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January 18, 2002

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Davidson Inc.
1551 Larue Lane
Fairbanks, Alaska 99709

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**CONTAMINATED
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Attn: Ms. Janie Feist

**RE: RESULTS OF MONITORING WELL AND TEMPORARY WELL POINT
SAMPLING, 230 OLD STEESE HIGHWAY, FACILITY #2742, FAIRBANKS,
ALASKA**

In accordance with the Alaska State Underground Storage Tank Financial Assistance Program corrective action, Shannon & Wilson, Inc., presents the results of groundwater monitoring well sampling and installation and sampling of off-site temporary well points at 230 Old Steese Highway in Fairbanks, Alaska. This report summarizes our field activities and analytical results. This work was performed in general accordance with the Alaska Department of Environmental Conservation (ADEC) continuing cleanup Grant #15274231. The grant provides for semiannual groundwater monitoring of the existing wells, installation and one-time sampling of temporary driven well points, and the installation and sampling of two off-site monitoring wells. The off-site well installation and second water sampling event tasks remain to be completed.

Groundwater sampling was conducted on July 30, 2001, using a no-purge technique. Monitoring well MW-5 was not sampled, because it was destroyed by road work as part of the Old Steese Highway reconstruction project. No sample was collected from monitoring well MW-1, because construction activity at that location at the time of sampling would have placed our field sampling crew's safety at risk. Samples for this event were collected from on-site wells MW-2, MW-3, MW-4 (including a duplicate sample at this well), MW-6, and off-site wells MW-7 and MW-8. We also collected water samples from two locations on Noyes Slough; one adjacent to well MW-8 (Slough-1) and one adjacent to well MW-7 (Slough-2). Eight temporary well points were installed on the Santana's Flowers and Burger King properties.

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Preliminary well point installation locations were selected in consultation with ADEC. We then contacted the affected property owners for access permission, which was granted for most well point locations. Final well point locations were adjusted based on property owner access limitations (Burger King and Santina's Flowers allowed access) and underground and overhead utility limitations.

Well point sampling consisted of first measuring the depth to water and then purging the well point using a peristaltic pump with new tubing. These well points exhibited low rates of recovery, with volumes purged ranging from less than a half-gallon to one gallon per well point. Purge water from the well points was containerized pending analytical results.

Water samples collected from these well points were placed in a cooler, cooled to about 4° C, and hand-delivered to CTE Environmental Services of Fairbanks for analysis for VOCs.

Slough Samples

Slough samples were collected from Noyes Slough adjacent to monitoring wells MW-7 and MW-8. These samples were collected 2 feet from the bank, using a new, clean disposable bailer. Slough samples were handled in the same manner as the monitoring well samples and were analyzed for GRO and VOCs.

ANALYTICAL RESULTS

Samples collected from monitoring wells MW-2 and MW-6 were analyzed for BTEX and GRO by EPA Method AK-101. Samples collected from monitoring wells MW-3, MW-4, MW-7, MW-8, and the two slough locations were analyzed for GRO by Method AK-101 and VOCs by EPA Method 8260B. Table 1 provides a summary of the GRO, BTEX, and VOC's results from monitoring wells and Noyes Slough locations sampled in July 2001.

The well point samples were analyzed for VOCs by EPA Method 8260B. Results of the well point sample analysis are summarized in Table 2.

State regulations have established groundwater cleanup levels in 18 AAC 75.345. The applicable cleanup levels are included in tables 1 and 2 for reference. Tables 3 and 4 present

Slough Samples

VOCs were not detected in the two slough samples collected during the July 30th sampling event.

QUALITY ASSURANCE/QUALITY CONTROL

Quality Assurance (QA) and Quality Control (QC) procedures are used to see that sampling, documentation, and laboratory data are of known and acceptable quality and reliability. QA procedures, used to validate the analytical results, included laboratory QC and the collection of a field duplicate sample at a frequency of at least 10 percent. Field duplicate samples are collected to evaluate the measure of analytical precision, measured in relative percent difference (RPD). Laboratory method blank analyses are performed by the laboratory to demonstrate the measure of their own precision. An evaluation of analytical precision can be performed only if the results of the analysis of both the original sample and its field or laboratory duplicate are above the method detection limits.

The QC samples consisted of field duplicate samples collected from monitoring well MW-4 (designated MW-14) and from well point WP-8 (designated WP-9). The duplicate samples were analyzed by the same methods as the corresponding field sample.

NCA performed reanalysis of two monitoring well samples at a 20X dilution, MW-4 and its field duplicate MW-14, because several compounds were detected in these samples at concentrations exceeding the calibration range. When a compound was reported in both the original analysis and diluted analysis, we selected the higher of the two reported results for the summary data table (Table 1). If the higher value was flagged as estimated, we used the lower value in Table 1.

RPDs could be calculated for 12 compounds between MW-4 and its duplicate MW-14. These RPDs ranged from 24 percent to 89 percent. The target RPD is less than 30 percent. Seven of the 12 RPDs exceeded that target. This may be in part to the reanalysis of these samples at a 20X dilution. It is interesting to note that for each detected compound in this sample/duplicate pair the higher concentration was reported in the original sample, and the lower concentration in the duplicate (which was collected immediately after the original sample). This may be representative of the effects of no-purge sampling techniques on field duplicate results, and may

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Based on the July 30th monitoring well sample data, the only on-site well to exceed groundwater cleanup levels was MW-4. The reported benzene concentration of 26.1 µg/L in that well is comparable to previous sampling events (33 µg/L in January 1998 and 38.9 µg/L in July 1999), although other higher benzene concentrations have been reported in MW-4 between those two samples. Benzene concentrations in wells MW-2, MW-3, and MW-6 showed dramatic decreases between the November/December 2000 and the July 30, 2001, sample events, dropping from 76 µg/L, 1,010 µg/L, and 60.4 µg/L, respectively, to nondetect. Possible factors contributing to this decrease may include the use of no-purge sampling techniques, water table level and whether it is rising or falling, or groundwater contaminant concentrations having reached near steady-state conditions.

Temporal fluctuations in benzene concentrations in the off-site monitoring wells MW-7 and MW-8 do not suggest a well-defined trend in contaminant concentration decreases. Note that we also do not have the same number of samples as on-site wells to make such comparisons.

The distribution of benzene in off-site groundwater, as observed in the well-point sample data, infers a plume spread generally to the west of the site. Well points to the south and southwest of the site (WP-1, WP-5, and WP-6) contained benzene at concentrations one to two orders of magnitude lower than the other more downgradient well points.

A cursory comparison of benzene concentrations to groundwater levels did not suggest a correlation. High water levels were generally observed during spring and summer sampling periods, and winter sampling periods were generally characterized by low water levels. However, low water levels were observed during some summer sampling periods.

Water clarity is noted on our water sampling field forms and is based on a visual assessment. All of the groundwater samples collected during the July 30th sampling event were observed to be slightly turbid, with tinges of yellow, orange, or brown. Samples from previous sampling events, using a purge-and-sample procedure, were observed to be clear at the time of collection. Conducting future sample events using a purge-and-sample process would eliminate water clarity as a possible factor in assessing groundwater quality at the site.

There is a potential for other sources to have contributed to some of the groundwater contamination observed in the monitoring well and well point samples. Historic releases from

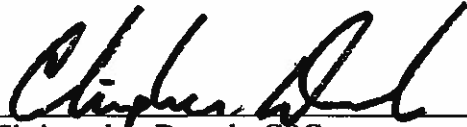
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We trust that this information is sufficient for your needs at the present time. If you have any questions, please do not hesitate to call.

Sincerely,

SHANNON & WILSON, INC.



Christopher Darrah, CPG
Senior Geologist

Reviewed By 

David M. McDowell
Vice President, Environmental Services

Enclosures: Table 1 Analytical Results for Monitoring Well Groundwater Samples
Table 2 Analytical Results for Well Point Groundwater Samples
Table 3 Historic GRO and BTEX Results
Table 4 Historic VOC results
Figure 1 On-Site Monitoring Well Locations and Former Tank Layout
Figure 2 Off-Site Monitoring Well and Well Point Locations
Analytical Laboratory Report – Monitoring Well Samples
Analytical Laboratory Report – Well Point Samples

cc: Janice Wieggers, ADEC - NRO
Linda Nuechterlein, ADEC - FAP

TABLE 1

230 Old Steese Groundwater Quality Summary
 Analytical Results for BTEX, GRO
 (EPA Method 8260B, units in µg/L)

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| Analyte | ADEC Groundwater Cleanup Level ¹ | Sample Location | | | | | | | | | | | |
|------------------------|---|-------------------|----------|-------------------|------------------------|-------------------|-----------|----------|----------|----------|----------|----------|----------|
| | | MW-2 ² | MW-3 | MW-4 ³ | MW-4 Dup. ³ | MW-6 ³ | MW-7 | MW-8 | Slough 1 | Slough 2 | | | |
| GRO | 1,300 | ND(50.0) | ND(50.0) | 4,810 | 1,850 | ND(50.0) | ND(50.0) | ND(50.0) | ND(50.0) | ND(50.0) | ND(50.0) | ND(50.0) | ND(50.0) |
| Benzene | 5 | ND(0.200) | ND(1.00) | 26.1 | 14.6 | ND(0.200) | ND(0.200) | 3.51 | ND(1.00) | ND(1.00) | ND(1.00) | ND(1.00) | ND(1.00) |
| Toluene | 1,000 | ND(0.500) | ND(1.00) | 10.8 | 8.03 | ND(0.500) | ND(0.500) | ND(1.00) | ND(1.00) | ND(1.00) | ND(1.00) | ND(1.00) | ND(1.00) |
| Ethylbenzene | 700 | ND(0.500) | ND(1.00) | 104 | 74.0 | ND(0.500) | ND(0.500) | ND(1.00) | ND(1.00) | ND(1.00) | ND(1.00) | ND(1.00) | ND(1.00) |
| Xylenes ⁴ | 10,000 | 3.23 | ND(2.00) | 360 | 283 | ND(1.00) | ND(1.00) | ND(2.00) | ND(2.00) | ND(2.00) | ND(2.00) | ND(2.00) | ND(2.00) |
| Tetrachloroethene | 5 | - | ND(1.00) | ND(1.00) | ND(1.00) | - | - | 1.34 | ND(1.00) | ND(1.00) | ND(1.00) | ND(1.00) | ND(1.00) |
| Isopropylbenzene | 3,650 | - | ND(1.00) | 12.9 | 8.23 | - | - | ND(1.00) | ND(1.00) | ND(1.00) | ND(1.00) | ND(1.00) | ND(1.00) |
| p-Isopropyltoluene | | - | ND(1.00) | 10.1 | 7.34 | - | - | ND(1.00) | ND(1.00) | ND(1.00) | ND(1.00) | ND(1.00) | ND(1.00) |
| Naphthalene | 1,460 | - | ND(1.00) | 65.4 | 48.2 | - | - | ND(1.00) | ND(1.00) | ND(1.00) | ND(1.00) | ND(1.00) | ND(1.00) |
| n-Propylbenzene | | - | ND(1.00) | 30.4 | 20.4 | - | - | ND(1.00) | ND(1.00) | ND(1.00) | ND(1.00) | ND(1.00) | ND(1.00) |
| 1,2,4-Trimethylbenzene | 70 | - | ND(1.00) | 355 | 263 | - | - | ND(1.00) | ND(1.00) | ND(1.00) | ND(1.00) | ND(1.00) | ND(1.00) |
| 1,3,5-Trimethylbenzene | 1,850 | - | ND(1.00) | 141 | 106 | - | - | ND(1.00) | ND(1.00) | ND(1.00) | ND(1.00) | ND(1.00) | ND(1.00) |
| cis 1,2-Dichloroethene | 70 | - | ND(1.00) | ND(1.00) | ND(1.00) | - | - | 1.21 | ND(1.00) | ND(1.00) | ND(1.00) | ND(1.00) | ND(1.00) |
| Trichlorofluoromethane | | - | ND(1.00) | ND(1.00) | ND(1.00) | - | - | 2.09 | ND(1.00) | ND(1.00) | ND(1.00) | ND(1.00) | ND(1.00) |
| sec-Butylbenzene | | - | ND(1.00) | 2.38 | 1.84 | - | - | ND(1.00) | ND(1.00) | ND(1.00) | ND(1.00) | ND(1.00) | ND(1.00) |
| Trichloroethene | 5 | - | ND(1.00) | ND(1.00) | ND(1.00) | - | - | 1.13 | ND(1.00) | ND(1.00) | ND(1.00) | ND(1.00) | ND(1.00) |

¹ 18 AAC 75, as amended by Technical Memorandum 01-007. Blank spaces indicate no cleanup level has been promulgated.
² "-" indicates the sample was not analyzed for this compound. MW-2 and MW-6 were analyzed for GRO and BTEX compounds only.
³ MW-4 and its field duplicate (labeled MW-14 in the laboratory data report) were re-extracted at a 20x dilution. See report text for discussion.
⁴ Nondetects show PQL for m, p-xylenes only; PQL for o-xylenes is 1.00 µg/L.

TABLE 2

230 Old Steese Well Point Groundwater Quality Summary
Analytical Results for VOCs
(EPA Method 8260B, units in µg/L)

| Analyte | ADEC Groundwater Cleanup Level ¹ | Well Point Identification | | | | | | | | | |
|------------------------|---|---------------------------|-----------|---------|---------|---------|---------|-----------|---------|---------|------------------------|
| | | WP-1 | WP-2 | WP-3 | WP-4 | WP-5 | WP-6 | WP-6 | WP-7 | WP-8 | WP-8 Dup. ² |
| Benzene | 5 | 2.8 | 330 D | 170 D | 480 D | 60 | 16 | 520 D | 300 D | 420 D | |
| Toluene | 1,000 | ND(1.0) | ND(5.0) D | 1.9 | 91 | 2.1 | 2.0 | 31 D | 2.1 | 2.2 | |
| Ethylbenzene | 700 | ND(1.0) | 77 D | 12 | 360 D | ND(1.0) | ND(1.0) | 680 D | 45 | 49 | |
| P. m- Xylenes | 10,000* | ND(2.0) | ND(10) D | ND(2.0) | 1100 D | ND(2.0) | ND(2.0) | 960 D | 2.4 | 2.6 | |
| o-Xylenes | (*total xylenes) | ND(1.0) | ND(5.0) D | ND(1.0) | 150 D | ND(1.0) | ND(1.0) | ND(20) D | ND(1.0) | ND(1.0) | |
| 1,2-Dibromoethane | | ND(1.0) | ND(5.0) D | ND(1.0) | ND(1.0) | ND(1.0) | ND(1.0) | ND(20) D | ND(1.0) | ND(1.0) | |
| 2-Methylnaphthalene | 1,500 | ND(5.0) | ND(25) D | ND(5.0) | 8.2 | ND(5.0) | ND(5.0) | ND(100) D | ND(5.0) | ND(5.0) | |
| 4-Isopropyltoluene | | ND(1.0) | ND(5.0) D | ND(1.0) | 5.6 | ND(1.0) | ND(1.0) | ND(20) D | ND(1.0) | ND(1.0) | |
| Acetone | 3,650 | ND(25) | ND(130) D | ND(25) | 34 | ND(25) | ND(25) | ND(500) D | ND(25) | ND(25) | |
| Chloromethane | | ND(1.0) | ND(5.0) D | ND(1.0) | 22 | 2.8 | 3.3 | ND(20) D | ND(1.0) | ND(1.0) | |
| cis-1,2-Dichloroethene | | 3.6 | ND(5.0) D | 1.2 | 2.0 | ND(1.0) | ND(1.0) | ND(20) D | 1.4 | 1.4 | |
| Isopropylbenzene | 3,650 | ND(5.0) | ND(25) D | ND(5.0) | 31 | ND(5.0) | ND(5.0) | ND(100) D | ND(5.0) | 5.3 | |
| Naphthalene | 1,460 | ND(5.0) | ND(25) D | ND(5.0) | 60 | ND(5.0) | ND(5.0) | ND(100) D | ND(5.0) | 5.1 | |
| n-Butylbenzene | | ND(1.0) | 11 D | ND(1.0) | 9.8 | ND(1.0) | ND(1.0) | ND(20) D | ND(1.0) | ND(1.0) | |
| n-Propylbenzene | | ND(1.0) | 23 D | 5.1 | 72 | ND(1.0) | ND(1.0) | 62 D | 8.6 | 9.6 | |
| Tetrachloroethene | 5 | 1.9 | ND(5.0) D | 2.3 | 3.5 | 4.2 | 11 | ND(20) D | 1.6 | 1.5 | |
| Trichloroethene | 5 | ND(1.0) | ND(5.0) D | 1.3 | ND(1.0) | ND(1.0) | ND(1.0) | ND(20) D | ND(1.0) | 1.1 | |
| Trichlorofluoromethane | | ND(1.0) | ND(5.0) D | 2.1 | ND(1.0) | 4.0 | 4.6 | ND(20) D | 70 | 59 | |
| 1,2,4-Trimethylbenzene | 70 | ND(1.0) | ND(5.0) D | ND(1.0) | 330 D | ND(1.0) | ND(1.0) | 720 D | 1.8 | 1.9 | |
| 1,3,5-Trimethylbenzene | 1,850 | ND(1.0) | ND(5.0) D | ND(1.0) | 200 D | ND(1.0) | ND(1.0) | 230 D | 1.3 | 1.5 | |
| Vinyl Chloride | 2 | ND(1.0) | ND(5.0) D | ND(1.0) | 1.2 | ND(1.0) | ND(1.0) | ND(20) D | ND(1.0) | ND(1.0) | |

NOTES:

¹ Blank spaces indicate no groundwater cleanup level has been promulgated by ADEC for the listed analyte.

² The field duplicate sample collected at well point WP-8 is designated WP-9 in the laboratory data report

Bold Type indicates a concentration exceeding ADEC groundwater cleanup levels (18 AAC 75, as amended by Technical Memorandum 01-007).

D = Sample result is based on secondary dilution.

ND(5) indicates the analyte was not detected. The practical quantitation limit is shown in parentheses.

No VOCs were detected in the trip blank associated with these samples.

TABLE 3
230 Old Steese
Analytical Results for Groundwater Samples BTEX
(EPA Methods 602/624/8260, all units µg/L)

| Monitoring Well | Sampling Date | Benzene | Toluene | Ethylbenzene | Xylenes | GRO |
|----------------------|--|---------------------|--------------|--------------|---------------|--------------|
| Cleanup Level | | 5.0 | 1,000 | 700 | 10,000 | 1,300 |
| MW-1 | 6/28/93 | 26,000 | 29,000 | 3,200 | 14,000 | — |
| | 3/8/94 | 22,000 | 24,000 | 2,400 | 12,000 | — |
| | 7/7/94 | 22,000 | 23,000 | 2,000 | 11,000 | — |
| | 2/22/95 | 21,000 | 25,000 | 2,200 | 12,000 | — |
| | 5/9/95 | 17,000 | 21,000 | 1,900 | 10,000 | — |
| | 8/31/95 | 15,000 | 16,000 | 1,100 | 6,800 | — |
| | 12/18/95 | 18,000 | 20,000 | 1,100 | 9,800 | — |
| | 7/11/96 | 15,000 | 19,000 | 1,100 | 100 | — |
| | 12/4/96 | 13,100 | 17,900 | 877 | 12,400 | — |
| | 7/29/97 | 15,800 | 17,600 | 351 | 10,400 | — |
| | 1/9/98 | 17,100 | 23,100 | 1,240 | 11,300 | — |
| | 6/30/98 | 471 | 2,070 | 181 | 3,620 | — |
| | 1/13/99 | 1.34 | 5.59 | 1.79 | 21.20 | — |
| | 7/20/99 | <1.00 | <1.00 | 1.45 | 3.15 | — |
| | 2/4/00 | 2.65 | <1.00 | 4.83 | 8.61 | — |
| | 2/4/00 dup | 2.47 | <1.00 | 4.89 | 8.81 | — |
| | 12/6/00 | 0.650 | 1.12 | 0.574 | 2.64 | 73.9 |
| 7/30/01 | Not sampled: access to well limited by road construction | | | | | |
| MW-2 | 6/28/93 | 8,800 | 19,000 | 2,800 | 11,000 | — |
| | 3/8/94 | 8,800 | 15,000 | 2,200 | 9,700 | — |
| | 3/8/94 dup | 4,600 | 16,000 | 2,300 | 10,000 | — |
| | 7/8/94 | 2,800 | 5,000 | 1,500 | 5,600 | — |
| | 2/22/95 | 3,100 | 3,800 | 1,200 | 4,600 | — |
| | 5/9/95 | 3,100 | 8,300 | 1,300 | 9,000 | — |
| | 8/31/95 | 1,200 | 290 | 410 | 1,600 | — |
| | 12/18/95 | 2,200 | 5,300 | 360 | 4,700 | — |
| | 7/11/96 | 326 | 1,443 | 95 | 2,012 | — |
| | 7/11/96 dup | 319 | 1,339 | 167 | 2,017 | — |
| | 12/4/96 | 42.4 | 1.38 | 10.7 | 27.8 | — |
| | 12/4/96 dup | 50.0 | 1.93 | 13.3 | 36.7 | — |
| | 7/29/97 | 1,130 | 2,140 | 213 | 984 | — |
| | 7/29/97 dup | 1,110 | 2,210 | 209 | 978 | — |
| | 1/9/98 | 2.44 | 3.04 | <1.00 | 3.30 | — |
| | 1/9/98 dup | 2.48 | 3.03 | <1.00 | 3.08 | — |
| | 6/30/98 | 5.16 | <0.5 | 0.99 | 3.80 | — |
| | 6/30/98 dup | 5.07 | <0.5 | 1.02 | 3.78 | — |
| | 1/13/99 | No sample recovered | | | | |
| 7/20/99 | 30.5 | 139 | 55.7 | 245 | — | |
| 2/7/00 | 194 | 498 | 326.0 | 1,290 | — | |
| 11/17/00 | 76.0 | 510 | 245 | 1,160 | 5000 | |
| 7/30/01 | <0.200 | <0.500 | <0.500 | 3.23 | <50.0 | |

TABLE 3
230 Old Steese
Analytical Results for Groundwater Samples BTEX
(EPA Methods 602/624/8260, all units µg/L)

SHANNON & WILSON, INC.

