.	Grab	Total Metals * (1/2 L poly (HNO3))	Cyanide (1/2 L poly (NaOH))	TSS (1/2 L poly)	Classic + Ammonia (1/2 L poly)	Total & Nonpolar FOG (80z GS, HCl)		Total Number of Containers	Remarks/Matrix
SUMP-3-2004			3/18-3/19/04	X		1	1	1				3	
SUMP-3-2004		0949	3/19/04		X				1	1		2	
SUMP-3-2004		1149	3/19/04		X					1		1	4 grabs for FOG composite.
SUMP-3-2004		1405	3/18/04		X					1		1	
SUMP-3-2004		1150	3/18/04		X					1		1	

Project Information

Project Number: 21-12132-005
Project Name: Snohomish County
Contact: Paul Van Horne
Ongoing Project? Yes [X] No [ ]
Sampler: Paul Van Horne

Sample Receipt

Total Number of Containers:
COC Seals/Intact? Y/N/NA:
Received Good Cond./Cold:
Delivery Method: Co. Personnel
(attach shipping bill, if any)

Instructions

Requested Turnaround Time: Standard
Special Instructions: X, Cd, Cr, Cu, Pb, Ni, Zn, Hg, As, Ag Meet Everett Sanitary Sewer detection limits

Distribution: White - w/shipment - returned to Shannon & Wilson w/ laboratory report
Yellow - w/shipment - for consignee files
Pink - Shannon & Wilson Job File

Relinquished By: 1.	Relinquished By: 2.	Relinquished By: 3.
Signature: Paul Van Horne Time:	Signature: Time:	Signature: Time:
Printed Name: Paul L. Van Horne Date: 3/19/04	Printed Name: Date:	Printed Name: Date:
Company: S&W	Company:	Company:

Received By: 1.	Received By: 2.	Received By: 3.
Signature: Time: 1250	Signature: Time:	Signature: Time:
Printed Name: Date: 3/19/04	Printed Name: Date:	Printed Name: Date:
Company: CCI AC	Company:	Company:

F-19-91/UR

No. 026139

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 7/1/04
CCIL JOB #: 406081
CCIL SAMPLE #: 1
DATE RECEIVED: 6/18/04
WDOE ACCREDITATION #: C142

CLIENT CONTACT: AGNES TIRAO

CLIENT PROJECT ID: 21-1-12132-005 SNOHOMISH COUNTY
CLIENT SAMPLE ID: SUMP-6-2004 6/17/04-6/18/04 0730-1135

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TOTAL FATS, OILS, GREASES	EPA-1664	ND(<5)	MG/L	6/22/04	HJK
NON-POLAR FATS, OILS, GREASES	EPA-1664	ND(<5)	MG/L	6/22/04	HJK
TOTAL SUSPENDED SOLIDS	EPA-160.2	ND(<5)	MG/L	6/21/04	HJK
CYANIDE	EPA-335.2	ND(<0.05)	MG/L	6/30/04	HJK
FLASH POINT	EPA-1010	>200	DEG F	6/21/04	HJK
ARSENIC	EPA-200.7	ND(<0.04)	MG/L	6/23/04	RAB
CADMIUM	EPA-200.7	ND(<0.005)	MG/L	6/23/04	RAB
CHROMIUM	EPA-200.7	ND(<0.007)	MG/L	6/23/04	RAB
COPPER	EPA-200.7	ND(<0.005)	MG/L	6/23/04	RAB
LEAD	EPA-200.7	ND(<0.04)	MG/L	6/23/04	RAB
MERCURY	EPA-245.1	ND(<0.0002	MG/L	6/21/04	RAB
NICKEL	EPA-200.7	ND(<0.02)	MG/L	6/23/04	RAB
SILVER	EPA-200.7	ND(<0.03)	MG/L	6/23/04	RAB
ZINC	EPA-200.7	0.02	MG/L	6/23/04	RAB

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY:

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CHAIN-OF-CUSTODY RECORD

SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

400 N. 34th Street, Suite 100
Seattle, WA 98103
(206) 632-8020

2043 Westport Center Drive
St. Louis, MO 63146-3564
(314) 392-0050

303 Wellsian Way
Richland, WA 99352
(509) 946-6309

2055 Hill Road
Fairbanks, AK 99709
(907) 479-0600

5430 Fairbanks Street, Suite 3
Anchorage, AK 99518
(907) 561-2120

2255 S.W. Canyon Road
Portland, OR 97201-2498
(503) 223-6147

1200 17th Street, Suite 1024
Denver, Co 80202
(303) 825-3800

Laboratory: CCI Page 1 of 1
Attn: Rick Bagan

Analysis Parameters/Sample Container Description (include preservative if used)

Sample Identity	Lab No.	Time	Date Sampled	Comp.	Grab	Total (4 oz G.J. w/ HCl)	Total (8 oz G.J. w/ HCl) closed cap flask/point	Cyanide (½ L. Poly w/ NaOH)	TSS (½ L. Poly)	Total Metals* (½ L. Poly w/ HNO3)	Total Number of Containers	Remarks/Matrix
SUMP-6-2004		0935	6-17-04		✓	1					1	Iced / Water
		1135	6-17-04		✓	1					1	
		0730	6-18-04		✓	1	1				2	
		0934	6-18-04		✓	1					1	
			6-17 to 6-18-04	✓				1	1	1	3	

Project Information	Sample Receipt
Project Number: 21-1-12132-00	Total Number of Containers:
Project Name: Snohomish County	COC Seals/Intact? Y/N/NA:
Contact: Paul VanHorne	Received Good Cond./Cold:
Ongoing Project? Yes ☒ No ☐	Delivery Method: Co. personnel
Sampler: Paul VanHorne	(attach shipping bill, if any)

Instructions

Requested Turnaround Time: Standard

Special Instructions: Metals: Cd, Cr, Cu, Pb, Ni, Zn, Hg, As, Ag. Meet Everett sanitary sewer detection limits.

Relinquished By: 1.	Relinquished By: 2.	Relinquished By: 3.
Signature: Paul VanHorne Time: 0951	Signature: Time:	Signature: Time:
Printed Name: Paul VanHorne Date: 6/18/04	Printed Name: Date:	Printed Name: Date:
Company: S&W	Company:	Company:

Received By: 1.	Received By: 2.	Received By: 3.
Signature: Time: 0951	Signature: Time:	Signature: Time:
Printed Name: Rick Bagan Date: 6/18/04	Printed Name: Date:	Printed Name: Date:
Company: CCIAL	Company:	Company:

Distribution: White - w/shipment - returned to Shannon & Wilson w/ laboratory report
Yellow - w/shipment - for consignee files
Pink - Shannon & Wilson - Job File

F-19-91/UR

A Send to Agnes per Paul 6/24-4

No. 026235

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 9/21/04
CCIL JOB #: 409036
CCIL SAMPLE #: 1
DATE RECEIVED: 9/8/04
WDOE ACCREDITATION #: C142

CLIENT CONTACT: PAUL VAN HORNE

CLIENT PROJECT ID: 21-1-12132-005
CLIENT SAMPLE ID: SUMP-9-2004 9/7/04-9/8/04

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TOTAL FATS, OILS, GREASES	EPA-1664	ND(<5)	MG/L	9/13/04	HJK
NON-POLAR FATS, OILS, GREASES	EPA-1664	ND(<5)	MG/L	9/13/04	HJK
TOTAL SUSPENDED SOLIDS	EPA-160.2	ND(<5)	MG/L	9/14/04	HJK
CYANIDE	EPA-335.2	ND(<0.05)	MG/L	9/21/04	HJK
FLASH POINT	EPA-1010	>200	DEG F	9/14/04	HJK
ARSENIC	EPA-200.7	ND(<0.04)	MG/L	9/10/04	RAB
CADMIUM	EPA-200.7	ND(<0.005)	MG/L	9/10/04	RAB
CHROMIUM	EPA-200.7	ND(<0.007)	MG/L	9/10/04	RAB
COPPER	EPA-200.7	ND(<0.005)	MG/L	9/10/04	RAB
LEAD	EPA-200.7	ND(<0.04)	MG/L	9/10/04	RAB
MERCURY	EPA-245.1	ND(<0.0002	MG/L	9/10/04	RAB
NICKEL	EPA-200.7	ND(<0.02)	MG/L	9/10/04	RAB
SILVER	EPA-200.7	ND(<0.03)	MG/L	9/10/04	RAB
ZINC	EPA-200.7	0.03	MG/L	9/10/04	RAB

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY:

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CC tical itori
8620 Holly Drive
Everett, WA 98208
Phone (425) 356-2600
(206) 292-9059 Seattle
(425) 356-2626 Fax
http://www.ccilabs.com

in Cl od
Laboratory Analysis Request

prato Only)
409036

Date 9/8/2004 Page 1 Of 1

PROJECT ID:	21-1-12132-005
REPORT TO COMPANY:	Shannon & Wilson, Inc.
PROJECT MANAGER:	Paul Van Horne
ADDRESS:	400 N 34TH ST
	SUITE 100, SEATTLE, WA 98103
PHONE:	206-695-6840 FAX: 206-695-6777
P.O. NUMBER:	21-1-12132-005 E-MAIL: PVH@SHANWIL.COM
INVOICE TO COMPANY:	Same
ATTENTION:	
ADDRESS:	

ANALYSIS REQUESTED / OTHER (Specify)

SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-HCID	NWTPH-DX	NWTPH-GX	BTEX by EPA-8021	MTBE by EPA-8021 ☐ EPA-8260 ☐	Halogenated Volatiles by EPA 8260	Volatile Organic Compounds by EPA 8260	Ethylene dibromide (EDB) by EPA-8260 ☐ EPA-504.1 ☐	1,2 Dichloroethene (EDC) by EPA-8260	Semivolatile Organic Compounds by EPA 8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA-8270 SIM ☐	PCB ☐ Pesticides ☐ by EPA 8081/8082	Metals-MTCA-5 ☐ RCRA-8 ☐ Pri Pol ☐ TAL ☐	Metals Other (Specify) As, Ag, Cd, Cr, Cu, Pb Ni, Zn, Hg (Soil: composite polyethylene bag)	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐	Total & Nonpolar FOG (8oz GS w/HCl) (4 grabs)	Cyanide (500mL poly w/NaOH)	TSS (500mL poly)	Closed Cup Flashpoint (500mL poly)				NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
1. SUMP-9-2004	9/7/04	1529	W																	1			1				2	
2. SUMP-9-2004	9/7/04	1729	W																	1							1	
3. SUMP-9-2004	9/8/04	1324	W																	1							1	
4. SUMP-9-2004	9/8/04	1528	W																	1							1	
5. SUMP-9-2004	9/7-9/8/04		W															1			1	1					3	
6.																												
7.																												
8.																												
9.																												
10.																												

1 Sample

REPORT COPY

SPECIAL INSTRUCTIONS

* CCI Analytical Laboratories, Inc accepts and processes this request on the terms and conditions set forth on the reverse side. By its signature hereon, Customer accepts these terms and conditions.*

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: Paul Van Horne, S+W, 9/8/04, 1549
Received By: CCIAL 9/8/04 1549
2. Relinquished By:
Received By:

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis: (10 Standard) 5 3 2 1 SAME DAY

Fuels & Hydrocarbon Analysis: (5 Standard) 3 1 SAME DAY

OTHER: Specify:

* Turnaround request less than standard may incur Rush Charges

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: SHANNON & WILSON, INC.
400 N. 34TH STREET, SUITE 100
SEATTLE, WA 98103

DATE: 1/3/05
CCIL JOB #: 412110
CCIL SAMPLE #: 1
DATE RECEIVED: 12/16/04
WDOE ACCREDITATION #: C142

CLIENT CONTACT: PAUL VAN HORNE

CLIENT PROJECT ID: 21-1-12132-005
CLIENT SAMPLE ID: SUMP-12-2004 12/15/04-12/16/04

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TOTAL FATS, OILS, GREASES	EPA-1664	ND(<5)	MG/L	12/21/04	HJK
NON-POLAR FATS, OILS, GREASES	EPA-1664	ND(<5)	MG/L	12/21/04	HJK
TOTAL SUSPENDED SOLIDS	EPA-160.2	ND(<5)	MG/L	12/21/04	HJK
CYANIDE	EPA-335.2	ND(<0.05)	MG/L	12/29/04	HJK
FLASH POINT	EPA-1010	>200	DEG F	12/21/04	HJK
ARSENIC	EPA-200.7	ND(<0.04)	MG/L	12/27/04	RAB
CADMIUM	EPA-200.7	ND(<0.005)	MG/L	12/27/04	RAB
CHROMIUM	EPA-200.7	0.009	MG/L	12/27/04	RAB
COPPER	EPA-200.7	ND(<0.005)	MG/L	12/27/04	RAB
LEAD	EPA-200.7	ND(<0.04)	MG/L	12/27/04	RAB
MERCURY	EPA-245.1	ND(<0.0002	MG/L	12/29/04	RAB
NICKEL	EPA-200.7	ND(<0.02)	MG/L	12/27/04	RAB
SILVER	EPA-200.7	ND(<0.03)	MG/L	12/27/04	RAB
ZINC	EPA-200.7	0.05	MG/L	12/27/04	RAB

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY:

8620 Holly Drive • Everett, WA 98208 • 425 356-2600 • FAX 425 356-2626 • Seattle 206 292-9059

CHAIN-OF-CUSTODY RECORD

SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

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Anchorage, AK 99518
(907) 561-2120

2255 S.W. Canyon Road
Portland, OR 97201-2498
(503) 223-6147

1200 17th Street, Suite 1024
Denver, Co 80202
(303) 825-3800

Laboratory CCI
Attn: Rick Bayan

Analysis Parameters/Sample Container Description
(include preservative if used)

Sample Identity	Lab No.	Time	Date Sampled	Comp.	Grab	500mL Poly closed cup #1 as preservative	40 oz 6.5 w/HCl Total + Nonpolar EOG	TSS (500mL poly)	Total CN (500mL poly w/ NaOH)	Total Metals (5* 500mL poly w/ HNO3)		Total Number of Containers	Remarks/Matrix
SUMP-12-2004		1615	12-15-04		X	1	1 (Grab 1)					2	Iced/water
SUMP-12-2004		1210	12-16-04		X		1 (Grab 2)					1	↓
SUMP-12-2004		1410	↓		X		1 (Grab 3)					1	
SUMP-12-2004		1614	↓		X		1 (Grab 4)					1	
SUMP-12-2004		See Above	12-15 to 12-16-04	X				1	1	1		3	↓

Project Information	Sample Receipt
Project Number: 21-1-12132-005	Total Number of Containers
Project Name: Snohomish Co. Park	COC Seals/Intact? Y/N/NA
Contact: Paul Van Horne	Received Good Cond./Cold
Ongoing Project? Yes ☐ No ☒	Delivery Method: Co. Personnel
Sampler: Paul Van Horne	(attach shipping bill, if any)

Instructions
Requested Turnaround Time: Standard
Special Instructions: Meet City of Everett Sanitary sewer detection limits. *Metals = Cd, Cr, Cu, Pb, Ni, Zn, Hg, As, Ag.

Relinquished By: 1.	Relinquished By: 2.	Relinquished By: 3.
Signature: Paul Van Horne Time: 1648	Signature: Time:	Signature: Time:
Printed Name: Paul Van Horne Date: 12/16/04	Printed Name: Date:	Printed Name: Date:
Company: S&W	Company:	Company:

Received By: 1.	Received By: 2.	Received By: 3.
Signature: Hiroko Forman Time: 1648	Signature: Time:	Signature: Time:
Printed Name: Hiroko Forman Date: 12/16/04	Printed Name: Date:	Printed Name: Date:
Company: CCAL	Company:	Company:

Distribution: White - w/shipment - returned to Shannon & Wilson w/ laboratory report
Yellow - w/shipment - for consignee files
Pink - Shannon & Wilson - Job File

F-19-91/UR

No. 026269

APPENDIX H

GEOPHYSICAL REPORT AND SELECT UST REMOVAL DATA

APPENDIX H

GEOPHYSICAL REPORT AND SELECT UST REMOVAL DATA

This appendix contains a geophysical survey report and select underground storage tank (UST) removal data, to assist in documenting remedial activities at the Snohomish County Campus.

More specifically, the geophysical report summarizes the results of a survey conducted in July 2002 by GeoRecon International, in the approximate area of a contaminant source (Figure 2). No potential USTs was found.

Two gasoline USTs from beneath the former aboveground parking garage entrance was observed by Shannon & Wilson, Inc. in 2004. This appendix includes a summary table of samples collected during the tank closure, as well as figures showing sample locations.

GEO RECON INTERNATIONAL

applied geophysics

August 6, 2002
J02-726/J

Shannon & Wilson
400 N 34th Street
Seattle, WA 98103

RE: UST Search
Everett City Facilities

This letter reports the results of a geophysical exploration for orphan underground storage tanks (UST) adjacent to the site of Borehole 18, between the Mission Building and the Administration Building Garage, on the vacated Rockefeller Ave. A gasoline service station at one time occupied the eastern side of the street, opposite BH-18. Product was found in BH-18. The work was completed on July 25,2002.

