

October 25, 2002

Independent Lift Truck of Alaska, Inc.  
1200 East 70<sup>th</sup> Avenue  
Anchorage, Alaska 99518

Attn: Mr. Gerry Dick

Fax: (907) 344-8591

**RE: LIMITED CLEANUP ACTIVITIES SUMMARY REPORT, 1200 EAST 70<sup>TH</sup>  
AVENUE, ANCHORAGE, ALASKA**

The purpose of this letter is to document the excavation and treatment of impacted soil located at 1200 East 70<sup>th</sup> Avenue, Anchorage, Alaska. The cleanup activities targeted areas where impacted was identified during a February 2001 Phase II Environmental Site Assessment (ESA) conducted at the site.

This work was performed in general accordance with a proposal that was authorized by Mr. Dick, of Independent Lift Truck of Alaska, Inc. (Independent) on June 26, 2002. In addition, this work was conducted in general accordance with our July 12, 2002 work plan that was approved by Ms. Eileen Olson of the Alaska Department of Environmental Conservation (ADEC).

**Background**

TERRASAT Inc. advanced three soil borings, designated Test Hole TH #1, TH #2 and TH #3, at the site during the February 2001 Phase II ESA. The boring locations are shown on Figure 1. The project purpose was to evaluate subsurface soil conditions in the vicinity of former aboveground storage tanks (ASTs) and areas of surface staining. Test Hole TH #1 was advanced to a depth of approximately 6 feet below the ground surface (bgs), and Test Hole TH #2 and TH #3 were advanced to approximately 4 feet bgs.

The results of soil sample analysis showed elevated levels of volatile organic compounds (VOCs) in Test Boring TB #1, which apparently are related to observed surface staining. The concentrations of methylene chloride in soil samples collected from 1 foot bgs and 6 feet bgs in Test Boring TB #1 were 0.02 parts per million (ppm) and 0.021 ppm, respectively. Tetrachloroethylene (PCE) concentrations were 0.130 ppm at 1 foot bgs and 0.045 ppm at 6 feet bgs in Test Boring TB #1. The ADEC cleanup levels for methylene chloride and PCE are 0.015 ppm and 0.03 ppm, respectively. It should be noted that methylene chloride is a typical laboratory

contaminant that is used during the analysis of diesel range organics (DRO) and residual range organics (RRO). DRO, gasoline range organics (GRO), RRO, and benzene, toluene, ethylbenzene, and xylenes (BTEX) compounds were either not detected or were in concentrations less than the applicable cleanup levels in Test Boring TB #1 soil samples. Based on the presence of petroleum hydrocarbons in the samples, it was assumed that the measured solvents are likely due to degreasing activities and the PCE is not classified as a listed waste.

The soil sample collected from 1 foot bgs in Test Boring TB #2 contained 540 ppm DRO, which exceeds the applicable ADEC cleanup level. The DRO concentration in the sample collected from 6 feet bgs was 27 ppm, indicating the DRO contamination is limited to the near-surface soil in the vicinity of Test Boring TB #2. GRO, BTEX and RRO concentrations were not detected or were less than the ADEC cleanup level.

Samples collected from Test Boring TB #3 did not contain petroleum hydrocarbons or hazardous substances in excess of the ADEC cleanup levels.

### **Field Activities**

On September 25, 2002 Independent Lift Truck of Alaska (Independent), the property owner, excavated soil in the vicinity of two borings that had concentrations exceeding soil cleanup levels. The excavated soil was transported directly to Alaska Soil Recycling (ASR) for thermal treatment. A Shannon & Wilson representative was present during the excavation activities to observe the activities, to field screen the excavated soil, and to collect field screening and analytical samples following the removal of the soil.

Soil was excavated from areas around test holes TH #1 and TH #2. Excavation 1 was advanced in the area of TH #1, and measured approximately 10 feet by 10 feet to a depth of about 7 feet bgs. Excavation 2 was completed adjacent to TH #2 and measured approximately 5 feet by 5 feet to a depth of about 4 feet. Excavation 1 and 2 are shown in Photos 1 and 2 in Attachment 2, respectively.

The soil encountered during the excavation consisted of dark brown, sandy gravel and gravelly sand. Groundwater was not encountered during the excavation activities. Approximately 40 cubic yards, or 62 tons, of material was excavated and placed adjacent to the excavations, as shown in Photos 1 and 2. Less than an hour later, the material was then placed in dump trucks and transported to Alaska Soil Recycling (ASR) for thermal treatment. It should be

noted, that approximately three inches of near surface soil beneath the temporary stockpiles was also excavated and transported to ASR. The excavations were then backfilled with clean imported fill and leveled to grade.

During the excavation activities, nine field screening samples were collected from each of the two excavations. Field screening results were used to guide the excavation extents and evaluate potential hydrocarbon concentrations during the excavation. Field screening was conducted with a photoionization detector (PID) calibrated with 100 ppm isobutylene calibration gas prior to use. Samples were collected in plastic bags, warmed to a common temperature, and the PID probe was inserted into the headspace of the bag. The maximum headspace reading on the PID was recorded for each sample. Upon completion of the excavation, field screening samples were also collected from the excavation base and the four sidewalls. Table 1 shows the results of the screening samples and the location and descriptions of the samples collected.

Two analytical samples were collected from each excavation based on headspace screening results. The samples selected for analytical testing were, EX1 East and EX1 Bottom from Excavation 1 and EX2 North and EX2 Bottom from Excavation 2. The soil samples from Excavation 1 were analyzed for VOCs by EPA Method 8260B and the soil samples from Excavation 2 were analyzed for DRO by Alaska Method (AK 102). A trip blank was included in the analytical testing program to evaluate the potential for cross contamination during transportation and handling of the samples. The trip blank was analyzed for VOC's by EPA Method 8260B.

Soil samples submitted for laboratory analyses were collected by quickly and completely filling laboratory-provided glass jars. The sample jars were then sealed with teflon-lined lids and placed in a chilled cooler for delivery to the laboratory. The analytical samples collected for VOCs were collected in accordance with AK 101. As detailed in this method, at least 25 grams of soil were quickly placed into a laboratory-supplied pre-weighed 4-ounce jar. Afterward, 25 milliliters of reagent grade methanol were added to completely submerge the soil. The methanol extracts the volatile petroleum hydrocarbons from the soil at the time of sampling, thereby reducing the possible loss of volatile constituents before analysis occurs.

### **Discussion of Results**

Samples EX1 East and EX1 Bottom, collected from Excavation 1, did not contain detectable concentrations of VOCs. Samples EX2 North and EX2 Bottom, from Excavation 2,

had DRO concentrations ranging from 65.6 to 71.6 ppm and RRO concentrations ranging from 193 to 307 ppm. The ADEC soil cleanup levels for DRO and RRO are 250 ppm and 11,000 ppm, respectively. The samples from Excavation 2 were below these levels.

The trip blank did not contain detectable concentrations of VOCs, indicating that the samples were not cross contaminated during the sample handling and transporting process. The sample results are summarized in Table 2 and the laboratory reports are included in Attachment 1.