| Monitoring Well | Sampling Date | Benzene | Toluene | Ethylbenzene | Xylenes | GRO |
|----------------------|----------------|---------------------|--------------|--------------|---------------|--------------|
| Cleanup Level | | 5.0 | 1,000 | 700 | 10,000 | 1,300 |
| MW-3 | 6/28/93 | 19,000 | 27,000 | 3,100 | 13,000 | — |
| | 3/8/94 | 19,000 | 28,000 | 2,900 | 14,000 | — |
| | 7/8/94 | 18,000 | 25,000 | 2,400 | 13,000 | — |
| | 7/8/94 dup | 14,000 | 19,000 | 3,000 | 14,000 | — |
| | 2/22/95 | 21,000 | 28,000 | 2,500 | 13,000 | — |
| | 2/22/95 dup | 23,000 | 29,000 | 2,600 | 13,000 | — |
| | 5/9/95 | 8,500 | 11,000 | 540 | 7,700 | — |
| | 8/31/95 | 9,700 | 8,000 | 1,200 | 9,300 | — |
| | 8/31/95 dup | 11,000 | 8,800 | 980 | 8,300 | — |
| | 12/18/95 | 690 | 2,800 | 220 | 3,200 | — |
| | 7/11/96 | 16 | 890 | 200 | 2,100 | — |
| | 12/4/96 | <40.0 | 211 | 409 | 3,020 | — |
| | 7/29/97 | <1.00 | 8.42 | 27.6 | 259 | — |
| | 1/9/98 | 39.9 | 13.1 | 87.6 | 731 | — |
| | 6/30/98 | 14.6 | 27.9 | 150 | 1,355 | — |
| | 1/13/99 | 616 | 19.2 | 48 | 581 | — |
| | 7/20/99 | 1,900 | 86.0 | 175 | 1,327 | — |
| 2/4/00 | 3,760 | 72.9 | 70.1 | 751 | — | |
| 11/17/00 | 1,010 | 51.0 | 43.6 | 330 | 3880 | |
| 11/17/00 (dup) | 948 | 46.8 | 44.2 | 320 | 3860 | |
| 7/30/01 | <1.00 | <1.00 | <1.00 | <2.00 | <50.0 | |
| MW-4 | 6/28/93 | 49,000 | 44,000 | 3,400 | 14,000 | — |
| | 3/8/94 | 35,000 | 34,000 | 4,400 | 21,000 | — |
| | 7/7/94 | 37,000 | 38,000 | 3,000 | 16,000 | — |
| | 2/22/95 | 44,000 | 38,000 | 2,900 | 15,000 | — |
| | 5/9/95 | 31,000 | 29,000 | 2,200 | 12,000 | — |
| | 8/31/95 | 24,000 | 22,000 | 1,500 | 9,100 | — |
| | 12/18/95 | 23,000 | 25,000 | 1,900 | 13,000 | — |
| | 12/18/95 dup | 21,000 | 24,000 | 1,900 | 13,000 | — |
| | 7/11/96 | 16,000 | 19,000 | 2,300 | 18,000 | — |
| | 12/4/96 | 4,680 | 8,720 | 795 | 9,320 | — |
| | 7/29/97 | 214 | 648 | 225 | 3,960 | — |
| | 1/9/98 | 33 | 249 | 151 | 2,050 | — |
| | 6/30/98 | 182 | 302 | 172 | 1,803 | — |
| | 1/13/99 | No sample recovered | — | — | — | — |
| | 7/20/99 | 38.9 | 97 | 123 | 823 | — |
| | 12/6/00 | 82.7 | 20.0 | 91.3 | 363.8 | 2790 |
| | 12/06/00 (dup) | 68.4 | 17.7 | 76.8 | 317.2 | 3200 |
| 7/30/01 | 26.1 | 10.8 | 104 | 360 | 4810 | |
| 7/30/01 (dup) | 14.6 | 8.03 | 74.0 | 283 | 1850 | |

TABLE 3

SHANNON & WILSON, INC.

230 Old Steese

Analytical Results for Groundwater Samples BTEX

(EPA Methods 602/624/8260, all units µg/L)

| Monitoring Well | Sampling Date | Benzene | Toluene | Ethylbenzene | Xylenes | GRO |
|----------------------|---------------|--|--------------|--------------|---------------|--------------|
| Cleanup Level | | 5.0 | 1,000 | 700 | 10,000 | 1,300 |
| MW-5 | 6/28/93 | 12,000 | 32,000 | 3,600 | 15,000 | — |
| | 3/8/94 | 8,600 | 15,000 | 2,200 | 9,500 | — |
| | 7/7/94 | 1,800 | 4,500 | 1,400 | 5,800 | — |
| | 2/23/95 | 5,100 | 18,000 | 2,400 | 12,000 | — |
| | 5/9/95 | 740 | 2,100 | 320 | 1,700 | — |
| | 8/31/95 | 1,400 | 1,600 | 640 | 1,900 | — |
| | 12/18/95 | 100 | 2,300 | 160 | 1,500 | — |
| | 7/11/96 | 206 | 666 | 46 | 592 | — |
| | 12/4/96 | 78.1 | 68.9 | 32.0 | 36.7 | — |
| | 7/29/97 | 118 | 49.2 | 32.6 | 111 | — |
| | 1/9/98 | 318 | 115 | 216 | 594 | — |
| | 6/30/98 | 289 | 174 | 178 | 580 | — |
| | 1/13/99 | No sample recovered | — | — | — | — |
| | 7/20/99 | 219 | 171 | 162 | 548 | — |
| 12/7/00 | 13.1 | 10.7 | 10.5 | 31.7 | 243 | |
| | 7/30/01 | This well was destroyed during adjacent road construction. | | | | |
| MW-6 | 7/8/94 | 37,000 | 34,000 | 2,500 | 12,000 | — |
| | 6/30/98 | 114 | 119 | 31.4 | 145 | — |
| | 1/13/99 | 123 | 133 | 62.5 | 209 | — |
| | 1/13/99 dup | 105 | 116 | 51.8 | 181 | — |
| | 7/20/99 | 45.3 | 40.3 | 31.9 | 60.7 | — |
| | 7/20/99 dup | 55.4 | 72.1 | 32.6 | 84.8 | — |
| | 12/7/00 | 60.4 | 34.2 | 48.2 | 70.4 | 1060 |
| | 7/30/01 | <0.200 | <0.500 | <0.500 | <1.00 | <50.0 |
| MW-7 | 7/8/94 | 1.1 | 2.8 | <0.50 | 2.4 | — |
| | 2/22/95 | 1.5 | <0.50 | <0.50 | <1.0 | — |
| | 5/9/95 | 66 | 1.1 | 0.56 | <1.0 | — |
| | 8/31/95 | 7.9 | 0.52 | <0.50 | <1.0 | — |
| | 12/18/95 | 2.4 | <0.5 | <0.5 | <1.0 | — |
| | 12/1/00 | 35.0 | <1.00 | <1.00 | <3.00 | 68.7 |
| | 7/30/01 | 13.3 | <1.00 | <1.00 | <2.00 | <50.0 |
| | | | | | | |
| MW-8 | 7/8/94 | 75 | 3.3 | 24 | 21 | — |
| | 2/22/95 | 1,400 | <20 | 170 | 110 | — |
| | 5/9/95 | 84 | 0.58 | 19 | 1.5 | — |
| | 5/9/95 dup. | 87 | <0.50 | 19 | 1.5 | — |
| | 8/31/95 | 1,200 | 8.20 | 130 | 48 | — |
| | 12/18/95 | 4,000 | 190 | 350 | 680 | — |
| | 6/7/00 | 186 | 2.46 | 25.8 | 31.57 | — |
| | 12/1/00 | 326 | 1.30 | 33.5 | 22.14 | 1580 |
| | 7/30/01 | 3.51 | <1.00 | <1.00 | <2.00 | <50.0 |

NOTES: — Sample not tested for this analyte.

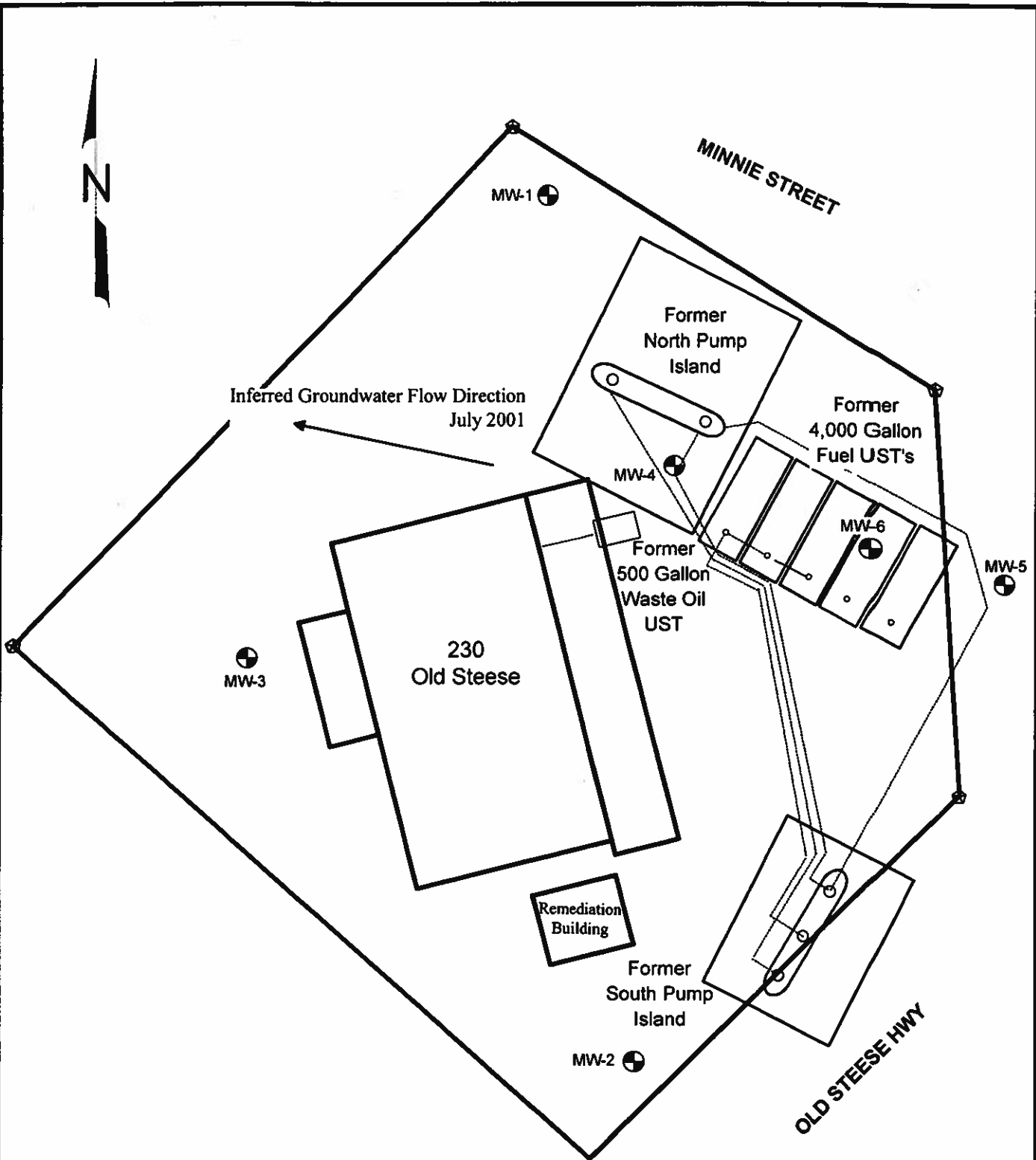
TABLE 4
230 Old Steese Groundwater Quality Summary
Analytical Results for VOCs (excluding BTEX, GRO)
 (EPA Methods 602/601/624/8260, all units µg/L)

| Monitoring Well | Sampling Date | 1,2-Dichloro-ethane | | 1,2-Dichloro-ethane | | 1,1,2-Trichloro-ethane | | Chloro-ethane | | 1,1,2-Trichloro-ethane | | 1,2-Dichloro-ethane | | 1,3,5-Trimethyl-benzene | | n-Propyl-benzene | | 1,2,4-Trimethyl-benzene | | 1,3,5-Trimethyl-benzene | | Dichloro-ethane | | Chloro-methane | | Trichloro-fluoromethane | | sec-Butyl-benzene | | Trichloro-ethene | |
|-----------------|---------------|---------------------|-------|---------------------|-------|------------------------|-------|---------------|-------|------------------------|-------|---------------------|-------|-------------------------|-------|------------------|-------|-------------------------|-------|-------------------------|---------|-----------------|-------|----------------|-------|-------------------------|-------|-------------------|-------|------------------|-------|
| | | 2,100 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 70.0 | 70.0 | 1,460 | 1,460 | 70.0 | 70.0 | 1,850.0 | 1,850.0 | 70 | 70 | 5.00 | 5.00 | 2.09 | 2.09 | <1.00 | <1.00 | <1.00 | <1.00 |
| MW-3 | 7/8/94 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | |
| MW-7 | 12/1/00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | |
| MW-8 | 7/8/94 | ND | 2.9 | ND | 1.8 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | <1.0 | 3.5 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | |
| | 2/22/95 | ND | 32 | ND | <5.0 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | |
| | 5/9/95 | ND | 2.4 | ND | 1.2 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | |
| | 5/9/95 Dup. | ND | 2.3 | ND | 1.2 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | |
| | 8/31/95 | ND | 38 | ND | 5.5 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | |
| | 12/18/95 | ND | <1.0 | ND | 4.3 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | |
| | 12/1/00 | <1.00 | <1.00 | <5.00 | 1.31 | <1.00 | <1.00 | <1.00 | <1.00 | 9.98 | 1.48 | 11.6 | 9.85 | 41.3 | 11.3 | 11.3 | 9.85 | 41.3 | 11.3 | 11.3 | 11.3 | 11.3 | <1.00 | <5.00 | <5.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | |
| | 7/30/01 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | |

NOTES: This table presents a summary of water quality data collected from wells located at the 230 Old Steese project site. Not all monitoring wells have been tested for VOCs at each sampling event. Furthermore, the methods used to analyze for VOCs have varied between sampling events. Data gaps present in this table represent the absence of data resulting from wells not having been tested for VOCs, or the variation in the number of analytes reported for a given analytical method.

— Sample not tested for this analyte.
 ND Analyte not detected above the PQL.
 BTEX and GRO results are shown in Table 3.

This table presents historic data for these wells, for reference only. Blank spaces indicate nondetects. We did not research old reports to determine detection limits for historic data.



APPROXIMATE SCALE: 1 inch = 20 feet



 Monitoring Well

Note: The former pump island and UST locations are approximate.

230 Old Steese
Fairbanks, Alaska

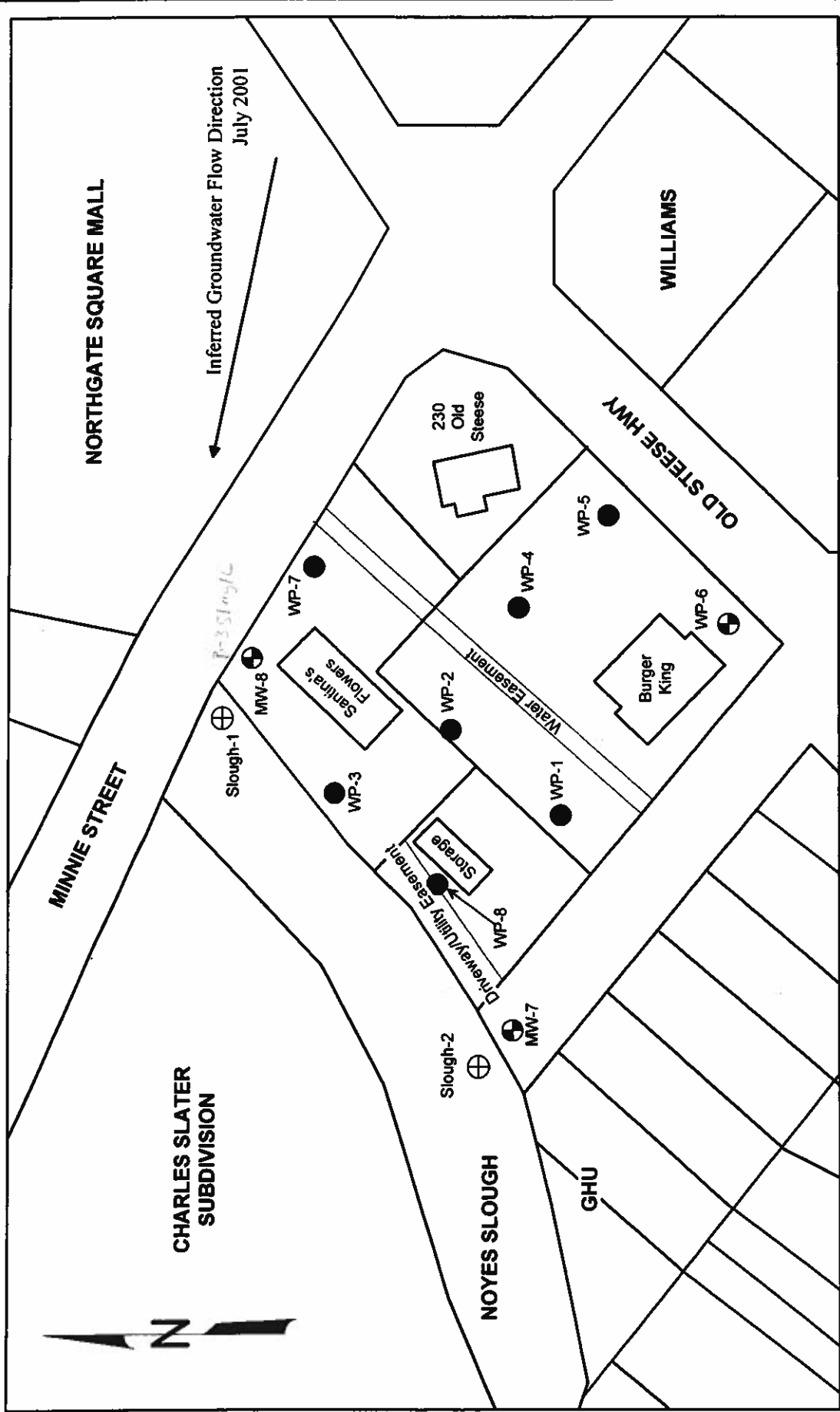
**ON-SITE MONITORING WELL LOCATIONS
AND FORMER TANK LAYOUT**

January 2002

31-1-11076-062

 **SHANNON & WILSON, INC.**
GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS

Figure 1



Approximate Scale: 1 inch = 90 feet

- Well point location
- ⊕ Off-site monitoring wells
- ⊕ Slough sampling location

230 Old Steese
Fairbanks, Alaska

OFF-SITE MONITORING WELL AND WELL POINT LOCATIONS

January 2002 31-1-11076-062

SHANNON & WILSON, INC.
GEO-TECHNICAL AND ENVIRONMENTAL CONSULTANTS

Figure 2

Source: Interior Mapping & Data Services ©2000

CHAIN OF CUSTODY REPORT **Work Order #: B1117050**

CLIENT: Shannon and Wilson

REPORT TO: Chris Darrach

ADDRESS: 2055 Hill Road 99706

PHONE: (907) 479-0600 FAX (907) 479-5691

PROJECT NAME: 230 Old Steese

PROJECT NUMBER: 31-1-11076

SAMPLED BY: MS

INVOICE TO: Shannon and Wilson

2055 Hill Road

Fairbanks, AK 99709

P.O. NUMBER: 405948

REQUESTED ANALYSES

| CLIENT SAMPLE IDENTIFICATION | SAMPLING DATE/TIME | VOC | GR0 | GR0/BTEX | MATRIX (W, S, O) | # OF CONT. | COMMENTS | NCA W/O ID |
|------------------------------|--------------------|-----|-----|----------|------------------|------------|----------|------------|
| 1. 1076-073001-MW2 | 7/30/01 @ 1130 | | | ✓ | W | 2 | | -01 |
| 2. 1076-073001-MW3 | 7/30/01 @ 1215 | | ✓ | | W | 4 | | -02 |
| 3. 1076-073001-MW6 | 7/30/01 @ 1240 | | | ✓ | | 3 | | -03 |
| 4. 1076-073001-MW4 | 7/30/01 @ 1315 | ✓ | ✓ | | | 4 | | -04 |
| 5. 1076-073001-MW14 | 7/30/01 @ 1330 | ✓ | ✓ | | | 4 | | -05 |
| 6. 1076-073001-MW8 | 7/30/01 @ 1400 | ✓ | ✓ | | | 4 | | -06 |
| 7. 1076-073001-Sbogs-1 | 7/30/01 @ 1415 | ✓ | ✓ | | | 4 | | -07 |
| 8. 1076-073001-MW7 | 7/30/01 @ 1445 | ✓ | ✓ | | | 4 | | -08 |
| 9. 1076-073001-Sloughs-2 | 7/30/01 @ 1500 | ✓ | ✓ | | | 4 | | -09 |
| 10. Trip | | ✓ | | | | 1 | | -10 |
| 11. | | | | | | | | |
| 12. | | | | | | | | |
| 13. | | | | | | | | |
| 14. | | | | | | | | |
| 15. | | | | | | | | |

*Turnaround Requests less than standard may incur Rush Charge!