Results of the Survey

No evidence of an underground storage tank was found during the survey.

Pipes were located during the survey. The locations of the found pipes are shown on Figure 1 attached to this report. In addition a buried, apparent erratic boulder was located as shown on the figure. Other large gravel was also noted during the survey.

A 15 metre (49.2 ft) GPR grid was run around BH-18, with BH-18 as the center of the grid. The lines were run at 1-metre intervals, both in the North-South and East-West directions. In addition, GPR lines were run over the adjacent area, outside of the grid.

Partial identifications of the pipe functions were determined from the construction drawings and marks from the location survey.

No evidence of product piping was found in the grassy area in front of the Administration Building.

Methods

The Ground Penetrating Radar (a GSSI, SIR System 3) utilized a 500 Mega-Hertz antenna. The GPR antenna used for this investigation transmits a 2 nano-second (ns)

pulse at a frequency of 500 Mega-Hertz for the selected scan rate of 8 times per second. When the signal encounters a change in electrical properties (a change in electrical permittivity), a portion of the signal energy is reflected back to the surface. The reflected signal received by the antenna, is digitally processed and recorded on a chart recorder in an amplitude-threshold format. The character of the reflection is used to interpret the source of the reflection.

It is noted that many targets may have similar GPR signatures due to similarity in shape, for example a buried log and a UST. Without corroborative evidence (e.g. an EM or magnetic signature) it may be difficult to classify a target as a UST by the GPR signature alone.

A UST will produce, in cross-section, a hyperbolic reflection. A traverse parallel to the centerline of the UST will show a horizontal (if there is no velocity or elevation change along the traverse) reflection, with hyperbolic signatures at both ends of the UST. The hyperbolic signature is the result of "seeing" the tank before the center of the antenna is over the tank. Distortions in the images can be created by adjacent reflectors, which may affect location and identification of the image.

The GPR records were recorded at a full-scale sweep of 80 nano-seconds, and have 8 nano-seconds between horizontal time marks. The top of the recording is marked at one metre (3.28 ft) intervals. The depth of an object is determined by the electro-magnetic wave propagation rate (inverse of wave velocity) of the site materials. The recorded time is two-way time, that is the time down to the surface and then back to the antenna. The two-way time is estimated to be between 5 to 6 nano-seconds per foot, or an estimated 1.3 to 1.6 feet between the horizontal time lines. The electro-magnetic velocity may vary across the site, both horizontally and vertically.

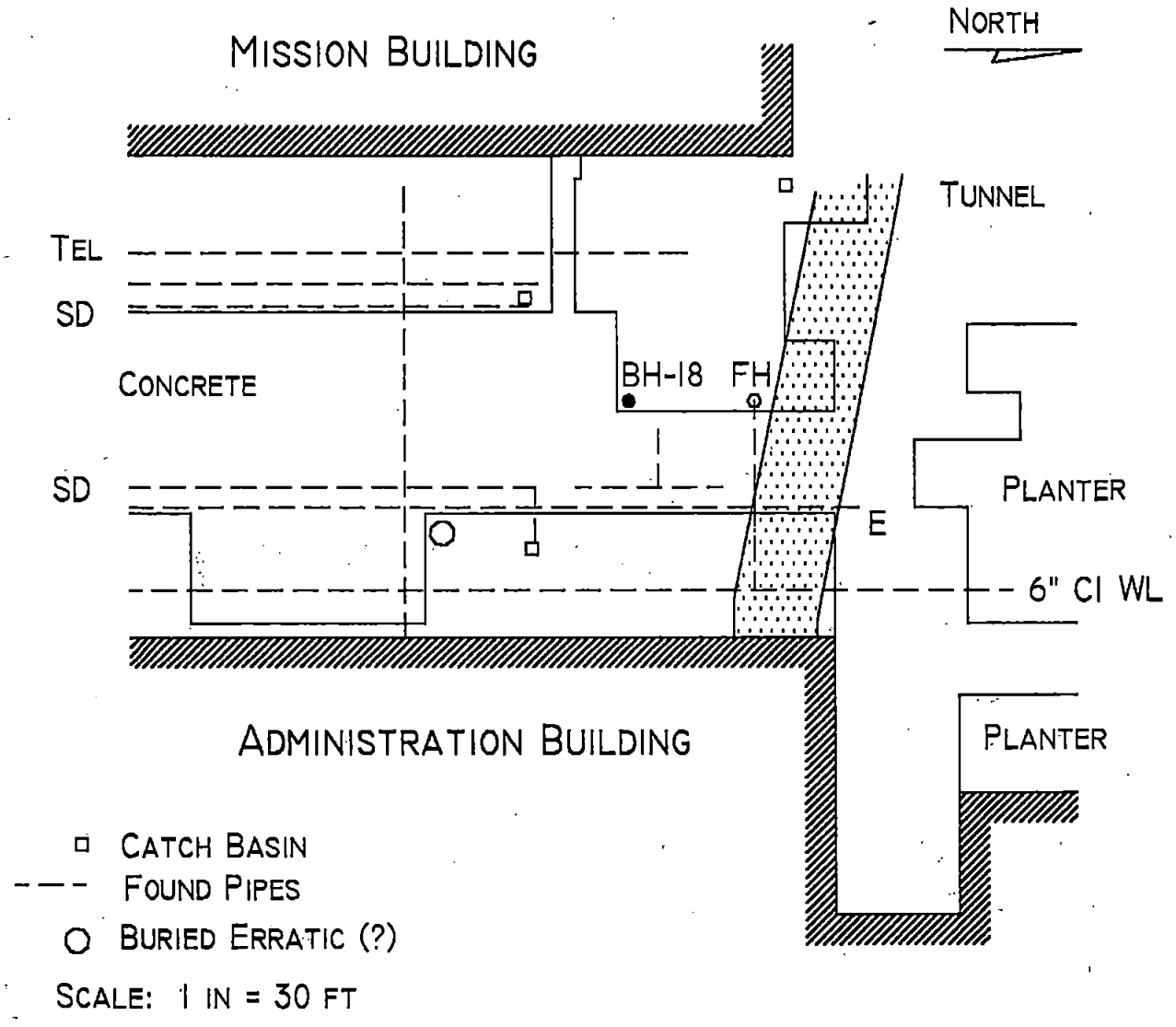
The information presented in this report is based upon geophysical measurements made by generally accepted methods and field procedures, and our interpretation of these data. The presented information is based upon our best estimate of subsurface conditions considering the geophysical results and all other information available to us. These results are interpretive in nature and are considered to be a reasonably accurate presentation of the existing conditions within the limitations of the method or methods employed.

We trust that the above is sufficient for your requirements. Please let us know if you have any questions or if we may be of further assistance.

For Geo-Recon International

John M Musser

John M Musser
Principal Geophysicist



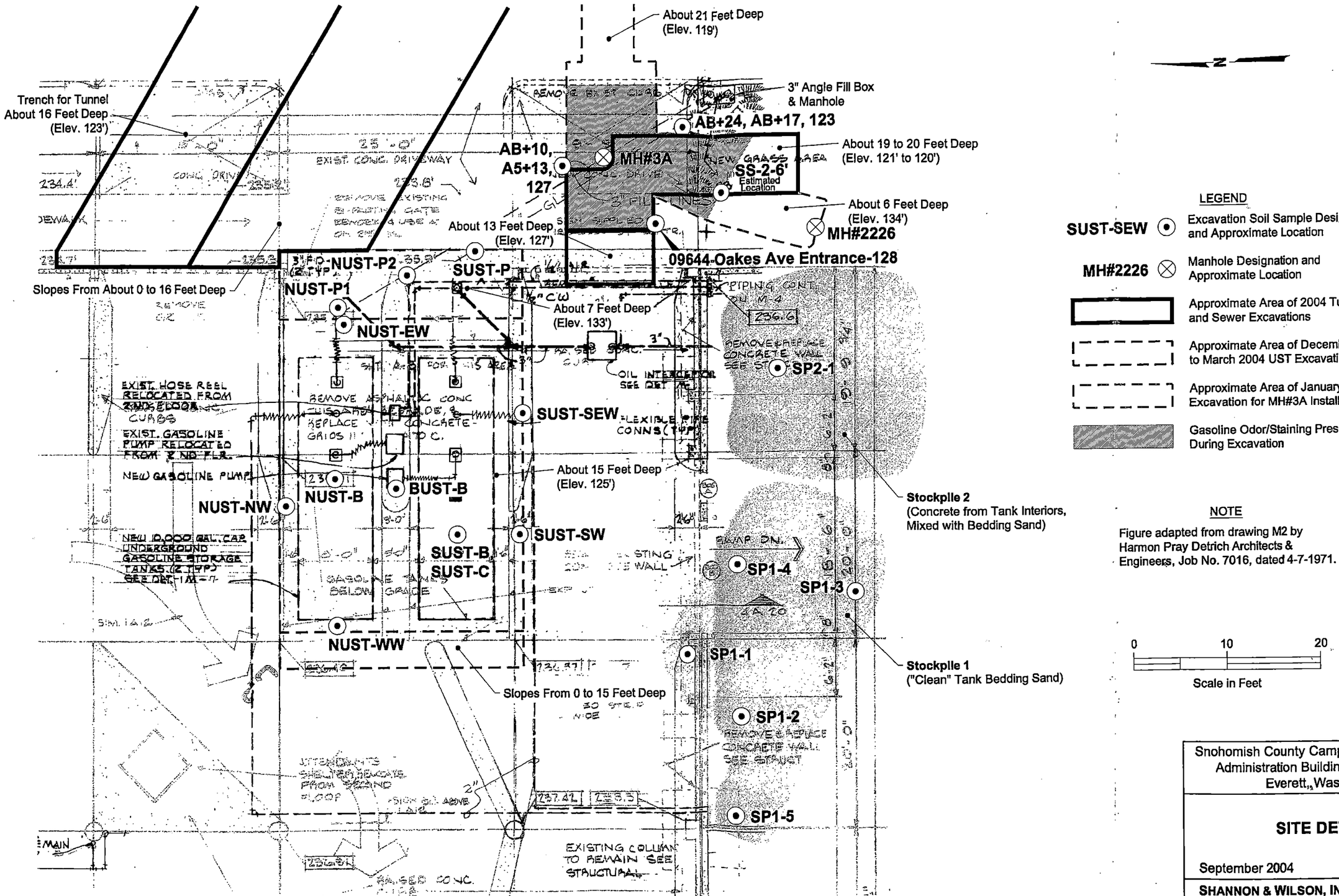
Exploration Plan	Everett City Facilities - At Borehole 18 (July 25, 2002)
GPR Survey J02-726/J	Geo-Recon International

FIG. 1

TABLE 1
SUMMARY OF SOIL SAMPLE ANALYSES

Sample Number	Sample Location	Approximate Sample Depth (feet)	Date Collected	Field PID Result (ppm)	USCS Soil Description	Gasoline Odor?	Results of Laboratory Analyses: Gasoline Range Organics NWTPH-Gx (MG/KG)	Benzene EPA-8021 (MG/KG)	Toluene EPA-8021 (MG/KG)	Ethyl-benzene EPA-8021 (MG/KG)	Xylenes EPA-8021 (MG/KG)	MTBE EPA-8021 (MG/KG)	Total Lead EPA-6010 (MG/KG)
MTCA Method A Cleanup Level							100/30***	0.03	7	6	9	0.1	250
SP1-1	Stockpile 1*	1	12/22/2003	3	SP-SM (Fill)	Slight	ND<3	ND<0.03	ND<0.05	ND<0.05	ND<0.2	NT	NT
SP1-2	Stockpile 1*	1	12/22/2003	2	SM (Mixed Fill & Till)	Slight	ND<3	ND<0.03	ND<0.05	ND<0.05	ND<0.2	NT	NT
SP1-3	Stockpile 1*	1	12/22/2003	3	SP-SM (Fill)	Slight	ND<3	ND<0.03	ND<0.05	ND<0.05	ND<0.2	NT	NT
SP1-4	Stockpile 1*	1	12/22/2003	7	SP-SM (Fill)	Slight	ND<3	ND<0.03	ND<0.05	ND<0.05	ND<0.2	NT	NT
SP1-5	Stockpile 1*	1	12/22/2003	4	SP-SM (Fill)	Slight	ND<3	ND<0.03	ND<0.05	ND<0.05	ND<0.2	NT	NT
SP2-1	Stockpile 2**	1	12/23/2003	37	SP-SM (Fill)	Moderate	14	ND<0.03	0.09	ND<0.05	ND<0.2	NT	ND<3.1
NUST-WW	West Wall Adjacent to West End of North UST	13	12/22/2003	0	SM (Till)	None	ND<3	ND<0.03	ND<0.05	ND<0.05	ND<0.2	NT	NT
NUST-B	Beneath North UST	14	12/22/2003	0	SM (Till)	None	ND<3	ND<0.03	ND<0.05	ND<0.05	ND<0.2	NT	NT
SUST-B	Beneath South UST	13-14	12/23/2003	0	SM (Till)	None	ND<3	ND<0.03	ND<0.05	ND<0.05	ND<0.2	NT	NT
SUST-C	Field Duplicate of #SUST-B	13-14	12/23/2003	0	SM (Till)	None	ND<3	ND<0.03	ND<0.05	ND<0.05	ND<0.2	NT	NT
BUST-B	Between USTs, Beneath Dispenser	14	12/23/2003	0	SM (Till)	None	ND<3	ND<0.03	ND<0.05	ND<0.05	ND<0.2	NT	NT
SUST-SW	South Wall Adjacent to South UST	13	12/23/2003	0	SM (Till)	None	ND<3	ND<0.03	ND<0.05	ND<0.05	ND<0.2	NT	NT
SUST-P	Beneath Elbow of South UST Fill Pipe	4	12/23/2003	10	SP-SM/SM (Fill/Till Interface)	Slight	ND<3	ND<0.03	ND<0.05	ND<0.05	ND<0.2	NT	NT
NUST-NW	North Wall Adjacent to North UST	13-14	12/24/2003	0	SM (Till)	None	ND<3	ND<0.03	ND<0.05	ND<0.05	ND<0.2	NT	NT
NUST-EW	East Wall, Near East End of North UST	13	12/24/2003	0	SM (Till)	None	ND<3	ND<0.03	ND<0.05	ND<0.05	ND<0.2	NT	NT
SUST-SEW	South Wall Adjacent to South UST	14	12/24/2003	0	SM (Till)	None	ND<3	ND<0.03	ND<0.05	ND<0.05	ND<0.2	NT	NT
NUST-P1	Beneath Elbow of North UST Fill Pipe	2.5	12/24/2003	1	SM (Till)	None	ND<3	ND<0.03	ND<0.05	ND<0.05	ND<0.2	NT	NT
NUST -P2	Beneath North UST Fill Pipe	2.5	12/24/2003	0	SM (Till)	None	ND<3	ND<0.03	ND<0.05	ND<0.05	ND<0.2	NT	NT
09644-Oakes Ave Entrance-128	West of Fill Port Vicinity	12-13	1/13/2003	350	SM (Till with Sand Seams)	Strong	5,000	ND<3	140	93	560	ND<10	NT
SS-2-6'	Approx. Midway Between MW#3A & MH#2226	6	1/17/2003	?	SM (Till)?	?	ND<3	ND<0.03	ND<0.05	ND<0.05	ND<0.2	ND<0.1	NT
AB+10, A5+13, 127	Between Fill Port and USTs	14-14.5	4/8/2004	38	SM (Till with Sand Seams)	None	ND<3	ND<0.03	ND<0.05	ND<0.05	ND<0.2	NT	NT
AB+24, A5+17, 123	Northwest of Fill Port Vicinity	18	4/12/2004	>2,000	SP/SM (Outwash in Till)	Strong	5,700	8.0	74	75	400	NT	NT
Trip Blank 1	Trip Blank for 12/23/2003		12/23/2003				ND<0.05	ND<0.001	ND<0.001	ND<0.001	ND<0.003	NT	NT
Trip Blank 2	Trip Blank for 12/24/2003		12/24/2003				ND<0.05	ND<0.001	ND<0.001	ND<0.001	ND<0.003	NT	NT

Notes:	Sample matrices consisted of soil, with the exception of trip blanks.
*	Soil stockpile 1 consisted of fill soil removed from above the tanks and fill piping.
**	Soil stockpile 2 consisted primarily of CDF from inside the abandoned tanks, mixed with some fill soils from adjacent to the sides and ends of the tanks.
***	Gasoline MTCA Method A cleanup level 100 mg/kg with no benzene detected and with ethylbenzene, toluene, and zylenes <1% of gasoline mixture; 30 mg/kg for all other gasoline mixtures.
EPA	Environmental Protection Agency
MG/KG	Milligrams per kilogram
MTBE	Methyl tertiary-butyl ether
MTCA	Model Toxics Control Act
ND	Analyte not detected at level above indicated reporting limit
NT	Test not performed
NWTPH-Gx	Northwest total petroleum hydrocarbons - gasoline range organics
UST	Underground storage tank
?	Unknown or not recorded



LEGEND

SUST-SEW ⊙	Excavation Soil Sample Designation and Approximate Location
MH#2226 ⊗	Manhole Designation and Approximate Location
	Approximate Area of 2004 Tunnel and Sewer Excavations
	Approximate Area of December 2003 to March 2004 UST Excavation
	Approximate Area of January 2003 Excavation for MH#3A Installation
	Gasoline Odor/Staining Present During Excavation

NOTE

Figure adapted from drawing M2 by Harmon Pray Detrich Architects & Engineers, Job No. 7016, dated 4-7-1971.

