

**INTERIM REPORT  
SIX MILE RICHARDSON HIGHWAY  
GROUNDWATER ASSESSMENT**

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**INTERIM REPORT  
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**1.0 INTRODUCTION**

This interim report presents the results of groundwater assessment activities in the Six Mile Richardson Highway area, approximately 6 miles southeast of Fairbanks, Alaska. This work was performed for the Alaska Department of Environmental Conservation (ADEC) under Notice to Proceed 1880175301A under Term Contract 18801753 for site assessments. The objective of this work was to evaluate the impact of trichloroethylene (TCE)-contaminated groundwater, previously identified in the vicinity of 6.5-mile Richardson Highway, on residential and commercial water supply wells downgradient of that area. This work was conducted in general accordance with our proposal dated May 16, 1995; our Project Work Plan dated July 28, 1994 (developed for Shannon & Wilson's 1994 site assessment work at the McCall property); and our ADEC-approved Quality Assurance Program Plan (QAPP) for underground storage tank work.

Only the results of residential and commercial drinking water supply well sampling and analyses are presented in this report. Other tasks described in our May 16 proposal include sampling existing groundwater monitoring wells, and the installation and sampling of additional groundwater monitoring wells in the vicinity of suspected TCE source areas and within the TCE plume area. These other tasks have not been completed by the time of this report, and their results will be presented in a future report.

The residential and commercial drinking water supply well sampling was conducted in two phases. During the initial phase, samples were collected from 41 residences and businesses downgradient from the suspected source areas between June 23, 1995, and August 2, 1995. Based on the results of analytical testing of these samples, a supplemental round of sampling was conducted between September 25, 1995, and October 15, 1995, in an attempt to include every

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well within the area bounded by the Old Richardson Highway on the north, the New Richardson Highway on the south, Badger Road on the west, and Davison Street on the east.

## 2.0 BACKGROUND

This work was conducted for the purpose of further investigating contaminated groundwater identified during previous environmental studies at properties located at approximately 6.5-mile New Richardson Highway. The study area for the current investigation involves an area about 1 mile in length, which encompasses approximately 0.45 square miles at about 6- to 6.5-Mile New Richardson Highway in Fairbanks, Alaska (Figure 1). Previous environmental investigations conducted in this area have focused on the McCall property located at about 6.5 Mile. Although that site has often been suggested as the sole source of the groundwater contamination in the area, based on current information, this may not be accurate. As described in Shannon & Wilson's April 28, 1995, Environmental Site Assessment report for the McCall property, data collected during that site assessment suggested the presence of several potential source areas not located on the McCall property. These potential source areas may have caused contamination of groundwater by TCE and other compounds, none of which have been found to date on the McCall property in concentrations high enough to have contaminated the groundwater. For this reason, the current investigation has been renamed the "Six Mile Richardson Highway Groundwater Assessment." A brief summary of previous environmental investigations in the area is presented below.

Contamination of groundwater in the area by TCE was first discovered in 1987, when ADEC sampled five water supply wells located within a 1,000-foot radius west and north of the northern pond located on the McCall property (a sixth well, about  $\frac{3}{4}$  mile upgradient of the site, was also sampled). The sampling was conducted as part of an investigation of alleged open burning of solid wastes at the property, including possible hazardous substances. TCE was detected in wells at two businesses, and not detected in four residential wells. Of the two wells in which TCE was reported, the one located farthest downgradient showed only a low level of

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the compound (0.9 ppb), which at the time would have suggested a limited extent of groundwater contamination. Well owners were informed of the results of this sampling by ADEC at the time.

In 1989, Shannon & Wilson conducted an investigation of the McCall property for the law firm of Staley, DeLisio, Cook, and Sherry. The report of the results of that investigation was provided to ADEC by the law firm on February 2, 1990. The results of that investigation did not show any contamination of the groundwater on the McCall property by TCE. In particular, there was no evidence that drums which had been disposed in a gravel pit on the McCall property were the source of TCE contamination, or that they were the source of any significant levels of contamination by any other compounds for which laboratory tests were performed. Three residential water supply wells to the west of the McCall property were sampled as part of the 1989 investigation. TCE was detected at concentrations of 9.9 to 29 ppb, and the well owners were notified of the test results by the law firm for whom the investigation was being performed.