TURNAROUND REQUEST in Business Days*

Organic & Inorganic Analytes

10 7 5 4 3 2 1 <1

5 4 3 2 1 <1

Other: Please Specify

RELINQUISHED BY: *Melody Debarshon* FIRM: Shannon and Wilson DATE: 7/31/01 TIME: 1200

RECEIVED BY: *Sydney* FIRM: NCA DATE: 8-1-01 TIME: 10:10

ADDITIONAL REMARKS: Samples were not @2-6C Upon Receipt



Seattle 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244
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 503.906.9200 fax 503.906.9210
 Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711
 541.383.9310 fax 541.382.7588

Invoice for Analytical Services

Invoice To:
 Shannon and Wilson - Fairbanks
 Chris Darrah
 2055 Hill Road
 Fairbanks, AK 99707

Remit To:
 North Creek Analytical, Inc.
 11720 North Creek Parkway N.
 Suite 400
 Bothell, WA 98011

Project Number: 31-1-11076
 Project Name: 230 Old Steese

Invoice Number: 60076
 Invoice Date: August 9, 2001
 Payment Due: September 8, 2001
 NCA Project Manager: Scott A. Woerman
 NCA Work Order: B1H0050

Consultant: Shannon and Wilson - Fairbank
 Contact: Chris Darrah

| Quantity | Analysis | Matrix | TAT | Unit Price | Total Price |
|----------|---------------------|--------|-----|------------|-------------|
| 8 | 8260B VOA Full List | Water | 10 | 225.00 | 1,800.00 |
| 7 | AK101 (GRO) | Water | 5 | 75.00 | 525.00 |
| 2 | AK101 (GRO/BTEX) | Water | 5 | 80.00 | 160.00 |

Invoice Total: 2,485.00

Credit terms are net 30 days. Please include the invoice number with the remittance. Invoices are due in full by the due date show above unless specifically contracted otherwise. Funds may be wired to our account number 76973601 at Bank of America, Seattle Washington. ABA routing number 125000024. Visa, Mastercard, and electronic transfers also accepted. NCA Federal Tax ID#91-1454309. Unpaid balances, if any, will be shown on a separate statement of account at the beginning of the next month.

North Creek Analytical, Inc.
 Environmental Laboratory Network



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08 August 2001

Chris Darrah
Shannon and Wilson - Fairbanks
2055 Hill Road
Fairbanks, AK/USA 99709
RE: 230 Old Steese

Enclosed are the results of analyses for samples received by the laboratory on 08/02/01 16:10. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Scott A. Woerman
Project Manager



Seattle 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244
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Shannon and Wilson - Fairbanks
 2055 Hill Road
 Fairbanks AK/USA, 99709

Project: 230 Old Steese
 Project Number: 31-1-11076
 Project Manager: Chris Darrah

Reported:
 08/08/01 19:35

ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Sampled | Date Received |
|----------------------|---------------|--------|----------------|----------------|
| 1076-073001-MW2 | B1H0050-01 | Water | 07/30/01 11:30 | 08/02/01 16:10 |
| 1076-073001-MW3 | B1H0050-02 | Water | 07/30/01 12:15 | 08/02/01 16:10 |
| 1076-073001-MW6 | B1H0050-03 | Water | 07/30/01 12:40 | 08/02/01 16:10 |
| 1076-073001-MW4 | B1H0050-04 | Water | 07/30/01 13:15 | 08/02/01 16:10 |
| 1076-073001-MW14 | B1H0050-05 | Water | 07/30/01 13:30 | 08/02/01 16:10 |
| 1076-073001-MW8 | B1H0050-06 | Water | 07/30/01 14:00 | 08/02/01 16:10 |
| 1076-073001-Slough-1 | B1H0050-07 | Water | 07/30/01 14:15 | 08/02/01 16:10 |
| 1076-073001-MW7 | B1H0050-08 | Water | 07/30/01 14:45 | 08/02/01 16:10 |
| 1076-073001-Slough-2 | B1H0050-09 | Water | 07/30/01 15:00 | 08/02/01 16:10 |
| Trip | B1H0050-10 | Water | 07/30/01 12:00 | 08/02/01 16:10 |

North Creek Analytical - Bothell

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.


 Scott A. Woerman, Project Manager

North Creek Analytical, Inc.
 Environmental Laboratory Network



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Shannon and Wilson - Fairbanks
 2055 Hill Road
 Fairbanks AK/USA, 99709

Project: 230 Old Steese
 Project Number: 31-1-11076
 Project Manager: Chris Darrah

Reported:
 08/08/01 19:35

Gasoline Range Hydrocarbons (n-Hexane to <n-Decane) by AK101
North Creek Analytical - Bothell

| Analyte | Result | Reporting | | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|--------|-----------|--|-------|----------|---------|----------|----------|--------|-------|
| | | Limit | | | | | | | | |
| 1076-073001-MW3 (B1H0050-02) Water Sampled: 07/30/01 12:15 Received: 08/02/01 16:10 | | | | | | | | | | |
| Gasoline Range Hydrocarbons | ND | 50.0 | | ug/l | 1 | 1H03012 | 08/03/01 | 08/03/01 | AK 101 | |
| Surrogate: 4-BFB (FID) | 87.1 % | 60-120 | | | | " | " | " | " | |
| 1076-073001-MW4 (B1H0050-04) Water Sampled: 07/30/01 13:15 Received: 08/02/01 16:10 | | | | | | | | | | |
| Gasoline Range Hydrocarbons | 4810 | 500 | | ug/l | 10 | 1H03012 | 08/03/01 | 08/03/01 | AK 101 | |
| Surrogate: 4-BFB (FID) | 104 % | 60-120 | | | | " | " | " | " | |
| 1076-073001-MW14 (B1H0050-05) Water Sampled: 07/30/01 13:30 Received: 08/02/01 16:10 | | | | | | | | | | |
| Gasoline Range Hydrocarbons | 1850 | 250 | | ug/l | 5 | 1H03012 | 08/03/01 | 08/03/01 | AK 101 | |
| Surrogate: 4-BFB (FID) | 105 % | 60-120 | | | | " | " | " | " | |
| 1076-073001-MW8 (B1H0050-06) Water Sampled: 07/30/01 14:00 Received: 08/02/01 16:10 | | | | | | | | | | |
| Gasoline Range Hydrocarbons | ND | 50.0 | | ug/l | 1 | 1H03012 | 08/03/01 | 08/03/01 | AK 101 | |
| Surrogate: 4-BFB (FID) | 76.0 % | 60-120 | | | | " | " | " | " | |
| 1076-073001-Slough-1 (B1H0050-07) Water Sampled: 07/30/01 14:15 Received: 08/02/01 16:10 | | | | | | | | | | |
| Gasoline Range Hydrocarbons | ND | 50.0 | | ug/l | 1 | 1H03012 | 08/03/01 | 08/03/01 | AK 101 | |
| Surrogate: 4-BFB (FID) | 83.8 % | 60-120 | | | | " | " | " | " | |
| 1076-073001-MW7 (B1H0050-08) Water Sampled: 07/30/01 14:45 Received: 08/02/01 16:10 | | | | | | | | | | |
| Gasoline Range Hydrocarbons | ND | 50.0 | | ug/l | 1 | 1H03012 | 08/03/01 | 08/03/01 | AK 101 | |
| Surrogate: 4-BFB (FID) | 82.1 % | 60-120 | | | | " | " | " | " | |
| 1076-073001-Slough-2 (B1H0050-09) Water Sampled: 07/30/01 15:00 Received: 08/02/01 16:10 | | | | | | | | | | |
| Gasoline Range Hydrocarbons | ND | 50.0 | | ug/l | 1 | 1H03012 | 08/03/01 | 08/03/01 | AK 101 | |
| Surrogate: 4-BFB (FID) | 81.7 % | 60-120 | | | | " | " | " | " | |

North Creek Analytical - Bothell

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Scott A. Woerman, Project Manager

North Creek Analytical, Inc.
 Environmental Laboratory Network



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Shannon and Wilson - Fairbanks
 2055 Hill Road
 Fairbanks AK/USA, 99709

Project: 230 Old Steese
 Project Number: 31-1-11076
 Project Manager: Chris Darrah

Reported:
 08/08/01 19:35

Gasoline Hydrocarbons (n-Hexane to <n-Decane) and BTEX by AK101
North Creek Analytical - Bothell

| Analyte | Result | Reporting | | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|--|--------|-----------|-------|-------|----------|---------|----------|----------|--------|-------|
| | | Result | Limit | | | | | | | |
| 1076-073001-MW2 (B1H0050-01) Water Sampled: 07/30/01 11:30 Received: 08/02/01 16:10 | | | | | | | | | | |
| Gasoline Range Hydrocarbons | ND | 50.0 | | ug/l | 1 | 1H03012 | 08/03/01 | 08/03/01 | AK 101 | |
| Benzene | ND | 0.200 | | " | " | " | " | " | " | |
| Toluene | ND | 0.500 | | " | " | " | " | " | " | |
| Ethylbenzene | ND | 0.500 | | " | " | " | " | " | " | |
| Xylenes (total) | 3.23 | 1.00 | | " | " | " | " | " | " | |
| Surrogate: 4-BFB (FID) | 87.5 % | 60-120 | | | | " | " | " | " | |
| Surrogate: 4-BFB (PID) | 94.4 % | 60-120 | | | | " | " | " | " | |
| 1076-073001-MW6 (B1H0050-03) Water Sampled: 07/30/01 12:40 Received: 08/02/01 16:10 | | | | | | | | | | |
| Gasoline Range Hydrocarbons | ND | 50.0 | | ug/l | 1 | 1H03012 | 08/03/01 | 08/03/01 | AK 101 | |
| Benzene | ND | 0.200 | | " | " | " | " | " | " | |
| Toluene | ND | 0.500 | | " | " | " | " | " | " | |
| Ethylbenzene | ND | 0.500 | | " | " | " | " | " | " | |
| Xylenes (total) | ND | 1.00 | | " | " | " | " | " | " | |
| Surrogate: 4-BFB (FID) | 85.8 % | 60-120 | | | | " | " | " | " | |
| Surrogate: 4-BFB (PID) | 97.9 % | 60-120 | | | | " | " | " | " | |

North Creek Analytical - Bothell

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Scott A. Woerman, Project Manager

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 Environmental Laboratory Network



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Shannon and Wilson - Fairbanks
 2055 Hill Road
 Fairbanks AK/USA, 99709

Project: 230 Old Steese
 Project Number: 31-1-11076
 Project Manager: Chris Darrah

Reported:
 08/08/01 19:35

Volatile Organic Compounds by EPA Method 8260B
North Creek Analytical - Bothell

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|--------|-----------------|-------|----------|---------|----------|----------|-----------|-------|
| 1076-073001-MW3 (B1H0050-02) Water Sampled: 07/30/01 12:15 Received: 08/02/01 16:10 | | | | | | | | | |
| Acetone | ND | 25.0 | ug/l | 1 | 1H06026 | 08/06/01 | 08/06/01 | EPA 8260B | |
| 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 | " | " | " | " | " | " | |
| 1,3-Dichloropropane | ND | 1.00 | " | " | " | " | " | " | |
| 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 | " | " | " | " | " | " | |

North Creek Analytical - Bothell

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Shannon and Wilson - Fairbanks
 2055 Hill Road
 Fairbanks AK/USA, 99709

Project: 230 Old Steese
 Project Number: 31-1-11076
 Project Manager: Chris Darrah

Reported:
 08/08/01 19:35

Volatile Organic Compounds by EPA Method 8260B
North Creek Analytical - Bothell

| Analyte | Result | Reporting | | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|--|--------|-----------|--|-------|----------|---------|----------|----------|-----------|-------|
| | | Limit | | | | | | | | |
| 1076-073001-MW3 (B1H0050-02) Water Sampled: 07/30/01 12:15 Received: 08/02/01 16:10 | | | | | | | | | | |
| Ethylbenzene | ND | 1.00 | | ug/l | 1 | 1H06026 | 08/06/01 | 08/06/01 | EPA 8260B | |
| 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 | 94.5 % | 73-137 | | | | " | " | " | " | |
| Surrogate: Toluene-d8 | 90.0 % | 75-124 | | | | " | " | " | " | |
| Surrogate: 4-BFB | 96.0 % | 77-120 | | | | " | " | " | " | |

North Creek Analytical - Bothell

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 Environmental Laboratory Network



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Shannon and Wilson - Fairbanks
 2055 Hill Road
 Fairbanks AK/USA, 99709

Project: 230 Old Steese
 Project Number: 31-1-11076
 Project Manager: Chris Darrah

Reported:
 08/08/01 19:35

Volatile Organic Compounds by EPA Method 8260B
North Creek Analytical - Bothell

| Analyte | Result | Reporting | | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---------|--------|-----------|--|-------|----------|-------|----------|----------|--------|-------|
| | | Limit | | | | | | | | |

1076-073001-MW4 (B1H0050-04) Water Sampled: 07/30/01 13:15 Received: 08/02/01 16:10

| | | | | | | | | | | |
|-----------------------------|------|------|--|------|---|---------|----------|----------|-----------|--|
| Acetone | ND | 25.0 | | ug/l | 1 | 1H06026 | 08/06/01 | 08/06/01 | EPA 8260B | |
| Benzene | 20.2 | 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 | 2.38 | 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 | | " | " | " | " | " | " | |
| 1,3-Dichloropropane | ND | 1.00 | | " | " | " | " | " | " | |
| 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 | | " | " | " | " | " | " | |

North Creek Analytical - Bothell

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Shannon and Wilson - Fairbanks
 2055 Hill Road
 Fairbanks AK/USA, 99709

Project: 230 Old Steese
 Project Number: 31-1-11076
 Project Manager: Chris Darrah

Reported:
 08/08/01 19:35

Volatile Organic Compounds by EPA Method 8260B
North Creek Analytical - Bothell

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|--|--------|-----------------|-------|----------|---------|----------|----------|-----------|-------|
| 1076-073001-MW4 (B1H0050-04) Water Sampled: 07/30/01 13:15 Received: 08/02/01 16:10 | | | | | | | | | |
| Ethylbenzene | 67.9 | 1.00 | ug/l | 1 | 1H06026 | 08/06/01 | 08/06/01 | EPA 8260B | E |
| Hexachlorobutadiene | ND | 1.00 | " | " | " | " | " | " | |
| 2-Hexanone | ND | 10.0 | " | " | " | " | " | " | |
| Isopropylbenzene | 12.9 | 1.00 | " | " | " | " | " | " | |
| p-Isopropyltoluene | 10.1 | 1.00 | " | " | " | " | " | " | |
| Methylene chloride | ND | 5.00 | " | " | " | " | " | " | |
| 4-Methyl-2-pentanone | ND | 10.0 | " | " | " | " | " | " | |
| Naphthalene | 59.4 | 1.00 | " | " | " | " | " | " | E |
| n-Propylbenzene | 30.4 | 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 | 10.8 | 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 | 122 | 1.00 | " | " | " | " | " | " | E |
| 1,3,5-Trimethylbenzene | 95.3 | 1.00 | " | " | " | " | " | " | E |
| Vinyl chloride | ND | 1.00 | " | " | " | " | " | " | |
| m,p-Xylene | 140 | 2.00 | " | " | " | " | " | " | E |
| o-Xylene | 15.7 | 1.00 | " | " | " | " | " | " | |
| Surrogate: 1,2-DCA-d4 | 106 % | 73-137 | | | " | " | " | " | |
| Surrogate: Toluene-d8 | 92.0 % | 75-124 | | | " | " | " | " | |
| Surrogate: 4-BFB | 119 % | 77-120 | | | " | " | " | " | |

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 541.383.9310 fax 541.382.7588

Shannon and Wilson - Fairbanks
 2055 Hill Road
 Fairbanks AK/USA, 99709

Project: 230 Old Steese
 Project Number: 31-1-11076
 Project Manager: Chris Darrah

Reported:
 08/08/01 19:35

Volatile Organic Compounds by EPA Method 8260B
North Creek Analytical - Bothell

| Analyte | Result | Reporting | | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|--|--------|-----------|--|-------|----------|---------|----------|----------|-----------|-------|
| | | Limit | | | | | | | | |
| 1076-073001-MW4 (B1H0050-04RE1) Water Sampled: 07/30/01 13:15 Received: 08/02/01 16:10 | | | | | | | | | | |
| Acetone | ND | 500 | | ug/l | 20 | 1H06026 | 08/06/01 | 08/06/01 | EPA 8260B | |
| Benzene | 26.1 | 20.0 | | " | " | " | " | " | " | |
| Bromobenzene | ND | 20.0 | | " | " | " | " | " | " | |
| Bromochloromethane | ND | 20.0 | | " | " | " | " | " | " | |
| Bromodichloromethane | ND | 20.0 | | " | " | " | " | " | " | |
| Bromoform | ND | 20.0 | | " | " | " | " | " | " | |
| Bromomethane | ND | 40.0 | | " | " | " | " | " | " | |
| 2-Butanone | ND | 200 | | " | " | " | " | " | " | |
| n-Butylbenzene | ND | 20.0 | | " | " | " | " | " | " | |
| sec-Butylbenzene | ND | 20.0 | | " | " | " | " | " | " | |
| tert-Butylbenzene | ND | 20.0 | | " | " | " | " | " | " | |
| Carbon disulfide | ND | 20.0 | | " | " | " | " | " | " | |
| Carbon tetrachloride | ND | 20.0 | | " | " | " | " | " | " | |
| Chlorobenzene | ND | 20.0 | | " | " | " | " | " | " | |
| Chloroethane | ND | 20.0 | | " | " | " | " | " | " | |
| Chloroform | ND | 20.0 | | " | " | " | " | " | " | |
| Chloromethane | ND | 100 | | " | " | " | " | " | " | |
| 2-Chlorotoluene | ND | 20.0 | | " | " | " | " | " | " | |
| 4-Chlorotoluene | ND | 20.0 | | " | " | " | " | " | " | |
| Dibromochloromethane | ND | 20.0 | | " | " | " | " | " | " | |
| 1,2-Dibromo-3-chloropropane | ND | 100 | | " | " | " | " | " | " | |
| 1,2-Dibromoethane | ND | 20.0 | | " | " | " | " | " | " | |
| Dibromomethane | ND | 20.0 | | " | " | " | " | " | " | |
| 1,2-Dichlorobenzene | ND | 20.0 | | " | " | " | " | " | " | |
| 1,3-Dichlorobenzene | ND | 20.0 | | " | " | " | " | " | " | |
| 1,4-Dichlorobenzene | ND | 20.0 | | " | " | " | " | " | " | |
| Dichlorodifluoromethane | ND | 20.0 | | " | " | " | " | " | " | |
| 1,1-Dichloroethane | ND | 20.0 | | " | " | " | " | " | " | |
| 1,2-Dichloroethane | ND | 20.0 | | " | " | " | " | " | " | |
| 1,1-Dichloroethene | ND | 20.0 | | " | " | " | " | " | " | |
| cis-1,2-Dichloroethene | ND | 20.0 | | " | " | " | " | " | " | |
| trans-1,2-Dichloroethene | ND | 20.0 | | " | " | " | " | " | " | |
| 1,2-Dichloropropane | ND | 20.0 | | " | " | " | " | " | " | |
| 1,3-Dichloropropane | ND | 20.0 | | " | " | " | " | " | " | |
| 2,2-Dichloropropane | ND | 20.0 | | " | " | " | " | " | " | |
| 1,1-Dichloropropene | ND | 20.0 | | " | " | " | " | " | " | |
| cis-1,3-Dichloropropene | ND | 20.0 | | " | " | " | " | " | " | |
| trans-1,3-Dichloropropene | ND | 20.0 | | " | " | " | " | " | " | |

North Creek Analytical - Bothell

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Shannon and Wilson - Fairbanks
 2055 Hill Road
 Fairbanks AK/USA, 99709

Project: 230 Old Steese
 Project Number: 31-1-11076
 Project Manager: Chris Darrah

Reported:
 08/08/01 19:35

Volatile Organic Compounds by EPA Method 8260B
North Creek Analytical - Bothell

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|--------|-----------------|-------|----------|---------|----------|----------|-----------|-------|
| 1076-073001-MW4 (B1H0050-04RE1) Water Sampled: 07/30/01 13:15 Received: 08/02/01 16:10 | | | | | | | | | |
| Ethylbenzene | 104 | 20.0 | ug/l | 20 | 1H06026 | 08/06/01 | 08/06/01 | EPA 8260B | |
| Hexachlorobutadiene | ND | 20.0 | " | " | " | " | " | " | |
| 2-Hexanone | ND | 200 | " | " | " | " | " | " | |
| Isopropylbenzene | ND | 20.0 | " | " | " | " | " | " | |
| p-Isopropyltoluene | ND | 20.0 | " | " | " | " | " | " | |
| Methylene chloride | ND | 100 | " | " | " | " | " | " | |
| 4-Methyl-2-pentanone | ND | 200 | " | " | " | " | " | " | |
| Naphthalene | 65.4 | 20.0 | " | " | " | " | " | " | |
| n-Propylbenzene | 27.7 | 20.0 | " | " | " | " | " | " | |
| Styrene | ND | 20.0 | " | " | " | " | " | " | |
| 1,1,1,2-Tetrachloroethane | ND | 20.0 | " | " | " | " | " | " | |
| 1,1,2,2-Tetrachloroethane | ND | 20.0 | " | " | " | " | " | " | |
| Tetrachloroethene | ND | 20.0 | " | " | " | " | " | " | |
| Toluene | ND | 20.0 | " | " | " | " | " | " | |
| 1,2,3-Trichlorobenzene | ND | 20.0 | " | " | " | " | " | " | |
| 1,2,4-Trichlorobenzene | ND | 20.0 | " | " | " | " | " | " | |
| 1,1,1-Trichloroethane | ND | 20.0 | " | " | " | " | " | " | |
| 1,1,2-Trichloroethane | ND | 20.0 | " | " | " | " | " | " | |
| Trichloroethene | ND | 20.0 | " | " | " | " | " | " | |
| Trichlorofluoromethane | ND | 20.0 | " | " | " | " | " | " | |
| 1,2,3-Trichloropropane | ND | 20.0 | " | " | " | " | " | " | |
| 1,2,4-Trimethylbenzene | 355 | 20.0 | " | " | " | " | " | " | |
| 1,3,5-Trimethylbenzene | 141 | 20.0 | " | " | " | " | " | " | |
| Vinyl chloride | ND | 20.0 | " | " | " | " | " | " | |
| m,p-Xylene | 360 | 40.0 | " | " | " | " | " | " | |
| o-Xylene | ND | 20.0 | " | " | " | " | " | " | |
| Surrogate: 1,2-DCA-d4 | 98.0 % | 73-137 | | | " | " | " | " | |
| Surrogate: Toluene-d8 | 93.5 % | 75-124 | | | " | " | " | " | |
| Surrogate: 4-BFB | 96.0 % | 77-120 | | | " | " | " | " | |

North Creek Analytical - Bothell

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North Creek Analytical, Inc.
 Environmental Laboratory Network



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Shannon and Wilson - Fairbanks
 2055 Hill Road
 Fairbanks AK/USA, 99709

Project: 230 Old Steese
 Project Number: 31-1-11076
 Project Manager: Chris Darrah