Snohomish County Campus Redevelopment
Administration Building UST Removal
Everett, Washington

SITE DETAIL

September 2004 | 21-1-12132-002

SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

FIG. 3

File: I:\Drafting\21\12132-002\21-1-12132-002 fig 3 (9-04).dwg Date: 09-03-2004 Author: SAC

Appendix I

APPENDIX I

INDOOR AIR SAMPLING SUMMARY

APPENDIX I

INDOOR AIR SAMPLING SUMMARY

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APPENDIX I

INDOOR AIR SAMPLING SUMMARY

I.1 INTRODUCTION

Under contract to Snohomish County, Shannon & Wilson performed an exposure assessment of the indoor air quality in select locations of the Snohomish County Campus (Campus) in January 2006. This assessment was performed to evaluate whether residual petroleum-contaminated soil (PCS) that remains beneath the Rockefeller Ramp and Administration Building areas (Figure I-1) following site redevelopment present an inhalation risk to indoor workspace located in the proximity.

As part of this assessment, a Shannon & Wilson representative performed real-time field screening of select indoor work spaces, collected air samples for offsite laboratory analysis, documented the sample collection and quality control procedures implemented during the assessment, and conducted an evaluation of the sample results to provide a professional opinion with regards to potential exposure risks. Sample collection and documentation was completed in accordance with Shannon & Wilson, Inc.'s standard operating procedures and is described in the following sections. A table summarizing the sample results, along with a figure showing sample locations, is attached. In addition, a copy of the final laboratory analytical results is included as an attachment.

I.2 FIELD SCREENING AND ENVIRONMENTAL SAMPLING METHODOLOGY

To complete a representative evaluation of indoor air quality, proper choice of sample collection method, location, and time are essential. The following sections outline the procedures followed by Shannon & Wilson during the exploration of workspace air conditions.

I.2.1 Workspace Evaluation

To support the selection of sample locations, Shannon & Wilson conducted a review of previous subsurface soil data to identify potential sample locations within the Campus that are in closest proximity to in-place residual PCS. Based on this review, the locations selected for air monitoring and sampling were the prisoner tunnel, pedestrian tunnel, and computer room (Figure I-1).

Choosing the proper sampling time is also important to evaluate potential exposure risks during high and low peak usage. For this assessment, the three areas in closest proximity to in-place residual PCS were sampled for 24-hour periods during both high- and low-peak usage. High-peak usage is defined as a 24-hour period during a typical 40-hour workweek (i.e., Monday 8am to Tuesday 8am), while low-peak usage is defined as a 24-hour period over the weekend (Sunday 8am to Monday 8am). In a typical workplace environment, airborne contaminant levels can be higher on days of low-peak usage. If a building is unoccupied for a weekend, contaminants can volatilize and accumulate in pockets of undisturbed air. This potential increase in volatized airborne contaminants within the breathing zone may cause a higher exposure risk for personnel arriving on Monday morning.

I.2.2 Field Screening – Drager Tubes

Within each selected area, the air was screened for petroleum hydrocarbons using Drager Tubes. The graduated tubes were packed with an iodine pentoxide (I_2O_5) media, which reacts with volatile organic compounds (VOCs) associated with petroleum hydrocarbons in air. To perform the screening, 200 milliliters of air was delivered through the tube using a Drager hand-pump. If petroleum hydrocarbons were present in the air sample at concentrations of 100 parts per million (ppm) or higher, they would react with the media in the tube, changing the color from white to green progressively along marked concentration graduations. The tubes have an effective measuring range of 100 to 2500 ppm and provided results within 30 seconds. If real-time field screening of the air had indicated the presence of petroleum hydrocarbons, this information would have been used in choosing a specific locations within the tunnels or computer room to collect an environmental air sample for off-site laboratory analysis.

I.2.3 Environmental Air Sampling – EPA Method TO-15 (SIM)

To determine VOC concentrations at a lower detection limit and with a higher degree of accuracy and confidence than allowed by the field screening performed with Drager Tubes, the Shannon & Wilson representative chose to collect air samples following EPA Method TO-15 guidelines for VOCs. This method utilized six-liter stainless-steel summa canisters under a vacuum of 28-30" Hg to obtain air samples. The canisters collected air at a constant flow rate over a 24-hour period for analysis in a laboratory setting. The method includes analysis of petroleum hydrocarbon-related VOCs. The detection limits associated with the analysis are sufficiently low to determine if impacted site soils have introduced airborne contamination into

the indoor workspaces within each of the three locations. The laboratory determines VOC concentrations using gas chromatography, mass spectrometry (GC/MS) and selective ion monitoring (SIM) to achieve low detection limits for the specific contaminants of concern (COCs).

The flow controller used in sample collection contained a critical diaphragm that allowed sampling at a constant flow rate regardless of temperature or pressure fluctuations. All sampling equipment was provided by the laboratory and was certified to be contaminant-free. As an additional measure of sample quality control and assurance, the Shannon & Wilson representative chose to collect a field blank. The field blank, collected in contaminant-free air, was useful in the final assessment of analytical results.

I.3 SAMPLE COLLECTION AND HANDLING PROCEDURES

Shannon & Wilson personnel followed standard field procedures and EPA sample collection guidelines as explained in the following sections.

I.3.1 Drager Tube Air Screening

Field screening with Drager Tubes was performed at eight locations (See Figure I-1, locations A through H) within the prisoner tunnel, pedestrian tunnel, and computer room. Field screening did not reveal petroleum hydrocarbon VOC concentrations above detection limits (100 ppm).

I.3.2 Summa Canister Air Sample Collection

The Shannon & Wilson representative chose low elevation points in both the tunnels, and the floor along the north wall in the computer room as suitable sample locations based on the COCs. Sample collection in the prisoner tunnel was not immediately adjacent to residual soil contamination due to the slope of the tunnel. This sample location was selected based upon the location where petroleum hydrocarbon VOCs would most likely accumulate (Figure I-1).

One six-liter summa canister with a flow controller was left at each location to sample air for a 24-hour period beginning on Sunday, January 8 and one Monday, January 9, 2006. Sample collection and analysis was performed according to EPA guidelines set forth for indoor air, EPA Method TO-15 (SIM). A field blank was collected outside, in fresh air away from traffic, to

evaluate laboratory and field quality control. The fresh air sample was pulled through activated carbon to remove all potential residual traces of VOCs.

I.4 ANALYTICAL RESULTS AND EVALUATION

Based on analytical results of the air samples, most COCs were not detected above the laboratory reporting limits in any of the samples collected. Because the laboratory performed SIM analysis, reporting limits were very low for this sampling event, with results being reported down to micrograms per cubic meter ($\mu g/m^3$). Results generally showed low concentrations during high- and low-peak usage. As shown in the attached table, methyl tert-butyl ether, 1,2-dichloroethane, or 1,2-dibromoethane were not detected above the laboratory reporting limits during high or low peak usage samples.

I.4.1 High Peak Usage

Detections of benzene, toluene, ethylbenzene, and xylenes were near detection limits, with the highest values of any VOCs reported being toluene detected in the high peak usage samples collected in the pedestrian tunnel. The Washington Industrial Safety and Health Administration (WISHA) permissible exposure limit (PEL) for toluene is 377,000 $\mu g/m^3$. The highest concentration of toluene detected was 13 $\mu g/m^3$- well below the WISHA PEL - found in the sample collected on Monday, January 9, 2006.

Low concentrations of xylenes and ethylbenzene were detected at concentrations well below the WISHA PELs. Overall, the highest concentrations of these COCs were detected in the 24-hour high peak usage sample collected within the pedestrian tunnel.

I.4.2 Low Peak Usage

Detections of benzene, toluene, ethylbenzene, and xylenes in low peak usage samples were also near detection limits, with the highest values of any VOCs reported being from samples collected in the pedestrian tunnel. The highest concentration of any VOC detected in the low peak usage samples was again toluene in the pedestrian tunnel (3.7 $\mu g/m^3$- well below the WISHA PEL).

I.4.3 Level 1 Data Review

Benzene and toluene were detected in all project samples and the field blank sample at concentrations below the regulatory PELs. A Level 1 data review of the sample results indicates that detections of these analytes in several project samples may be due to blank contamination and not representative of site conditions. Based on the Level 1 data review, concentrations of benzene and toluene detected in the project samples at less than 5 times the concentrations detected in the field blank sample are attributed to blank contamination and assumed to be not representative of the site. Specifically, this includes benzene detected in all project samples and toluene detected in all project samples but PED.T.010906 collected in the pedestrian tunnel on Monday, January 9, 2006.

I.5 SELECTED REGULATORY LEVELS

Regulatory occupational exposure levels for the compounds selected for analysis are well established for the project COCs except methyl tert butyl ether, which was not detected. OSHA, NIOSH, and WISHA have each published exposure limits based on 8-hour time weighted average (TWA) exposure times. Most states regard the OSHA PELs as an enforceable requirement and NIOSH RELs as optimal goals. Washington has a third tier of regulatory occupational exposure levels, which are more restrictive than OSHA PELs and are generally near the NIOSH RELs. However, unlike NIOSH RELs, WISHA PELs are an enforceable regulation in accordance with Washington Administrative Code (WAC) 296-841-200 – Table 3. The workspace air quality in this project location is governed chiefly by WISHA PELs, and meets these standards for the COC.

I.6 CONCLUSIONS

The analysis of workspace air was performed in the areas most likely to be impacted and to accumulate VOCs heavier than air during a 24-hour period of both high- and low-peak usage. Sample analysis indicates that most workspace air contaminant concentrations in the three areas selected as sample locations are orders of magnitude below the regulatory enforceable limits, as well as the most stringent NIOSH RELs. Based on the reported sample results and our understanding of the project objectives, it is our opinion that indoor airborne concentrations of petroleum-related VOCs are not present in the indoor workspace air in concentrations that exceed the regulatory PELs established for those contaminants.

I.7 REFERENCES

Shannon & Wilson, Inc., 2002, Geotechnical and environmental engineering report, Snohomish County campus, administration building and garage, Everett, Washington: Report prepared by Shannon & Wilson, Inc., Seattle, Wash., project no. 21-1-09644-005, for NBBJ, Seattle, Wash., August.

National Institute for Occupational Safety and Health (NIOSH). *Pocket Guide to Chemical Hazards.* U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention. Cincinnati, OH. 1997.

Occupational Safety and Health Administration (OSHA). Occupational Safety and Health Standards, Toxic and Hazardous Substances. *Code of Federal Regulations.* 29 CFR 1910.1000. 1998.

TABLE I-1
CONFIRMATION SOIL SAMPLES (REMAINING CONDITIONS)

Sample Number	Sample Elev. (feet)	Sample Date	Probable Product Type	Oil	Diesel	Gasoline	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes
Parking Garage											
09644-C-4-146 (WALL)	146	1/7/2003	Extremely Weathered Gasoline	--	--	19	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-J-4-135 (WALL)	135	1/7/2003		ND<50	ND<25	--	-	--	--	--	--
09644-A-3.3-136 (WALL)	136	1/13/2003		--	--	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-A-3.5-134	134	1/14/2003		--	--	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-C.4-4-134	134	1/14/2003	Highly Weathered Gasoline	--	--	**4,800**	**7.0***	**9.6**	**13**	**10**	8.7
09644-D.6-4.2-135	135	1/14/2003	Highly Weathered Gasoline	--	--	**4,700**	**8.0***	ND<6	**13**	**23**	**34**
09644-B.4-4-137	137	1/14/2003	Highly Weathered Gasoline	--	--	**1,400**	ND<2.0	ND<0.6	ND<1.0	3.8	4.5
09644-A.1-4-140	140	1/14/2003		--	--	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-J.9-4.2-129	129	1/15/2003		ND<50	ND<25	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-E.5-4-131	131	1/20/2003	Highly Weathered Gasoline	--	--	**3,500**	ND<5	ND<1.5	ND<2.5	**30**	**65**
09644-G-4-125	125	1/20/2003	Highly Weathered Gasoline	--	--	**1,400**	ND<2	ND<0.6	ND<1.0	**9.3**	**28**
09644-H.5-4-127	127	1/20/2003	Highly Weathered Gasoline	--	--	69	ND<0.1	ND<0.03	ND<0.05	0.3	0.8
09644-N-1.3-129	129	1/21/2003		ND<50	ND<25	--	--	--	--	--	--
09644-M-1-130	130	1/21/2003		ND<50	ND<25	--	--	--	--	--	--
09644-A-2.7-124	124	1/23/2003	Highly Weathered Gasoline	--	--	**140**	ND<0.2	ND<0.06	ND<0.1	0.5	0.8
09644-A-3.2-123	123	1/23/2003	Highly Weathered Gasoline	--	--	**550**	ND<1.0	ND<0.3	1.0	2.2	5.7
09644-A-3.6-122	122	1/23/2003		--	--	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-C-4-127	127	1/23/2003	Highly Weathered Gasoline	--	--	**8,400**	**18***	**3.5**	**70**	**57**	**270**
09644-A-4-127	127	1/23/2003	Extremely Weathered Gasoline	--	--	39	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-M-1-116	116	1/27/2003		ND<50	ND<25	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-K.5-1-116	116	1/27/2003		ND<50	ND<25	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-J-1-118	118	1/27/2003	Highly Weathered Gasoline	ND<50	ND<25	69	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-N-1.5-119	119	1/27/2003	Diesel No. 2	ND	**2,800**	ND<30	ND<1	ND<0.3	ND<0.5	ND<0.5	ND<2
09644-A-3.5-119	119	1/27/2003		--	--	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-A-2.5-119	119	1/27/2003		--	--	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-C-1-119	119	1/28/2003		--	--	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-D.8-1-118	118	1/28/2003		--	--	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-B.5-4-123	123	1/28/2003	Highly Weathered Gasoline	--	--	**3,900**	ND<2	ND<0.6	**9**	**39**	**140**
09644-C-4-119	119	1/28/2003	Highly Weathered Gasoline	--	--	**6,500**	ND<2	ND<0.6	**80**	**73**	**300**
09644-F-4-118	118	1/29/2003	Highly Weathered Gasoline	--	--	**1,100**	ND<2.0	ND<0.6	2.5	**7.0**	**37**
09644-H-4-118	118	1/29/2003	Highly Weathered Gasoline	--	--	**240**	ND<0.4	ND<0.1	ND<0.2	0.6	**35**
09644-I-4-119	119	1/29/2003		--	--	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
MTCA Method A				2,000	2,000	100/30	0.1	0.03	7	6	9

TABLE I-1
CONFIRMATION SOIL SAMPLES (REMAINING CONDITIONS)

Sample Number	Sample Elev. (feet)	Sample Date	Probable Product Type	Oil	Diesel	Gasoline	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes
Parking Garage, Cont.											
09644-J-4-125	125	1/29/2003	Diesel & Highly Weathered Gasoline	ND	1,900	300**	ND<0.4	ND<0.1	ND<0.2	1.7	5.4
09644-K-4-122.5	122.5	1/29/2003	Diesel & Highly Weathered Gasoline	ND	12,000	1,700**	ND<2.0	ND<0.6	2.4	5.6	26
09644-K.8-1-117	117	2/4/2003	Highly Weathered Gasoline	ND<50	ND<25	23	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-E-1-117	117	2/4/2003		--	--	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-G-1-117	117	2/4/2003		--	--	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-N-1.2-119	119	2/5/2003		ND<50	ND<25	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-N-1.8-119	119	2/5/2003		ND<50	ND<25	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-N-3-119	119	2/5/2003		ND<50	ND<25	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-J.5-4-114	114	2/6/2003		ND<50	ND<25	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-K.8-1-109	109	2/12/2003		ND<50	ND<25	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-B.7-4-107	107	2/27/2003		--	--	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-D.5-4-111	111	2/27/2003		--	--	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-G-4-110	110	2/27/2003		--	--	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
09644-I-4-110	110	2/27/2003		--	--	ND<3	ND<0.1	ND<0.03	ND<0.05	ND<0.05	ND<0.2
Administration Building											
AB+6, A1-16, 132	132	2/4/2004	Diesel	ND<100	3,100	--		--	--	--	--
AB+32.5, A1-18, 131.5	131.5	2/5/2004	Diesel	ND<50	230	--		--	--	--	--
AB+22, A1-3, 134.5	134.5	2/5/2004	Diesel	ND<100	2,200	--		--	--	--	--
AB+32, A1-3, 134.5	134.5	2/5/2004		ND<50	ND<25	--		--	--	--	--
AB+19, A1+7, 134	134	2/7/2004		ND<50	ND<25	--		--	--	--	--
AB+3, A1+6, 134.5	134.5	2/7/2004		ND<50	ND<25	--		--	--	--	--
MTCA Method A				2,000	2,000	100/30	0.1	0.03	7	6	9