Shannon & Wilson was hired by ADEC in July 1994 to conduct an investigation, the primary objective of which was to attempt to locate the source of the TCE in groundwater in the vicinity of the McCall property. The final report for this study was issued on April 28, 1995. Nine water supply wells to the west and north of the McCall property were sampled as part of the 1994 work. Three wells contained no detected TCE, and the remaining wells contained TCE at concentrations ranging from 0.34 to 19 ppb. Test results were provided to the well owners.

During the 1994 study the presence of two potential TCE source areas was tentatively identified based on soil gas and groundwater probes installed at the McCall and Holder properties (the Holder property is located immediately west of the McCall Property, see Figure 2) and on groundwater monitoring well and water supply well samples. One source area was suspected to be to the east or southeast of the water supply well on the Holder property, and the other in

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the vicinity of a former generator building on the Holder/McCall property line. Both of these suspected source areas were believed to be shallow (possibly 2 to 10 feet). Although soil contaminated by TCE was not actually found, the locations of the source areas were inferred within a several 100-foot-diameter area based on the results of the groundwater sampling. Groundwater monitoring wells on the McCall property itself were again found not to contain TCE at concentrations above the detection limit. No evidence was found of groundwater contamination originating from a now-filled gravel pit on the southern portion of the McCall property.

Groundwater samples collected from a monitoring well installed on the Walsky property (immediately west of the Holder property), and from the water supply well at the 6-Mile Truck Shop (located immediately west of the Walsky property), contained TCE at significantly higher concentrations than the wells on and immediately downgradient of the Holder property. In addition, 1,1,1-trichloroethane (TCA) and several other compounds which were not present in wells on the Holder property were found in the Walsky and 6-Mile Truck Shop wells. These results inferred the potential presence of one or more additional source areas for those compounds, possibly located in the vicinity of one or both of those properties. The results of analytical testing of groundwater and drinking water samples collected during previous investigations are presented in Appendix A.

Water level data collected from the groundwater monitoring wells located on the McCall, Holder, and Walsky properties, during the summer and winter months of 1994, indicated that groundwater flows in a direction ranging from N38°W to N50°W (i.e., groundwater flows to the northwest). Data collected from the Arctic Surplus Superfund Site remedial investigation work, which is unrelated to this study, also indicated a groundwater flow direction ranging from N40°W to N50°W. The Arctic Surplus site is located immediately outside the northwest corner of the study area, at the northeast corner of Badger Road and the Old Richardson Highway. This groundwater flow direction agrees with information presented by the U.S. Geological

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Survey in a 1982 report on the hydrology of the Badger Road area. We are unaware of any factual conflicting data on groundwater flow direction in the vicinity of 6-Mile Richardson Highway.

For a more complete description of the history of the McCall site, and results of investigations conducted on that and adjacent sites, the reader is referred to Shannon & Wilson's Environmental Site Assessment report for that site, dated April 28, 1995.

Shannon & Wilson's April 1995 report concluded that the originally known plume of TCE-contaminated groundwater in the vicinity of the McCall site was limited in extent, and that TCE concentrations in the groundwater had decreased significantly with time. The report recommended identification and sampling of additional wells in the potentially impacted area, investigation of other possible source areas identified by the 1994 work, and continued monitoring of the original TCE plume. A contract to perform this additional work was awarded to Shannon & Wilson by ADEC on June 2, 1995. This interim report presents the initial results of the current study.

### 3.0 FIELD METHODS

The initial round of water supply well sampling was conducted on properties that were identified downgradient and generally within  $\frac{1}{2}$  mile of the 6-Mile Truck Shop property. A total of 41 wells were sampled during this initial round. Identification of wells in the study area was made using a combination of Fairbanks North Star Borough (FNSB) tax lot map review, aerial photography review, and door-to-door canvassing of residences and businesses. The initial group of well samples was collected between June 23 and 29, 1995, with the remaining samples collected on July 24, August 1, and August 2, 1995. Five of the initial group of wells were resampled on August 1 and 2, 1995, because the original samples collected in June had not been analyzed by the laboratory prior to the expiration of the allowed 2-week holding time.