Reported:
 08/08/01 19:35

Volatile Organic Compounds by EPA Method 8260B
North Creek Analytical - Bothell

| Analyte | Result | Reporting | | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|--|--------|-----------|--|-------|----------|---------|----------|----------|-----------|-------|
| | | Limit | | | | | | | | |
| 1076-073001-MW14 (B1H0050-05) Water Sampled: 07/30/01 13:30 Received: 08/02/01 16:10 | | | | | | | | | | |
| Acetone | ND | 25.0 | | ug/l | 1 | 1H06026 | 08/06/01 | 08/06/01 | EPA 8260B | |
| Benzene | 14.6 | 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 | 1.84 | 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 | | " | " | " | " | " | " | |
| 1,3-Dichloropropane | ND | 1.00 | | " | " | " | " | " | " | |
| 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 | | " | " | " | " | " | " | |

North Creek Analytical - Bothell

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Shannon and Wilson - Fairbanks
 2055 Hill Road
 Fairbanks AK/USA, 99709

Project: 230 Old Steese
 Project Number: 31-1-11076
 Project Manager: Chris Darrah

Reported:
 08/08/01 19:35

Volatile Organic Compounds by EPA Method 8260B
North Creek Analytical - Bothell

| Analyte | Result | Reporting | | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|--|--------|-----------|-------|-------|----------|---------|----------|----------|-----------|-------|
| | | Limit | Limit | | | | | | | |
| 1076-073001-MW14 (B1H0050-05) Water Sampled: 07/30/01 13:30 Received: 08/02/01 16:10 | | | | | | | | | | |
| Ethylbenzene | 53.6 | 1.00 | | ug/l | 1 | 1H06026 | 08/06/01 | 08/06/01 | EPA 8260B | E |
| Hexachlorobutadiene | ND | 1.00 | | " | " | " | " | " | " | |
| 2-Hexanone | ND | 10.0 | | " | " | " | " | " | " | |
| Isopropylbenzene | 8.23 | 1.00 | | " | " | " | " | " | " | |
| p-Isopropyltoluene | 7.34 | 1.00 | | " | " | " | " | " | " | |
| Methylene chloride | ND | 5.00 | | " | " | " | " | " | " | |
| 4-Methyl-2-pentanone | ND | 10.0 | | " | " | " | " | " | " | |
| Naphthalene | 37.6 | 1.00 | | " | " | " | " | " | " | |
| n-Propylbenzene | 17.2 | 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 | 8.03 | 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 | 93.6 | 1.00 | | " | " | " | " | " | " | E |
| 1,3,5-Trimethylbenzene | 57.2 | 1.00 | | " | " | " | " | " | " | E |
| Vinyl chloride | ND | 1.00 | | " | " | " | " | " | " | |
| m,p-Xylene | 131 | 2.00 | | " | " | " | " | " | " | E |
| o-Xylene | 11.4 | 1.00 | | " | " | " | " | " | " | |
| Surrogate: 1,2-DCA-d4 | 106 % | 73-137 | | | | " | " | " | " | |
| Surrogate: Toluene-d8 | 90.5 % | 75-124 | | | | " | " | " | " | |
| Surrogate: 4-BFB | 87.0 % | 77-120 | | | | " | " | " | " | |

North Creek Analytical - Bothell

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 Environmental Laboratory Network



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Shannon and Wilson - Fairbanks
 2055 Hill Road
 Fairbanks AK/USA, 99709

Project: 230 Old Steese
 Project Number: 31-1-11076
 Project Manager: Chris Darrah

Reported:
 08/08/01 19:35

Volatile Organic Compounds by EPA Method 8260B
North Creek Analytical - Bothell

| Analyte | Result | Reporting | | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|--|--------|-----------|--|-------|----------|---------|----------|----------|-----------|-------|
| | | Limit | | | | | | | | |
| 1076-073001-MW14 (B1H0050-05RE1) Water Sampled: 07/30/01 13:30 Received: 08/02/01 16:10 | | | | | | | | | | |
| Acetone | ND | 500 | | ug/l | 20 | 1H06026 | 08/06/01 | 08/06/01 | EPA 8260B | |
| Benzene | ND | 20.0 | | " | " | " | " | " | " | |
| Bromobenzene | ND | 20.0 | | " | " | " | " | " | " | |
| Bromochloromethane | ND | 20.0 | | " | " | " | " | " | " | |
| Bromodichloromethane | ND | 20.0 | | " | " | " | " | " | " | |
| Bromoform | ND | 20.0 | | " | " | " | " | " | " | |
| Bromomethane | ND | 40.0 | | " | " | " | " | " | " | |
| 2-Butanone | ND | 200 | | " | " | " | " | " | " | |
| n-Butylbenzene | ND | 20.0 | | " | " | " | " | " | " | |
| sec-Butylbenzene | ND | 20.0 | | " | " | " | " | " | " | |
| tert-Butylbenzene | ND | 20.0 | | " | " | " | " | " | " | |
| Carbon disulfide | ND | 20.0 | | " | " | " | " | " | " | |
| Carbon tetrachloride | ND | 20.0 | | " | " | " | " | " | " | |
| Chlorobenzene | ND | 20.0 | | " | " | " | " | " | " | |
| Chloroethane | ND | 20.0 | | " | " | " | " | " | " | |
| Chloroform | ND | 20.0 | | " | " | " | " | " | " | |
| Chloromethane | ND | 100 | | " | " | " | " | " | " | |
| 2-Chlorotoluene | ND | 20.0 | | " | " | " | " | " | " | |
| 4-Chlorotoluene | ND | 20.0 | | " | " | " | " | " | " | |
| Dibromochloromethane | ND | 20.0 | | " | " | " | " | " | " | |
| 1,2-Dibromo-3-chloropropane | ND | 100 | | " | " | " | " | " | " | |
| 1,2-Dibromoethane | ND | 20.0 | | " | " | " | " | " | " | |
| Dibromomethane | ND | 20.0 | | " | " | " | " | " | " | |
| 1,2-Dichlorobenzene | ND | 20.0 | | " | " | " | " | " | " | |
| 1,3-Dichlorobenzene | ND | 20.0 | | " | " | " | " | " | " | |
| 1,4-Dichlorobenzene | ND | 20.0 | | " | " | " | " | " | " | |
| Dichlorodifluoromethane | ND | 20.0 | | " | " | " | " | " | " | |
| 1,1-Dichloroethane | ND | 20.0 | | " | " | " | " | " | " | |
| 1,2-Dichloroethane | ND | 20.0 | | " | " | " | " | " | " | |
| 1,1-Dichloroethene | ND | 20.0 | | " | " | " | " | " | " | |
| cis-1,2-Dichloroethene | ND | 20.0 | | " | " | " | " | " | " | |
| trans-1,2-Dichloroethene | ND | 20.0 | | " | " | " | " | " | " | |
| 1,2-Dichloropropane | ND | 20.0 | | " | " | " | " | " | " | |
| 1,3-Dichloropropane | ND | 20.0 | | " | " | " | " | " | " | |
| 2,2-Dichloropropane | ND | 20.0 | | " | " | " | " | " | " | |
| 1,1-Dichloropropene | ND | 20.0 | | " | " | " | " | " | " | |
| cis-1,3-Dichloropropene | ND | 20.0 | | " | " | " | " | " | " | |
| trans-1,3-Dichloropropene | ND | 20.0 | | " | " | " | " | " | " | |

North Creek Analytical - Bothell

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Shannon and Wilson - Fairbanks
 2055 Hill Road
 Fairbanks AK/USA, 99709

Project: 230 Old Steese
 Project Number: 31-1-11076
 Project Manager: Chris Darrah

Reported:
 08/08/01 19:35

Volatile Organic Compounds by EPA Method 8260B
North Creek Analytical - Bothell

| Analyte | Result | Reporting | | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---------|--------|-----------|--|-------|----------|-------|----------|----------|--------|-------|
| | | Limit | | | | | | | | |

1076-073001-MW14 (B1H0050-05RE1) Water Sampled: 07/30/01 13:30 Received: 08/02/01 16:10

| | | | | | | | | | | |
|---------------------------|------|------|--|------|----|---------|----------|----------|-----------|--|
| Ethylbenzene | 74.0 | 20.0 | | ug/l | 20 | 1H06026 | 08/06/01 | 08/06/01 | EPA 8260B | |
| Hexachlorobutadiene | ND | 20.0 | | " | " | " | " | " | " | |
| 2-Hexanone | ND | 200 | | " | " | " | " | " | " | |
| Isopropylbenzene | ND | 20.0 | | " | " | " | " | " | " | |
| p-Isopropyltoluene | ND | 20.0 | | " | " | " | " | " | " | |
| Methylene chloride | ND | 100 | | " | " | " | " | " | " | |
| 4-Methyl-2-pentanone | ND | 200 | | " | " | " | " | " | " | |
| Naphthalene | 48.2 | 20.0 | | " | " | " | " | " | " | |
| n-Propylbenzene | 20.4 | 20.0 | | " | " | " | " | " | " | |
| Styrene | ND | 20.0 | | " | " | " | " | " | " | |
| 1,1,1,2-Tetrachloroethane | ND | 20.0 | | " | " | " | " | " | " | |
| 1,1,2,2-Tetrachloroethane | ND | 20.0 | | " | " | " | " | " | " | |
| Tetrachloroethene | ND | 20.0 | | " | " | " | " | " | " | |
| Toluene | ND | 20.0 | | " | " | " | " | " | " | |
| 1,2,3-Trichlorobenzene | ND | 20.0 | | " | " | " | " | " | " | |
| 1,2,4-Trichlorobenzene | ND | 20.0 | | " | " | " | " | " | " | |
| 1,1,1-Trichloroethane | ND | 20.0 | | " | " | " | " | " | " | |
| 1,1,2-Trichloroethane | ND | 20.0 | | " | " | " | " | " | " | |
| Trichloroethene | ND | 20.0 | | " | " | " | " | " | " | |
| Trichlorofluoromethane | ND | 20.0 | | " | " | " | " | " | " | |
| 1,2,3-Trichloropropane | ND | 20.0 | | " | " | " | " | " | " | |
| 1,2,4-Trimethylbenzene | 263 | 20.0 | | " | " | " | " | " | " | |
| 1,3,5-Trimethylbenzene | 106 | 20.0 | | " | " | " | " | " | " | |
| Vinyl chloride | ND | 20.0 | | " | " | " | " | " | " | |
| m,p-Xylene | 283 | 40.0 | | " | " | " | " | " | " | |
| o-Xylene | ND | 20.0 | | " | " | " | " | " | " | |

Surrogate: 1,2-DCA-d4

100 % 73-137

Surrogate: Toluene-d8

92.0 % 75-124

Surrogate: 4-BFB

93.5 % 77-120

North Creek Analytical - Bothell

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 541.383.9310 fax 541.382.7588

Shannon and Wilson - Fairbanks
 2055 Hill Road
 Fairbanks AK/USA, 99709

Project: 230 Old Steese
 Project Number: 31-1-11076
 Project Manager: Chris Darrah

Reported:
 08/08/01 19:35

Volatile Organic Compounds by EPA Method 8260B
North Creek Analytical - Bothell

| Analyte | Result | Reporting | | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|--------|-----------|--|-------|----------|---------|----------|----------|-----------|-------|
| | | Limit | | | | | | | | |
| 1076-073001-MW8 (B1H0050-06) Water Sampled: 07/30/01 14:00 Received: 08/02/01 16:10 | | | | | | | | | | |
| Acetone | ND | 25.0 | | ug/l | 1 | 1H06026 | 08/06/01 | 08/06/01 | EPA 8260B | |
| Benzene | 3.51 | 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 | | " | " | " | " | " | " | |
| 1,3-Dichloropropane | ND | 1.00 | | " | " | " | " | " | " | |
| 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 | | " | " | " | " | " | " | |

North Creek Analytical - Bothell

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Scott A. Woerman, Project Manager



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Shannon and Wilson - Fairbanks
 2055 Hill Road
 Fairbanks AK/USA, 99709

Project: 230 Old Steese
 Project Number: 31-1-11076
 Project Manager: Chris Darrah

Reported:
 08/08/01 19:35

Volatile Organic Compounds by EPA Method 8260B
North Creek Analytical - Bothell

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|--|--------|-----------------|-------|----------|---------|----------|----------|-----------|-------|
| 1076-073001-MW8 (B1H0050-06) Water Sampled: 07/30/01 14:00 Received: 08/02/01 16:10 | | | | | | | | | |
| Ethylbenzene | ND | 1.00 | ug/l | 1 | 1H06026 | 08/06/01 | 08/06/01 | EPA 8260B | |
| 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 | 102 % | 73-137 | | | " | " | " | " | |
| Surrogate: Toluene-d8 | 90.5 % | 75-124 | | | " | " | " | " | |
| Surrogate: 4-BFB | 103 % | 77-120 | | | " | " | " | " | |

North Creek Analytical - Bothell

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Scott A. Woerman, Project Manager

North Creek Analytical, Inc.
 Environmental Laboratory Network



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 541.383.9310 fax 541.382.7588

Shannon and Wilson - Fairbanks
 2055 Hill Road
 Fairbanks AK/USA, 99709

Project: 230 Old Steese
 Project Number: 31-1-11076
 Project Manager: Chris Darrah

Reported:
 08/08/01 19:35

Volatile Organic Compounds by EPA Method 8260B - Quality Control
North Creek Analytical - Bothell

| Analyte | Reporting | | Units | Spike Level | Source Result | %REC | | RPD | RPD Limit | Notes |
|---------|-----------|-------|-------|-------------|---------------|------|--------|-----|-----------|-------|
| | Result | Limit | | | | %REC | Limits | | | |

Batch 1H06026: Prepared 08/06/01 Using EPA 5030B [P/T]

Blank (1H06026-BLK1)

| | | | | | | | | | | |
|---------------------------|------|------|------|------|--|------|--------|--|--|--|
| 2,2-Dichloropropane | ND | 1.00 | ug/l | | | | | | | |
| 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 | 19.2 | | " | 20.0 | | 96.0 | 73-137 | | | |
| Surrogate: Toluene-d8 | 18.2 | | " | 20.0 | | 91.0 | 75-124 | | | |
| Surrogate: 4-BFB | 19.7 | | " | 20.0 | | 98.5 | 77-120 | | | |

North Creek Analytical - Bothell

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Scott A. Woerman, Project Manager

North Creek Analytical, Inc.
 Environmental Laboratory Network



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 541.383.9310 fax 541.382.7588

Shannon and Wilson - Fairbanks
 2055 Hill Road
 Fairbanks AK/USA, 99709

Project: 230 Old Steese
 Project Number: 31-1-11076
 Project Manager: Chris Darrah

Reported:
 08/08/01 19:35

Volatile Organic Compounds by EPA Method 8260B - Quality Control
North Creek Analytical - Bothell

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|-----------------|-------|-------------|---------------|-------------|-----|-----------|-------|
|---------|--------|-----------------|-------|-------------|---------------|-------------|-----|-----------|-------|

Batch 1H06026: Prepared 08/06/01 Using EPA 5030B [P/T]

LCS (1H06026-BS1)

| | | | | | | | | | |
|-----------------------|------|------|------|------|--|------|--------|--|--|
| Benzene | 10.1 | 1.00 | ug/l | 10.0 | | 101 | 80-120 | | |
| Chlorobenzene | 9.65 | 1.00 | " | 10.0 | | 96.5 | 77-120 | | |
| 1,1-Dichloroethene | 9.55 | 1.00 | " | 10.0 | | 95.5 | 80-120 | | |
| Toluene | 8.99 | 1.00 | " | 10.0 | | 89.9 | 80-120 | | |
| Trichloroethene | 10.2 | 1.00 | " | 10.0 | | 102 | 80-120 | | |
| Surrogate: 1,2-DCA-d4 | 19.1 | | " | 20.0 | | 95.5 | 73-137 | | |
| Surrogate: Toluene-d8 | 18.2 | | " | 20.0 | | 91.0 | 75-124 | | |
| Surrogate: 4-BFB | 18.8 | | " | 20.0 | | 94.0 | 77-120 | | |

LCS Dup (1H06026-BSD1)

| | | | | | | | | | |
|-----------------------|------|------|------|------|--|------|--------|-------|----|
| Benzene | 10.0 | 1.00 | ug/l | 10.0 | | 100 | 80-120 | 0.995 | 20 |
| Chlorobenzene | 9.38 | 1.00 | " | 10.0 | | 93.8 | 77-120 | 2.84 | 20 |
| 1,1-Dichloroethene | 9.32 | 1.00 | " | 10.0 | | 93.2 | 80-120 | 2.44 | 20 |
| Toluene | 9.07 | 1.00 | " | 10.0 | | 90.7 | 80-120 | 0.886 | 20 |
| Trichloroethene | 10.0 | 1.00 | " | 10.0 | | 100 | 80-120 | 1.98 | 20 |
| Surrogate: 1,2-DCA-d4 | 19.0 | | " | 20.0 | | 95.0 | 73-137 | | |
| Surrogate: Toluene-d8 | 18.1 | | " | 20.0 | | 90.5 | 75-124 | | |
| Surrogate: 4-BFB | 19.5 | | " | 20.0 | | 97.5 | 77-120 | | |

Matrix Spike (1H06026-MS1)

Source: B1H0076-02

| | | | | | | | | | |
|-----------------------|------|------|------|------|----|------|--------|--|--|
| Benzene | 11.1 | 1.00 | ug/l | 10.0 | ND | 111 | 75-125 | | |
| Chlorobenzene | 10.5 | 1.00 | " | 10.0 | ND | 105 | 75-125 | | |
| 1,1-Dichloroethene | 11.7 | 1.00 | " | 10.0 | ND | 117 | 40-154 | | |
| Toluene | 9.95 | 1.00 | " | 10.0 | ND | 99.5 | 72-125 | | |
| Trichloroethene | 11.3 | 1.00 | " | 10.0 | ND | 113 | 73-131 | | |
| Surrogate: 1,2-DCA-d4 | 20.0 | | " | 20.0 | | 100 | 73-137 | | |
| Surrogate: Toluene-d8 | 18.7 | | " | 20.0 | | 93.5 | 75-124 | | |
| Surrogate: 4-BFB | 19.5 | | " | 20.0 | | 97.5 | 77-120 | | |

North Creek Analytical - Bothell

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Scott A. Woerman, Project Manager

North Creek Analytical, Inc.
 Environmental Laboratory Network

Page 29 of 31



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Shannon and Wilson - Fairbanks
 2055 Hill Road
 Fairbanks AK/USA, 99709

Project: 230 Old Steese
 Project Number: 31-1-11076
 Project Manager: Chris Darrah

Reported:
 08/08/01 19:35

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 1H06026: Prepared 08/06/01 Using EPA 5030B [P/T]

Matrix Spike Dup (1H06026-MSD1)

Source: B1H0076-02

| | | | | | | | | | | |
|-----------------------|------|------|------|------|----|------|--------|-------|----|--|
| Benzene | 11.1 | 1.00 | ug/l | 10.0 | ND | 111 | 75-125 | 0.00 | 20 | |
| Chlorobenzene | 10.4 | 1.00 | " | 10.0 | ND | 104 | 75-125 | 0.957 | 20 | |
| 1,1-Dichloroethene | 11.2 | 1.00 | " | 10.0 | ND | 112 | 40-154 | 4.37 | 30 | |
| Toluene | 9.54 | 1.00 | " | 10.0 | ND | 95.4 | 72-125 | 4.21 | 20 | |
| Trichloroethene | 11.3 | 1.00 | " | 10.0 | ND | 113 | 73-131 | 0.00 | 20 | |
| Surrogate: 1,2-DCA-d4 | 20.0 | | " | 20.0 | | 100 | 73-137 | | | |
| Surrogate: Toluene-d8 | 17.9 | | " | 20.0 | | 89.5 | 75-124 | | | |
| Surrogate: 4-BFB | 18.7 | | " | 20.0 | | 93.5 | 77-120 | | | |

North Creek Analytical - Bothell

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Shannon and Wilson - Fairbanks
 2055 Hill Road
 Fairbanks AK/USA, 99709

Project: 230 Old Steese
 Project Number: 31-1-11076
 Project Manager: Chris Darrah

Reported:
 08/08/01 19:35

Notes and Definitions

- E Estimated value. The reported value exceeds the calibration range of the analysis.
- Q-16 The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to interference from coeluting organic compounds present in the sample.
- 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


 Scott A. Woerman, Project Manager

CHAIN OF CUSTODY REPORT

Work Order #: **B110050**

| CLIENT: Shannon and Wilson | | INVOICE TO: Shannon and Wilson | | TURNAROUND REQUEST in Business Days* Organic & Inorganic Analyses <input type="checkbox"/> 10 <input type="checkbox"/> 7 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <1 <small>STD</small> Petroleum Hydrocarbon Analyses <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <1 <small>STD</small> <input type="checkbox"/> OTHER Please Specify _____ <small>*Turnaround Requests less than standard may incur Rush Charges.</small> | | | | | | | |
|---|--------------------|---------------------------------------|-----|---|--|------------------------|--|--------------------|------------|-------------|-----------|
| REPORT TO: Chris Darrach | | 2055 Hill Road Fairbanks, AK 99709 | | | | | | | | | |
| ADDRESS: 2055 Hill Road Fairbanks AK 99706 | | P.O. NUMBER: 405948 | | | | | | | | | |
| PHONE: (907) 479-0600 | | FAX: (907) 479-5691 | | | | | | | | | |
| PROJECT NAME: 230 Old Steese | | REQUESTED ANALYSES | | | | | | | | | |
| PROJECT NUMBER: 31-1-11076 | | | | | | | | | | | |
| SAMPLED BY: MD | | | | | | | | | | | |
| CLIENT SAMPLE IDENTIFICATION | SAMPLING DATE/TIME | VOC | GR0 | GR0/BTEX | | | | MATRIX (W, S, O) | # OF CONT. | COMMENTS | NCA WO ID |
| 1. 1076-073001-mw2 | 7/30/01 @ 1130 | | | ✓ | | | | W | 2 | | -01 |
| 2. 1076-073001-mw3 | 7/30/01 @ 1215 | ✓ | ✓ | | | | | | 4 | | -02 |
| 3. 1076-073001-mw6 | 7/30/01 @ 1240 | | | ✓ | | | | | 3 | | -03 |
| 4. 1076-073001-mw4 | 7/30/01 @ 1315 | ✓ | ✓ | | | | | | 4 | | -04 |
| 5. 1076-073001-mw14 | 7/30/01 @ 1330 | ✓ | ✓ | | | | | | 4 | | -05 |
| 6. 1076-073001-mw8 | 7/30/01 @ 1400 | ✓ | ✓ | | | | | | 4 | | -06 |
| 7. 1076-073001-slougs-1 | 7/30/01 @ 1415 | ✓ | ✓ | | | | | | 4 | | -07 |
| 8. 1076-073001-mw7 | 7/30/01 @ 1445 | ✓ | ✓ | | | | | | 4 | | -08 |
| 9. 1076-073001-slougs-2 | 7/30/01 @ 1500 | ✓ | ✓ | | | | | | 4 | | -09 |
| 10. trip | | ✓ | | | | | | | 1 | | -10 |
| 11. | | | | | | | | | | | |
| 12. | | | | | | | | | | | |
| 13. | | | | | | | | | | | |
| 14. | | | | | | | | | | | |
| 15. | | | | | | | | | | | |
| RELINQUISHED BY: Melody Debenham | | DATE: 7/31/01 | | RECEIVED BY: S. Yamanich | | DATE: 8-1-01 | | | | | |
| PRINT NAME: Melody Debenham | | FIRM: Shannon and Wilson | | TIME: 1200 | | PRINT NAME: NCA | | TIME: 16:10 | | | |
| RELINQUISHED BY: | | DATE: | | RECEIVED BY: | | DATE: | | | | | |
| PRINT NAME: | | FIRM: | | TIME: | | PRINT NAME: | | TIME: | | | |
| ADDITIONAL REMARKS: | | Samples were not @2-6C Upon Receipt | | | | | | Temp: 10-2 | | | |
| COC REV 3/99 | | | | | | | | JCS | | PAGE 1 OF 1 | |



CT&E Environmental Services Inc.