TABLE I-1
CONFIRMATION SOIL SAMPLES (REMAINING CONDITIONS)

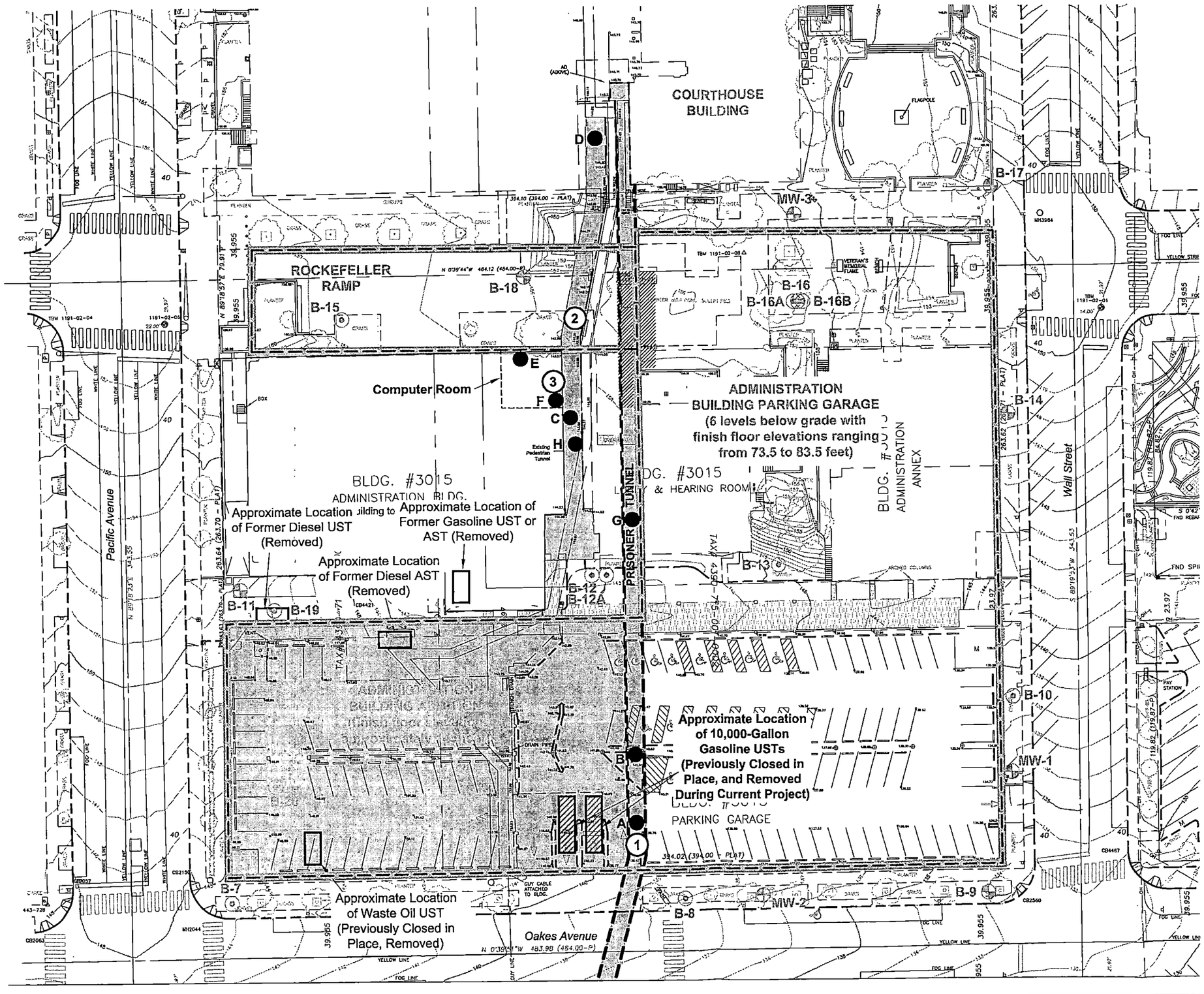
Sample Number	Sample Elev. (feet)	Sample Date	Probable Product Type	Oil	Diesel	Gasoline	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes
Rockefeller Ramp											
E5+2.5, 139.5	139.5	3/26/2004	Highly Weathered Gasoline	--	--	2,600	--	ND<0.75	ND<2.5	7.1	ND<10
W20+4, 134	134	3/29/2004	Highly Weathered Gasoline	--	--	410	--	ND<0.12	ND<0.2	0.3	ND<0.8
W14+3, 139	139	3/31/2004		--	--	ND<3	--	ND<0.03	ND<0.05	ND<0.05	ND<0.2
W16+6.5, 135	135	3/31/2004	Highly Weathered Gasoline	--	--	15	--	ND<0.03	ND<0.05	ND<0.05	ND<0.2
W17+6.5, 134.5	134.5	3/31/2004	Highly Weathered Gasoline	--	--	2,200	--	ND<0.6	ND<1.0	2.9	6.1
E6+5.5, 141	141	4/5/2004	Weathered Gasoline	--	--	2,500	--	ND<0.3	2.0	9.1	23
E1+4, 136.5	136.5	4/6/2004	Highly Weathered Gasoline	--	--	3,100	--	ND<0.6	1.3	3.8	2.2
E3+3.5, 134.5	134.5	4/6/2004	Highly Weathered Gasoline	--	--	240	--	ND<0.6	ND<1.0	2.9	ND<4.0
E8+5, 136	136	4/7/2004	Highly Weathered Gasoline	--	--	1,500	--	ND<0.6	ND<1.0	3.0	3.7
E1-12, 137	137	4/7/2004	Highly Weathered Gasoline	--	--	2,000	--	ND<0.12	0.9	1.8	6.3
W21+12, 135.5	135.5	4/8/2004	Highly Weathered Gasoline	--	--	1,800	--	ND<1.5	ND<2.5	7.5	ND<10
E6+3, TRENCH, 129.5	129.5	4/12/2004	Highly Weathered Gasoline	--	--	610	--	ND<0.3	ND<0.5	1.6	2.0
W21, TRENCH, 127	127	4/13/2004		--	--	ND<3	--	ND<0.03	ND<0.05	ND<0.05	ND<0.2
E2, TRENCH, 134	134	4/13/2004	Highly Weathered Gasoline	--	--	1,300	--	ND<0.3	1.1	2.0	ND<2.0
W21+13, WW+9.5, 130.5	130.5	4/16/2004	Highly Weathered Gasoline	--	--	2,700	--	ND<0.6	ND<1.0	14	32
MTCA Method A				2,000	2,000	100/30	0.1	0.03	7	6	9

NOTES:
(1) Soil cleanup level is 100 mg/kg for gasoline mixtures without benzene and for which the total BTEX concentration is less than 1% of the gasoline mixture. Soil cleanup level is 30 mg/kg for all other gasoline mixtures.
(2) Benzene, toluene, ethylbenzene, and xylenes (BTEX) and MBTE by EPA Method 8021
(3) Diesel- and oil-range hydrocarbons by Method NWTPH-Dx
(4) EPA = U.S. Environmental Protection Agency
(5) Gasoline-range hydrocarbons by Method NWTPH-Gx
(6) MTBE = Methyl tertiary-butyl ether
(7) MTCA = Washington Model Toxics Control Act
(8) ND = not detected
(9) Soil results are reported in milligrams per kilogram (mg/kg).
(10) Shaded text indicates detected concentration exceeds MTCA cleanup criteria.
(11) -- = Not tested
(12) * = No gas chromatograph/mass spectrometer (GC/MS) analysis was performed to confirm MTBE detection.
(13) ** = Gasoline result biased high due to diesel range overlap.
(14) Laboratory data reports for the Parking Garage, Administration Building, and Rockefeller Ramp are contained in Appendices C, E, and D, respectively.

TABLE I-2
INDOOR AIR SAMPLING SUMMARY

Sample Number	Sample Location*	Sample Time	High or Low Peak Usage	Methyl tert butyl ether	1,2-Dichloroethane	Benzene	Toluene	1,2-Dibromoethane	Ethylbenzene	m & p-Xylene	o-Xylene
				(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)
Pr.T.-010806	Prisoner Tunnel (1)	1/8/2006 08:10 to 1/9/2006 08:09	Low	ND<0.19	ND<0.085	1.0	2.8	ND<0.22	ND<0.59	ND<1.2	ND<0.59
Ped.T.-010806	Pedestrian Tunnel (2)	1/8/2006 08:45 to 1/9/2006 08:24	Low	ND<0.19	ND<0.086	1.1	3.7	ND<0.23	0.63	2.0	0.76
C.R.-010806	Computer Room (3)	1/8/2006 08:35 to 1/9/06 08:21	Low	ND<0.19	ND<0.087	0.98	3.5	ND<0.23	0.67	1.7	0.63
Pr.T.-010906	Prisoner Tunnel (1)	1/9/2006 08:13 to 1/10/2006 08:09	High	ND<0.19	ND<.087	2.2	4.3	ND<0.23	1.3	1.8	0.75
Ped.T.-010906	Pedestrian Tunnel (2)	1/9/2006 08:26 to 1/10/2006 08:25	High	ND<0.26	ND<0.12	2.5	13	ND<0.31	1.4	4.3	1.6
C.R.-010906	Computer Room (3)	1/9/2006 08:22 to 1/10/2006 08:14	High	ND<0.19	ND<0.086	1.0	6.1	ND<0.23	ND<0.60	1.4	ND<0.40
010906B (Field Blank)	-	1/9/2006 08:50 (instantaneous)	-	ND<.20	ND<.088	0.65	1.3	ND<0.23	ND<0.61	ND<1.2	ND<0.61
WISHA PEL (µg/m³)				-	4,000	3,190	377,000	770	434,000	434,000	434,000
OSHA PEL (µg/m³)				-	202,000	3,190	754,000	154,000	434,000	434,000	434,000
NIOSH REL (µg/m³)				-	4,000	320	377,000	300	434,000	434,000	434,000

NOTES:
(1) EPA Method TO-15 SIM GC/MS.
(2) Analytical Method: TO-15 SIM.
(3) EPA = U.S. Environmental Protection Agency.
(4) OSHA = U.S. Occupational Safety and Health Administration.
(5) NIOSH = U.S. National Institute for Occupational Safety and Health.
(6) WISHA = Washington Industrial Safety and Health Administration.
(7) PEL = Permissible Exposure Limit - 8 hour exposure, time weighted average.
(8) REL = Recommended Exposure Limit - 8 hour exposure, time weighted average.
(9) ND = not detected.
(10) Air sampling results are reported in µg/m³.
(11) Shaded text indicates detected concentration exceeds OSHA PEL, NIOSH REL, or WISHA PEL.
* See Figure I-1 for sample locations indicated within parentheses.



LEGEND

- (1) TD-15 Air Sample Collection Designation and Approximate Location
- A● Drager-Tube Air Sample Collection Designation and Approximate Location
- Approximate Extent of Excavations
- B-7 ◎ Boring Designation and Approximate Location
- B-9 ⊕ Boring Designation and Approximate Location, Completed as a Monitoring Well
- PW-1 ⊕ Boring Designation and Approximate Location, Completed as a Pumping Well

NOTES

1. This figure adapted from site topographic survey by Perteet Engineering, Inc., dated 6-2001. Elevation datum NAVD 88.
2. Boring locations are based on tape measurements from former site features and should be considered approximate.

0 50 100

Scale in Feet

Snohomish County Campus Redevelopment
Remedial Action Report
Everett, Washington

AIR SAMPLE COLLECTION LOCATIONS

October 2006 21-1-12132-004

SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

FIG. I-1

Filename: J:\21\12132-004\21-1-12132-004 Fig I-1 (09-06).dwg Date: 08-23-2006 Login: Leslie Regler

January 19, 2006
Sample Delivery Groups (SDG): 206018

Ann Marie Johnson
Shannon & Wilson, Inc.
400 North 34th Street
Seattle, WA 98103

Dear Ann:

Enclosed is the analytical report for the sample(s) received and analyzed by Environmental Analytical Service, Inc. for the following project:

Project Name : Snohomish County Courthouse
Project Number: 21-1-12132-004

The report consists of the following sections:

I. Sample Description
II. Laboratory Narrative and Chain of Custody Forms
III. Laboratory Certification
IV. Quality Control Reports
V. Analytical Results

If you have any questions on the report or the analytical data please contact me at (805) 781-3585.

Sincerely,

Steven D. Hoyt, Ph.D.
Laboratory Director

SDH/lims

173 Cross Street
San Luis Obispo
CA
93401-7597
805.781.3585
Fax 805.541.4550

Analytical Report

SDG Number 206018

Client: Shannon & Wilson **Date Received:** 1/11/2006

I. SAMPLE DESCRIPTION AND ANALYSIS REQUESTED

Client Sample No.	EAS Lab No	Analysis Requested	Date Sample	Pressure (torr) Rec	Final
Pr.T.-010806	206018 1	EPA TO-15 SIM Special List	1/8/2006	763	925
Ped.T.-010806	206018 2	EPA TO-15 SIM Special List	1/8/2006	758	931
C.R.-010806	206018 3	EPA TO-15 SIM Special List	1/8/2006	747	923
Pr.T.-010906	206018 4	EPA TO-15 SIM Special List	1/9/2006	757	938
Ped.T.-010906	206018 5	EPA TO-15 SIM Special List	1/9/2006	541	909
C.R.-010806	206018 6	EPA TO-15 SIM Special List	1/9/2006	744	913
010906b	206018 7	EPA TO-15 SIM Special List	1/9/2006	748	937

II. LABORATORY CASE NARRATIVE and CHAIN OF CUSTODY FORMS

SDG Numbers: 206018
Analysis performed for: Shannon & Wilson, Inc.

All laboratory quality control criteria were met for the samples in this report.

III. LABORATORY CERTIFICATION

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the condition noted above.

Steven D. Hoyt, Ph.D.
Laboratory Director

ENVIRONMENTAL
Analytical Service, Inc.

173 Cross Street
San Luis Obispo, CA
93401 - 7597
805.781.3585
Fax 805.541.4550

CHAIN OF CUSTODY RECORD

Project Number: 21-1-12132-004 | Project Name: SNOHOMISH COUNTY COURTHOUSE | Quote Number: 12601

REPORT TO:

Company: Shannon and Wilson
Address: 400 N 34th St
City/State/Zip: Seattle WA 98103
Phone: (206) 695-6793 (FAX) (206) 695-6777
ATTENTION: Jeremy Davis

MATRIX LEGEND: A - Ambient Air, Low Level; I - Indoor Air; S - Source Air, High Level; G - Gas/Product

SAMPLE DESCRIPTION	SAMPLE DATE	SAMPLE TIME	CANISTER NUMBER	COMP	GRAB	MATRIX A	MATRIX I	MATRIX S	MATRIX G	INITIAL PRESSURE / Elapsed Time (minutes)	FINAL PRESSURE	FIELD FLOW RATE	EPA TO-15 SIM Special List IP	EPA TO-15 SIM Special List FP	REMARKS
Pr.T.-010806	1/8/06	0810	659		X	A				1839 30		0106018-1	763	925	24 hour flow control
Ped.T.-010806	1/8/06	0845	164							1419		-2	758	931	
C.R.-010806	1/8/06	0835	402							1426		-3	747	923	
Pr.T.-010906	1/9/06	0813	190							1436		-4	757	938	
Ped.T.-010906	1/9/06	0826	5003							1439		-5	511	909	
C.R.-010806	1/9/06	0822	952							1432		-6	~~744~~ 749	913	
0109066	1/9/06	0850	751		↓	↓				—		-7	748	937	

COMMENTS: Please email results to jmd@shanwil.com cc: ACT@shanwil.com Returned can #526, FC: CT-52, CT-28, CT-57
cc: AMJ@shanwil.com CT-65, CT-27, CT-100, CT-48, CT-22, #15, gauge-6011

BILLING INFORMATION

Company: Shannon and Wilson
Address: 400 N 34th St
City/State/Zip: Seattle, WA 98103
ATTENTION: Jeremy Davis
Purchase Order/Billing Reference: 21-1-12132-004

		Date	Time		Date	Time
SAMPLED BY:	Jeremy Davis	1/10/06	0900	Received by:		
Relinquished By:		Date	Time	Received by:	Date	Time
Relinquished By:		Date	Time	Received by:	Date	Time
Relinquished By:		Date	Time	Received for lab by:	Date	Time
					1/11/06	930

IV. QUALITY CONTROL REPORT

SDG Numbers: 206018
Client: Shannon & Wilson, Inc.

LABORATORY QC REPORT

QC NARRATIVE

Unless project specific QC was specified, these samples were analyzed with the standard EAS QC for the method as defined in the EAS Quality Manual.