### **Conclusions/Recommendations**

Based on the data presented herein and our interpretations of the conditions at the two excavations, concentrations of DRO and VOCs are not present above the applicable cleanup levels. Based on the sample results it is our opinion that additional assessment or cleanup work is not warranted at this time. We also recommend requesting a 'No Further Action' status for the site from the ADEC.

Approximately 40 cubic yards, or 62 tons, were excavated and transported to ASR for thermal remediation. Once the material has been remediated, we recommend submitting the disposal receipts to the ADEC. Following the cleanup activities the excavations were backfilled with clean imported fill material.

Per 18 AAC 75, Shannon & Wilson recommends that you submit a copy of this report to the ADEC for their review.

### **Closure/Limitations**

This report was prepared for the exclusive use of our clients and their representatives in the study of this site. The findings we have presented within this report are based on limited research and on the sampling and analysis that we conducted at this site. They should not be construed as a definite conclusion regarding the soils and groundwater at this site. It is possible that our tests may have missed some higher levels of petroleum hydrocarbon constituents, although our intention was to sample areas likely to be impacted. As a result, the analysis and sampling performed can only provide you with our best judgement as to the environmental characteristics of this site, and in no way guarantees that an agency or its staff will reach the same

conclusions as Shannon & Wilson, Inc. The data presented in this report should be considered representative of the time of our assessment. Changes in site conditions can occur with time because of natural forces or human activity. In addition, changes in government codes, regulations, or laws may occur. Because of such changes beyond our control, our observations and interpretations may need to be revised.

Shannon & Wilson has prepared Attachment 3 "Important Information About Your Geotechnical/Environmental Report" to assist you and others in understanding the use and limitations of our reports.

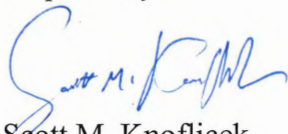
You are advised that various state and federal agencies (ADEC, EPA, etc.) may require the reporting of this information. Shannon & Wilson does not assume the responsibility for reporting these findings and therefore, has not and will not disclose the results of this study, except with your permission or as required by law.

Shannon & Wilson appreciates this opportunity to be of service. Please call the undersigned with any questions or comments concerning the contents of this report.

Sincerely,

**SHANNON & WILSON, INC.**

Prepared by:



Scott M. Knoflicek  
Environmental Geologist

Reviewed by:



Dan P. McMahon  
Environmental Scientist IV

sjg

Encl: Tables 1 and 2, Figure 1, and Attachments 1, 2, and 3

TABLE 1 - SAMPLE LOCATIONS AND DESCRIPTIONS

| Sample Number <sup>^</sup> | Date       | Sample Location<br>(See Figure 1 and Table 2) | Depth<br>(ft.) | PID<br>(ppm) | Sample Classification                             |
|----------------------------|------------|---|----------------|--------------|---|
| <b>Excavation 1</b>        |            |   |                |              |   |
| EX1S1                      | 09/25/2002 | Excavation 1, Northwest Corner                | 1.0            | 0            | Brown, slightly sandy SILT; moist                 |
| EX1S2                      | 09/25/2002 | Excavation 1, Southeast Corner                | 1.0            | 0            | Dark brown, gravelly SAND; moist                  |
| EX1S3                      | 09/25/2002 | Excavation 1, Northeast Corner                | 6.0            | 0            | Dark brown, sandy GRAVEL; moist                   |
| EX1S4                      | 09/25/2002 | Excavation 1, Southwest Corner                | 6.0            | 0            | Dark brown, sandy GRAVEL; moist                   |
| EX1 North                  | 09/25/2002 | Excavation 1, North Sidewall                  | 3.5            | 0            | Dark brown, sandy GRAVEL; moist                   |
| EX1 South                  | 09/25/2002 | Excavation 1, South Sidewall                  | 3.5            | 0.3          | Dark brown, sandy GRAVEL; moist                   |
| EX1 West                   | 09/25/2002 | Excavation 1, West Sidewall                   | 3.5            | 0.3          | Dark brown, gravelly SAND; moist                  |
| EX1 East*                  | 09/25/2002 | Excavation 1, East Sidewall                   | 3.5            | 1.2          | Dark brown, gravelly SAND; moist                  |
| EX1 Bottom*                | 09/25/2002 | Excavation 1, Bottom                          | 7.0            | 1.0          | Dark brown, sandy GRAVEL; moist                   |
| <b>Excavation 2</b>        |            |   |                |              |   |
| EX2S1                      | 09/25/2002 | Excavation 2, Southwest Corner                | 1.5            | 0            | Dark brown, gravelly SAND; moist                  |
| EX2S2                      | 09/25/2002 | Excavation 2, Northwest Corner                | 1.5            | 0            | Dark brown, gravelly SAND; moist                  |
| EX2S3                      | 09/25/2002 | Excavation 2, Northeast Corner                | 1.5            | 0.4          | Dark brown, slightly sandy, gravelly SAND; moist  |
| EX2S4                      | 09/25/2002 | Excavation 2, Southeast Corner                | 1.5            | 0.3          | Dark brown, slightly sandy, gravelly SAND; moist  |
| EX2 North*                 | 09/25/2002 | Excavation 2, North Sidewall                  | 2.0            | 0.6          | Dark brown gravelly SAND; moist                   |
| EX2 South                  | 09/25/2002 | Excavation 2, South Sidewall                  | 2.0            | 0            | Dark brown gravelly SAND; moist                   |
| EX2 West                   | 09/25/2002 | Excavation 2, West Sidewall                   | 2.0            | 0            | Dark brown , slightly gravelly, silty SAND; moist |
| EX2 East                   | 09/25/2002 | Excavation 2, East Sidewall                   | 2.0            | 0.3          | Dark brown to gray, gravelly SAND; moist          |
| EX2 Bottom*                | 09/25/2002 | Excavation 2, Bottom                          | 4.0            | 0.9          | Dark brown to gray, gravelly SAND; moist          |
| <b>Quality Control</b>     |            |   |                |              |   |
| TB                         | 09/25/2002 | Trip Blank                                    | -              | -            | Methanol and Ottawa Sand                          |

**KEY DESCRIPTION**

- \* Sample analyzed by the laboratory  
<sup>^</sup> Sample numbers are preceded by '32-1-16594 ' on chain-of-custody forms

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS

| Parameter Tested                        | Method      | ADEC~<br>Cleanup Levels | Sample type, sample number‡, and depth (See Table 1, Figure 1 and Attachment 1) |                   |                  |                   |                  |
|---|-------------|-------------------------|---|-------------------|------------------|-------------------|------------------|
|   |             |                         | Excavation 1  |                   | Excavation 2     |                   | Quality Control  |
|   |             |                         | EX1 East<br>3.5   | EX1 Bottom<br>7.0 | EX2 North<br>2.0 | EX2 Bottom<br>4.0 | Trip Blank<br>NA |
| PID Headspace Reading - ppm             | Thermo 580B | NA                      | 1.2   | 1.0               | 0.6              | 0.9               | -                |
| Percent Solid - %                       | SM20 2540G  | NA                      | 71.5  | 84.1              | 94.8             | 83.0              | -                |
| Diesel Range Organics (DRO) - ppm       | AK 102      | 250                     | -   | -                 | 65.6             | 71.6              | -                |
| Residual Range Organics (RRO) - ppm     | AK 103      | 11,000                  | -   | -                 | 193              | 307               | -                |
| Volatile Organic Compounds (VOCs) - ppm | EPA 8260    | Various                 | ND  | ND                | -                | -                 | ND               |