INVOICE

COPY

Alaska Division
200 W. Potter Drive
Anchorage, AK 99518-1605

Phone: (907) 562-2343
Fax: (907) 561-5301
Web: <http://www.cteesi.com>

No. 52364821
Date 09/25/2001

| | |
|---|---|
| BILL TO 5230071 | SHIP TO |
| Accounts Payable Shannon & Wilson-Fairbanks 2055 Hill Rd Fairbanks, AK 99709 | Chris Darrah Shannon & Wilson-Fairbanks 2055 Hill Road Fairbanks, AK 99707 |

| | | | |
|---------------|-----------------|--------------|----------------|
| CLIENT | P.O. NO. | TERMS | PRINTED |
| SHANFBK | | NET 30 | 09/25/2001 |

| ITEM/DESCRIPTION | | | AMOUNT |
|------------------|---|---------------------------------|--------|
| Workorder : | 1015740 | | |
| | 31-1-11076-003 230 Old Steese | | |
| Logged: | 09/10/2001 | | |
| Comments: | | | |
| CT&E Sample ID: | 1015740001 | Client Sample ID: 1076-0906-WP4 | |
| | SW846-8260 Volatiles by GC/MS <Ref Lab> | | 195.00 |
| CT&E Sample ID: | 1015740002 | Client Sample ID: 1076-0906-WP5 | |
| | SW846-8260 Volatiles by GC/MS <Ref Lab> | | 195.00 |
| CT&E Sample ID: | 1015740003 | Client Sample ID: 1076-0906-WP7 | |
| | SW846-8260 Volatiles by GC/MS <Ref Lab> | | 195.00 |
| CT&E Sample ID: | 1015740004 | Client Sample ID: 1076-0906-WP8 | |
| | SW846-8260 Volatiles by GC/MS <Ref Lab> | | 195.00 |
| CT&E Sample ID: | 1015740005 | Client Sample ID: 1076-0906-WP9 | |
| | SW846-8260 Volatiles by GC/MS <Ref Lab> | | 195.00 |
| CT&E Sample ID: | 1015740006 | Client Sample ID: 1076-0907-WP3 | |
| | SW846-8260 Volatiles by GC/MS <Ref Lab> | | 195.00 |
| CT&E Sample ID: | 1015740007 | Client Sample ID: 1076-0907-WP2 | |
| | SW846-8260 Volatiles by GC/MS <Ref Lab> | | 195.00 |
| CT&E Sample ID: | 1015740008 | Client Sample ID: 1076-0907-WP1 | |
| | SW846-8260 Volatiles by GC/MS <Ref Lab> | | 195.00 |
| CT&E Sample ID: | 1015740009 | Client Sample ID: 1076-0907-WP6 | |
| | SW846-8260 Volatiles by GC/MS <Ref Lab> | | 195.00 |

A Finance Charge of 1.5% Per Month (18% Annual)
Will Be Charged On Past Due Accounts

Please Remit To: **CT&E Environmental Services, Inc.**
P.O. Box 10001-1019
Pasadena, CA 91110-1019



CT&E Environmental Services Inc.

INVOICE

COPY

Alaska Division
200 W. Potter Drive
Anchorage, AK 99518-1605

Phone: (907) 562-2343
Fax: (907) 561-5301
Web: http://www.cteesi.com

No. 52364821
Date 09/25/2001

BILL TO 5230071 SHIP TO

Accounts Payable
Shannon & Wilson-Fairbanks
2055 Hill Rd

Fairbanks, AK 99709

Chris Darrah
Shannon & Wilson-Fairbanks
2055 Hill Road

Fairbanks, AK 99707

CLIENT P.O. NO. TERMS PRINTED

SHANFBK NET 30 09/25/2001

ITEM/DESCRIPTION AMOUNT

Please Pay This Amount \$1,755.00

Finance Charge of 1.5% Per Month (18% Annual)
Will Be Charged On Past Due Accounts

Please Remit To: CT&E Environmental Services, Inc.
P.O. Box 10001-1019
Pasadena, CA 91110-1019



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

Chris Darrah
Shannon & Wilson

| | |
|---------------------|---------------------------------|
| Work Order: | 3014265 Old Steese (1015740) |
| Client: | Shannon & Wilson |
| Report Date: | September 21, 2001 |

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.
- 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.# 3014265001
 Client Name Shannon & Wilson
 Project Name/# Old Steese (1015740)
 Client Sample ID 1076-0906-WP4
 Matrix Aqueous
 Ordered By

Client PO#
 Printed Date/Time 09/21/2001 10:37
 Collected Date/Time 09/06/2001 15:30
 Received Date/Time 09/11/2001 13:00
 Technical Director Stephen C. Ede

Released By *Denise Calafato*

Sample Remarks:
 Sample analyzed at the Ludington, Michigan laboratory of CT&E Environmental Services Inc.

| Parameter | Results | PQL | Units | Method | Allowable Limits | Prep Date | Analysis Date | Init |
|--|----------|--------|-------|--------------|------------------|-----------|---------------|------|
| GC/MS VOLATILE ORGANIC ANALYSIS | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 1,1,1-Trichloroethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 1,1,2-Tetrachloroethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 1,1,2-Trichloroethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 1,1-Dichloroethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 1,1-Dichloroethylene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 1,1-Dichloropropene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 1,2,3-Trichlorobenzene | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 1,2,3-Trichloropropane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 1,2,4-Trichlorobenzene | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 1,2,4-Trimethylbenzene | D 0.33 | 0.020 | mg/L | SW-846 8260B | | 09/18/01 | 09/20/01 | HNL |
| 1,2-Dibromo-3-chloropropane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 1,2-Dibromoethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 1,2-Dichlorobenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 1,2-Dichloroethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 1,2-Dichloropropane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 1,3,5-Trimethylbenzene | D 0.20 | 0.020 | mg/L | SW-846 8260B | | 09/18/01 | 09/20/01 | HNL |
| 1,3-Dichlorobenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 1,3-Dichloropropane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 1,4-Dichlorobenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 1,2-Dichloropropane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 2-Butanone (M E K) | 0.025 U | 0.025 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 2-chloroethylvinyl ether | 0.010 U | 0.010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 2-Chlorotoluene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 2-Hexanone | 0.050 U | 0.050 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 2-Methylnaphthalene | 0.0082 | 0.0050 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 2-Chlorotoluene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 4-Isopropyltoluene | 0.0056 | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 4-Methyl-2-pentanone (MIBK) | 0.050 U | 0.050 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Acetone | 0.034 | 0.025 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Acrolein | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |



CT&E Ref.# 3014265001
 Client Name Shannon & Wilson
 Project Name/# Old Steese (1015740)
 Client Sample ID 1076-0906-WP4
 Matrix Aqueous
 Ordered By

Client PO#
 Printed Date/Time 09/21/2001 10:37
 Collected Date/Time 09/06/2001 15:30
 Received Date/Time 09/11/2001 13:00
 Technical Director Stephen C. Ede

| Parameter | Results | PQL | Units | Method | Allowable Limits | Prep Date | Analysis Date | Init |
|--|----------|--------|-------|--------------|------------------|-----------|---------------|------|
| GC/MS VOLATILE ORGANIC ANALYSIS | | | | | | | | |
| Acrylonitrile | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Allyl chloride | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Benzene | D 0.48 | 0.020 | mg/L | SW-846 8260B | | 09/18/01 | 09/20/01 | HNL |
| Bromobenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Bromochloromethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Bromodichloromethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Bromoform | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Bromomethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Carbon disulfide | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Carbon tetrachloride | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Chlorobenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Chloroethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Chloroform | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Chloromethane | 0.022 | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| cis-1,2-Dichloroethene | 0.0020 | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| cis-1,3-Dichloropropene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Dibromochloromethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Dibromomethane | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Dichlorodifluoromethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Diethyl Ether | 0.010 U | 0.010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Diisopropyl ether | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Ethylbenzene | D 0.36 | 0.020 | mg/L | SW-846 8260B | | 09/18/01 | 09/20/01 | HNL |
| Hexachlorobutadiene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Hexachloroethane | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Isopropylbenzene (Cumene) | 0.031 | 0.0050 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Methyl iodide | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Methyl Tertiary Butyl Ether | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Methylene chloride | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| n-Butylbenzene | 0.0098 | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| n-Propylbenzene | 0.072 | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Naphthalene | 0.060 | 0.0050 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| o-Xylene | D 0.15 | 0.020 | mg/L | SW-846 8260B | | 09/18/01 | 09/20/01 | HNL |
| P & M -Xylene | D 1.1 | 0.040 | mg/L | SW-846 8260B | | 09/18/01 | 09/20/01 | HNL |
| sec-Butylbenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |



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Shannon and Wilson - Fairbanks
 2055 Hill Road
 Fairbanks AK/USA, 99709

Project: 230 Old Steese
 Project Number: 31-1-11076
 Project Manager: Chris Darrah

Reported:
 08/08/01 19:35

Volatile Organic Compounds by EPA Method 8260B
North Creek Analytical - Bothell

| Analyte | Result | Reporting | | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|--|--------|-----------|--|-------|----------|---------|----------|----------|-----------|-------|
| | | Limit | | | | | | | | |
| 1076-073001-Slough-1 (B1H0050-07) Water Sampled: 07/30/01 14:15 Received: 08/02/01 16:10 | | | | | | | | | | |
| Acetone | ND | 25.0 | | ug/l | 1 | 1H06026 | 08/06/01 | 08/06/01 | EPA 8260B | |
| 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 | | " | " | " | " | " | " | |
| 1,3-Dichloropropane | ND | 1.00 | | " | " | " | " | " | " | |
| 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 | | " | " | " | " | " | " | |

North Creek Analytical - Bothell

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Scott A. Woerman, Project Manager



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Shannon and Wilson - Fairbanks
 2055 Hill Road
 Fairbanks AK/USA, 99709

Project: 230 Old Steese
 Project Number: 31-1-11076
 Project Manager: Chris Darrah

Reported:
 08/08/01 19:35

Volatile Organic Compounds by EPA Method 8260B
North Creek Analytical - Bothell

| Analyte | Result | Reporting | | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|--------|-----------|--|-------|----------|---------|----------|----------|-----------|-------|
| | | Limit | | | | | | | | |
| 1076-073001-Slough-1 (B1H0050-07) Water Sampled: 07/30/01 14:15 Received: 08/02/01 16:10 | | | | | | | | | | |
| Ethylbenzene | ND | 1.00 | | ug/l | 1 | 1H06026 | 08/06/01 | 08/06/01 | EPA 8260B | |
| 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 | 98.5 % | 73-137 | | | | " | " | " | " | |
| Surrogate: Toluene-d8 | 90.5 % | 75-124 | | | | " | " | " | " | |
| Surrogate: 4-BFB | 93.0 % | 77-120 | | | | " | " | " | " | |

North Creek Analytical - Bothell

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Scott A. Woerman, Project Manager

North Creek Analytical, Inc.
 Environmental Laboratory Network



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Shannon and Wilson - Fairbanks
 2055 Hill Road
 Fairbanks AK/USA, 99709

Project: 230 Old Steese
 Project Number: 31-1-11076
 Project Manager: Chris Darrah

Reported:
 08/08/01 19:35

Volatile Organic Compounds by EPA Method 8260B
North Creek Analytical - Bothell

| Analyte | Result | Reporting | | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|--|--------|-----------|--|-------|----------|---------|----------|----------|-----------|-------|
| | | Limit | | | | | | | | |
| 1076-073001-MW7 (B1H0050-08) Water Sampled: 07/30/01 14:45 Received: 08/02/01 16:10 | | | | | | | | | | |
| Acetone | ND | 25.0 | | ug/l | 1 | 1H06026 | 08/06/01 | 08/06/01 | EPA 8260B | |
| Benzene | 13.3 | 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 | 1.21 | 1.00 | | " | " | " | " | " | " | |
| trans-1,2-Dichloroethene | ND | 1.00 | | " | " | " | " | " | " | |
| 1,2-Dichloropropane | ND | 1.00 | | " | " | " | " | " | " | |
| 1,3-Dichloropropane | ND | 1.00 | | " | " | " | " | " | " | |
| 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 | | " | " | " | " | " | " | |

North Creek Analytical - Bothell

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Scott A. Woerman, Project Manager



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Shannon and Wilson - Fairbanks
 2055 Hill Road
 Fairbanks AK/USA, 99709

Project: 230 Old Steese
 Project Number: 31-1-11076
 Project Manager: Chris Darrah

Reported:
 08/08/01 19:35

Volatile Organic Compounds by EPA Method 8260B
North Creek Analytical - Bothell

| Analyte | Result | Reporting | | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|-------------|-----------|--|-------|----------|---------|----------|----------|-----------|-------|
| | | Limit | | | | | | | | |
| 1076-073001-MW7 (B1H0050-08) Water Sampled: 07/30/01 14:45 Received: 08/02/01 16:10 | | | | | | | | | | |
| Ethylbenzene | ND | 1.00 | | ug/l | 1 | 1H06026 | 08/06/01 | 08/06/01 | EPA 8260B | |
| 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 | 1.34 | 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 | 1.13 | 1.00 | | " | " | " | " | " | " | |
| Trichlorofluoromethane | 2.09 | 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 | 99.5 % | 73-137 | | | | " | " | " | " | |
| Surrogate: Toluene-d8 | 86.5 % | 75-124 | | | | " | " | " | " | |
| Surrogate: 4-BFB | 97.0 % | 77-120 | | | | " | " | " | " | |

North Creek Analytical - Bothell

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North Creek Analytical, Inc.
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Shannon and Wilson - Fairbanks
 2055 Hill Road
 Fairbanks AK/USA, 99709

Project: 230 Old Steese
 Project Number: 31-1-11076
 Project Manager: Chris Darrah

Reported:
 08/08/01 19:35

Volatile Organic Compounds by EPA Method 8260B
North Creek Analytical - Bothell

| Analyte | Result | Reporting | | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---------|--------|-----------|--|-------|----------|-------|----------|----------|--------|-------|
| | | Limit | | | | | | | | |

1076-073001-Slough-2 (B1H0050-09) Water **Sampled: 07/30/01 15:00 Received: 08/02/01 16:10**

| | | | | | | | | | | |
|-----------------------------|----|------|--|------|---|---------|----------|----------|-----------|--|
| Acetone | ND | 25.0 | | ug/l | 1 | 1H06026 | 08/06/01 | 08/06/01 | EPA 8260B | |
| 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 | | " | " | " | " | " | " | |
| 1,3-Dichloropropane | ND | 1.00 | | " | " | " | " | " | " | |
| 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 | | " | " | " | " | " | " | |

North Creek Analytical - Bothell

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 Environmental Laboratory Network



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Shannon and Wilson - Fairbanks
 2055 Hill Road
 Fairbanks AK/USA, 99709

Project: 230 Old Steese
 Project Number: 31-1-11076
 Project Manager: Chris Darrah

Reported:
 08/08/01 19:35

Volatile Organic Compounds by EPA Method 8260B
North Creek Analytical - Bothell

| Analyte | Result | Reporting | | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|--------|-----------|--|-------|----------|---------|----------|----------|-----------|-------|
| | | Limit | | | | | | | | |
| 1076-073001-Slough-2 (B1H0050-09) Water Sampled: 07/30/01 15:00 Received: 08/02/01 16:10 | | | | | | | | | | |
| Ethylbenzene | ND | 1.00 | | ug/l | 1 | 1H06026 | 08/06/01 | 08/06/01 | EPA 8260B | |
| 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 | 97.5 % | 73-137 | | | | " | " | " | " | |
| Surrogate: Toluene-d8 | 86.5 % | 75-124 | | | | " | " | " | " | |
| Surrogate: 4-BFB | 98.0 % | 77-120 | | | | " | " | " | " | |

North Creek Analytical - Bothell

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 Environmental Laboratory Network



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Shannon and Wilson - Fairbanks
 2055 Hill Road
 Fairbanks AK/USA, 99709

Project: 230 Old Steese
 Project Number: 31-1-11076
 Project Manager: Chris Darrah

Reported:
 08/08/01 19:35

Volatile Organic Compounds by EPA Method 8260B
North Creek Analytical - Bothell

| Analyte | Result | Reporting | | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|--------|-----------|--|-------|----------|---------|----------|----------|-----------|-------|
| | | Limit | | | | | | | | |
| Trip (B1H0050-10) Water Sampled: 07/30/01 12:00 Received: 08/02/01 16:10 | | | | | | | | | | |
| Acetone | ND | 25.0 | | ug/l | 1 | 1H06026 | 08/06/01 | 08/06/01 | EPA 8260B | |
| 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 | | " | " | " | " | " | " | |
| 1,3-Dichloropropane | ND | 1.00 | | " | " | " | " | " | " | |
| 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 | | " | " | " | " | " | " | |

North Creek Analytical - Bothell

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Shannon and Wilson - Fairbanks
 2055 Hill Road
 Fairbanks AK/USA, 99709

Project: 230 Old Steese
 Project Number: 31-1-11076
 Project Manager: Chris Darrah

Reported:
 08/08/01 19:35

Volatile Organic Compounds by EPA Method 8260B
North Creek Analytical - Bothell

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|--|--------|-----------------|-------|----------|---------|----------|----------|-----------|-------|
| Trip (B1H0050-10) Water Sampled: 07/30/01 12:00 Received: 08/02/01 16:10 | | | | | | | | | |
| Ethylbenzene | ND | 1.00 | ug/l | 1 | 1H06026 | 08/06/01 | 08/06/01 | EPA 8260B | |
| 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 | 95.0 % | 73-137 | | | " | " | " | " | |
| Surrogate: Toluene-d8 | 91.0 % | 75-124 | | | " | " | " | " | |
| Surrogate: 4-BFB | 80.5 % | 77-120 | | | " | " | " | " | |

North Creek Analytical - Bothell

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Shannon and Wilson - Fairbanks
 2055 Hill Road
 Fairbanks AK/USA, 99709

Project: 230 Old Steese
 Project Number: 31-1-11076
 Project Manager: Chris Darrah

Reported:
 08/08/01 19:35

**Gasoline Range Hydrocarbons (n-Hexane to <n-Decane) by AK101 - Quality Control
 North Creek Analytical - Bothell**

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|--------|-----------------|-------|-------------|---------------|------|-------------|-------|-----------|-------|
| Batch 1H03012: Prepared 08/03/01 Using EPA 5030B (P/T) | | | | | | | | | | |
| Blank (1H03012-BLK1) | | | | | | | | | | |
| Gasoline Range Hydrocarbons | ND | 50.0 | ug/l | | | | | | | |
| Surrogate: 4-BFB (FID) | 39.2 | | " | 48.0 | | 81.7 | 60-120 | | | |
| LCS (1H03012-BS1) | | | | | | | | | | |
| Gasoline Range Hydrocarbons | 447 | 50.0 | ug/l | 500 | | 89.4 | 60-120 | | | |
| Surrogate: 4-BFB (FID) | 60.2 | | " | 48.0 | | 125 | 60-120 | | | Q-16 |
| LCS Dup (1H03012-BSD1) | | | | | | | | | | |
| Gasoline Range Hydrocarbons | 450 | 50.0 | ug/l | 500 | | 90.0 | 60-120 | 0.669 | 20 | |
| Surrogate: 4-BFB (FID) | 59.1 | | " | 48.0 | | 123 | 60-120 | | | Q-16 |
| Matrix Spike (1H03012-MS1) Source: B1H0050-01 | | | | | | | | | | |
| Gasoline Range Hydrocarbons | 461 | 50.0 | ug/l | 500 | ND | 87.3 | 60-120 | | | |
| Surrogate: 4-BFB (FID) | 51.6 | | " | 48.0 | | 108 | 60-120 | | | |
| Matrix Spike Dup (1H03012-MSD1) Source: B1H0050-01 | | | | | | | | | | |
| Gasoline Range Hydrocarbons | 478 | 50.0 | ug/l | 500 | ND | 90.7 | 60-120 | 3.62 | 20 | |
| Surrogate: 4-BFB (FID) | 53.5 | | " | 48.0 | | 111 | 60-120 | | | |

North Creek Analytical - Bothell

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Shannon and Wilson - Fairbanks Project: 230 Old Steese
 2055 Hill Road Project Number: 31-1-11076 Reported:
 Fairbanks AK/USA, 99709 Project Manager: Chris Darrah 08/08/01 19:35

**Gasoline Hydrocarbons (n-Hexane to <n-Decane) and BTEX by AK101 - Quality Control
 North Creek Analytical - Bothell**

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC %REC | Limit | RPD RPD | Limit | Notes |
|---------|--------|-----------------|-------|-------------|---------------|-----------|-------|---------|-------|-------|
|---------|--------|-----------------|-------|-------------|---------------|-----------|-------|---------|-------|-------|