STANDARD LABORATORY QC REPORT

Unless project specific QC reporting was requested, this Section contains the standard laboratory QC supplied with the analytical reports, which includes the daily method blank and the daily duplicate control samples as described below. Each day that samples are analyzed comprises a Daily Analytical Batch for a particular instrument. A Daily Analytical Batch QC report will be supplied for each method and each day samples from this SDG Group were analyzed.

METHOD BLANK

A method blank is a laboratory-generated sample which assesses the degree to which laboratory operations and procedures cause false-positive analytical results for your samples. A copy of each batch Method Blank is included with the report. If a compound is detected in the Method Blank between the RL and MDL, it will be flagged with a "J". If a compound is above the RL, it will be flagged with a "B"

DUPLICATE CONTROL SAMPLES

A duplicate or duplicate control sample (DCS) was analyzed as part of each daily analytical batch. A DCS is a well-characterized matrix (blank water, ambient air, or actual sample) which may or may not be spiked and run in duplicate with your sample batch. The results are on the attached Duplicate Sample/Spike results. Precision is measured in a duplicate test by Relative Percent Difference (RPD) as in:

$$RPD = \frac{[\%\ \text{Recovery Test 1} - \%\ \text{Recovery Test 2}] \times 100}{(\text{Recovery Test 1} + \text{Recovery Test 2}) / 2}$$

METHOD BLANK REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 SIM GC/MS
Analytical Method: **TO-15 SIM**

SDG: **LABQC**
Laboratory Number: **B01176**

File: CC25A.D
Description: METHOD BLANK
Can/Tube#:
Sam_Type: MB
QC_Batch: 011706-MS1
Air Volume: 500 ml

Date Sampled: **Time:**
Date Received:
Date Extracted:
Date Analyzed: 01/17/06 **Time:** 12:11
Can Dilution Factor: 1.00 3
Not Detected Flag: U

CAS#	Compound	MDL ppbv	RL ppbv	Amount ppbv	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
1634-04-4	Methyl tert butyl ether	0.040	0.156	0.040	0.149	0.581	0.149	U
107-06-2	1,2-Dichloroethane	0.016	0.020	0.016	0.067	0.084	0.067	U
71-43-2	Benzene	0.012	0.104	0.064	0.040	0.343	0.210	J
108-88-3	Toluene	0.018	0.104	0.045	0.070	0.404	0.174	J
106-93-4	1,2-Dibromoethane	0.022	0.104	0.022	0.175	0.826	0.175	U
100-41-4	Ethylbenzene	0.014	0.104	0.014	0.063	0.466	0.063	U
108-38-3	m & p-Xylene	0.014	0.206	0.025	0.063	0.922	0.112	J
95-47-6	o-Xylene	0.016	0.104	0.016	0.072	0.466	0.072	U

Surrogate Recovery	Spike Amt. ppbV	Amount ppbV	% Rec.	QC Limits	Flag * = Out
Toluene-d8	0.200	0.193	96	70-130	

Notes: 1) Reported results are to be interpreted to two significant figures.
2) ug/m3 = ppbV*FW/23.68 calculated assuming conditions at 60 F and 1 atm.
3) MDL and RL are adjusted for sample volume and can dilution.
4) U and ND are Flags used for Not Detected
5) J is a flag for a result between the MDL and the RL (or lower quantitation limit, LQL)

QUALITY CONTROL DUPLICATE

ENVIRONMENTAL
Analytical Service, Inc.

Duplicate of QC Sample

EPA Method TO-15 SIM GC/MS **SDG: LABQC**
Analytical Method: **TO-15 SIM**

Dup File: QC01176B.D
Description: ST-071105-2
Can/Tube#:
QC_Batch: 011706-MS1

CAS#	Compound	LCD ppbv	LCS ppbv	RPD %D	Limit %	Flag * = Out
107-06-2	1,2-Dichloroethane	0.094	0.088	6	30	
71-43-2	Benzene	0.091	0.094	3	30	
108-88-3	Toluene	0.099	0.097	2	30	
106-93-4	1,2-Dibromoethane	0.121	0.131	10	30	
100-41-4	Ethylbenzene	0.082	0.080	2	30	
108-38-3	m & p-Xylene	0.170	0.170	0	30	
95-47-6	o-Xylene	0.089	0.089	0	30	

QUALITY CONTROL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

LABORATORY CONTROL SPIKE

EPA Method TO-15 SIM GC/MS **SDG: LABQC**
Analytical Method: TO-15 SIM

File: QC01176A.D
Description: ST-071105-2
Can/Tube#:
Sam_Type: LCS
QC_Batch: 011706-MS1
Air Volume: 1000 ml

Date Sampled: NA
Date Received: NA
Date Extracted: NA
Date Analyzed: 01/17/06 **Time:** 9:45
Can Dilution Factor: 1.00 3
QC Duplicate: No

CAS#	Compound	MDL ppbv	Spike Conc ppbv	Amount ppbv	Matrix Amt ppbv	Spk Amt ppbv	Percent Recovery	LCL %	UCL %	Flag
107-06-2	1,2-Dichloroethane	0.008	0.103	0.088	0.000	0.088	85	70	130	
71-43-2	Benzene	0.006	0.103	0.094	0.000	0.094	91	70	130	
108-88-3	Toluene	0.009	0.103	0.097	0.000	0.097	94	70	130	
106-93-4	1,2-Dibromoethane	0.011	0.103	0.131	0.000	0.131	127	70	130	
100-41-4	Ethylbenzene	0.007	0.103	0.080	0.000	0.080	78	70	130	
108-38-3	m & p-Xylene	0.007	0.206	0.170	0.000	0.170	83	70	130	
95-47-6	o-Xylene	0.008	0.103	0.089	0.000	0.089	86	70	130	

Surrogate Recovery	Spike Amt. ppbV	Amount ppbV	% Rec.	QC Limits	Flag * = Out
Toluene-d8	0.200	0.196	98	70-130	

Notes: Reported results are to be interpreted to two significant figures.
*ug/m3 calculated assuming conditions at 60 F and 1 atm.

QUALITY CONTROL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

LABORATORY CONTROL DUPLICATE

EPA Method TO-15 SIM GC/MS **SDG: LABQC**
Analytical Method: TO-15 SIM

File: QC01176B.D
Description: ST-071105-2
Can/Tube#:
Sam_Type: LCD
QC_Batch: 011706-MS1
Air Volume: 1000 ml

Date Sampled: NA
Date Received: NA
Date Extracted: NA
Date Analyzed: 01/17/06 **Time:** 10:27
Can Dilution Factor: 1.00 3
QC Duplicate: Yes

CAS#	Compound	MDL ppbv	Spike Conc ppbv	Amount ppbv	Matrix Amt ppbv	Spk Amt ppbv	Percent Recovery	LCL %	UCL %	Flag
107-06-2	1,2-Dichloroethane	0.008	0.103	0.094	0.000	0.094	91	70	130	
71-43-2	Benzene	0.006	0.103	0.091	0.000	0.091	88	70	130	
108-88-3	Toluene	0.009	0.103	0.099	0.000	0.099	96	70	130	
106-93-4	1,2-Dibromoethane	0.011	0.103	0.121	0.000	0.121	117	70	130	
100-41-4	Ethylbenzene	0.007	0.103	0.082	0.000	0.082	80	70	130	
108-38-3	m & p-Xylene	0.007	0.206	0.170	0.000	0.170	83	70	130	
95-47-6	o-Xylene	0.008	0.103	0.089	0.000	0.089	86	70	130	

Surrogate Recovery	Spike Amt. ppbV	Amount ppbV	% Rec.	QC Limits	Flag * = Out
Toluene-d8	0.200	0.192	96	70-130	

Notes: Reported results are to be interpreted to two significant figures.
*ug/m3 calculated assuming conditions at 60 F and 1 atm.

V. ANALYTICAL RESULTS

SDG Numbers: 206018
Client: Shannon & Wilson, Inc.

The following pages contain the certified reports for the analytical methods and the compounds requested. The reports are in order of analytical method then EAS ID number. A brief description of the units that appear on the reports is given below:

ppbV, ppmV, Percent

Parts per billion by volume (also known as mole ratio) and other related units. This is the primary reporting unit for all volatile organic compound analysis except the hydrocarbon speciation and total hydrocarbons. This unit is independent of temperature and pressure.

$$ppbV = \frac{\text{nanomoles of compound}}{\text{moles of air}}$$

ug/m3, mg/m3

Micrograms of compound per cubic meter of air and other related units. This is the primary reporting unit for semi volatile organic compounds. It is not a primary reporting unit for volatile organic compounds because it is temperature and pressure dependent, so the result will vary depending on the conditions when the sample was collected. EAS provides the units on its analytical reports as a convenience to the client, but they should be used with caution. The following equation can be used to convert from ppbV to ug/m3.

$$ug/m3 = \frac{ppbV \times MW\ compound}{23.68}$$

23.68 is the molar volume of a gas at 60 F and 1 atm pressure

ppbC, ppmC

Parts per billion by volume as carbon (methane) and other related units. This unit is the primary reporting unit for hydrocarbon analysis, even if it does not appear on the report. This unit is used because the flame ionization detector response is proportional to the number of carbons in the compound, so an accurate concentration can be reported even if the identification of the compound is not known.

$$ppbC = ppbV \times \text{number of carbons in compound}$$

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 SIM GC/MS **SDG:** 206018
Analytical Method: TO-15 SIM **Laboratory Number:** 01

File: 0601801A.D
Description: PR.T.-010806
Can/Tube#: 659
Sam_Type: SA
QC_Batch: 011706-MS1
Air Volume: 477 ml

Date Sampled: 01/08/06 **Time:** 8:10
Date Received: 01/11/06
Date Extracted:
Date Analyzed: 01/17/06 **Time:** 15:48
Can Dilution Factor: 1.21 3
Not Detected Flag: U

CAS#	Compound	MDL ppbv	RL ppbv	Amount ppbv	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
1634-04-4	Methyl tert butyl ether	0.051	0.198	0.051	0.189	0.737	0.189	U
107-06-2	1,2-Dichloroethane	0.020	0.025	0.020	0.085	0.106	0.085	U
71-43-2	Benzene	0.015	0.132	0.308	0.050	0.435	1.016	
108-88-3	Toluene	0.023	0.132	0.728	0.089	0.513	2.832	
106-93-4	1,2-Dibromoethane	0.028	0.132	0.028	0.222	1.047	0.222	U
100-41-4	Ethylbenzene	0.018	0.132	0.067	0.079	0.590	0.298	J
108-38-3	m & p-Xylene	0.018	0.261	0.222	0.079	1.170	0.992	J
95-47-6	o-Xylene	0.020	0.132	0.081	0.091	0.590	0.362	J

Surrogate Recovery	Spike Amt. ppbV	Amount ppbV	% Rec.	QC Limits	Flag * = Out
Toluene-d8	0.200	0.185	93	70-130	

Notes: 1) Reported results are to be interpreted to two significant figures.
2) ug/m3 = ppbV*FW/23.68 calculated assuming conditions at 60 F and 1 atm.
3) MDL and RL are adjusted for sample volume and can dilution.
4) U and ND are Flags used for Not Detected
5) J is a flag for a result between the MDL and the RL (or lower quantitation limit, LQL)

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 SIM GC/MS
Analytical Method: TO-15 SIM

SDG: 206018
Laboratory Number: 02

File: 0601802A.D
Description: PED.T.-010806
Can/Tube#: 164
Sam_Type: SA
QC_Batch: 011706-MS1
Air Volume: 477 ml

Date Sampled: 01/08/06 **Time:** 8:45
Date Received: 01/11/06
Date Extracted:
Date Analyzed: 01/17/06 **Time:** 16:33
Can Dilution Factor: 1.23 3
Not Detected Flag: U

CAS#	Compound	MDL ppbv	RL ppbv	Amount ppbv	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
1634-04-4	Methyl tert butyl ether	0.052	0.201	0.052	0.192	0.749	0.192	U
107-06-2	1,2-Dichloroethane	0.021	0.026	0.021	0.086	0.108	0.086	U
71-43-2	Benzene	0.015	0.134	0.346	0.051	0.442	1.143	
108-88-3	Toluene	0.023	0.134	0.940	0.090	0.522	3.658	
106-93-4	1,2-Dibromoethane	0.028	0.134	0.028	0.225	1.065	0.225	U
100-41-4	Ethylbenzene	0.018	0.134	0.140	0.081	0.600	0.625	
108-38-3	m & p-Xylene	0.018	0.266	0.445	0.081	1.189	1.993	
95-47-6	o-Xylene	0.021	0.134	0.170	0.092	0.600	0.760	

Surrogate Recovery	Spike Amt. ppbV	Amount ppbV	% Rec.	QC Limits	Flag * = Out
Toluene-d8	0.200	0.190	95	70-130	

Notes: 1) Reported results are to be interpreted to two significant figures.
2) ug/m3 = ppbV*FW/23.68 calculated assuming conditions at 60 F and 1 atm.
3) MDL and RL are adjusted for sample volume and can dilution.
4) U and ND are Flags used for Not Detected
5) J is a flag for a result between the MDL and the RL (or lower quantitation limit, LQL)

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 SIM GC/MS **SDG: 206018**
Analytical Method: TO-15 SIM **Laboratory Number: 03**

File:	0601803A.D	**Date Sampled:**	01/08/06	**Time:**	8:35
Description:	C.R.-010806	**Date Received:**	01/11/06		
Can/Tube#:	402	**Date Extracted:**			
Sam_Type:	SA	**Date Analyzed:**	01/17/06	**Time:**	17:17
QC_Batch:	011706-MS1	**Can Dilution Factor:**	1.24		3
Air Volume:	477 ml	**Not Detected Flag:**	U		

CAS#	Compound	MDL ppbv	RL ppbv	Amount ppbv	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
1634-04-4	Methyl tert butyl ether	0.052	0.203	0.052	0.194	0.755	0.194	U
107-06-2	1,2-Dichloroethane	0.021	0.026	0.021	0.087	0.109	0.087	U
71-43-2	Benzene	0.016	0.135	0.296	0.051	0.446	0.977	
108-88-3	Toluene	0.023	0.135	0.894	0.091	0.526	3.476	
106-93-4	1,2-Dibromoethane	0.029	0.135	0.029	0.227	1.073	0.227	U
100-41-4	Ethylbenzene	0.018	0.135	0.150	0.081	0.605	0.671	
108-38-3	m & p-Xylene	0.018	0.268	0.384	0.081	1.199	1.720	
95-47-6	o-Xylene	0.021	0.135	0.140	0.093	0.605	0.628	

Surrogate Recovery	Spike Amt. ppbV	Amount ppbV	% Rec.	QC Limits	Flag * = Out
Toluene-d8	0.200	0.180	90	70-130	

Notes: 1) Reported results are to be interpreted to two significant figures.
2) ug/m3 = ppbV*FW/23.68 calculated assuming conditions at 60 F and 1 atm.
3) MDL and RL are adjusted for sample volume and can dilution.
4) U and ND are Flags used for Not Detected
5) J is a flag for a result between the MDL and the RL (or lower quantitation limit, LQL)

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 SIM GC/MS
Analytical Method: **TO-15 SIM**

SDG: **206018**
Laboratory Number: **04**

File: 0601804A.D
Description: PR.T.-010906
Can/Tube#: 190
Sam_Type: SA
QC_Batch: 011706-MS1
Air Volume: 477 ml

Date Sampled: 01/09/06 **Time:** 8:13
Date Received: 01/11/06
Date Extracted:
Date Analyzed: 01/17/06 **Time:** 18:02
Can Dilution Factor: 1.24 3
Not Detected Flag: U

CAS#	Compound	MDL ppbv	RL ppbv	Amount ppbv	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
1634-04-4	Methyl tert butyl ether	0.052	0.203	0.052	0.194	0.755	0.194	U
107-06-2	1,2-Dichloroethane	0.021	0.026	0.021	0.087	0.109	0.087	U
71-43-2	Benzene	0.016	0.135	0.671	0.051	0.446	2.212	
108-88-3	Toluene	0.023	0.135	1.114	0.091	0.526	4.333	
106-93-4	1,2-Dibromoethane	0.029	0.135	0.029	0.227	1.073	0.227	U
100-41-4	Ethylbenzene	0.018	0.135	0.298	0.081	0.605	1.336	
108-38-3	m & p-Xylene	0.018	0.268	0.398	0.081	1.199	1.783	
95-47-6	o-Xylene	0.021	0.135	0.166	0.093	0.605	0.745	

Surrogate Recovery	Spike Amt. ppbV	Amount ppbV	% Rec.	QC Limits	Flag * = Out
Toluene-d8	0.200	0.176	88	70-130	

Notes: 1) Reported results are to be interpreted to two significant figures.
2) ug/m3 = ppbV*FW/23.68 calculated assuming conditions at 60 F and 1 atm.
3) MDL and RL are adjusted for sample volume and can dilution.
4) U and ND are Flags used for Not Detected
5) J is a flag for a result between the MDL and the RL (or lower quantitation limit, LQL)

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 SIM GC/MS **SDG: 206018**
Analytical Method: TO-15 SIM **Laboratory Number: 05**

File: 0601805A.D
Description: PED.T.-010906
Can/Tube#: 5003
Sam_Type: SA
QC_Batch: 011706-MS1
Air Volume: 477 ml

Date Sampled: 01/09/06 **Time:** 8:26
Date Received: 01/11/06
Date Extracted:
Date Analyzed: 01/17/06 **Time:** 18:44
Can Dilution Factor: 1.68 3
Not Detected Flag: U

CAS#	Compound	MDL ppbv	RL ppbv	Amount ppbv	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
1634-04-4	Methyl tert butyl ether	0.070	0.275	0.070	0.262	1.023	0.262	U
107-06-2	1,2-Dichloroethane	0.028	0.035	0.028	0.118	0.147	0.118	U
71-43-2	Benzene	0.021	0.183	0.764	0.070	0.604	2.521	
108-88-3	Toluene	0.032	0.183	3.402	0.123	0.712	13.230	
106-93-4	1,2-Dibromoethane	0.039	0.183	0.039	0.308	1.454	0.308	U
100-41-4	Ethylbenzene	0.025	0.183	0.306	0.110	0.820	1.369	
108-38-3	m & p-Xylene	0.025	0.363	0.956	0.110	1.624	4.277	
95-47-6	o-Xylene	0.028	0.183	0.362	0.126	0.820	1.622	

Surrogate Recovery	Spike Amt. ppbV	Amount ppbV	% Rec.	QC Limits	Flag * = Out
Toluene-d8	0.200	0.183	92	70-130	

Notes: 1) Reported results are to be interpreted to two significant figures.
2) ug/m3 = ppbV*FW/23.68 calculated assuming conditions at 60 F and 1 atm.
3) MDL and RL are adjusted for sample volume and can dilution.
4) U and ND are Flags used for Not Detected
5) J is a flag for a result between the MDL and the RL (or lower quantitation limit, LQL).