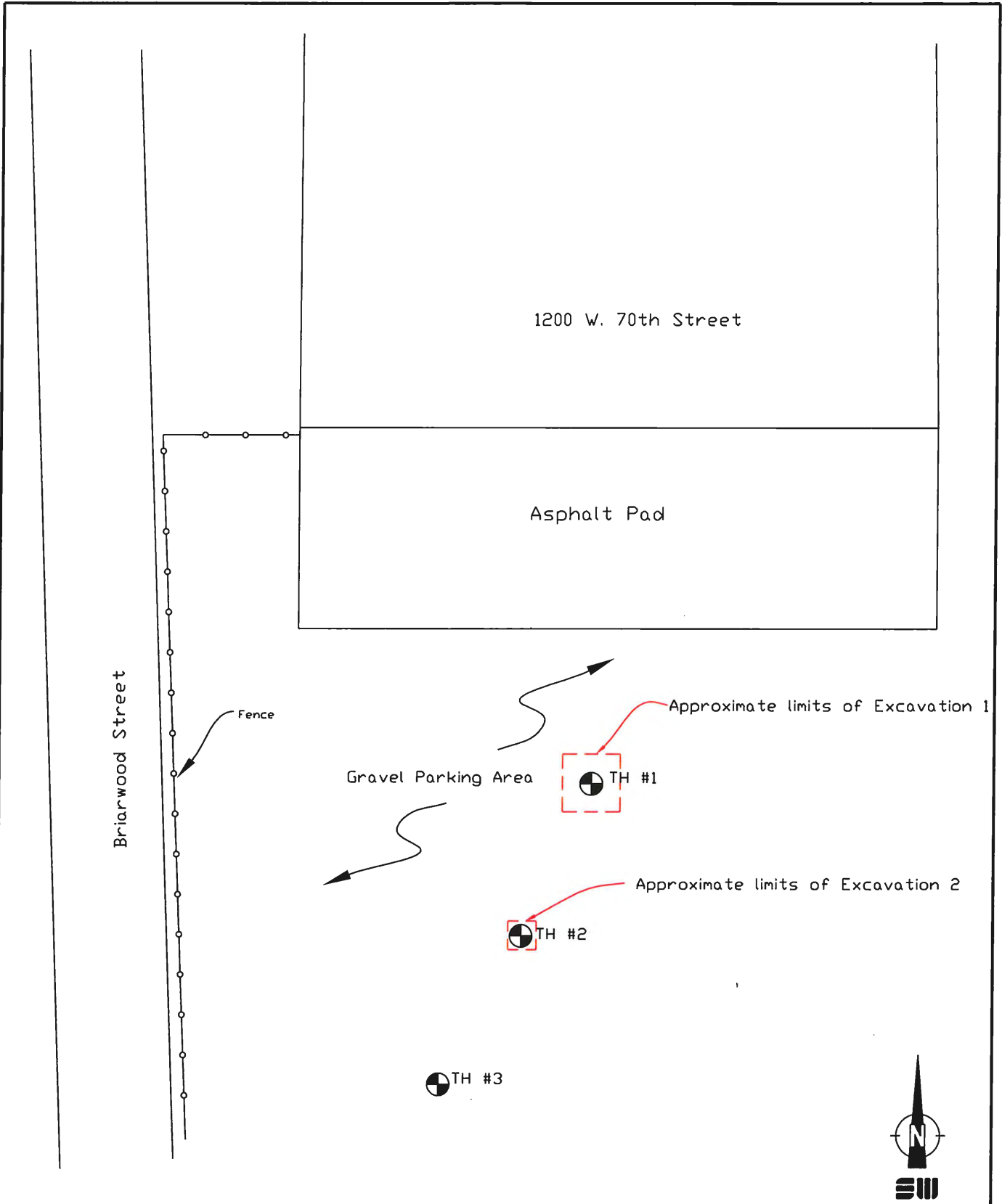
| Key | Description   |
|-----|---|
| NA  | Not Applicable  |
| ND  | Not Detected  |
| -   | Analyte Not Analyzed  |
| ‡   | Sample numbers are preceded by '32-1-16594' on chain-of-custody forms |
| ~   | Cleanup levels are listed in Table B1, ADEC AAC 75.341                |


Fig1.dwg Shannon & Wilson, Inc

### Legend



Approximate location of Test Hole TH #1 advanced by Terrasat in February 2001



|   |            |
|---|------------|
| 1200 East 70th Ave<br>Anchorage, Alaska   |            |
| <b>SITE PLAN</b>  |            |
| October 2002  | 32-1-16594 |
|  SHANNON & WILSON, INC.<br>Geotechnical & Environmental Consultants | Fig. 1     |



**ATTACHMENT 1**

**RESULTS OF ANALYTICAL TESTING BY CT&E ENVIRONMENTAL  
SERVICES, INC. OF ANCHORAGE, ALASKA**



200 W. Potter Drive  
Anchorage, AK 99518-1605  
Tel: (907) 562-2343  
Fax: (907) 561-5301  
Web: <http://www.cteesi.com>

Scott Knoflicek:  
Shannon & Wilson Inc.  
5430 Fairbanks Street, Ste 3  
Anchorage, AK 99518

---

|                     |  |
|---------------------|--|
| <b>Work Order:</b>  | 1026369<br>32-1-16594 1200 E. 70th Ave |
| <b>Client:</b>      | Shannon & Wilson Inc.                  |
| <b>Report Date:</b> | October 04, 2002                       |

---

Enclosed are the analytical results associated with the above workorder.

As required by the state of Alaska and the USEPA, a formal Quality Assurance/Quality Control Program is maintained by CT&E. A copy of our Quality Control Manual that outlines this program is available at your request.

Except as specifically noted, all statements and data in this report are in conformance to the provisions set forth in our Quality Assurance Program Plan.

If you have any questions regarding this report or if we can be of any other assistance, please call your CT&E Project Manager at (907) 562-2343.