Batch 1H03012: Prepared 08/03/01 Using EPA 5030B (P/T)

Blank (1H03012-BLK1)

| | | | | | | | | | | |
|-----------------------------|------|-------|------|------|--|------|--------|--|--|--|
| Gasoline Range Hydrocarbons | ND | 50.0 | ug/l | | | | | | | |
| Benzene | ND | 0.200 | " | | | | | | | |
| Toluene | ND | 0.500 | " | | | | | | | |
| Ethylbenzene | ND | 0.500 | " | | | | | | | |
| Xylenes (total) | ND | 1.00 | " | | | | | | | |
| Surrogate: 4-BFB (FID) | 39.2 | | " | 48.0 | | 81.7 | 60-120 | | | |
| Surrogate: 4-BFB (PID) | 44.5 | | " | 48.0 | | 92.7 | 60-120 | | | |

LCS (1H03012-BS1)

| | | | | | | | | | | |
|-----------------------------|------|------|------|------|--|------|--------|--|--|------|
| Gasoline Range Hydrocarbons | 447 | 50.0 | ug/l | 500 | | 89.4 | 60-120 | | | |
| Surrogate: 4-BFB (FID) | 60.2 | | " | 48.0 | | 125 | 60-120 | | | Q-16 |

LCS (1H03012-BS2)

| | | | | | | | | | | |
|------------------------|------|-------|------|------|--|------|--------|--|--|--|
| Benzene | 9.75 | 0.200 | ug/l | 10.0 | | 97.5 | 60-120 | | | |
| Toluene | 9.95 | 0.500 | " | 10.0 | | 99.5 | 60-120 | | | |
| Ethylbenzene | 10.5 | 0.500 | " | 10.0 | | 105 | 60-120 | | | |
| Xylenes (total) | 31.8 | 1.00 | " | 30.0 | | 106 | 60-120 | | | |
| Surrogate: 4-BFB (PID) | 47.0 | | " | 48.0 | | 97.9 | 60-120 | | | |

LCS Dup (1H03012-BSD1)

| | | | | | | | | | | |
|-----------------------------|------|------|------|------|--|------|--------|-------|----|------|
| Gasoline Range Hydrocarbons | 450 | 50.0 | ug/l | 500 | | 90.0 | 60-120 | 0.669 | 20 | |
| Surrogate: 4-BFB (FID) | 59.1 | | " | 48.0 | | 123 | 60-120 | | | Q-16 |

LCS Dup (1H03012-BSD2)

| | | | | | | | | | | |
|------------------------|------|-------|------|------|--|------|--------|-------|----|--|
| Benzene | 9.66 | 0.200 | ug/l | 10.0 | | 96.6 | 60-120 | 0.927 | 20 | |
| Toluene | 10.2 | 0.500 | " | 10.0 | | 102 | 60-120 | 2.48 | 20 | |
| Ethylbenzene | 10.7 | 0.500 | " | 10.0 | | 107 | 60-120 | 1.89 | 20 | |
| Xylenes (total) | 32.4 | 1.00 | " | 30.0 | | 108 | 60-120 | 1.87 | 20 | |
| Surrogate: 4-BFB (PID) | 49.1 | | " | 48.0 | | 102 | 60-120 | | | |

North Creek Analytical - Bothell

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Scott A. Woerman, Project Manager



Seattle 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244
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 509.924.9200 fax 509.924.9290
 Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132
 503.906.9200 fax 503.906.9210
 Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711
 541.383.9310 fax 541.382.7588

Shannon and Wilson - Fairbanks
 2055 Hill Road
 Fairbanks AK/USA, 99709

Project: 230 Old Steese
 Project Number: 31-1-11076
 Project Manager: Chris Darrah

Reported:
 08/08/01 19:35

**Gasoline Hydrocarbons (n-Hexane to <n-Decane) and BTEX by AK101 - Quality Control
 North Creek Analytical - Bothell**

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|

Batch 1H03012: Prepared 08/03/01 Using EPA 5030B (P/T)

Matrix Spike (1H03012-MS1)

Source: B1H0050-01

| | | | | | | | | | | |
|-----------------------------|------|------|------|------|----|------|--------|--|--|--|
| Gasoline Range Hydrocarbons | 461 | 50.0 | ug/l | 500 | ND | 87.3 | 60-120 | | | |
| Surrogate: 4-BFB (FID) | 51.6 | | " | 48.0 | | 108 | 60-120 | | | |

Matrix Spike (1H03012-MS2)

Source: B1H0050-02

| | | | | | | | | | | |
|------------------------|------|-------|------|------|-------|------|--------|--|--|--|
| Benzene | 10.0 | 0.200 | ug/l | 10.0 | 0.206 | 97.9 | 60-120 | | | |
| Toluene | 10.3 | 0.500 | " | 10.0 | ND | 103 | 60-120 | | | |
| Ethylbenzene | 10.9 | 0.500 | " | 10.0 | ND | 109 | 60-120 | | | |
| Xylenes (total) | 33.1 | 1.00 | " | 30.0 | ND | 110 | 60-120 | | | |
| Surrogate: 4-BFB (PID) | 48.5 | | " | 48.0 | | 101 | 60-120 | | | |

Matrix Spike Dup (1H03012-MSD1)

Source: B1H0050-01

| | | | | | | | | | | |
|-----------------------------|------|------|------|------|----|------|--------|------|----|--|
| Gasoline Range Hydrocarbons | 478 | 50.0 | ug/l | 500 | ND | 90.7 | 60-120 | 3.62 | 20 | |
| Surrogate: 4-BFB (FID) | 53.5 | | " | 48.0 | | 111 | 60-120 | | | |

Matrix Spike Dup (1H03012-MSD2)

Source: B1H0050-02

| | | | | | | | | | | |
|------------------------|------|-------|------|------|-------|-----|--------|------|----|--|
| Benzene | 10.3 | 0.200 | ug/l | 10.0 | 0.206 | 101 | 60-120 | 2.96 | 20 | |
| Toluene | 10.7 | 0.500 | " | 10.0 | ND | 107 | 60-120 | 3.81 | 20 | |
| Ethylbenzene | 11.3 | 0.500 | " | 10.0 | ND | 113 | 60-120 | 3.60 | 20 | |
| Xylenes (total) | 34.2 | 1.00 | " | 30.0 | ND | 114 | 60-120 | 3.27 | 20 | |
| Surrogate: 4-BFB (PID) | 51.6 | | " | 48.0 | | 108 | 60-120 | | | |

North Creek Analytical - Bothell

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Scott A. Woerman, Project Manager

North Creek Analytical, Inc.
 Environmental Laboratory Network



Seattle 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244
 425.420.9200 fax 425.420.9210
 Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
 509.924.9200 fax 509.924.9290
 Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132
 503.906.9200 fax 503.906.9210
 Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711
 541.383.9310 fax 541.382.7588

| | | |
|---|--|-----------------------------|
| Shannon and Wilson - Fairbanks 2055 Hill Road Fairbanks AK/USA, 99709 | Project: 230 Old Steese Project Number: 31-1-11076 Project Manager: Chris Darrah | Reported: 08/08/01 19:35 |
|---|--|-----------------------------|

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 1H06026: Prepared 08/06/01 Using EPA 5030B [P/T]

Blank (1H06026-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 | " | | | | | | | |
| 1,3-Dichloropropane | ND | 1.00 | " | | | | | | | |

North Creek Analytical - Bothell

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Scott A. Woerman, Project Manager

North Creek Analytical, Inc.
 Environmental Laboratory Network



CT&E Ref.# 3014265001
 Client Name Shannon & Wilson
 Project Name/# Old Steese (1015740)
 Client Sample ID 1076-0906-WP4
 Matrix Aqueous
 Ordered By

Client PO#
 Printed Date/Time 09/21/2001 10:37
 Collected Date/Time 09/06/2001 15:30
 Received Date/Time 09/11/2001 13:00
 Technical Director Stephen C. Ede

| Parameter | Results | PQL | Units | Method | Allowable Limits | Prep Date | Analysis Date | Init |
|--|----------|--------|-------|--------------|------------------|-----------|---------------|------|
| GC/MS VOLATILE ORGANIC ANALYSIS | | | | | | | | |
| styrene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| tert-Butylbenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| tetrachloroethene | 0.0035 | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| tetrahydrofuran | 0.10 U | 0.10 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Toluene | 0.091 | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| trans-1,2-Dichloroethene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| trans-1,3-Dichloropropene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| trans-1,4-Dichloro-2-Butene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| trichloroethene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| trichlorofluoromethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Vinyl acetate | 0.050 U | 0.050 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Vinyl chloride | 0.0012 | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Surrogates | | | | | | | | |
| 1,2-Dichloroethane-D4 <Surr> | 102 | | % | SW-846 8260B | 77.7-122.3 | 09/18/01 | 09/18/01 | HNL |
| 1-Bromofluorobenzene <Surr> | 97 | | % | SW-846 8260B | 89.3-107.7 | 09/18/01 | 09/18/01 | HNL |
| Dibromofluoromethane <Surr> | 102 | | % | SW-846 8260B | 84.6-117.9 | 09/18/01 | 09/18/01 | HNL |
| Toluene-d8 <Surr> | 102 | | % | SW-846 8260B | 90.9-107.1 | 09/18/01 | 09/18/01 | HNL |



CT&E Ref.# 3014265002
 Client Name Shannon & Wilson
 Project Name/# Old Steese (1015740)
 Client Sample ID 1076-0906-WP5
 Matrix Aqueous
 Ordered By

Client PO#
 Printed Date/Time 09/21/2001 9:20
 Collected Date/Time 09/06/2001 15:10
 Received Date/Time 09/11/2001 13:00
 Technical Director Stephen C. Ede

Released By *Denise Calyato*

Sample Remarks:
 Sample analyzed at the Ludington, Michigan laboratory of CT&E Environmental Services Inc.

| Parameter | Results | PQL | Units | Method | Allowable Limits | Prep Date | Analysis Date | Init |
|--|----------|--------|-------|--------------|------------------|-----------|---------------|------|
| GC/MS VOLATILE ORGANIC ANALYSIS | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| 1,1,1-Trichloroethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| 1,1,2,2-Tetrachloroethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| 1,1,2-Trichloroethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| 1,1-Dichloroethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| 1,1-Dichloroethylene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| 1,1-Dichloropropene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| 1,2,3-Trichlorobenzene | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| 1,2,3-Trichloropropane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| 1,2,4-Trichlorobenzene | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| 1,2,4-Trimethylbenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| 1,2-Dibromo-3-chloropropane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| 1,2-Dibromoethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| 1,2-Dichlorobenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| 1,2-Dichloroethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| 1,2-Dichloropropane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| 1,3,5-Trimethylbenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| 1,3-Dichlorobenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| 1,3-Dichloropropane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| 1,4-Dichlorobenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| 2,2-Dichloropropane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| 2-Butanone (M E K) | 0.025 U | 0.025 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| 2-chloroethylvinyl ether | 0.010 U | 0.010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| 2-Chlorotoluene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| 2-Hexanone | 0.050 U | 0.050 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| 2-Methylnaphthalene | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| 4-Chlorotoluene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| 4-Isopropyltoluene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| 4-Methyl-2-pentanone (MIBK) | 0.050 U | 0.050 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Acetone | 0.025 U | 0.025 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Acrolein | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |



CT&E Ref.# 3014265002
 Client Name Shannon & Wilson
 Project Name## Old Steese (1015740)
 Client Sample ID 1076-0906-WP5
 Matrix Aqueous
 Ordered By

Client PO#
 Printed Date/Time 09/21/2001 9:20
 Collected Date/Time 09/06/2001 15:10
 Received Date/Time 09/11/2001 13:00
 Technical Director Stephen C. Ede

| Parameter | Results | PQL | Units | Method | Allowable Limits | Prep Date | Analysis Date | Init |
|--|----------|--------|-------|--------------|------------------|-----------|---------------|------|
| GC/MS VOLATILE ORGANIC ANALYSIS | | | | | | | | |
| Acrylonitrile | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Allyl chloride | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Benzene | 0.060 | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Bromobenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Bromochloromethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Bromodichloromethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Bromoform | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Bromomethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Carbon disulfide | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Carbon tetrachloride | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Chlorobenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Chloroethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Chloroform | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Chloromethane | 0.0028 | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Cis-1,2-Dichloroethene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Cis-1,3-Dichloropropene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Dibromochloromethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Dibromomethane | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Dichlorodifluoromethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Diethyl Ether | 0.010 U | 0.010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Diisopropyl ether | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Ethylbenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Hexachlorobutadiene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Hexachloroethane | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Isopropylbenzene (Cumene) | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Methyl iodide | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Methyl Tertiary Butyl Ether | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Methylene chloride | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| n-Butylbenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| n-Propylbenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Naphthalene | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| o-Xylene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| p & m -Xylene | 0.0020 U | 0.0020 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| sec-Butylbenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |



CT&E Ref.# 3014265002
 Client Name Shannon & Wilson
 Project Name/# Old Steese (1015740)
 Client Sample ID 1076-0906-WP5
 Matrix Aqueous
 Ordered By

Client PO#
 Printed Date/Time 09/21/2001 9:20
 Collected Date/Time 09/06/2001 15:10
 Received Date/Time 09/11/2001 13:00
 Technical Director Stephen C. Ede

| Parameter | Results | PQL | Units | Method | Allowable Limits | Prep Date | Analysis Date | Init |
|--|----------|--------|-------|--------------|------------------|-----------|---------------|------|
| GC/MS VOLATILE ORGANIC ANALYSIS | | | | | | | | |
| Styrene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| tert-Butylbenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Tetrachloroethene | 0.0042 | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Tetrahydrofuran | 0.10 U | 0.10 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Toluene | 0.0021 | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| trans-1,2-Dichloroethene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| trans-1,3-Dichloropropene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| trans-1,4-Dichloro-2-Butene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Trichloroethene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Trichlorofluoromethane | 0.0040 | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Vinyl acetate | 0.050 U | 0.050 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Vinyl chloride | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Surrogates | | | | | | | | |
| 1,2-Dichloroethane-D4 <Surr> | 107 | | % | SW-846 8260B | 77.7-122.3 | 09/17/01 | 09/18/01 | HNL |
| 4-Bromofluorobenzene <Surr> | 97.7 | | % | SW-846 8260B | 89.3-107.7 | 09/17/01 | 09/18/01 | HNL |
| Dibromofluoromethane <Surr> | 103 | | % | SW-846 8260B | 84.6-117.9 | 09/17/01 | 09/18/01 | HNL |
| Toluene-d8 <Surr> | 102 | | % | SW-846 8260B | 90.9-107.1 | 09/17/01 | 09/18/01 | HNL |



CT&E Ref.# 3014265003
 Client Name Shannon & Wilson
 Project Name/# Old Steese (1015740)
 Client Sample ID 1076-0906-WP7
 Matrix Aqueous
 Ordered By

Client PO#
 Printed Date/Time 09/21/2001 9:20
 Collected Date/Time 09/06/2001 15:55
 Received Date/Time 09/11/2001 13:00
 Technical Director Stephen C. Ede

Released By *Denise Calyato*

Sample Remarks:
 Sample analyzed at the Ludington, Michigan laboratory of CT&E Environmental Services Inc.

| Parameter | Results | PQL | Units | Method | Allowable Limits | Prep Date | Analysis Date | Init |
|--|-----------|-------|-------|--------------|------------------|-----------|---------------|------|
| GC/MS VOLATILE ORGANIC ANALYSIS | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | D 0.020 U | 0.020 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| 1,1,1-Trichloroethane | D 0.020 U | 0.020 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| 1,1,2,2-Tetrachloroethane | D 0.020 U | 0.020 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| 1,1,2-Trichloroethane | D 0.020 U | 0.020 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| 1,1-Dichloroethane | D 0.020 U | 0.020 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| 1,1-Dichloroethylene | D 0.020 U | 0.020 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| 1,1-Dichloropropene | D 0.020 U | 0.020 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| 1,2,3-Trichlorobenzene | D 0.10 U | 0.10 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| 1,2,3-Trichloropropane | D 0.020 U | 0.020 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| 1,2,4-Trichlorobenzene | D 0.10 U | 0.10 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| 1,2,4-Trimethylbenzene | D 0.72 | 0.020 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| 1,2-Dibromo-3-chloropropane | D 0.020 U | 0.020 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| 1,2-Dibromoethane | D 0.020 U | 0.020 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| 1,2-Dichlorobenzene | D 0.020 U | 0.020 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| 1,2-Dichloroethane | D 0.020 U | 0.020 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| 1,2-Dichloropropane | D 0.020 U | 0.020 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| 1,3,5-Trimethylbenzene | D 0.23 | 0.020 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| 1,3-Dichlorobenzene | D 0.020 U | 0.020 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| 1,3-Dichloropropane | D 0.020 U | 0.020 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| 1,4-Dichlorobenzene | D 0.020 U | 0.020 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| 1,2-Dichloropropane | D 0.020 U | 0.020 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| 2-Butanone (M E K) | D 0.50 U | 0.50 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| 2-chloroethylvinyl ether | D 0.20 U | 0.20 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| 1-Chlorotoluene | D 0.020 U | 0.020 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| 2-Hexanone | D 1.0 U | 1.0 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| 2-Methylnaphthalene | D 0.10 U | 0.10 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| 1-Chlorotoluene | D 0.020 U | 0.020 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| 4-Isopropyltoluene | D 0.020 U | 0.020 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| 4-Methyl-2-pentanone (MIBK) | D 1.0 U | 1.0 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Acetone | D 0.50 U | 0.50 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Acrolein | D 0.10 U | 0.10 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |



CT&E Ref.# 3014265003
 Client Name Shannon & Wilson
 Project Name/# Old Steese (1015740)
 Client Sample ID 1076-0906-WP7
 Matrix Aqueous
 Ordered By

Client PO#
 Printed Date/Time 09/21/2001 9:20
 Collected Date/Time 09/06/2001 15:55
 Received Date/Time 09/11/2001 13:00
 Technical Director Stephen C. Ede

| Parameter | Results | PQL | Units | Method | Allowable Limits | Prep Date | Analysis Date | Init |
|--|-----------|-------|-------|--------------|------------------|-----------|---------------|------|
| GC/MS VOLATILE ORGANIC ANALYSIS | | | | | | | | |
| Acrylonitrile | D 0.020 U | 0.020 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Allyl chloride | D 0.020 U | 0.020 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Benzene | D 0.52 | 0.020 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Bromobenzene | D 0.020 U | 0.020 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Bromochloromethane | D 0.020 U | 0.020 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Bromodichloromethane | D 0.020 U | 0.020 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Bromoform | D 0.020 U | 0.020 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Bromomethane | D 0.020 U | 0.020 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Carbon disulfide | D 0.10 U | 0.10 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Carbon tetrachloride | D 0.020 U | 0.020 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Chlorobenzene | D 0.020 U | 0.020 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Chloroethane | D 0.020 U | 0.020 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Chloroform | D 0.020 U | 0.020 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Chloromethane | D 0.020 U | 0.020 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| cis-1,2-Dichloroethene | D 0.020 U | 0.020 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| cis-1,3-Dichloropropene | D 0.020 U | 0.020 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Dibromochloromethane | D 0.020 U | 0.020 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Dibromomethane | D 0.10 U | 0.10 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Dichlorodifluoromethane | D 0.020 U | 0.020 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Diethyl Ether | D 0.20 U | 0.20 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Diisopropyl ether | D 0.020 U | 0.020 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Ethylbenzene | D 0.68 | 0.020 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Hexachlorobutadiene | D 0.020 U | 0.020 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Hexachloroethane | D 0.10 U | 0.10 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Isopropylbenzene (Cumene) | D 0.10 U | 0.10 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Methyl iodide | D 0.020 U | 0.020 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Methyl Tertiary Butyl Ether | D 0.10 U | 0.10 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Methylene chloride | D 0.10 U | 0.10 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| n-Butylbenzene | D 0.020 U | 0.020 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| n-Propylbenzene | D 0.062 | 0.020 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Naphthalene | D 0.10 U | 0.10 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| o-Xylene | D 0.020 U | 0.020 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| P & M -Xylene | D 0.96 | 0.040 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| sec-Butylbenzene | D 0.020 U | 0.020 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |



CT&E Ref.# 3014265003
 Client Name Shannon & Wilson
 Project Name/# Old Steese (1015740)
 Client Sample ID 1076-0906-WP7
 Matrix Aqueous
 Ordered By

Client PO#
 Printed Date/Time 09/21/2001 9:20
 Collected Date/Time 09/06/2001 15:55
 Received Date/Time 09/11/2001 13:00
 Technical Director Stephen C. Ede

| Parameter | Results | PQL | Units | Method | Allowable Limits | Prep Date | Analysis Date | Init |
|--|-----------|-------|-------|--------------|------------------|-----------|---------------|------|
| GC/MS VOLATILE ORGANIC ANALYSIS | | | | | | | | |
| Benzene | D 0.020 U | 0.020 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| tert-Butylbenzene | D 0.020 U | 0.020 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Trichloroethene | D 0.020 U | 0.020 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Tetrahydrofuran | D 2.0 U | 2.0 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Toluene | D 0.031 | 0.020 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| trans-1,2-Dichloroethene | D 0.020 U | 0.020 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| trans-1,3-Dichloropropene | D 0.020 U | 0.020 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| trans-1,4-Dichloro-2-Butene | D 0.020 U | 0.020 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Dichloroethene | D 0.020 U | 0.020 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Trichlorofluoromethane | D 0.020 U | 0.020 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Vinyl acetate | D 1.0 U | 1.0 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Vinyl chloride | D 0.020 U | 0.020 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Surrogates | | | | | | | | |
| 1,2-Dichloroethane-D4 <Surr> | 106 | | % | SW-846 8260B | 77.7-122.3 | 09/20/01 | 09/20/01 | HNL |
| 4-Bromofluorobenzene <Surr> | 99.3 | | % | SW-846 8260B | 89.3-107.7 | 09/20/01 | 09/20/01 | HNL |
| Dibromofluoromethane <Surr> | 103 | | % | SW-846 8260B | 84.6-117.9 | 09/20/01 | 09/20/01 | HNL |
| 1,2,4-Trichlorobenzene-d8 <Surr> | 101 | | % | SW-846 8260B | 90.9-107.1 | 09/20/01 | 09/20/01 | HNL |