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 SIM GC/MS **SDG: 206018**
Analytical Method: TO-15 SIM **Laboratory Number: 06**

File: 0601806A.D
Description: C.R.-010806
Can/Tube#: 952
Sam_Type: SA
QC_Batch: 011706-MS1
Air Volume: 477 ml

Typo - should read C.R.-010906

Date Sampled: 01/09/06 **Time:** 8:22
Date Received: 01/11/06
Date Extracted:
Date Analyzed: 01/17/06 **Time:** 19:29
Can Dilution Factor: 1.23 3
Not Detected Flag: U

CAS#	Compound	MDL ppbv	RL ppbv	Amount ppbv	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
1634-04-4	Methyl tert butyl ether	0.052	0.201	0.052	0.192	0.749	0.192	U
107-06-2	1,2-Dichloroethane	0.021	0.026	0.021	0.086	0.108	0.086	U
71-43-2	Benzene	0.015	0.134	0.309	0.051	0.442	1.018	
108-88-3	Toluene	0.023	0.134	1.556	0.090	0.522	6.051	
106-93-4	1,2-Dibromoethane	0.028	0.134	0.028	0.225	1.065	0.225	U
100-41-4	Ethylbenzene	0.018	0.134	0.100	0.081	0.600	0.449	J
108-38-3	m & p-Xylene	0.018	0.266	0.306	0.081	1.189	1.369	
95-47-6	o-Xylene	0.021	0.134	0.106	0.092	0.600	0.476	J

Surrogate Recovery	Spike Amt. ppbV	Amount ppbV	% Rec.	QC Limits	Flag * = Out
Toluene-d8	0.200	0.183	92	70-130	

Notes: 1) Reported results are to be interpreted to two significant figures.
2) ug/m3 = ppbV*FW/23.68 calculated assuming conditions at 60 F and 1 atm.
3) MDL and RL are adjusted for sample volume and can dilution.
4) U and ND are Flags used for Not Detected
5) J is a flag for a result between the MDL and the RL (or lower quantitation limit, LQL)

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 SIM GC/MS **SDG: 206018**
Analytical Method: TO-15 SIM **Laboratory Number: 07**

File:	0601807A.D	**Date Sampled:**	01/09/06	**Time:**	8:50
Description:	010906B	**Date Received:**	01/11/06		
Can/Tube#:	751	**Date Extracted:**			
Sam_Type:	SA	**Date Analyzed:**	01/17/06	**Time:**	15:03
QC_Batch:	011706-MS1	**Can Dilution Factor:**	1.25		3
Air Volume:	477 ml	**Not Detected Flag:**	U		

CAS#	Compound	MDL ppbv	RL ppbv	Amount ppbv	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
1634-04-4	Methyl tert butyl ether	0.052	0.204	0.052	0.195	0.761	0.195	U
107-06-2	1,2-Dichloroethane	0.021	0.026	0.021	0.088	0.110	0.088	U
71-43-2	Benzene	0.016	0.136	0.197	0.052	0.449	0.650	
108-88-3	Toluene	0.024	0.136	0.333	0.092	0.530	1.295	
106-93-4	1,2-Dibromoethane	0.029	0.136	0.029	0.229	1.082	0.229	U
100-41-4	Ethylbenzene	0.018	0.136	0.080	0.082	0.610	0.357	J
108-38-3	m & p-Xylene	0.018	0.270	0.207	0.082	1.208	0.926	J
95-47-6	o-Xylene	0.021	0.136	0.084	0.094	0.610	0.375	J

Surrogate Recovery	Spike Amt. ppbV	Amount ppbV	% Rec.	QC Limits	Flag * = Out
Toluene-d8	0.200	0.188	94	70-130	

Notes: 1) Reported results are to be interpreted to two significant figures.
2) ug/m3 = ppbV*FW/23.68 calculated assuming conditions at 60 F and 1 atm.
3) MDL and RL are adjusted for sample volume and can dilution.
4) U and ND are Flags used for Not Detected
5) J is a flag for a result between the MDL and the RL (or lower quantitation limit, LQL)

DATA QUALIFIERS *and* ABBREVIATIONS

ENVIRONMENTAL
Analytical Service, Inc.

Qualifiers

*	See Case Narrative
B	This compound was detected in the blank above the Reporting Limit (RL)
D	This report was calculated from a secondary dilution factor
E	Compound exceeds the calibration range and is an estimated value
J	The amount reported is an estimated value because it is between the Reporting Limit (RL) and the Method Detection Limit (MDL)
F	Higher detection limit due to sample matrix
G	Higher detection limit due to limited sample size
Q	Compound secondary ion ratio qualifiers are outside the standard acceptance criteria
R	Compound secondary retention time (RT) is outside the acceptance criteria for the method
U	Compound is less than the Method Detection Limit (MDL)

Abbreviations

MDL Minimum Detection Limit– Instrument detection limit

The minimum detectable level (MDL) is the lowest concentration of a substance that can be measured with confidence. The MDL is calculated at the 99% confidence level from seven repetitive measurements on a sample whose concentration does not exceed 10 times the estimated MDL (Glasser et. al. 1981; Long and Winefordner, 1983). Generating an MDL study, a sample is prepared in the appropriate matrix with components near the estimated MDL, which is about 3 times the instrument noise level. This sample is run seven consecutive times and the standard deviation (S) is calculated. The MDL is determined using the following formula: MDL = 3.14*S

ND Not Detected – a reported limit

NA Not Applicable

RPD Relative Percent Difference

The relative percent difference for a pair of duplicate samples is calculated from repetitive runs on sample pairs representative of the types of samples that are analyzed. The RPD provides information on the precision or reproducibility of the actual measurement process. The RPD is calculated for a particular compound from the average using the following formula:

$$RPD(\%) = \frac{\text{Difference} * 100}{\text{Average}}$$

RSD Relative Standard Deviation

The relative standard deviation is reported as a percentage deviation at a particular concentration using the following equation:

$$RSD(\%) = \frac{S * 100}{\text{Average}}$$

APPENDIX J

MONITORING WELL INFORMATION

APPENDIX J

MONITORING WELL INFORMATION

LIST OF TABLES

Table No.

J-1 Snohomish County Campus Redevelopment Well Information

LIST OF ATTACHMENTS

Resource Protection Well Reports (Construction) – 8 pages

Resource Protection Well Reports (Decommission) – 2 pages

APPENDIX J

WELL DECOMMISSIONING INFORMATION

J.1 INTRODUCTION

Eight monitoring wells (MW-1, MW-2 MW-3, B-9, B-11, B-14, B-17, and B-18) were installed at the site over the course of the project. Monitoring wells B-11 and B-18 were located in areas of excavation and were removed during construction. Following site development activities, Cascade Drilling decommissioned monitoring wells MW-1 and B-17. Wells MW-2, MW-3, B-9, and B-14 were sealed by concrete. For more information concerning these wells, refer to Table J-1 and the Resource Protection Well Reports attached.

TABLE J-1
Snohomish County Campus Redevelopment Well Information

Well Log ID	Ecology Well Tag	S&W Identifier	Notice of Intent Number (Construct)	Notice of Intent Number (Decommission)	Well Depth (ft)	Screened Interval (ft)	Well Completion Date	Well Decommission Date	Abandonment Type*	Location
361749	AFT309	MW-1	R064002	A106545	38	25-35	11/14/2002	1/10/2006	Driller Decommissioned	Campus
361750	AFT310	MW-2	R064002	-	30	20-30	11/13/2002	-	Capped	Campus
361751	AFT311	MW-3	R064002	-	45	35-45	11/26/2002	-	Capped	Campus
331772	AGT524	B-9	R061764	-	55	45-55	2/21/2002	-	Capped	Campus
331769	AGL042	B-11	R061764	-	45	35-45	2/20/2002	-	Excavated	Campus
331768	AGL041	B-14	R061764	-	45	32-45	2/20/2002	-	Capped	Campus
337260	AHE735	B-17	R062823	A106545	50	40-50	6/21/2002	1/10/2006	Driller Decommissioned	Campus
337261	AHE736	B-18	R062823	-	43	23-43	1/11/2006	-	Excavated	Campus

NOTES:
(1) Campus = Snohomish County Campus in Everrett, Washington
* Three abandonment types:
Driller Decommissioned - Decommissioning forms attached
Capped - Covered by sidewalk, wells do not connect to aquifer - effectively decommissioned
Excavated - Completely removed during site developement

RESOURCE PROTECTION WELL REPORT

Notice of Intent No. R-64002

(SUBMIT ONE WELL REPORT PER WELL INSTALLED)

133148

29-5E-29D

Construction/Decommission *("x" in circle)*

(X) Construction

( ) Decommission *Original Construction Notice of Intent Number* _____

MW-1

Type of Well *("x" in circle)*

(X) Resource Protection (MON.WELL)

( ) Geotech Soil Boring

Property Owner SNOHOMISH COUNTY

Unique Ecology Well ID Tag No AFT-309

Consulting Firm SHANNON & WILSON

Driller or Trainee Name BILLY A. DODGE

Driller or Trainee Signature Billy A Dodge

Driller or Trainee License No 1146

If trainee, licensed driller's Signature and License no _____

Site Address OAKES & WALL ST. (COURTHOUSE)

City EVERETT County SNOHOMISH

Location NW 1/4- 1/4 NW 1/4 Sec 29 Twn 29 R 5 (EWM) or WWM *circle one*

Lat/Long (s, t, r still REQUIRED) Lat Deg _____ Lat Min/Sec _____ Long Deg _____ Long Min/Sec _____

Tax Parcel No 00439071500100

Cased or Uncased Diameter 2" Static Level 20'

Work/Decommission Start Date 11-14-02

Work/Decommission Completed Date 11-14-02

SOIL DESCRIPTION Surface Elev. Approx 138 Ft Datum	Depth, Ft.	Symbol	Samples	Ground Water	Depth, Ft	Standard Penetration Resistance (140 lb. weight, 30-inch drop) ▲ Blows per foot 0 20 40 60	
Very dense, brown, gravelly, silty, fine to medium SAND to silty, fine to medium sandy GRAVEL; moist; trace of iron-oxide stains; (Till) SM			1		5		50/3"
					10		50/3.5"
Very dense, brownish-gray, slightly silty to slightly gravelly, silty, fine to coarse and fine to medium SAND; moist, trace of peat at 17.6 feet and slight gasoline-like odor, (Advance Outwash?) SM/SP-SM	14.0		2 3		15 20		87/10.5"
Very dense, gray, slightly silty to silty, gravelly to slightly gravelly, fine to medium and fine to coarse SAND; wet, SM/SP-SM.	21.0		4	Boring Backfilled with Bentonite Chips	25		50/3"
Very dense, gray, interbedded, fine sandy SILT, moist to wet and clayey SILT; laminated; moist; common fine sand seams, moist; ML/SM	28.2		5 6		30		50/5"
					35		50/5"
BOTTOM OF BORING COMPLETED 11/14/2002	38.4		7		40 45		50/4.5"

Scale 1

(Rev 2/01)

0 20 40 60

LEGEND

- Sample Not Recovered
- I Standard Penetration Test
- Piezometer Screen and Sand Filter
- Bentonite-Cement Grout
- Bentonite Chips/Pellets
- Bentonite Grout
- ▽ Ground Water Level ATD
- ▼ Ground Water Level in Well
- ● % Water Content
- Plastic Limit |—●—| Liquid Limit
- Natural Water Content

NOTES

1. The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual
2. The discussion in the text of this report is necessary for a proper understanding of the nature of the subsurface materials
3. Groundwater level, if indicated above, is for the date specified and may vary
4. Refer to KEY for explanation of symbols, codes, and definitions
5. USCS designation is based on visual manual classification and selected lab testing

Snohomish County Campus
Administration Building
Everett, Washington

LOG OF BORING MW-1

March 2003 21-1-09644-010

RECEIVED
JUN 04 2003
DEPT OF ECOLOGY

The Department of Ecology does NOT Warranty the Data and/or the Information on this Well Report.

RESOURCE PROTECTION WELL REPORT Notice of Intent No. R-64002

(SUBMIT ONE WELL REPORT PER WELL INSTALLED)

29-5E.29D

Construction/Decommission *("x" in circle)* 133149

⊗ Construction MW-2

○ Decommission *Original Construction Notice of Intent Number* _____

Type of Well *("x" in circle)*

⊗ Resource Protection (MON.WELL)

○ Geotech Soil Boring

Property Owner SNOHOMISH COUNTY

Unique Ecology Well ID Tag No AFT-310

Consulting Firm SHANNON & WILSON

Driller or Trainee Name BILLY A. DODGE

Driller or Trainee Signature Billy A Dodge

Driller or Trainee License No 1146

If trainee, licensed driller's Signature and License no _____

Site Address OAKES & WALL ST. (COURTHOUSE)

City EVERETT County SNOHOMISH

Location NW 1/4- 1/4 NW 1/4 Sec 29 Twn 29 R 5 (EWM or WWM) *circle one*

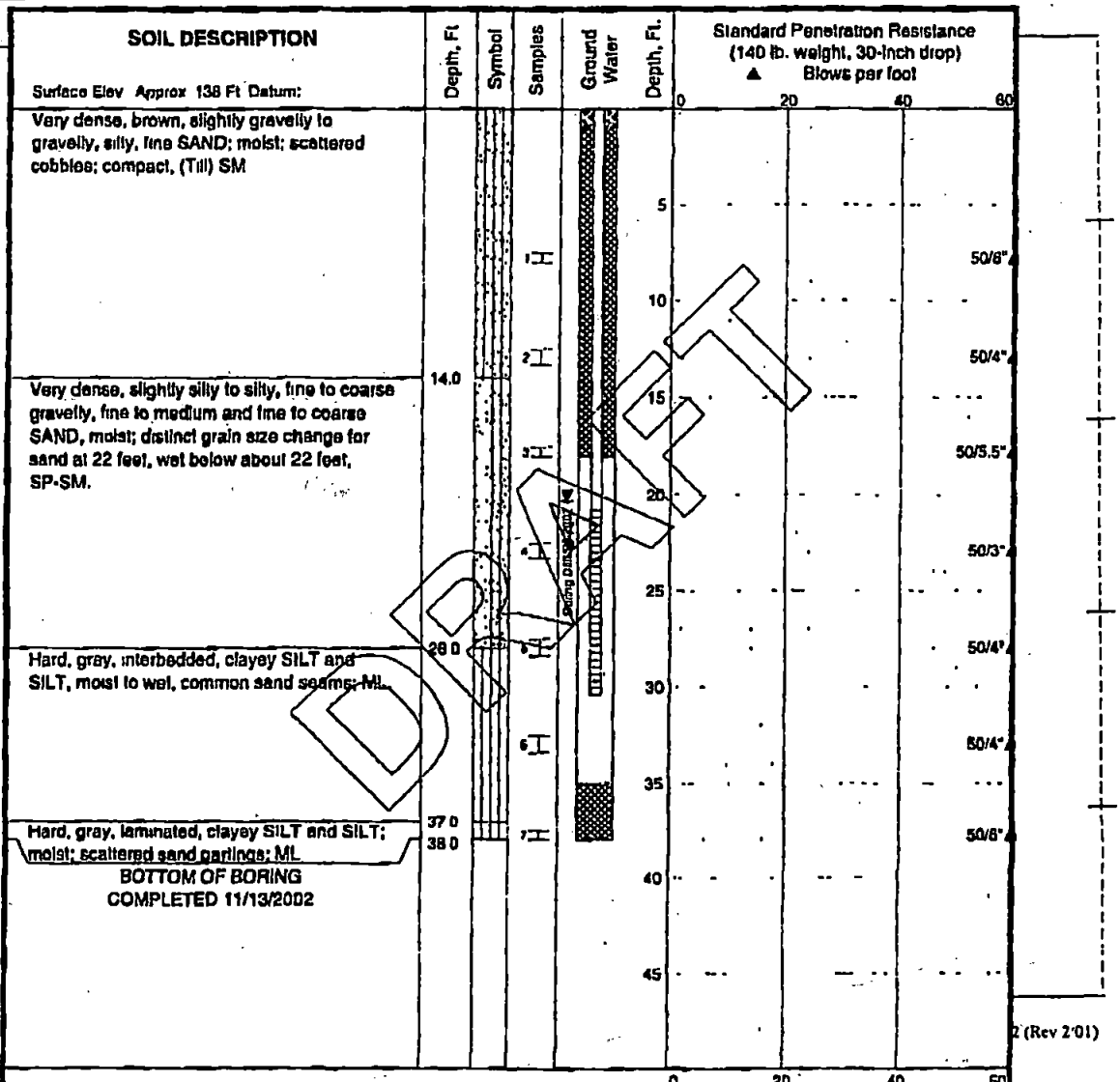
Lat/Long (s, t, r still REQUIRED) Lat Deg _____ Lat Min/Sec _____ Long Deg _____ Long Min/Sec _____