The following descriptors may be found on your report which will serve to further qualify the data.

|    |   |
|----|---|
| U  | Indicates the analyte was analyzed for but not detected.                        |
| F  | Indicates an estimated value that falls below PQL, but is greater than the MDL. |
| J  | Indicates an estimated value that falls below PQL, but is greater than the MDL. |
| B  | Indicates the analyte is found in the blank associated with the sample.         |
| *  | The analyte has exceeded allowable limits.                                      |
| GT | Greater Than  |
| D  | Secondary Dilution  |
| LT | Less Than   |
| !  | Surrogate out of range  |



CT&E Ref.# 1026369001  
 Client Name Shannon & Wilson Inc.  
 Project Name/# 32-1-16594 1200 E. 70th Ave  
 Client Sample ID 32-1-16594-EX1East  
 Matrix Soil/Solid

All Dates/Times are Alaska Standard Time  
 Printed Date/Time 10/04/2002 16:57  
 Collected Date/Time 09/25/2002 11:50  
 Received Date/Time 09/26/2002 13:20  
 Technical Director Stephen C. Ede

Released By *Shawn Patten*

Sample Remarks:

| Parameter  | Results  | PQL    | Units | Method      | Allowable Limits | Prep Date | Analysis Date | Init |
|--|----------|--------|-------|-------------|------------------|-----------|---------------|------|
| <b>Solids</b>  |          |        |       |             |                  |           |               |      |
| Total Solids   | 71.5     |        | %     | SM20 2540G  |                  |           | 10/02/02      | DS   |
| <b>Volatile Gas Chromatography/Mass Spectroscopy</b> |          |        |       |             |                  |           |               |      |
| Dichlorodifluoromethane                              | 0.0360 U | 0.0360 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| Chloromethane  | 0.0360 U | 0.0360 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| Vinyl chloride                                       | 0.0187 U | 0.0187 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| Bromomethane   | 0.144 U  | 0.144  | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| Chloroethane   | 0.144 U  | 0.144  | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| Trichlorofluoromethane                               | 0.0360 U | 0.0360 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| 1,1-Dichloroethene                                   | 0.0360 U | 0.0360 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| Carbon disulfide                                     | 0.144 U  | 0.144  | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| Methylene chloride                                   | 0.144 U  | 0.144  | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| trans-1,2-Dichloroethene                             | 0.0360 U | 0.0360 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| 2-Butanone (MEK)                                     | 0.360 U  | 0.360  | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| 2,2-Dichloropropane                                  | 0.0360 U | 0.0360 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| 1,1,1-Trichloroethane                                | 0.0360 U | 0.0360 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| cis-1,2-Dichloroethene                               | 0.0360 U | 0.0360 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| 1,1-Dichloroethane                                   | 0.0360 U | 0.0360 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| Bromochloromethane                                   | 0.0360 U | 0.0360 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| Chloroform   | 0.0360 U | 0.0360 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| Carbon tetrachloride                                 | 0.0360 U | 0.0360 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| Benzene  | 0.0187 U | 0.0187 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| 1,1-Dichloropropene                                  | 0.0360 U | 0.0360 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| 1,2-Dichloroethane                                   | 0.0187 U | 0.0187 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| Trichloroethene                                      | 0.0288 U | 0.0288 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| 1,2-Dichloropropane                                  | 0.0187 U | 0.0187 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| Dibromomethane                                       | 0.0360 U | 0.0360 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| Bromodichloromethane                                 | 0.0360 U | 0.0360 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| 1,1,2-Trichloroethane                                | 0.0187 U | 0.0187 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| 2-Chloroethyl Vinyl Ether                            | 0.360 U  | 0.360  | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |



CT&E Ref.# 1026369001  
 Client Name Shannon & Wilson Inc.  
 Project Name/# 32-1-16594 1200 E. 70th Ave  
 Client Sample ID 32-1-16594-EX1 East  
 Matrix Soil/Solid

All Dates/Times are Alaska Standard Time  
 Printed Date/Time 10/04/2002 16:57  
 Collected Date/Time 09/25/2002 11:50  
 Received Date/Time 09/26/2002 13:20  
 Technical Director Stephen C. Ede

| Parameter  | Results  | PQL    | Units | Method      | Allowable Limits | Prep Date | Analysis Date | Init |
|--|----------|--------|-------|-------------|------------------|-----------|---------------|------|
| <b>Volatile Gas Chromatography/Mass Spectroscopy</b> |          |        |       |             |                  |           |               |      |
| cis-1,3-Dichloropropene                              | 0.0288 U | 0.0288 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| 4-Methyl-2-pentanone (MIBK)                          | 0.360 U  | 0.360  | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| Toluene  | 0.0719 U | 0.0719 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| trans-1,3-Dichloropropene                            | 0.0360 U | 0.0360 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| Tetrachloroethene                                    | 0.0360 U | 0.0360 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| 1,3-Dichloropropane                                  | 0.0360 U | 0.0360 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| 2-Hexanone   | 0.360 U  | 0.360  | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| Dibromochloromethane                                 | 0.0360 U | 0.0360 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| 1,1,1,2-Tetrachloroethane                            | 0.0360 U | 0.0360 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| 1,2-Dibromoethane                                    | 0.0360 U | 0.0360 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| Chlorobenzene  | 0.0360 U | 0.0360 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| Ethylbenzene   | 0.0719 U | 0.0719 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| P & M -Xylene  | 0.0719 U | 0.0719 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| o-Xylene   | 0.0719 U | 0.0719 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| Styrene  | 0.0360 U | 0.0360 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| Bromoform  | 0.0360 U | 0.0360 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| Isopropylbenzene (Cumene)                            | 0.0360 U | 0.0360 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| Bromobenzene   | 0.0360 U | 0.0360 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| 1,2,3-Trichloropropane                               | 0.0360 U | 0.0360 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| 1,1,2,2-Tetrachloroethane                            | 0.0360 U | 0.0360 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| n-Propylbenzene                                      | 0.0360 U | 0.0360 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| 2-Chlorotoluene                                      | 0.0360 U | 0.0360 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| 4-Chlorotoluene                                      | 0.0360 U | 0.0360 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| 1,3,5-Trimethylbenzene                               | 0.0719 U | 0.0719 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| tert-Butylbenzene                                    | 0.0360 U | 0.0360 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| 1,2,4-Trimethylbenzene                               | 0.0719 U | 0.0719 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| sec-Butylbenzene                                     | 0.0360 U | 0.0360 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| 1,3-Dichlorobenzene                                  | 0.0360 U | 0.0360 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| 4-Isopropyltoluene                                   | 0.0360 U | 0.0360 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| 1,4-Dichlorobenzene                                  | 0.0360 U | 0.0360 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| 1,2-Dichlorobenzene                                  | 0.0360 U | 0.0360 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| n-Butylbenzene                                       | 0.0360 U | 0.0360 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| 1,2-Dibromo-3-chloropropane                          | 0.144 U  | 0.144  | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| 1,2,4-Trichlorobenzene                               | 0.0360 U | 0.0360 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |



CT&E Ref.# 1026369001  
 Client Name Shannon & Wilson Inc.  
 Project Name/# 32-1-16594 1200 E. 70th Ave  
 Client Sample ID 32-1-16594-EX1East  
 Matrix Soil/Solid