CT&E Ref.# 3014265004
 Client Name Shannon & Wilson
 Project Name/# Old Steese (1015740)
 Client Sample ID 1076-0906-WP8
 Matrix Aqueous
 Ordered By

Client PO#
 Printed Date/Time 09/21/2001 9:20
 Collected Date/Time 09/06/2001 16:25
 Received Date/Time 09/11/2001 13:00
 Technical Director Stephen C. Ede

Released By *Denise Calyabo*

Sample Remarks:
 Sample analyzed at the Ludington, Michigan laboratory of CT&E Environmental Services Inc.

| Parameter | Results | PQL | Units | Method | Allowable Limits | Prep Date | Analysis Date | Init |
|--|----------|--------|-------|--------------|------------------|-----------|---------------|------|
| GC/MS VOLATILE ORGANIC ANALYSIS | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| 1,1,1-Trichloroethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| 1,1,1,2,2-Tetrachloroethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| 1,1,2-Trichloroethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| 1,1-Dichloroethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| 1,1-Dichloroethylene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| 1,1-Dichloropropene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| 1,2,3-Trichlorobenzene | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| 1,2,3-Trichloropropane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| 1,2,4-Trichlorobenzene | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| 1,2,4-Trimethylbenzene | 0.0018 | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| 1,2-Dibromo-3-chloropropane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| 1,2-Dibromoethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| 1,2-Dichlorobenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| 1,2-Dichloroethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| 1,2-Dichloropropane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| 1,3,5-Trimethylbenzene | 0.0013 | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| 1,3-Dichlorobenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| 1,3-Dichloropropane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| 1,4-Dichlorobenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| 2,2-Dichloropropane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| 2-Butanone (M E K) | 0.025 U | 0.025 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| 2-chloroethylvinyl ether | 0.010 U | 0.010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| 2-Chlorotoluene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| 2-Hexanone | 0.050 U | 0.050 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| 2-Methylnaphthalene | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| 4-Chlorotoluene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| 4-Isopropyltoluene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| 4-Methyl-2-pentanone (MIBK) | 0.050 U | 0.050 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Acetone | 0.025 U | 0.025 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Acrolein | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |



CT&E Ref.# 3014265004
 Client Name Shannon & Wilson
 Project Name/# Old Steese (1015740)
 Client Sample ID 1076-0906-WP8
 Matrix Aqueous
 Ordered By

Client PO#
 Printed Date/Time 09/21/2001 9:20
 Collected Date/Time 09/06/2001 16:25
 Received Date/Time 09/11/2001 13:00
 Technical Director Stephen C. Ede

| Parameter | Results | PQL | Units | Method | Allowable Limits | Prep Date | Analysis Date | Init |
|--|----------|--------|-------|--------------|------------------|-----------|---------------|------|
| GC/MS VOLATILE ORGANIC ANALYSIS | | | | | | | | |
| Acrylonitrile | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Allyl chloride | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Benzene | D 0.30 | 0.010 | mg/L | SW-846 8260B | | 09/17/01 | 09/20/01 | HNL |
| Bromobenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Bromochloromethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Bromodichloromethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Bromoform | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Bromomethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Carbon disulfide | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Carbon tetrachloride | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Chlorobenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Chloroethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Chloroform | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Chloromethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| cis-1,2-Dichloroethene | 0.0014 | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| cis-1,3-Dichloropropene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Dibromochloromethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Dibromomethane | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Dichlorodifluoromethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Diethyl Ether | 0.010 U | 0.010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Diisopropyl ether | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Ethylbenzene | 0.045 | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Hexachlorobutadiene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Hexachloroethane | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Isopropylbenzene (Cumene) | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Methyl iodide | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Methyl Tertiary Butyl Ether | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Methylene chloride | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| n-Butylbenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| n-Propylbenzene | 0.0086 | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Naphthalene | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| o-Xylene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| p & m -Xylene | 0.0024 | 0.0020 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| sec-Butylbenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |



CT&E Ref.# 3014265004
 Client Name Shannon & Wilson
 Project Name/# Old Steese (1015740)
 Client Sample ID 1076-0906-WP8
 Matrix Aqueous
 Ordered By

Client PO#
 Printed Date/Time 09/21/2001 9:20
 Collected Date/Time 09/06/2001 16:25
 Received Date/Time 09/11/2001 13:00
 Technical Director Stephen C. Ede

| Parameter | Results | PQL | Units | Method | Allowable Limits | Prep Date | Analysis Date | Init |
|--|----------|--------|-------|--------------|------------------|-----------|---------------|------|
| GC/MS VOLATILE ORGANIC ANALYSIS | | | | | | | | |
| Styrene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| tert-Butylbenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Tetrachloroethene | 0.0016 | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Tetrahydrofuran | 0.10 U | 0.10 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Toluene | 0.0021 | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| trans-1,2-Dichloroethene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| trans-1,3-Dichloropropene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| trans-1,4-Dichloro-2-Butene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Trichloroethene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Trichlorofluoromethane | 0.070 | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Vinyl acetate | 0.050 U | 0.050 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Vinyl chloride | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/18/01 | HNL |
| Surrogates | | | | | | | | |
| 1,2-Dichloroethane-D4 <Surr> | 116 | | % | SW-846 8260B | 77.7-122.3 | 09/17/01 | 09/18/01 | HNL |
| 4-Bromofluorobenzene <Surr> | 100 | | % | SW-846 8260B | 89.3-107.7 | 09/17/01 | 09/18/01 | HNL |
| Dibromofluoromethane <Surr> | 102 | | % | SW-846 8260B | 84.6-117.9 | 09/17/01 | 09/18/01 | HNL |
| Toluene-d8 <Surr> | 101 | | % | SW-846 8260B | 90.9-107.1 | 09/17/01 | 09/18/01 | HNL |



CT&E Ref.# 3014265005
 Client Name Shannon & Wilson
 Project Name# Old Steese (1015740)
 Client Sample ID 1076-0906-WP9
 Matrix Aqueous
 Ordered By

Client PO#
 Printed Date/Time 09/21/2001 9:20
 Collected Date/Time 09/06/2001 16:30
 Received Date/Time 09/11/2001 13:00
 Technical Director Stephen C. Ede

Released By

Denise Calafato

Sample Remarks:

Sample analyzed at the Ludington, Michigan laboratory of CT&E Environmental Services Inc.

| Parameter | Results | PQL | Units | Method | Allowable Limits | Prep Date | Analysis Date | Init |
|--|----------|--------|-------|--------------|------------------|-----------|---------------|------|
| GC/MS VOLATILE ORGANIC ANALYSIS | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 1,1,1-Trichloroethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 1,1,2,2-Tetrachloroethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 1,1,2-Trichloroethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 1,1-Dichloroethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 1,1-Dichloroethylene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 1,1-Dichloropropene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 1,2,3-Trichlorobenzene | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 1,2,3-Trichloropropane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 1,2,4-Trichlorobenzene | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 1,2,4-Trimethylbenzene | 0.0019 | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 1,2-Dibromo-3-chloropropane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 1,2-Dibromoethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 1,2-Dichlorobenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 1,2-Dichloroethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 1,2-Dichloropropane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 1,3,5-Trimethylbenzene | 0.0015 | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 1,3-Dichlorobenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 1,3-Dichloropropane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 1,4-Dichlorobenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 1,2-Dichloropropane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 2-Butanone (M E K) | 0.025 U | 0.025 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 2-chloroethylvinyl ether | 0.010 U | 0.010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 2-Chlorotoluene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 2-Hexanone | 0.050 U | 0.050 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 2-Methylnaphthalene | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 2-Chlorotoluene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 2-Isopropyltoluene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 4-Methyl-2-pentanone (MIBK) | 0.050 U | 0.050 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Acetone | 0.025 U | 0.025 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Acrolein | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |



CT&E Ref.# 3014265005
 Client Name Shannon & Wilson
 Project Name/# Old Steese (1015740)
 Client Sample ID 1076-0906-WP9
 Matrix Aqueous
 Ordered By

Client PO#
 Printed Date/Time 09/21/2001 9:20
 Collected Date/Time 09/06/2001 16:30
 Received Date/Time 09/11/2001 13:00
 Technical Director Stephen C. Ede

| Parameter | Results | PQL | Units | Method | Allowable Limits | Prep Date | Analysis Date | Init |
|--|----------|--------|-------|--------------|------------------|-----------|---------------|------|
| GC/MS VOLATILE ORGANIC ANALYSIS | | | | | | | | |
| Acrylonitrile | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Allyl chloride | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Benzene | D 0.42 | 0.010 | mg/L | SW-846 8260B | | 09/18/01 | 09/20/01 | HNL |
| Bromobenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Bromochloromethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Bromodichloromethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Bromoform | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Bromomethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Carbon disulfide | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Carbon tetrachloride | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Chlorobenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Chloroethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Chloroform | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Chloromethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| cis-1,2-Dichloroethene | 0.0014 | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| cis-1,3-Dichloropropene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Dibromochloromethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Dibromomethane | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Dichlorodifluoromethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Diethyl Ether | 0.010 U | 0.010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Diisopropyl ether | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Ethylbenzene | 0.049 | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Hexachlorobutadiene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Hexachloroethane | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Isopropylbenzene (Cumene) | 0.0053 | 0.0050 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Methyl iodide | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Methyl Tertiary Butyl Ether | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Methylene chloride | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| n-Butylbenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| n-Propylbenzene | 0.0096 | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Naphthalene | 0.0051 | 0.0050 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| o-Xylene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| P & M -Xylene | 0.0026 | 0.0020 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| sec-Butylbenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |



CT&E Ref.# 3014265005
 Client Name Shannon & Wilson
 Project Name/# Old Steese (1015740)
 Client Sample ID 1076-0906-WP9
 Matrix Aqueous
 Ordered By

Client PO#
 Printed Date/Time 09/21/2001 9:20
 Collected Date/Time 09/06/2001 16:30
 Received Date/Time 09/11/2001 13:00
 Technical Director Stephen C. Ede

| Parameter | Results | PQL | Units | Method | Allowable Limits | Prep Date | Analysis Date | Init |
|--|----------|--------|-------|--------------|------------------|-----------|---------------|------|
| GC/MS VOLATILE ORGANIC ANALYSIS | | | | | | | | |
| Styrene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| tert-Butylbenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Tetrachloroethene | 0.0015 | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Tetrahydrofuran | 0.10 U | 0.10 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Toluene | 0.0022 | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| trans-1,2-Dichloroethene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| trans-1,3-Dichloropropene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| trans-1,4-Dichloro-2-Butene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Trichloroethene | 0.0011 | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Trichlorofluoromethane | 0.059 | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Vinyl acetate | 0.050 U | 0.050 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Vinyl chloride | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Surrogates | | | | | | | | |
| 1,2-Dichloroethane-D4 <Surr> | 122 | | % | SW-846 8260B | 77.7-122.3 | 09/18/01 | 09/18/01 | HNL |
| 4-Bromofluorobenzene <Surr> | 96.8 | | % | SW-846 8260B | 89.3-107.7 | 09/18/01 | 09/18/01 | HNL |
| Dibromofluoromethane <Surr> | 104 | | % | SW-846 8260B | 84.6-117.9 | 09/18/01 | 09/18/01 | HNL |
| Toluene-d8 <Surr> | 101 | | % | SW-846 8260B | 90.9-107.1 | 09/18/01 | 09/18/01 | HNL |



CT&E Ref.# 3014265006
 Client Name Shannon & Wilson
 Project Name/# Old Steese (1015740)
 Client Sample ID 1076-0907-WP3
 Matrix Aqueous
 Ordered By

Client PO#
 Printed Date/Time 09/21/2001 9:20
 Collected Date/Time 09/07/2001 14:25
 Received Date/Time 09/11/2001 13:00
 Technical Director Stephen C. Ede

Released By *Denise Calafato*

Sample Remarks:
 Sample analyzed at the Ludington, Michigan laboratory of CT&E Environmental Services Inc.

| Parameter | Results | PQL | Units | Method | Allowable Limits | Prep Date | Analysis Date | Init |
|--|----------|--------|-------|--------------|------------------|-----------|---------------|------|
| GC/MS VOLATILE ORGANIC ANALYSIS | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 1,1,1-Trichloroethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 1,1,2,2-Tetrachloroethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 1,1,2-Trichloroethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 1,1-Dichloroethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 1,1-Dichloroethylene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 1,1-Dichloropropene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 1,2,3-Trichlorobenzene | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 1,2,3-Trichloropropane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 1,2,4-Trichlorobenzene | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 1,2,4-Trimethylbenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 1,2-Dibromo-3-chloropropane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 1,2-Dibromoethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 1,2-Dichlorobenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 1,2-Dichloroethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 1,2-Dichloropropane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 1,3,5-Trimethylbenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 1,3-Dichlorobenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 1,3-Dichloropropane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 1,4-Dichlorobenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 2,2-Dichloropropane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 2-Butanone (M E K) | 0.025 U | 0.025 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 2-chloroethylvinyl ether | 0.010 U | 0.010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 2-Chlorotoluene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 2-Hexanone | 0.050 U | 0.050 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 2-Methylnaphthalene | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 4-Chlorotoluene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 4-Isopropyltoluene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| 4-Methyl-2-pentanone (MIBK) | 0.050 U | 0.050 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Acetone | 0.025 U | 0.025 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Acrolein | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |



CT&E Ref.# 3014265006
 Client Name Shannon & Wilson
 Project Name/# Old Steese (1015740)
 Client Sample ID 1076-0907-WP3
 Matrix Aqueous
 Ordered By

Client PO#
 Printed Date/Time 09/21/2001 9:20
 Collected Date/Time 09/07/2001 14:25
 Received Date/Time 09/11/2001 13:00
 Technical Director Stephen C. Ede

| Parameter | Results | PQL | Units | Method | Allowable Limits | Prep Date | Analysis Date | Init |
|--|----------|--------|-------|--------------|------------------|-----------|---------------|------|
| GC/MS VOLATILE ORGANIC ANALYSIS | | | | | | | | |
| Acrylonitrile | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Allyl chloride | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Benzene | D 0.17 | 0.0050 | mg/L | SW-846 8260B | | 09/18/01 | 09/20/01 | HNL |
| Bromobenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Bromochloromethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Bromodichloromethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Bromoform | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Bromomethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Carbon disulfide | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Carbon tetrachloride | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Chlorobenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Chloroethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Chloroform | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Chloromethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| cis-1,2-Dichloroethene | 0.0012 | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| cis-1,3-Dichloropropene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Dibromochloromethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Dibromomethane | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Dichlorodifluoromethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Diethyl Ether | 0.010 U | 0.010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Diisopropyl ether | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Ethylbenzene | 0.012 | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Hexachlorobutadiene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Hexachloroethane | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Isopropylbenzene (Cumene) | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Methyl iodide | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Methyl Tertiary Butyl Ether | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Methylene chloride | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| n-Butylbenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| n-Propylbenzene | 0.0051 | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Naphthalene | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| o-Xylene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| p & m -Xylene | 0.0020 U | 0.0020 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| sec-Butylbenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |



CT&E Ref.# 3014265006
 Client Name Shannon & Wilson
 Project Name/# Old Steese (1015740)
 Client Sample ID 1076-0907-WP3
 Matrix Aqueous
 Ordered By

Client PO#
 Printed Date/Time 09/21/2001 9:20
 Collected Date/Time 09/07/2001 14:25
 Received Date/Time 09/11/2001 13:00
 Technical Director Stephen C. Ede

| Parameter | Results | PQL | Units | Method | Allowable Limits | Prep Date | Analysis Date | Init |
|--|----------|--------|-------|--------------|------------------|-----------|---------------|------|
| GC/MS VOLATILE ORGANIC ANALYSIS | | | | | | | | |
| Styrene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| tert-Butylbenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Tetrachloroethene | 0.0023 | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Tetrahydrofuran | 0.10 U | 0.10 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Toluene | 0.0019 | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| trans-1,2-Dichloroethene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| trans-1,3-Dichloropropene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| trans-1,4-Dichloro-2-Butene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Trichloroethene | 0.0013 | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Trichlorofluoromethane | 0.0021 | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Vinyl acetate | 0.050 U | 0.050 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Vinyl chloride | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/18/01 | 09/18/01 | HNL |
| Surrogates | | | | | | | | |
| 1,2-Dichloroethane-D4 <Surr> | 112 | | % | SW-846 8260B | 77.7-122.3 | 09/18/01 | 09/18/01 | HNL |
| 4-Bromofluorobenzene <Surr> | 99 | | % | SW-846 8260B | 89.3-107.7 | 09/18/01 | 09/18/01 | HNL |
| Dibromofluoromethane <Surr> | 102 | | % | SW-846 8260B | 84.6-117.9 | 09/18/01 | 09/18/01 | HNL |
| Toluene-d8 <Surr> | 100 | | % | SW-846 8260B | 90.9-107.1 | 09/18/01 | 09/18/01 | HNL |



CT&E Ref.# 3014265007
 Client Name Shannon & Wilson
 Project Name/# Old Steese (1015740)
 Client Sample ID 1076-0907-WP2
 Matrix Aqueous
 Ordered By

Client PO#
 Printed Date/Time 09/21/2001 9:20
 Collected Date/Time 09/07/2001 14:45
 Received Date/Time 09/11/2001 13:00
 Technical Director Stephen C. Ede

Released By *Denise Calafato*

Sample Remarks:
 Sample analyzed at the Ludington, Michigan laboratory of CT&E Environmental Services Inc.

| Parameter | Results | PQL | Units | Method | Allowable Limits | Prep Date | Analysis Date | Init |
|--|------------|--------|-------|--------------|------------------|-----------|---------------|------|
| GC/MS VOLATILE ORGANIC ANALYSIS | | | | | | | | |
| 1,1,2-Tetrachloroethane | D 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| 1,1,1-Trichloroethane | D 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| 1,1,2,2-Tetrachloroethane | D 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| 1,1,2-Trichloroethane | D 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| 1,1-Dichloroethane | D 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| 1,1-Dichloroethylene | D 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| 1,1-Dichloropropene | D 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| 1,2,3-Trichlorobenzene | D 0.025 U | 0.025 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| 1,2,3-Trichloropropane | D 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| 1,2,4-Trichlorobenzene | D 0.025 U | 0.025 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| 1,2,4-Trimethylbenzene | D 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| 1,2-Dibromo-3-chloropropane | D 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| 1,2-Dibromoethane | D 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| 1,2-Dichlorobenzene | D 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| 1,2-Dichloroethane | D 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| 1,2-Dichloropropane | D 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| 1,3,5-Trimethylbenzene | D 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| 1,3-Dichlorobenzene | D 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| 1,3-Dichloropropane | D 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| 1,4-Dichlorobenzene | D 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| 1,2-Dichloropropane | D 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| 2-Butanone (M E K) | D 0.13 U | 0.13 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| 2-chloroethylvinyl ether | D 0.050 U | 0.050 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| o-Chlorotoluene | D 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| 2-Hexanone | D 0.25 U | 0.25 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| 2-Methylnaphthalene | D 0.025 U | 0.025 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| p-Chlorotoluene | D 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Isopropyltoluene | D 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| 4-Methyl-2-pentanone (MIBK) | D 0.25 U | 0.25 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| acetone | D 0.13 U | 0.13 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Acrofein | D 0.025 U | 0.025 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |



CT&E Ref.# 3014265007
 Client Name Shannon & Wilson
 Project Name/# Old Steese (1015740)
 Client Sample ID 1076-0907-WP2
 Matrix Aqueous
 Ordered By

Client PO#
 Printed Date/Time 09/21/2001 9:20
 Collected Date/Time 09/07/2001 14:45
 Received Date/Time 09/11/2001 13:00
 Technical Director Stephen C. Ede

| Parameter | Results | PQL | Units | Method | Allowable Limits | Prep Date | Analysis Date | Init |
|--|------------|--------|-------|--------------|------------------|-----------|---------------|------|
| GC/MS VOLATILE ORGANIC ANALYSIS | | | | | | | | |
| Acrylonitrile | D 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Allyl chloride | D 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Benzene | D 0.33 | 0.0050 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Bromobenzene | D 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Bromochloromethane | D 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Bromodichloromethane | D 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Bromoform | D 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Bromomethane | D 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Carbon disulfide | D 0.025 U | 0.025 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Carbon tetrachloride | D 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Chlorobenzene | D 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Chloroethane | D 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Chloroform | D 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Chloromethane | D 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| cis-1,2-Dichloroethene | D 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| cis-1,3-Dichloropropene | D 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Dibromochloromethane | D 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Dibromomethane | D 0.025 U | 0.025 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Dichlorodifluoromethane | D 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Diethyl Ether | D 0.050 U | 0.050 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Diisopropyl ether | D 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Ethylbenzene | D 0.077 | 0.0050 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Hexachlorobutadiene | D 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Hexachloroethane | D 0.025 U | 0.025 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Isopropylbenzene (Cumene) | D 0.025 U | 0.025 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Methyl iodide | D 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Methyl Tertiary Butyl Ether | D 0.025 U | 0.025 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Methylene chloride | D 0.025 U | 0.025 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| n-Butylbenzene | D 0.011 | 0.0050 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| n-Propylbenzene | D 0.023 | 0.0050 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Naphthalene | D 0.025 U | 0.025 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| o-Xylene | D 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| P & M -Xylene | D 0.010 U | 0.010 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| sec-Butylbenzene | D 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |



CT&E Ref.# 3014265007
 Client Name Shannon & Wilson
 Project Name/# Old Steese (1015740)
 Client Sample ID 1076-0907-WP2
 Matrix Aqueous
 Ordered By