Tax Parcel No 004390711500100 0

Cased or Uncased Diameter 2" Static Level 20'

Work/Decommission Start Date 11-13-02

Work/Decommission Completed Date 11-13-02



Scale

2 (Rev 2/01)

LEGEND

- Sample Not Recovered
- I Standard Penetration Test
- Piezometer Screen and Sand Filter
- Bentonite-Cement Grout
- Bentonite Chips/Pellets
- Bentonite Grout
- ▽ Ground Water Level ATD
- ▼ Ground Water Level in Well
- ● % Water Content
- Plastic Limit ⊢●⊣ Liquid Limit
- Natural Water Content

NOTES

1. The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual
2. The discussion in the text of this report is necessary for a proper understanding of the nature of the subsurface materials
3. Groundwater level, if indicated above, is for the date specified and may vary
4. Refer to KEY for explanation of symbols, codes, and definitions
5. USCS designation is based on visual manual classification and selected lab testing

Snohomish County Campus
Administration Building
Everett, Washington

LOG OF BORING MW-2

March 2003 21-1-09644-010

RECEIVED
JUN 04 2003
DEPT OF ECOLOGY

The Department of Ecology does NOT Warranty the Data and/or the Information on this Well Report.

RESOURCE PROTECTION WELL REPORT

Notice of Intent No. R-64002

(SUBMIT ONE WELL REPORT PER WELL INSTALLED)

29-5E-29D

Construction/Decommission *("x" in circle)*
, 33150
⊗ Construction
○ Decommission *Original Construction Notice of Intent Number* _____

MW-3

Type of Well *("x" in circle)*
⊗ Resource Protection (MON.WELL)
○ Geotech Soil Boring

Property Owner SNOHOMISH COUNTY

Unique Ecology Well ID Tag No AET-311

Consulting Firm SHANNON & WILSON

Driller or Trainee Name BILLY A. DODGE

Driller or Trainee Signature Billy A Dodge

Driller or Trainee License No 1146

If trainee, licensed driller's Signature and License no _____

Site Address OAKES & WALL ST. (COURTHOUSE)

City EVERETT County SNOHOMISH

Location NW 1/4 - 1/4 NW 1/4 Sec 29 Twn 29 R 5 (EWM) or WWM *circle one*

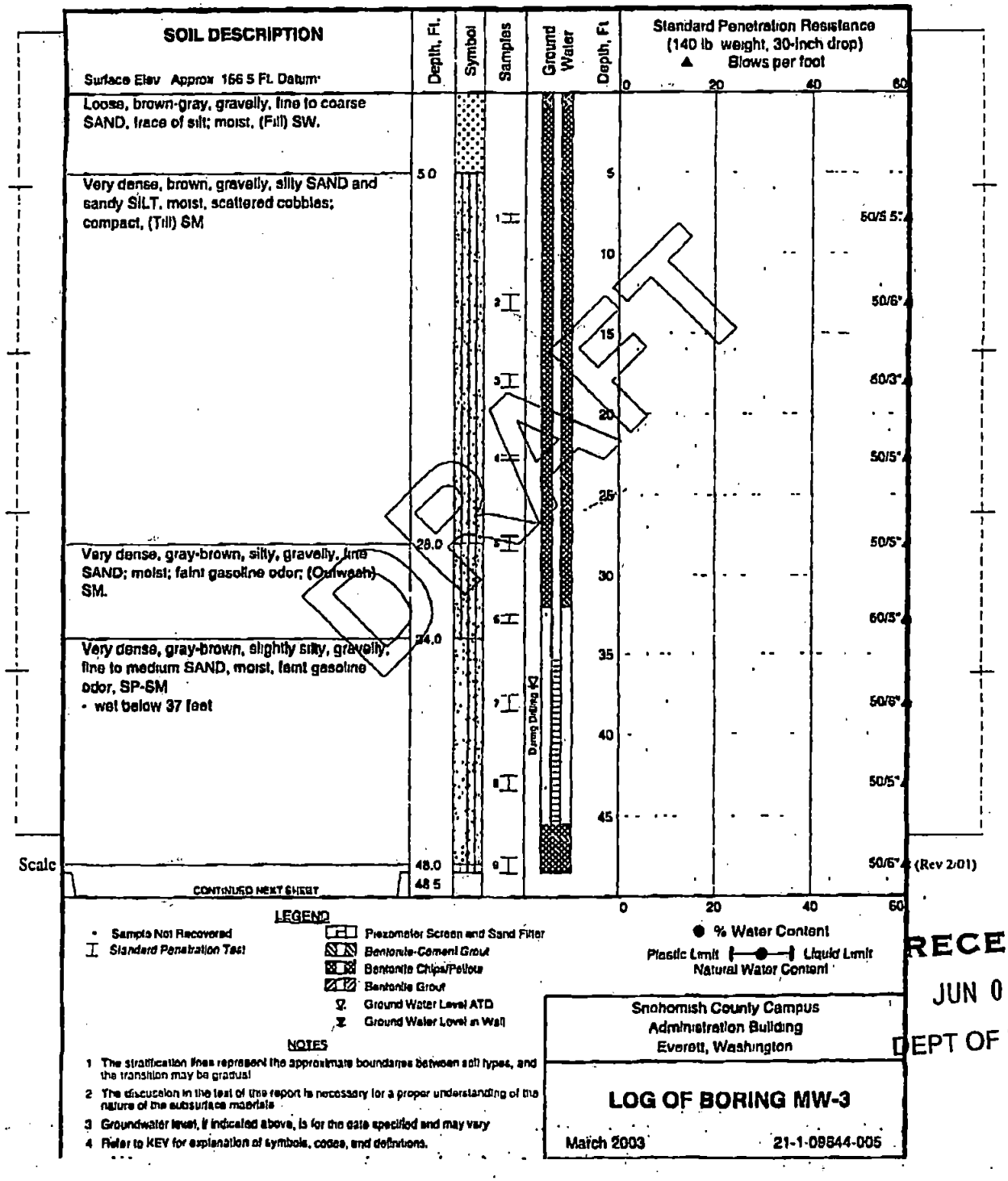
Lat/Long (s, t, r still REQUIRED) Lat Deg _____ Lat Min/Sec _____ Long Deg _____ Long Min/Sec _____

Tax Parcel No 00439071500100

Cased or Uncased Diameter 2" Static Level 37'

Work/Decommission Start Date 11-26-02

Work/Decommission Completed Date 11-26-02



DRAFT

LEGEND

- Sample Not Recovered
- Standard Penetration Test
- Piezometer Screen and Sand Filter
- Bentonite-Cement Grout
- Bentonite Chips/Pellets
- Bentonite Grout
- ▽ Ground Water Level ATD
- ▼ Ground Water Level in Well
- ● % Water Content
- Plastic Limit ⊢●⊣ Liquid Limit
- Natural Water Content

NOTES

1 The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual

2 The discussion in the text of the report is necessary for a proper understanding of the nature of the subsurface materials

3 Groundwater level, if indicated above, is for the date specified and may vary

4 Refer to KEY for explanation of symbols, codes, and definitions.

Snohomish County Campus
Administration Building
Everett, Washington

LOG OF BORING MW-3

March 2003 21-1-09544-005

RECEIVED
JUN 04 2003
DEPT OF ECOLOGY

112251

RESOURCE PROTECTION WELL REPORT

WELL TAG NO. AGT-524 START CARD NO. R-61764

PROJECT NAME: SNOHOMISH COUNTY COUNTY: SNOHOMISH 29-5E-29D

WELL IDENTIFICATION NO. PIEZOMETER LOCATION: NW¼ NW ¼ Sec 29 Twn 29N R 5E

DRILLING METHOD: MUD ROTARY STREET ADDRESS OF WELL: 3000 ROCKEFELLER AVE EVERETT WA.

DRILLER: CHRIS GREGORY WATER LEVEL ELEVATION: N/A

FIRM: GREGORY DRILLING GROUND SURFACE ELEVATION: N/A

SIGNATURE: [signature] INSTALLED: 2-21-02

CONSULTING FIRM: SHANNON + WILSON DEVELOPED: BY CLIENT

REPRESENTATIVE: AGNES JONES

Soil Type	Depth (in feet below ground surface)		
	0	Stick-up Height (if applicable)	
		Monument Type	8" FLUSH
		Well Cap Type	2" CAP
0-30' GLACIAL TILL SILT/SAND GRAVEL			
		Grout Type/#Sacks	2 SKS CONCRETE
30'-55' SILT/SAND	2		
		Bentonite Seal/#Sacks	12 SKS CHIPS
	44		
		Well Casing I.D.:	2"
		Type of casing	PVC
	45'	Type of connection	FLUSH THEAD
		Filter Pack/size/#Sacks	10-20 SILICA 6 SKS
		Well Screen I.D	2"
		Type of Screen	SCH 40 PVC
		Slot size	020
		Diameter of borehole	6"
		Endcap Type	2" THREAD
	55'		

RECEIVED
APR 9 2 2002
DEPT OF ECOLOGY

Remarks:

112248

RESOURCE PROTECTION WELL REPORT

WELL TAG NO. AGL-042 START CARD NO. R-61764

PROJECT NAME: SNOHOMISH COUNTY COUNTY: SNOHOMISH 29-5E-29D

WELL IDENTIFICATION NO. PIEZOMETER LOCATION: NW¼ NW ¼ Sec 29 Twn 29N R 5E

DRILLING METHOD: STREET ADDRESS OF WELL: 3000 ROCKEFELLER AVE EVERETT WA.

DRILLER: CHRIS GREGORY WATER LEVEL ELEVATION: N/A

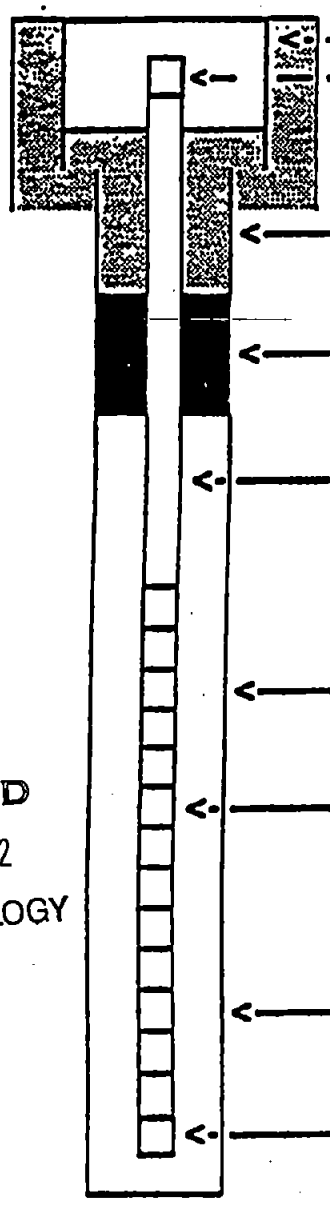
FIRM: GREGORY DRILLING GROUND SURFACE ELEVATION: N/A

SIGNATURE: INSTALLED: 2-20-02

CONSULTING FIRM: SHANNON + WILSON DEVELOPED: BY CLIENT

REPRESENTATIVE: AGNES JONES

Soil Type	Depth (in feet below ground surface)
0-28' FILL SAND/GRAVEL	0
28'-38' SAND/SILT	2
38'-43' SAND	34'
43'-45' SILT	35'
	45'



Stick-up Height (if applicable)

Monument Type 8" FLUSH

Well Cap Type 2" LAP

Grout Type/#Sacks 2 SKS CONCRETE

Bentonite Seal/#Sacks 10 SKS CHIPS

Well Casing I.D.: 2"

Type of casing PVC

Type of connection FLUSH THREAD

Filter Pack/size/#Sacks 10-20 SILICA 10 SKS

Well Screen I.D 2"

Type of Screen SCH 40 PVC

Slot size .020

Diameter of borehole 9"

Endcap Type 2" THREAD

RECEIVED
APR 22 2002
DEPT OF ECOLOGY

Remarks:

The Department of Ecology does NOT Warranty the Data and/or the Information on this Well Report.

112247

RESOURCE PROTECTION WELL REPORT

WELL TAG NO. AGL-041 START CARD NO. R-61764

PROJECT NAME: SNOHOMISH COUNTY COUNTY: SNOHOMISH 29-5E-29D

WELL IDENTIFICATION NO. PIEZOMETER LOCATION: NW¼ NW ¼ Sec 29 Twn 29N R 5E

DRILLING METHOD: HSA / MUD ROTARY STREET ADDRESS OF WELL: 3000 ROCKEFELLER AVE EVERETT WA.

DRILLER: CHRIS GREGORY WATER LEVEL ELEVATION: N/A

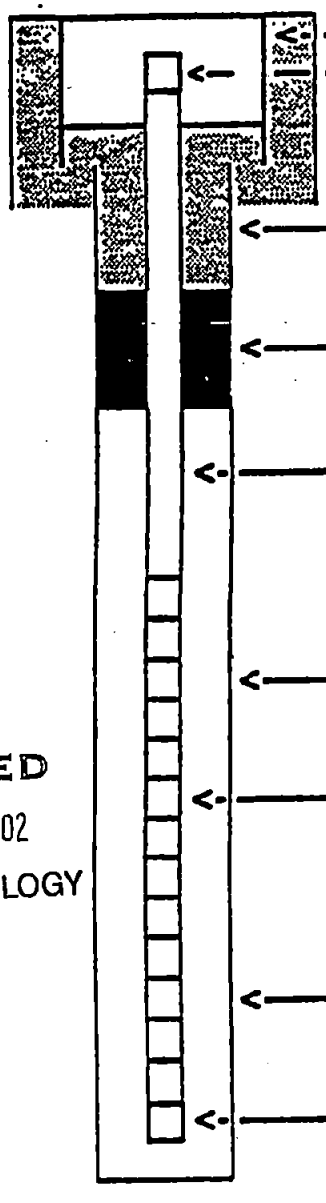
FIRM: GREGORY DRILLING GROUND SURFACE ELEVATION: N/A

SIGNATURE: INSTALLED: 2-20 02

CONSULTING FIRM: SHANNON + WILSON DEVELOPED: BY CLIENT

REPRESENTATIVE: AGNES JONES

Soil Type	Depth (in feet below ground surface)
0-30' GLACIAL TILL SILT/SAND GRAVEL	0
	2
30-45' SAND	31
	32
	45



Stick-up Height (if applicable) _____

Monument Type 8" FLUSH

Well Cap Type 2" CAP

Grout Type/#Sacks 2 SKS CONCRETE

Bentonite Seal/#Sacks 7 SKS CHIPS

Well Casing I.D.: 2"

Type of casing PVC

Type of connection FLUSH THREAD

Filter Pack/size/#Sacks 5 SKS 10-20 SILICA

Well Screen I.D 2"

Type of Screen SCH 40 PVC

Slot size .020

Diameter of borehole 9"

Endcap Type 2" THREAD

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Remarks:

117139

RESOURCE PROTECTION WELL REPORT

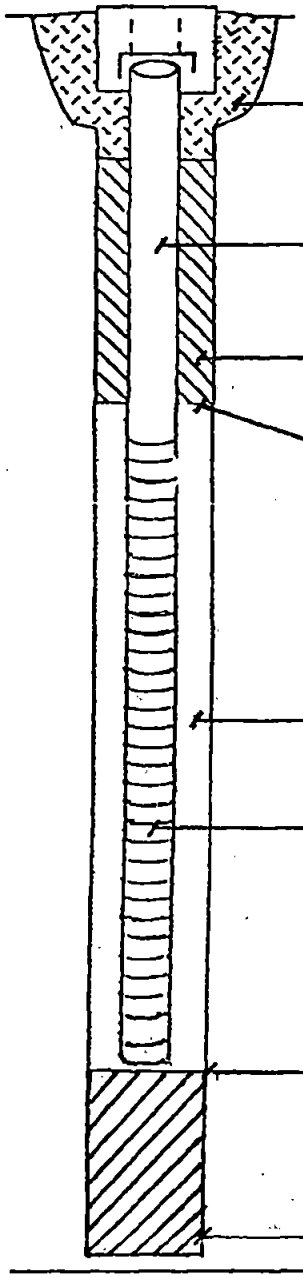
Start Card # R 62823

Client Well # _____
Project Name Snoh Cnty Justice Cntr
State Identification # AHE 735
Drilling Method HSA
Driller Scott E Krueger
Firm Cascade Drilling, Inc
Signature _____
Consulting Firm Shannon & Wilson
Representative Paul van Horne

County Snohomish
Location NW 1/4 NW 1/4 Sec 29 Twn 29N R 5E
Street Address of Well Wall Street & Oakes Ave, Everett
Water Level Elevation 32
Ground Surface Elevation N/A
Date Installed 6-21-02
Date Developed N/A

2331

AS BUILT | WELL DATA | FORMATION DESCRIPTION



Well Cover

Concrete Surface Seal
Depth = 1/ft

Blank Casing 2 " 40'
Material PVC

Backfill 37 ft
Type Bent chips

Seal _____
Material _____

Gravel Pack 12 ft
Material 2/12

Screen 2 "x 10'
Slot Size 10 10
Material PVC

Well Depth 50 ' "

Backfill _____
Material _____
Total Hole Depth _____

0 - 4 ft
brown silty gravel fill

4 - 50 ft
brown sandy gravel

- ft

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JUL 29 2002
DEPT OF ECOLOGY

SCALE 1 = _____ PAGE _____ OF _____

ECY 050-12 (Rev 11/89)

The Department of Ecology does NOT Warranty the Data and/or the Information on this Well Report.