All Dates/Times are Alaska Standard Time

Printed Date/Time 10/04/2002 16:57  
 Collected Date/Time 09/25/2002 11:50  
 Received Date/Time 09/26/2002 13:20  
 Technical Director Stephen C. Ede

| Parameter  | Results  | PQL    | Units | Method      | Allowable Limits | Prep Date | Analysis Date | Init |
|--|----------|--------|-------|-------------|------------------|-----------|---------------|------|
| <b>Volatile Gas Chromatography/Mass Spectroscopy</b> |          |        |       |             |                  |           |               |      |
| Hexachlorobutadiene                                  | 0.0360 U | 0.0360 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| Naphthalene  | 0.0719 U | 0.0719 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| 1,2,3-Trichlorobenzene                               | 0.0360 U | 0.0360 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| <b>Surrogates</b>                                    |          |        |       |             |                  |           |               |      |
| Dibromofluoromethane <surr>                          | 101      |        | %     | SW846-8260B | 80-117           | 09/25/02  | 10/01/02      | RMV  |
| 1,2-Dichloroethane-D4 <surr>                         | 109      |        | %     | SW846-8260B | 80-120           | 09/25/02  | 10/01/02      | RMV  |
| Toluene-d8 <surr>                                    | 107      |        | %     | SW846-8260B | 82-118           | 09/25/02  | 10/01/02      | RMV  |
| 4-Bromofluorobenzene <Surr>                          | 82.9     |        | %     | SW846-8260B | 51-132           | 09/25/02  | 10/01/02      | RMV  |



CT&E Ref.# 1026369002  
 Client Name Shannon & Wilson Inc.  
 Project Name/# 32-1-16594 1200 E. 70th Ave  
 Client Sample ID 32-1-16594-EX1Bottom  
 Matrix Soil/Solid

All Dates/Times are Alaska Standard Time  
 Printed Date/Time 10/04/2002 16:57  
 Collected Date/Time 09/25/2002 12:00  
 Received Date/Time 09/26/2002 13:20  
 Technical Director Stephen C. Ede

Released By *Shane Poston*

Sample Remarks:

| Parameter  | Results  | PQL    | Units | Method      | Allowable Limits | Prep Date | Analysis Date | Init |
|--|----------|--------|-------|-------------|------------------|-----------|---------------|------|
| <b>Solids</b>  |          |        |       |             |                  |           |               |      |
| Total Solids   | 84.1     |        | %     | SM20 2540G  |                  |           | 10/02/02      | DS   |
| <b>Volatile Gas Chromatography/Mass Spectroscopy</b> |          |        |       |             |                  |           |               |      |
| Dichlorodifluoromethane                              | 0.0339 U | 0.0339 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| Chloromethane  | 0.0339 U | 0.0339 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| Vinyl chloride                                       | 0.0176 U | 0.0176 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| Bromomethane   | 0.136 U  | 0.136  | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| Chloroethane   | 0.136 U  | 0.136  | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| Trichlorofluoromethane                               | 0.0339 U | 0.0339 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| 1,1-Dichloroethene                                   | 0.0339 U | 0.0339 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| Carbon disulfide                                     | 0.136 U  | 0.136  | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| Methylene chloride                                   | 0.136 U  | 0.136  | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| trans-1,2-Dichloroethene                             | 0.0339 U | 0.0339 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| 2-Butanone (MEK)                                     | 0.339 U  | 0.339  | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| 2,2-Dichloropropane                                  | 0.0339 U | 0.0339 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| 1,1,1-Trichloroethane                                | 0.0339 U | 0.0339 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| cis-1,2-Dichloroethene                               | 0.0339 U | 0.0339 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| 1,1-Dichloroethane                                   | 0.0339 U | 0.0339 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| Bromochloromethane                                   | 0.0339 U | 0.0339 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| Chloroform   | 0.0339 U | 0.0339 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| Carbon tetrachloride                                 | 0.0339 U | 0.0339 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| Benzene  | 0.0176 U | 0.0176 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| 1,1-Dichloropropene                                  | 0.0339 U | 0.0339 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| 1,2-Dichloroethane                                   | 0.0176 U | 0.0176 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| Trichloroethene                                      | 0.0271 U | 0.0271 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| 1,2-Dichloropropane                                  | 0.0176 U | 0.0176 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| Dibromomethane                                       | 0.0339 U | 0.0339 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| Bromodichloromethane                                 | 0.0339 U | 0.0339 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| 2-Chloroethyl Vinyl Ether                            | 0.339 U  | 0.339  | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| 1,1,2-Trichloroethane                                | 0.0176 U | 0.0176 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |



CT&E Ref.# 1026369002  
 Client Name Shannon & Wilson Inc.  
 Project Name/# 32-1-16594 1200 E. 70th Ave  
 Client Sample ID 32-1-16594-EX1Bottom  
 Matrix Soil/Solid

All Dates/Times are Alaska Standard Time  
 Printed Date/Time 10/04/2002 16:57  
 Collected Date/Time 09/25/2002 12:00  
 Received Date/Time 09/26/2002 13:20  
 Technical Director Stephen C. Ede

| Parameter  | Results  | PQL    | Units | Method      | Allowable Limits | Prep Date | Analysis Date | Init |
|--|----------|--------|-------|-------------|------------------|-----------|---------------|------|
| <b>Volatile Gas Chromatography/Mass Spectroscopy</b> |          |        |       |             |                  |           |               |      |
| cis-1,3-Dichloropropene                              | 0.0271 U | 0.0271 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| 4-Methyl-2-pentanone (MIBK)                          | 0.339 U  | 0.339  | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| Toluene  | 0.0678 U | 0.0678 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| trans-1,3-Dichloropropene                            | 0.0339 U | 0.0339 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| Tetrachloroethene                                    | 0.0339 U | 0.0339 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| 1,3-Dichloropropane                                  | 0.0339 U | 0.0339 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| 2-Hexanone   | 0.339 U  | 0.339  | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| Dibromochloromethane                                 | 0.0339 U | 0.0339 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| 1,1,1,2-Tetrachloroethane                            | 0.0339 U | 0.0339 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| 1,2-Dibromoethane                                    | 0.0339 U | 0.0339 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| Chlorobenzene  | 0.0339 U | 0.0339 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| Ethylbenzene   | 0.0678 U | 0.0678 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| P & M -Xylene  | 0.0678 U | 0.0678 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| o-Xylene   | 0.0678 U | 0.0678 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| Styrene  | 0.0339 U | 0.0339 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| Bromoform  | 0.0339 U | 0.0339 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| Isopropylbenzene (Cumene)                            | 0.0339 U | 0.0339 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| Bromobenzene   | 0.0339 U | 0.0339 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| 1,2,3-Trichloropropane                               | 0.0339 U | 0.0339 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| 1,1,2,2-Tetrachloroethane                            | 0.0339 U | 0.0339 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| n-Propylbenzene                                      | 0.0339 U | 0.0339 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| 2-Chlorotoluene                                      | 0.0339 U | 0.0339 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| 4-Chlorotoluene                                      | 0.0339 U | 0.0339 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| 1,3,5-Trimethylbenzene                               | 0.0678 U | 0.0678 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| tert-Butylbenzene                                    | 0.0339 U | 0.0339 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| 1,2,4-Trimethylbenzene                               | 0.0678 U | 0.0678 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| sec-Butylbenzene                                     | 0.0339 U | 0.0339 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| 1,3-Dichlorobenzene                                  | 0.0339 U | 0.0339 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| 4-Isopropyltoluene                                   | 0.0339 U | 0.0339 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| 1,4-Dichlorobenzene                                  | 0.0339 U | 0.0339 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| 1,2-Dichlorobenzene                                  | 0.0339 U | 0.0339 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| n-Butylbenzene                                       | 0.0339 U | 0.0339 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| 1,2-Dibromo-3-chloropropane                          | 0.136 U  | 0.136  | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| 1,2,4-Trichlorobenzene                               | 0.0339 U | 0.0339 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |



CT&E Ref.# 1026369002  
 Client Name Shannon & Wilson Inc.  
 Project Name/# 32-1-16594 1200 E. 70th Ave  
 Client Sample ID 32-1-16594-EX1Bottom  
 Matrix Soil/Solid

All Dates/Times are Alaska Standard Time  
 Printed Date/Time 10/04/2002 16:57  
 Collected Date/Time 09/25/2002 12:00  
 Received Date/Time 09/26/2002 13:20  
 Technical Director Stephen C. Ede

| Parameter  | Results  | PQL    | Units | Method      | Allowable Limits | Prep Date | Analysis Date | Init |
|--|----------|--------|-------|-------------|------------------|-----------|---------------|------|
| <b>Volatile Gas Chromatography/Mass Spectroscopy</b> |          |        |       |             |                  |           |               |      |
| Hexachlorobutadiene                                  | 0.0339 U | 0.0339 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| Naphthalene  | 0.0678 U | 0.0678 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| 1,2,3-Trichlorobenzene                               | 0.0339 U | 0.0339 | mg/Kg | SW846-8260B |                  | 09/25/02  | 10/01/02      | RMV  |
| <b>Surrogates</b>                                    |          |        |       |             |                  |           |               |      |
| Dibromofluoromethane <surr>                          | 106      |        | %     | SW846-8260B | 80-117           | 09/25/02  | 10/01/02      | RMV  |
| 1,2-Dichloroethane-D4 <surr>                         | 109      |        | %     | SW846-8260B | 80-120           | 09/25/02  | 10/01/02      | RMV  |
| Toluene-d8 <surr>                                    | 104      |        | %     | SW846-8260B | 82-118           | 09/25/02  | 10/01/02      | RMV  |
| 4-Bromofluorobenzene <Surr>                          | 94.3     |        | %     | SW846-8260B | 51-132           | 09/25/02  | 10/01/02      | RMV  |





CT&E Ref.# 1026369003
Client Name Shannon & Wilson Inc.
Project Name/# 32-1-16594 1200 E. 70th Ave
Client Sample ID 32-1-16594-EX2North
Matrix Soil/Solid

All Dates/Times are Alaska Standard Time
Printed Date/Time 10/04/2002 16:57
Collected Date/Time 09/25/2002 10:30
Received Date/Time 09/26/2002 13:20
Technical Director Stephen C. Ede

Released By [Signature]

Sample Remarks:

RRO - Surrogate is outside QC goals (biased high) due to hydrocarbon interference. Sample results should not be affected.
DRO/RRO - The pattern is consistent with a lube oil.

Table with 10 columns: Parameter, Results, PQL, Units, Method, Allowable Limits, Prep Date, Analysis Date, Init. Rows include Solids (Total Solids), Semivolatile Organic Fuels Department (Diesel Range Organics, Residual Range Organics GC), and Surrogates (5a Androstane, n-Triacontane-d62).



CT&E Ref.# 1026369004
Client Name Shannon & Wilson Inc.
Project Name/# 32-1-16594 1200 E. 70th Ave
Client Sample ID 32-1-16594-EX2Bottom
Matrix Soil/Solid

All Dates/Times are Alaska Standard Time
Printed Date/Time 10/04/2002 16:57
Collected Date/Time 09/25/2002 10:50
Received Date/Time 09/26/2002 13:20
Technical Director Stephen C. Ede

Released By [Signature]

Sample Remarks:

RRO - Surrogate is outside QC goals (biased high) due to hydrocarbon interference. Sample results should not be affected.
DRO - Unknown hydrocarbon with several peaks is present.

Table with 10 columns: Parameter, Results, PQL, Units, Method, Allowable Limits, Prep Date, Analysis Date, Init. Rows include Solids (Total Solids), Semivolatile Organic Fuels Department (Diesel Range Organics, Residual Range Organics GC), and Surrogates (5a Androstane <surr>, n-Triacontane-d62 <Surr>).



CT&E Ref.# 1026369005  
 Client Name Shannon & Wilson Inc.  
 Project Name/# 32-1-16594 1200 E. 70th Ave  
 Client Sample ID Trip Blank  
 Matrix Soil/Solid

All Dates/Times are Alaska Standard Time  
 Printed Date/Time 10/04/2002 16:57  
 Collected Date/Time 09/25/2002 0:00  
 Received Date/Time 09/26/2002 13:20  
 Technical Director Stephen C. Ede

Released By *Shane Peterson*

Sample Remarks:

| Parameter  | Results  | PQL    | Units | Method      | Allowable Limits | Prep Date | Analysis Date | Init |
|--|----------|--------|-------|-------------|------------------|-----------|---------------|------|
| <b>Solids</b>  |          |        |       |             |                  |           |               |      |
| Total Solids   | 100      |        | %     | SM20 2540G  |                  |           | 10/02/02      | DS   |
| <b>Volatile Gas Chromatography/Mass Spectroscopy</b> |          |        |       |             |                  |           |               |      |
| Dichlorodifluoromethane                              | 0.0253 U | 0.0253 | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |
| Chloromethane  | 0.0253 U | 0.0253 | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |
| Vinyl chloride                                       | 0.0132 U | 0.0132 | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |
| Bromomethane   | 0.101 U  | 0.101  | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |
| Chloroethane   | 0.101 U  | 0.101  | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |
| Trichlorofluoromethane                               | 0.0253 U | 0.0253 | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |
| 1,1-Dichloroethene                                   | 0.0253 U | 0.0253 | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |
| Carbon disulfide                                     | 0.101 U  | 0.101  | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |
| Methylene chloride                                   | 0.101 U  | 0.101  | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |
| trans-1,2-Dichloroethene                             | 0.0253 U | 0.0253 | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |
| 2-Butanone (MEK)                                     | 0.253 U  | 0.253  | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |
| 2,2-Dichloropropane                                  | 0.0253 U | 0.0253 | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |
| 1,1,1-Trichloroethane                                | 0.0253 U | 0.0253 | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |
| cis-1,2-Dichloroethene                               | 0.0253 U | 0.0253 | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |
| 1,1-Dichloroethane                                   | 0.0253 U | 0.0253 | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |
| Bromochloromethane                                   | 0.0253 U | 0.0253 | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |
| Chloroform   | 0.0253 U | 0.0253 | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |
| Carbon tetrachloride                                 | 0.0253 U | 0.0253 | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |
| Benzene  | 0.0132 U | 0.0132 | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |
| 1,1-Dichloropropene                                  | 0.0253 U | 0.0253 | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |
| 1,2-Dichloroethane                                   | 0.0132 U | 0.0132 | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |
| Trichloroethene                                      | 0.0203 U | 0.0203 | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |
| 1,2-Dichloropropane                                  | 0.0132 U | 0.0132 | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |
| Dibromomethane                                       | 0.0253 U | 0.0253 | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |
| Bromodichloromethane                                 | 0.0253 U | 0.0253 | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |
| 1,1,2-Trichloroethane                                | 0.0132 U | 0.0132 | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |
| 2-Chloroethyl Vinyl Ether                            | 0.253 U  | 0.253  | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |



CT&E Ref.# 1026369005  
 Client Name Shannon & Wilson Inc.  
 Project Name/# 32-1-16594 1200 E. 70th Ave  
 Client Sample ID Trip Blank  
 Matrix Soil/Solid

All Dates/Times are Alaska Standard Time  
 Printed Date/Time 10/04/2002 16:57  
 Collected Date/Time 09/25/2002 0:00  
 Received Date/Time 09/26/2002 13:20  
 Technical Director Stephen C. Ede

| Parameter  | Results  | PQL    | Units | Method      | Allowable Limits | Prep Date | Analysis Date | Init |
|--|----------|--------|-------|-------------|------------------|-----------|---------------|------|
| <b>Volatile Gas Chromatography/Mass Spectroscopy</b> |          |        |       |             |                  |           |               |      |
| cis-1,3-Dichloropropene                              | 0.0203 U | 0.0203 | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |
| 4-Methyl-2-pentanone (MIBK)                          | 0.253 U  | 0.253  | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |
| Toluene  | 0.0506 U | 0.0506 | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |
| trans-1,3-Dichloropropene                            | 0.0253 U | 0.0253 | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |
| Tetrachloroethene                                    | 0.0253 U | 0.0253 | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |
| 1,3-Dichloropropane                                  | 0.0253 U | 0.0253 | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |
| 2-Hexanone   | 0.253 U  | 0.253  | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |
| Dibromochloromethane                                 | 0.0253 U | 0.0253 | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |
| 1,1,1,2-Tetrachloroethane                            | 0.0253 U | 0.0253 | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |
| 1,2-Dibromoethane                                    | 0.0253 U | 0.0253 | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |
| Chlorobenzene  | 0.0253 U | 0.0253 | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |
| Ethylbenzene   | 0.0506 U | 0.0506 | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |
| P & M -Xylene  | 0.0506 U | 0.0506 | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |
| o-Xylene   | 0.0506 U | 0.0506 | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |
| Styrene  | 0.0253 U | 0.0253 | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |
| Bromoform  | 0.0253 U | 0.0253 | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |
| Isopropylbenzene (Cumene)                            | 0.0253 U | 0.0253 | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |
| Bromobenzene   | 0.0253 U | 0.0253 | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |
| 1,2,3-Trichloropropane                               | 0.0253 U | 0.0253 | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |
| 1,1,2,2-Tetrachloroethane                            | 0.0253 U | 0.0253 | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |
| n-Propylbenzene                                      | 0.0253 U | 0.0253 | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |
| 2-Chlorotoluene                                      | 0.0253 U | 0.0253 | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |
| 4-Chlorotoluene                                      | 0.0253 U | 0.0253 | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |
| 1,3,5-Trimethylbenzene                               | 0.0506 U | 0.0506 | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |
| tert-Butylbenzene                                    | 0.0253 U | 0.0253 | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |
| 1,2,4-Trimethylbenzene                               | 0.0506 U | 0.0506 | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |
| sec-Butylbenzene                                     | 0.0253 U | 0.0253 | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |
| 1,3-Dichlorobenzene                                  | 0.0253 U | 0.0253 | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |
| 4-Isopropyltoluene                                   | 0.0253 U | 0.0253 | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |
| 1,4-Dichlorobenzene                                  | 0.0253 U | 0.0253 | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |
| 1,2-Dichlorobenzene                                  | 0.0253 U | 0.0253 | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |
| n-Butylbenzene                                       | 0.0253 U | 0.0253 | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |
| 1,2-Dibromo-3-chloropropane                          | 0.101 U  | 0.101  | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |
| 1,2,4-Trichlorobenzene                               | 0.0253 U | 0.0253 | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |



CT&E Ref.# 1026369005  
 Client Name Shannon & Wilson Inc.  
 Project Name/# 32-1-16594 1200 E. 70th Ave  
 Client Sample ID Trip Blank  
 Matrix Soil/Solid

All Dates/Times are Alaska Standard Time  
 Printed Date/Time 10/04/2002 16:57  
 Collected Date/Time 09/25/2002 0:00  
 Received Date/Time 09/26/2002 13:20  
 Technical Director Stephen C. Ede

| Parameter  | Results  | PQL    | Units | Method      | Allowable Limits | Prep Date | Analysis Date | Init |
|--|----------|--------|-------|-------------|------------------|-----------|---------------|------|
| <b>Volatile Gas Chromatography/Mass Spectroscopy</b> |          |        |       |             |                  |           |               |      |
| Hexachlorobutadiene                                  | 0.0253 U | 0.0253 | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |
| Naphthalene  | 0.0506 U | 0.0506 | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |
| 1,2,3-Trichlorobenzene                               | 0.0253 U | 0.0253 | mg/Kg | SW846-8260B |                  | 09/29/02  | 10/01/02      | RMV  |
| <b>Surrogates</b>                                    |          |        |       |             |                  |           |               |      |
| Dibromofluoromethane <surr>                          | 101      |        | %     | SW846-8260B | 80-117           | 09/29/02  | 10/01/02      | RMV  |
| 1,2-Dichloroethane-D4 <surr>                         | 106      |        | %     | SW846-8260B | 80-120           | 09/29/02  | 10/01/02      | RMV  |
| Toluene-d8 <surr>                                    | 102      |        | %     | SW846-8260B | 82-118           | 09/29/02  | 10/01/02      | RMV  |
| 4-Bromofluorobenzene <Surr>                          | 102      |        | %     | SW846-8260B | 51-132           | 09/29/02  | 10/01/02      | RMV  |