Client PO#
 Printed Date/Time 09/21/2001 9:20
 Collected Date/Time 09/07/2001 14:45
 Received Date/Time 09/11/2001 13:00
 Technical Director Stephen C. Ede

| Parameter | Results | PQL | Units | Method | Allowable Limits | Prep Date | Analysis Date | Init |
|--|------------|--------|-------|--------------|------------------|-----------|---------------|------|
| GC/MS VOLATILE ORGANIC ANALYSIS | | | | | | | | |
| Benzene | D 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| tert-Butylbenzene | D 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Tetrachloroethene | D 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Tetrahydrofuran | D 0.50 U | 0.50 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Toluene | D 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| trans-1,2-Dichloroethene | D 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| trans-1,3-Dichloropropene | D 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| trans-1,4-Dichloro-2-Butene | D 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Dichloroethene | D 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Dichlorofluoromethane | D 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Vinyl acetate | D 0.25 U | 0.25 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Vinyl chloride | D 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/20/01 | 09/20/01 | HNL |
| Surrogates | | | | | | | | |
| 1,2-Dichloroethane-D4 <Surr> | 101 | | % | SW-846 8260B | 77.7-122.3 | 09/20/01 | 09/20/01 | HNL |
| Bromofluorobenzene <Surr> | 99.3 | | % | SW-846 8260B | 89.3-107.7 | 09/20/01 | 09/20/01 | HNL |
| Dibromofluoromethane <Surr> | 93.6 | | % | SW-846 8260B | 84.6-117.9 | 09/20/01 | 09/20/01 | HNL |
| Chlorobenzene-d8 <Surr> | 99.7 | | % | SW-846 8260B | 90.9-107.1 | 09/20/01 | 09/20/01 | HNL |



CT&E Ref.# 3014265008
 Client Name Shannon & Wilson
 Project Name/# Old Steese (1015740)
 Client Sample ID 1076-0907-WP1
 Matrix Aqueous
 Ordered By

Client PO#
 Printed Date/Time 09/21/2001 9:20
 Collected Date/Time 09/07/2001 15:10
 Received Date/Time 09/11/2001 13:00
 Technical Director Stephen C. Ede

Released By *Denise Califano*

Sample Remarks:
 Sample analyzed at the Ludington, Michigan laboratory of CT&E Environmental Services Inc.

| Parameter | Results | PQL | Units | Method | Allowable Limits | Prep Date | Analysis Date | Init |
|--|----------|--------|-------|--------------|------------------|-----------|---------------|------|
| GC/MS VOLATILE ORGANIC ANALYSIS | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| 1,1,1-Trichloroethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| 1,1,2,2-Tetrachloroethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| 1,1,2-Trichloroethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| 1,1-Dichloroethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| 1,1-Dichloroethylene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| 1,1-Dichloropropene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| 1,2,3-Trichlorobenzene | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| 1,2,3-Trichloropropane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| 1,2,4-Trichlorobenzene | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| 1,2,4-Trimethylbenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| 1,2-Dibromo-3-chloropropane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| 1,2-Dibromoethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| 1,2-Dichlorobenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| 1,2-Dichloroethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| 1,2-Dichloropropane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| 1,3,5-Trimethylbenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| 1,3-Dichlorobenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| 1,3-Dichloropropane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| 1,4-Dichlorobenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| 2,2-Dichloropropane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| 2-Butanone (M E K) | 0.025 U | 0.025 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| 2-chloroethylvinyl ether | 0.010 U | 0.010 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| 2-Chlorotoluene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| 2-Hexanone | 0.050 U | 0.050 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| 2-Methylnaphthalene | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| 4-Chlorotoluene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| 4-Isopropyltoluene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| 4-Methyl-2-pentanone (MIBK) | 0.050 U | 0.050 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| Acetone | 0.025 U | 0.025 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| Acrolein | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |



CT&E Ref.# 3014265008
 Client Name Shannon & Wilson
 Project Name/# Old Steese (1015740)
 Client Sample ID 1076-0907-WP1
 Matrix Aqueous
 Ordered By

Client PO#
 Printed Date/Time 09/21/2001 9:20
 Collected Date/Time 09/07/2001 15:10
 Received Date/Time 09/11/2001 13:00
 Technical Director Stephen C. Ede

| Parameter | Results | PQL | Units | Method | Allowable Limits | Prep Date | Analysis Date | Init |
|--|----------|--------|-------|--------------|------------------|-----------|---------------|------|
| GC/MS VOLATILE ORGANIC ANALYSIS | | | | | | | | |
| Acrylonitrile | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| Allyl chloride | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| Benzene | 0.0028 | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| Bromobenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| Bromochloromethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| Bromodichloromethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| Bromoform | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| Bromomethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| Carbon disulfide | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| Carbon tetrachloride | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| Chlorobenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| Chloroethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| Chloroform | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| Chloromethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| Cis-1,2-Dichloroethene | 0.0036 | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| Cis-1,3-Dichloropropene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| Dibromochloromethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| Dibromomethane | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| Dichlorodifluoromethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| Diethyl Ether | 0.010 U | 0.010 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| Diisopropyl ether | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| Ethylbenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| Hexachlorobutadiene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| Hexachloroethane | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| Isopropylbenzene (Cumene) | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| Methyl iodide | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| Methyl Tertiary Butyl Ether | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| Methylene chloride | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| n-Butylbenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| n-Propylbenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| Naphthalene | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| o-Xylene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| p & m-Xylene | 0.0020 U | 0.0020 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| sec-Butylbenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |



CT&E Ref.# 3014265008
 Client Name Shannon & Wilson
 Project Name/# Old Steese (1015740)
 Client Sample ID 1076-0907-WP1
 Matrix Aqueous
 Ordered By

Client PO#
 Printed Date/Time 09/21/2001 9:20
 Collected Date/Time 09/07/2001 15:10
 Received Date/Time 09/11/2001 13:00
 Technical Director Stephen C. Ede

| Parameter | Results | PQL | Units | Method | Allowable Limits | Prep Date | Analysis Date | Init |
|--|----------|--------|-------|--------------|------------------|-----------|---------------|------|
| GC/MS VOLATILE ORGANIC ANALYSIS | | | | | | | | |
| Styrene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| tert-Butylbenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| Tetrachloroethene | 0.0019 | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| Tetrahydrofuran | 0.10 U | 0.10 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| Toluene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| trans-1,2-Dichloroethene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| trans-1,3-Dichloropropene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| trans-1,4-Dichloro-2-Butene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| Trichloroethene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| Trichlorofluoromethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| Vinyl acetate | 0.050 U | 0.050 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| Vinyl chloride | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/19/01 | HNL |
| Surrogates | | | | | | | | |
| 1,2-Dichloroethane-D4 <Surr> | 103 | | % | SW-846 8260B | 77.7-122.3 | 09/19/01 | 09/19/01 | HNL |
| 4-Bromofluorobenzene <Surr> | 98.7 | | % | SW-846 8260B | 89.3-107.7 | 09/19/01 | 09/19/01 | HNL |
| Dibromofluoromethane <Surr> | 103 | | % | SW-846 8260B | 84.6-117.9 | 09/19/01 | 09/19/01 | HNL |
| Toluene-d8 <Surr> | 100 | | % | SW-846 8260B | 90.9-107.1 | 09/19/01 | 09/19/01 | HNL |



CT&E Ref.# 3014265009
 Client Name Shannon & Wilson
 Project Name/# Old Steese (1015740)
 Client Sample ID 1076-0907-WP6
 Matrix Aqueous
 Ordered By

Client PO#
 Printed Date/Time 09/21/2001 9:20
 Collected Date/Time 09/07/2001 15:40
 Received Date/Time 09/11/2001 13:00
 Technical Director Stephen C. Ede

Released By *Denise Calyado*

Sample Remarks:
 Sample analyzed at the Ludington, Michigan laboratory of CT&E Environmental Services Inc.

| Parameter | Results | PQL | Units | Method | Allowable Limits | Prep Date | Analysis Date | Init |
|--|----------|--------|-------|--------------|------------------|-----------|---------------|------|
| GC/MS VOLATILE ORGANIC ANALYSIS | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| 1,1,1-Trichloroethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| 1,1,2,2-Tetrachloroethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| 1,1,2-Trichloroethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| 1,1-Dichloroethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| 1,1-Dichloroethylene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| 1,1-Dichloropropene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| 1,2,3-Trichlorobenzene | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| 1,2,3-Trichloropropane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| 1,2,4-Trichlorobenzene | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| 1,2,4-Trimethylbenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| 1,2-Dibromo-3-chloropropane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| 1,2-Dibromoethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| 1,2-Dichlorobenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| 1,2-Dichloroethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| 1,2-Dichloropropane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| 1,3,5-Trimethylbenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| 1,3-Dichlorobenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| 1,3-Dichloropropane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| 1,4-Dichlorobenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| 1,2-Dichloropropane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| 2-Butanone (M E K) | 0.025 U | 0.025 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| 2-chloroethylvinyl ether | 0.010 U | 0.010 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| o-Chlorotoluene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| 2-Hexanone | 0.050 U | 0.050 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| 2-Methylnaphthalene | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| o-Chlorotoluene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| p-Isopropyltoluene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| 4-Methyl-2-pentanone (MIBK) | 0.050 U | 0.050 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| Acetone | 0.025 U | 0.025 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| Acrolein | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |



CT&E Ref.# 3014265009
 Client Name Shannon & Wilson
 Project Name/# Old Steese (1015740)
 Client Sample ID 1076-0907-WP6
 Matrix Aqueous
 Ordered By

Client PO#
 Printed Date/Time 09/21/2001 9:20
 Collected Date/Time 09/07/2001 15:40
 Received Date/Time 09/11/2001 13:00
 Technical Director Stephen C. Ede

| Parameter | Results | PQL | Units | Method | Allowable Limits | Prep Date | Analysis Date | Init |
|--|----------|--------|-------|--------------|------------------|-----------|---------------|------|
| GC/MS VOLATILE ORGANIC ANALYSIS | | | | | | | | |
| Acrylonitrile | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| Allyl chloride | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| Benzene | 0.016 | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| Bromobenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| Bromochloromethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| Bromodichloromethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| Bromoform | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| Bromomethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| Carbon disulfide | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| Carbon tetrachloride | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| Chlorobenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| Chloroethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| Chloroform | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| Chloromethane | 0.0033 | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| cis-1,2-Dichloroethene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| cis-1,3-Dichloropropene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| Dibromochloromethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| Dibromomethane | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| Dichlorodifluoromethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| Diethyl Ether | 0.010 U | 0.010 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| Diisopropyl ether | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| Ethylbenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| Hexachlorobutadiene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| Hexachloroethane | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| Isopropylbenzene (Cumene) | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| Methyl iodide | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| Methyl Tertiary Butyl Ether | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| Methylene chloride | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| n-Butylbenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| n-Propylbenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| Naphthalene | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| o-Xylene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| P & M -Xylene | 0.0020 U | 0.0020 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| sec-Butylbenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |



CT&E Ref.# 3014265009
 Client Name Shannon & Wilson
 Project Name/# Old Steese (1015740)
 Client Sample ID 1076-0907-WP6
 Matrix Aqueous
 Ordered By

Client PO#
 Printed Date/Time 09/21/2001 9:20
 Collected Date/Time 09/07/2001 15:40
 Received Date/Time 09/11/2001 13:00
 Technical Director Stephen C. Ede

| Parameter | Results | PQL | Units | Method | Allowable Limits | Prep Date | Analysis Date | Init |
|--|----------|--------|-------|--------------|------------------|-----------|---------------|------|
| GC/MS VOLATILE ORGANIC ANALYSIS | | | | | | | | |
| Styrene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| tert-Butylbenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| Tetrachloroethene | 0.011 | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| Tetrahydrofuran | 0.10 U | 0.10 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| Toluene | 0.0020 | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| trans-1,2-Dichloroethene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| trans-1,3-Dichloropropene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| trans-1,4-Dichloro-2-Butene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| Trichloroethene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| Trichlorofluoromethane | 0.0046 | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| Vinyl acetate | 0.050 U | 0.050 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| Vinyl chloride | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/19/01 | 09/20/01 | HNL |
| Surrogates | | | | | | | | |
| 1,2-Dichloroethane-D4 <Surr> | 104 | | % | SW-846 8260B | 77.7-122.3 | 09/19/01 | 09/20/01 | HNL |
| 1-Bromofluorobenzene <Surr> | 98.6 | | % | SW-846 8260B | 89.3-107.7 | 09/19/01 | 09/20/01 | HNL |
| Dibromofluoromethane <Surr> | 103 | | % | SW-846 8260B | 84.6-117.9 | 09/19/01 | 09/20/01 | HNL |
| Toluene-d8 <Surr> | 99.6 | | % | SW-846 8260B | 90.9-107.1 | 09/19/01 | 09/20/01 | HNL |



CT&E Ref.# 3014265010
 Client Name Shannon & Wilson
 Project Name/# Old Steese (1015740)
 Client Sample ID Trip Blank
 Matrix Aqueous
 Ordered By

Client PO#
 Printed Date/Time 09/21/2001 9:20
 Collected Date/Time
 Received Date/Time 09/11/2001 13:00
 Technical Director Stephen C. Ede

Released By *Denise Calyato*

Sample Remarks:
 Sample analyzed at the Ludington, Michigan laboratory of CT&E Environmental Services Inc.

| Parameter | Results | PQL | Units | Method | Allowable Limits | Prep Date | Analysis Date | Init |
|--|----------|--------|-------|--------------|------------------|-----------|---------------|------|
| GC/MS VOLATILE ORGANIC ANALYSIS | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| 1,1,1-Trichloroethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| 1,1,2,2-Tetrachloroethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| 1,1,2-Trichloroethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| 1,1-Dichloroethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| 1,1-Dichloroethylene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| 1,1-Dichloropropene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| 1,2,3-Trichlorobenzene | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| 1,2,3-Trichloropropane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| 1,2,4-Trichlorobenzene | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| 1,2,4-Trimethylbenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| 1,2-Dibromo-3-chloropropane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| 1,2-Dibromoethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| 1,2-Dichlorobenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| 1,2-Dichloroethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| 1,2-Dichloropropane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| 1,3,5-Trimethylbenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| 1,3-Dichlorobenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| 1,3-Dichloropropane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| 1,4-Dichlorobenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| 2,2-Dichloropropane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| 2-Butanone (M E K) | 0.025 U | 0.025 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| 2-chloroethylvinyl ether | 0.010 U | 0.010 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| 2-Chlorotoluene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| 2-Hexanone | 0.050 U | 0.050 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| 2-Methylnaphthalene | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| 4-Chlorotoluene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| 4-Isopropyltoluene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| 4-Methyl-2-pentanone (MIBK) | 0.050 U | 0.050 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| Acetone | 0.025 U | 0.025 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| Acrolein | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |



CT&E Ref.# 3014265010
 Client Name Shannon & Wilson
 Project Name/# Old Steese (1015740)
 Client Sample ID Trip Blank
 Matrix Aqueous
 Ordered By

Client PO#
 Printed Date/Time 09/21/2001 9:20
 Collected Date/Time
 Received Date/Time 09/11/2001 13:00
 Technical Director Stephen C. Ede

| Parameter | Results | PQL | Units | Method | Allowable Limits | Prep Date | Analysis Date | Init |
|--|----------|--------|-------|--------------|------------------|-----------|---------------|------|
| GC/MS VOLATILE ORGANIC ANALYSIS | | | | | | | | |
| Acrylonitrile | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| Allyl chloride | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| Benzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| Bromobenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| Bromochloromethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| Bromodichloromethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| Bromoform | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| Bromomethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| Carbon disulfide | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| Carbon tetrachloride | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| Chlorobenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| Chloroethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| Chloroform | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| Chloromethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| cis-1,2-Dichloroethene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| cis-1,3-Dichloropropene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| Dibromochloromethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| Dibromomethane | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| Dichlorodifluoromethane | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| Diethyl Ether | 0.010 U | 0.010 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| Diisopropyl ether | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| Ethylbenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| Hexachlorobutadiene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| Hexachloroethane | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| Isopropylbenzene (Cumene) | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| Methyl iodide | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| Methyl Tertiary Butyl Ether | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| Methylene chloride | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| n-Butylbenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| n-Propylbenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| Naphthalene | 0.0050 U | 0.0050 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| o-Xylene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| p & m -Xylene | 0.0020 U | 0.0020 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |
| sec-Butylbenzene | 0.0010 U | 0.0010 | mg/L | SW-846 8260B | | 09/17/01 | 09/17/01 | HNL |



CT&E Ref.# 3014265010
Client Name Shannon & Wilson
Project Name/# Old Steese (1015740)
Client Sample ID Trip Blank
Matrix Aqueous
Ordered By

Client PO#
Printed Date/Time 09/21/2001 9:20
Collected Date/Time
Received Date/Time 09/11/2001 13:00
Technical Director Stephen C. Ede

Table with columns: Parameter, Results, PQL, Units, Method, Allowable Limits, Prep Date, Analysis Date, Init. Includes sections for GC/MS VOLATILE ORGANIC ANALYSIS and Surrogates.

1015740



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

2065 Hill Road Fairbanks, AK 99707 (907) 479-0600
 5430 Fairbanks Street, Suite 3 Anchorage, AK 99518 (907) 561-2120

Chain of Custody Record

Page 1 of 1
 Laboratory CT&E
 Attn: Bill A

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

| Sample Identity | Lab No. | pm Time | Date Sampled | Comp. Grab | VOCs | 2260 | Total Number of Containers | Remarks/Matrix |
|-----------------|---------|------------|-----------------|---------------|------|------|-------------------------------|----------------|
| 1076-0906-WP4 | (1) | 3:30 | 9-6 | X | X | | 3 | Water |
| 1076-0906-WP5 | (2) | 3:10 | 9-6 | X | X | | 3 | |
| 1076-0906-WP7 | (3) | 3:55 | 9-6 | X | X | | 3 | |
| 1076-0906-WP8 | (4) | 4:25 | 9-6 | X | X | | 3 | |
| 1076-0906-WP9 | (5) | 4:30 | 9-6 | X | X | | 3 | |
| 1076-0907-WP3 | (6) | 2:25 | 9-7 | X | X | | 3 | |
| 1076-0907-WP2 | (7) | 2:45 | 9-7 | X | X | | 3 | |
| 1076-0907-WP1 | (8) | 3:10 | 9-7 | X | X | | 3 | |
| 1076-0907-WP6 | (9) | 3:40 | 9-7 | X | X | | 3 | |
| Tr.p Blank | (10) | | | X | X | | 3 | |

| Project Information | Sample Receipt | Relinquished By: 1 | Relinquished By: 2 | Relinquished By: 3 |
|--|--|--|--|---------------------------------|
| Project Number: <u>31-1-11076-003</u> | Total Number of Containers | Signature: <u>[Signature]</u> Time: <u>16:45</u> | Signature: <u>[Signature]</u> Time: <u>16:15</u> | Signature: _____ Time: _____ |
| Project Name: <u>230 Old Steege</u> | COC Seals/Intact? <u>Y/N/A</u> | Printed Name: _____ Date: <u>9-7-01</u> | Printed Name: <u>WILLIAM T ANDREWS</u> Date: <u>9-7-01</u> | Printed Name: _____ Date: _____ |
| Contact: <u>Chris Darrak</u> | Received Good Cond. <u>Cold</u> <u>260</u> | Company: <u>SEW FBX</u> | Company: <u>CT&E</u> | Company: _____ |
| Ongoing Project? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> | Delivery Method: <u>HAND</u> | Received By: 1 | Received By: 2 | Received By: 3 |
| Sampler: <u>MSL</u> | (attach shipping bill, if any) | Signature: <u>[Signature]</u> Time: <u>16:45</u> | Signature: _____ Time: _____ | Signature: _____ Time: _____ |
| Instructions | | Printed Name: <u>WILLIAM T ANDREWS</u> Date: <u>9-7-01</u> | Printed Name: _____ Date: _____ | Printed Name: _____ Date: _____ |
| Requested Turn Around Time: <u>STANDARD</u> | | Company: <u>CT&E</u> | Company: _____ | Company: _____ |
| Special Instructions: <u>PO 405987</u> | | | | |

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



Yes No

Are samples RUSH, priority, or within 72 hrs. of hold time? Yes No
 If yes have you done e-mail notification? Yes No
 Are samples within 24 hrs. of hold time or due date? Yes No
 If yes, have you spoken with Supervisor? Yes No
 Are there any problems (e.g., lds, analyses)? Yes No
 Were samples preserved correctly and pH verified? Yes No

Has Project Manager been notified of problems? Yes No
 Is this an ACOE / AFCOE / ADEC project? Yes No
 Will a data package be required? Yes No
 If this is for PWS, provide PWSID. _____
 Is there a quote for this project? _____
 Will courier charges apply? Yes No
 Completed by (sign): Justin G. [Signature] (print): JUSTIN G. [Signature]

*****The following must be completed for all ACOE & AFCOE: *****

Yes No

Is received temperature $4 \pm 2^{\circ}\text{C}$? Temp: _____
 Thermometer used: _____
 Was there an airbill, etc.? Note #: _____
 Was cooler sealed with custody seals? Fax'd to COE? _____
 # / where: _____
 Were seals intact upon arrival? _____
 Was there a COC with cooler? _____
 Was the COC filled out properly? _____
 Did the COC indicate ACOE / AFCOE project? (If applicable) _____
 Did the COC and samples correspond? _____
 Were all samples packed to prevent breakage? _____
 packing material: _____
 Were all samples unbroken and clearly labeled? _____
 Were all samples sealed in separate plastic bags? _____
 Were all bottles for volatiles free of headspace? _____
 Were correct container / sample sizes submitted? _____
 Is sample condition good? _____
 Was client notified of problems? (Specify below) _____

Individual contacted: _____
 Date / Time: _____
 Phone / Fax: _____

Due Date: 9/18/01
 Received Date/Time: 9/20/01 16:45
 Received Temperature: 2.68
 Matrix of each Sample: # 1 - # 9

Trip Blank 1 # ID _____
 BMS/BMSD _____
 Additional Sample Remarks: _____
 Extra Sample Volume? _____
 Limited Sample Volume? _____
 Field pres'd for volatiles? _____
 Field-filtered for dissolved _____
 Lab-filtered for dissolved _____
 Ref Lab required? CTE/MLI

Notes: _____

of each Container Received:

- 950 ml amber unpres'd _____
- 950 ml amber w / HCl _____
- 500 ml amber w / H₂SO₄ _____
- 1L cubics unpres'd _____
- 1L cubics w / HNO₃ _____
- 1L cubics w / H₂SO₄ _____
- 1L cubics w / NaOH + ZnAc _____
- 120 ml coil bottles _____
- 60 ml Nalgene _____
- 8 oz amber unpres'd _____
- 4 oz amber unpres'd _____
- 4 oz w / septa w / MeOH _____
- 40 ml vials w / HCl 30
- Other (specify) _____
- Other (specify) _____

TO BE COMPLETED IN ANCHORAGE UPON AIRRIVAL FROM FAIRBANKS:
 DATE / TIME: _____
 COOLER TEMP: _____
 SYSTEMS CONTACT: YES / NO # / WHERE: _____