117140

RESOURCE PROTECTION WELL REPORT

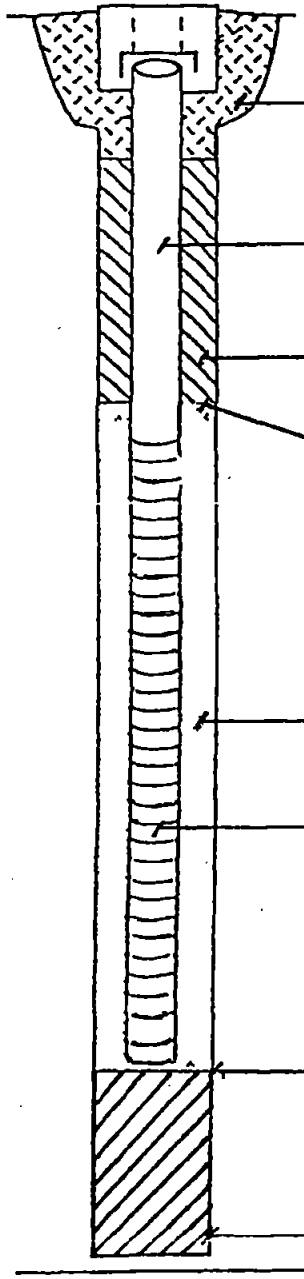
Start Card # R 62823

Client Well # _____
Project Name Snoh Cnty Justice Cntr
State Identification # AHE 736
Drilling Method HSA
Driller Scott E Krueger
Firm Cascade Drilling, Inc
Signature _____
Consulting Firm Shannon & Wilson
Representative Paul van Horne

County Snohomish
Location NW 1/4 NW 1/4 Sec 29 Twn 29N R 5E
Street Address of Well Wall Street & Oakes Ave, Everett
Water Level Elevation 30
Ground Surface Elevation N/A
Date Installed 6-21-02
Date Developed N/A

2331

AS BUILT



WELL DATA

Well Cover
Concrete Surface Seal
Depth = 1/ft
Blank Casing 2 "23 '
Material PVC
Backfill 20 ft
Type Bent.
Seal _____
Material _____
Gravel Pack 22 ft
Material 2/12
Screen 2 "x 20 '
Slot Size .010
Material PVC
Well Depth 43 ' "
Backfill 2
Material 2/12
Total Hole Depth 45

FORMATION DESCRIPTION

0 - 4 ft
brown Sandy gravel Fill

4 - 43 ft
brown Sandy gravel

- ft

RECEIVED
JUL 29 2002
DEPT OF ECOLOGY

SCALE 1 = _____ PAGE _____ OF _____

ECY 050 12 (Rev 11/89)

RESOURCE PROTECTION WELL REPORT

(SUBMIT ONE WELL REPORT PER WELL INSTALLED)

CURRENT Notice of Intent No. A 106545

Construction/Decommission *("x" in circle)*

O Construction

X Decommission *ORIGINAL INSTALLATION Notice of Intent Number* _____

Type of Well *("x" in circle)*

X Resource Protection

O Geotech Soil Boring

Property Owner Snohomish Co. Campus

Site Address Wall St + Oaks AVE

Drilling Firm Shannon + Wilson

Unique Ecology Well ID Tag # ~

City Everett County: Snohomish

Location NW 1/4 NW 1/4 Sec 29 Twn 29N R 5E EWM or WWM *circle one*

Lat/Long (s, t, r still REQUIRED) Lat Deg _____ Lat Min/Sec _____

Long Deg _____ Long Min/Sec _____

WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards. Materials used and the information reported above are true to my best knowledge and belief.

☐ Driller ☐ Engineer ☒ Trainee Name (Print) Arlo Terletter

Driller/Engineer/Trainee Signature _____

Driller/Trainee License No. 2093T

Tax Parcel No. ~

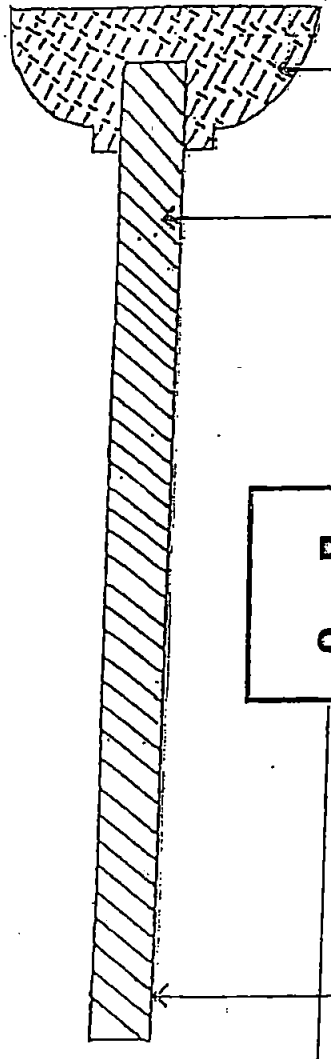
Cased or Uncased Diameter 2" Static Level 20'

Work/Decommission Start Date 1/10/06

Work/Decommission Completed Date 1/10/06

If trainee, licensed driller's Signature and License no. Kasey Goble 2501

Construction/Design | Well Data WO6-023 | Formation Description



CONCRETE SURFACE SEAL 0 - ft.

BACKFILL Bent. Chips

REQUIRED INFORMATION

(Must get one or both if available)

DEPT OF ECOLOGY WELL TAG # : AFT 309

CLIENTS WELL ID # : ~~BH~~ MW-1

DEPTH OF BORING 30' "

Scale 1" = _____ Page _____ of _____

ECY 050-12 (Rev 2/01)

RESOURCE PROTECTION WELL REPORT

(SUBMIT ONE WELL REPORT PER WELL INSTALLED)

CURRENT Notice of Intent No. A 106545

Construction/Decommission *("x" in circle)*

O Construction

X Decommission *ORIGINAL INSTALLATION Notice of Intent Number* _____

Type of Well *("x" in circle)*

X Resource Protection

O Geotech Soil Boring

Consulting Firm Shannon + Wilson

Property Owner Snohomish Co. Campus

Site Address Wall St + Oaks Ave

Unique Ecology Well ID Tag No: ~

City Everett County: Snohomish

Location NW 1/4 NW 1/4 Sec 29 Twn 29N R 5E EWM or WWM *circle one*

Lat/Long (s, t, r still REQUIRED) Lat Deg _____ Lat Min/Sec _____

Long Deg _____ Long Min/Sec _____

WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards. Materials used and the information reported above are true to my best knowledge and belief.

☐ Driller ☐ Engineer ☒ Trainee Name (Print) Arlo Tersteeg

Driller/Engineer/Trainee Signature _____

Driller or Trainee License No. 21093T

Tax Parcel No. ~

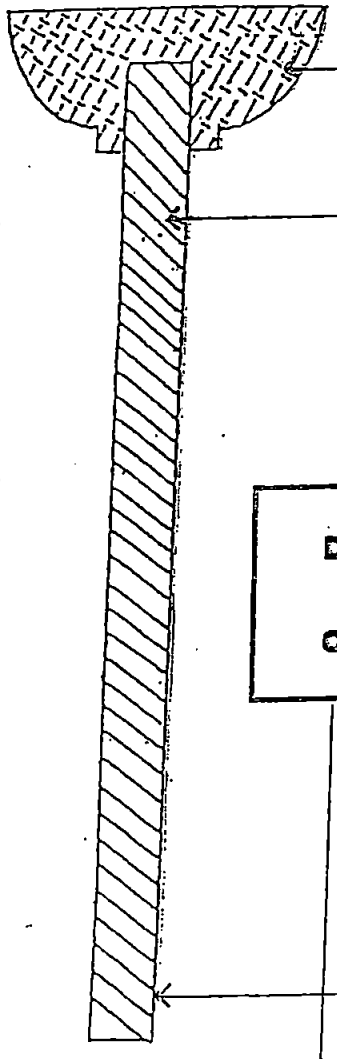
Cased or Uncased Diameter 2" Static Level 20 ft bgs

Work/Decommission Start Date 1/10/06

If trainee, licensed driller's Signature and License no. Kasey Doble 2501

Work/Decommission Completed Date 1/10/06

Construction/Design — Well Data W006-023 — Formation Description



CONCRETE SURFACE SEAL — 0 - ft.

BACKFILL Bentonite chips

REQUIRED INFORMATION

(Must get one or both if available)

DEPT OF ECOLOGY WELL TAG #: AHE 735

CLIENTS WELL ID #: B-17

DEPTH OF BORING 50 ' "

ECY 050-12 (Rev 2/01)

Appendix K

APPENDIX K

IMPORTANT INFORMATION ABOUT YOUR ENVIRONMENTAL REPORT

SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

Attachment to and part of Report 21-1-12132-004

Date: September 28, 2006
To: Mr. Al Garcia
Snohomish County Facilities Management

IMPORTANT INFORMATION ABOUT YOUR GEOTECHNICAL/ENVIRONMENTAL REPORT

CONSULTING SERVICES ARE PERFORMED FOR SPECIFIC PURPOSES AND FOR SPECIFIC CLIENTS.

Consultants prepare reports to meet the specific needs of specific individuals. A report prepared for a civil engineer may not be adequate for a construction contractor or even another civil engineer. Unless indicated otherwise, your consultant prepared your report expressly for you and expressly for the purposes you indicated. No one other than you should apply this report for its intended purpose without first conferring with the consultant. No party should apply this report for any purpose other than that originally contemplated without first conferring with the consultant.

THE CONSULTANT'S REPORT IS BASED ON PROJECT-SPECIFIC FACTORS.

A geotechnical/environmental report is based on a subsurface exploration plan designed to consider a unique set of project-specific factors. Depending on the project, these may include: the general nature of the structure and property involved; its size and configuration; its historical use and practice; the location of the structure on the site and its orientation; other improvements such as access roads, parking lots, and underground utilities; and the additional risk created by scope-of-service limitations imposed by the client. To help avoid costly problems, ask the consultant to evaluate how any factors that change subsequent to the date of the report may affect the recommendations. Unless your consultant indicates otherwise, your report should not be used: (1) when the nature of the proposed project is changed (for example, if an office building will be erected instead of a parking garage, or if a refrigerated warehouse will be built instead of an unrefrigerated one, or chemicals are discovered on or near the site); (2) when the size, elevation, or configuration of the proposed project is altered; (3) when the location or orientation of the proposed project is modified; (4) when there is a change of ownership; or (5) for application to an adjacent site. Consultants cannot accept responsibility for problems that may occur if they are not consulted after factors which were considered in the development of the report have changed.

SUBSURFACE CONDITIONS CAN CHANGE.

Subsurface conditions may be affected as a result of natural processes or human activity. Because a geotechnical/environmental report is based on conditions that existed at the time of subsurface exploration, construction decisions should not be based on a report whose adequacy may have been affected by time. Ask the consultant to advise if additional tests are desirable before construction starts; for example, groundwater conditions commonly vary seasonally.

Construction operations at or adjacent to the site and natural events such as floods, earthquakes, or groundwater fluctuations may also affect subsurface conditions and, thus, the continuing adequacy of a geotechnical/environmental report. The consultant should be kept apprised of any such events, and should be consulted to determine if additional tests are necessary.

MOST RECOMMENDATIONS ARE PROFESSIONAL JUDGMENTS.

Site exploration and testing identifies actual surface and subsurface conditions only at those points where samples are taken. The data were extrapolated by your consultant, who then applied judgment to render an opinion about overall subsurface conditions. The actual interface between materials may be far more gradual or abrupt than your report indicates. Actual conditions in areas not sampled may differ from those predicted in your report. While nothing can be done to prevent such situations, you and your consultant can work together to help reduce their impacts. Retaining your consultant to observe subsurface construction operations can be particularly beneficial in this respect.

A REPORT'S CONCLUSIONS ARE PRELIMINARY.

The conclusions contained in your consultant's report are preliminary because they must be based on the assumption that conditions revealed through selective exploratory sampling are indicative of actual conditions throughout a site. Actual subsurface conditions can be discerned only during earthwork; therefore, you should retain your consultant to observe actual conditions and to provide conclusions. Only the consultant who prepared the report is fully familiar with the background information needed to determine whether or not the report's recommendations based on those conclusions are valid and whether or not the contractor is abiding by applicable recommendations. The consultant who developed your report cannot assume responsibility or liability for the adequacy of the report's recommendations if another party is retained to observe construction.

THE CONSULTANT'S REPORT IS SUBJECT TO MISINTERPRETATION.

Costly problems can occur when other design professionals develop their plans based on misinterpretation of a geotechnical/environmental report. To help avoid these problems, the consultant should be retained to work with other project design professionals to explain relevant geotechnical, geological, hydrogeological, and environmental findings, and to review the adequacy of their plans and specifications relative to these issues.

BORING LOGS AND/OR MONITORING WELL DATA SHOULD NOT BE SEPARATED FROM THE REPORT.

Final boring logs developed by the consultant are based upon interpretation of field logs (assembled by site personnel), field test results, and laboratory and/or office evaluation of field samples and data. Only final boring logs and data are customarily included in geotechnical/environmental reports. These final logs should not, under any circumstances, be redrawn for inclusion in architectural or other design drawings, because drafters may commit errors or omissions in the transfer process.

To reduce the likelihood of boring log or monitoring well misinterpretation, contractors should be given ready access to the complete geotechnical engineering/environmental report prepared or authorized for their use. If access is provided only to the report prepared for you, you should advise contractors of the report's limitations, assuming that a contractor was not one of the specific persons for whom the report was prepared, and that developing construction cost estimates was not one of the specific purposes for which it was prepared. While a contractor may gain important knowledge from a report prepared for another party, the contractor should discuss the report with your consultant and perform the additional or alternative work believed necessary to obtain the data specifically appropriate for construction cost estimating purposes. Some clients hold the mistaken impression that simply disclaiming responsibility for the accuracy of subsurface information always insulates them from attendant liability. Providing the best available information to contractors helps prevent costly construction problems and the adversarial attitudes that aggravate them to a disproportionate scale.

READ RESPONSIBILITY CLAUSES CLOSELY.

Because geotechnical/environmental engineering is based extensively on judgment and opinion, it is far less exact than other design disciplines. This situation has resulted in wholly unwarranted claims being lodged against consultants. To help prevent this problem, consultants have developed a number of clauses for use in their contracts, reports and other documents. These responsibility clauses are not exculpatory clauses designed to transfer the consultant's liabilities to other parties; rather, they are definitive clauses that identify where the consultant's responsibilities begin and end. Their use helps all parties involved recognize their individual responsibilities and take appropriate action. Some of these definitive clauses are likely to appear in your report, and you are encouraged to read them closely. Your consultant will be pleased to give full and frank answers to your questions.

The preceding paragraphs are based on information provided by the
ASFE/Association of Engineering Firms Practicing in the Geosciences, Silver Spring, Maryland