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 CTE  
 Attn: Shane

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

| Sample Identity       | Lab No. | Time | Date Sampled | Analysis Parameters/Sample Container Description |      |                    |                  | Total Number of Containers | Remarks/Matrix |
|-----------------------|---------|------|--------------|--|------|--------------------|------------------|----------------------------|----------------|
|                       |         |      |              | Comp.  | Grab | PRO/RO (AK102/103) | VOCs (EPA 8260B) |                            |                |
| 32-1-16594-EX1 East   | ① A-B   | 1150 | 9/25/02      | X  |      | X                  |                  | 2                          | Soil           |
| 32-1-16594-EX1 Bottom | ② A-B   | 1200 | 9/25/02      | X  |      | X                  |                  | 2                          | Soil           |
| 32-1-16594-EX2 North  | ③ A-B   | 1030 | 9/25/02      | X  | X    |                    |                  | 2                          | Soil           |
| 32-1-16594-EX2 Bottom | ④ A-B   | 1050 | 9/25/02      | X  | X    |                    |                  | 2                          | Soil           |
| TB                    | ⑤ A     |      | 9/21/02      | X  |      | X                  |                  | 1                          | Soil           |
|                       |         |      |              |  |      |                    |                  |                            |                |
|                       |         |      |              |  |      |                    |                  |                            |                |
|                       |         |      |              |  |      |                    |                  |                            |                |
|                       |         |      |              |  |      |                    |                  |                            |                |
|                       |         |      |              |  |      |                    |                  |                            |                |

| Project Information  | Sample Receipt                 |
|--|--------------------------------|
| Project Number: 32-1-16594   | Total Number of Containers     |
| Project Name: 1200 E. 70 <sup>th</sup> Ave   | COC Seals/Intact? Y/N/NA       |
| Contact: Scott Knoflicek   | Received Good Cond./Cold 5.8   |
| Ongoing Project? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> | Delivery Method:               |
| Sampler: Scott Knoflicek   | (attach shipping bill, if any) |

| Instructions                         |
|--------------------------------------|
| Requested Turn Around Time: Standard |
| Special Instructions:<br>Quote #6015 |

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: <u>[Signature]</u> Time: 1320    | Signature: _____ Time: _____    | Signature: _____ Time: _____               |
| Printed Name: Scott Knoflicek Date: 9/26/02 | Printed Name: _____ Date: _____ | Printed Name: _____ Date: _____            |
| Company: STW                                | Company: _____                  | Company: _____                             |
| Received By: 1.                             | Received By: 2.                 | Received By: 3.                            |
| Signature: _____ Time: _____                | Signature: _____ Time: _____    | Signature: <u>[Signature]</u> Time: 1320   |
| Printed Name: _____ Date: _____             | Printed Name: _____ Date: _____ | Printed Name: Forrest Taylor Date: 9/26/02 |
| Company: _____                              | Company: _____                  | Company: CTE                               |

**ATTACHMENT 2**  
**SITE PHOTOGRAPHS**



Photo 1: Looking southwest at Excavation 1.



Photo 2: Looking northeast at Excavation 2.



**ATTACHMENT 3**

**IMPORTANT INFORMATION ABOUT YOUR  
GEOTECHNICAL/ENVIRONMENTAL REPORT**

## **Important Information About Your Environmental Site Assessment/Evaluation Report**

### **ENVIRONMENTAL SITE ASSESSMENTS/EVALUATIONS ARE PERFORMED FOR SPECIFIC PURPOSES AND FOR SPECIFIC CLIENTS.**

This report was prepared to meet the needs you specified with respect to your specific site and your risk management preferences. Unless indicated otherwise, we prepared your report expressly for you and for the purposes you indicated. No one other than you should use this report for any purpose without first conferring with us. No one is authorized to use this report for any purpose other than that originally contemplated without our prior written consent.

The findings and conclusions documented in this site assessment/evaluation have been prepared for specific application to this project and have been developed in a manner consistent with that level of care and skill normally exercised by members of the environmental science profession currently practicing under similar conditions in this area. The conclusions presented are based on interpretation of information currently available to us and are made within the operational scope, budget, and schedule constraints of this project. No warranty, express or implied, is made.

### **OUR REPORT IS BASED ON PROJECT-SPECIFIC FACTORS.**

Our environmental site assessment is based on several factors and may include (but not be limited to): reviewing public documents to chronicle site ownership for the past 30, 40, or more years; investigating the site's regulatory history to learn about permits granted or citations issued; determining prior uses of the site and those adjacent to it; reviewing available topographic and real estate maps, historical aerial photos, geologic information, and hydrologic data; reviewing readily available published information about surface and subsurface conditions; reviewing federal and state lists of known and potentially contaminated sites; evaluating the potential for naturally occurring hazards; and interviewing public officials, owners/operators, and/or adjacent owners with respect to local concerns and environmental conditions.

Except as noted within the text of the report, no sampling or quantitative laboratory testing was performed by us as part of this site assessment. Where such analyses were conducted by an outside laboratory, Shannon & Wilson relied upon the data provided and did not conduct an independent evaluation regarding the reliability of the data.

### **CONDITIONS CAN CHANGE.**

Site conditions, both surface and subsurface, may be affected as a result of natural processes or human influence. An environmental site assessment/evaluation is based on conditions that existed at the time of the evaluation. Because so many aspects of a historical review rely on third party information, most consultants will refuse to certify (warrant) that a site is free of contaminants, as it is impossible to know with absolute certainty if such a condition exists. Contaminants may be present in areas that were not surveyed or sampled, or may migrate to areas that showed no signs of contamination at the time they were studied.

Unless your consultant indicates otherwise, your report should not be construed to represent geotechnical subsurface conditions at or adjacent to the site and does not provide sufficient information for construction-related activities. Your report also should not be used following floods, earthquakes, or other acts of nature; if the size or configuration of the site is altered; if the location of the site is modified; or if there is a change of ownership and/or use of the property.

**INCIDENTAL DAMAGE MAY OCCUR DURING SAMPLING ACTIVITIES.**

Incidental damage to a facility may occur during sampling activities. Asbestos and lead-based paint sampling often require destructive sampling of pipe insulation, floor tile, walls, doors, ceiling tile, roofing, and other building materials. Shannon & Wilson does not provide for paint repair. Limited repair of asbestos sample locations are provided. However, Shannon & Wilson neither warranties repairs made by our field personnel, nor are we held liable for injuries or damages as a result of those repairs. If you desire a specific form of repair, such as those provided by a licensed roofing contractor, you need to request the specific repair at the time of the proposal. The owner is responsible for repair methods that are not specified in the proposal.

**READ RESPONSIBILITY CLAUSES CAREFULLY.**

Environmental site assessments/evaluations are less exact than other design disciplines because they are based extensively on judgment and opinion, and there may not have been any (or very limited) investigation of actual subsurface conditions. Wholly unwarranted claims have been lodged against consultants. To limit this exposure, 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 responsibilities begin and end. Their use helps all parties involved recognize their individual responsibilities and take appropriate action. Some of these definitive clauses may appear in this report, and you are encouraged to read them closely. Your consultant will be pleased to give full and frank answers to your questions.

Consultants cannot accept responsibility for problems that may develop if they are not consulted after factors considered in their reports have changed, or conditions at the site have changed. Therefore, it is incumbent upon you to notify your consultant of any factors that may have changed prior to submission of the final assessment/evaluation.

An assessment/evaluation of a site helps reduce your risk, but does not eliminate it. Even the most rigorous professional assessment may fail to identify all existing conditions.

**ONE OF THE OBLIGATIONS OF YOUR CONSULTANT IS TO PROTECT THE SAFETY, HEALTH, PROPERTY, AND WELFARE OF THE PUBLIC.**

If our environmental site assessment/evaluation discloses the existence of conditions that may endanger the safety, health, property, or welfare of the public, we may be obligated under rules of professional conduct, statutory law, or common law to notify you and others of these conditions.

The preceding paragraphs are based on information provided by the ASFE/Association of Engineering Firms Practicing in the Geosciences, Silver Spring, Maryland