On September 12, 1995, based on the results of the testing of the initial 41 wells, ADEC issued a health alert covering the area between the Old and New Richardson Highways and Badger Road and Davison Street. As a consequence of the health alert, Shannon & Wilson was requested by ADEC to perform additional sampling of wells within the health alert area. The original group of wells sampled during 1995 had been selected to be a representative group of wells, primarily within a  $\frac{1}{2}$ -mile radius of the 6-Mile Truck Shop. The goal of the followup sampling was to attempt to identify and sample every well within the health alert area.

The possible existence of a total of 118 wells was identified within the health alert area and the immediately adjacent area south of the Richardson Highway, based on properties which appeared to have a residence on them during a drive-through of the entire area. During the period of September 25 through October 12, 1995, an additional 54 wells were sampled, bringing the total number of wells sampled during 1995 to 95. The locations and street addresses of each of the sampled or suspected but unsampled wells is shown in Figure 2. Information regarding the owner or occupant of each property sampled is presented in Table 1.

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The initial 1994 samples were submitted to the laboratory for standard turnaround analysis. Samples collected after issuance of the health alert were submitted for 3-day turnaround rush analysis. An exception was samples collected from wells on vacant properties, or wells which are not currently connected to a water system in a building; these were submitted for standard turnaround analysis.

An attempt was made to collect samples from each well at a location as close to the wellhead as possible, before any water softening or other treatment units. Samples were typically collected from faucets at or near the wellhead. When such faucets either were not present or were inaccessible, samples were collected from the next most readily accessible location. Where present and when possible, aerators were removed from faucets before sampling to prevent possible loss of volatile compounds. At least two samples could only be collected after water had passed through a softener or other treatment unit. Five wells that were unattached to any structure were sampled for this project.

Each well was purged for 5 to 10 minutes by allowing the selected faucet to run for that length of time. The intent was to purge the well, piping, and pressure tank of standing water so that the sample collected would be as representative of the groundwater as possible. Generally the water temperature was measured during this purging, and a relatively constant cold temperature was used as confirmation that the water being sampled was water being pumped directly from the well (as opposed to water which had been standing in the pressure tank). The unattached wells were purged using either a gasoline-powered diaphragm pump or a battery-powered 1½-inch-diameter submersible pump.

Once collected, the samples were stored in a cooler with an ice substitute, at a temperature between 2°C and 6°C, until they could be transported to the analytical laboratory. All of the samples collected for this project were submitted to Commercial Testing and Engineering of Anchorage, Alaska, through their Fairbanks office location. All samples collected for this

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project were analyzed by EPA Method 502.2/524.2, Volatile Organic Compounds (VOCs). Duplicate samples were collected at a frequency of 10 percent, and trip blanks were submitted with each shipment of samples to the laboratory.



#### 4.0 ANALYTICAL RESULTS

A summary of the compounds that were detected in the wells sampled during this study is presented in Table 2, organized by street name and address. In addition, Table 3 presents a summary of the number of occurrences for each compound detected above its detection limit, the highest reported concentration of those occurrences, and the compound's federal or state maximum contaminant level (MCL) for public drinking water supplies, if one has been established. The individual laboratory analytical data reports are presented in their entirety in Appendix B. The laboratory reports do not identify the address or owner's name corresponding to a given sample result. The "Client Sample ID" number in the heading of the laboratory report must be cross-referenced to location in Table 1 or 2. Attention should be paid to the "QC Qual" letter in the column to the right of the "Results" column on the laboratory report. As explained in the footnotes at the end of each laboratory report, a "U" qualifier means that the compound was not detected at the concentration shown (this concentration is the "detection limit" for that compound). A "J" qualifier means that the compound was detected below the range for which the laboratory equipment was calibrated and, therefore, is an estimated value. A "D" qualifier means that the sample had to be diluted to perform the analysis within the equipment calibration range; this should not significantly impact the validity of the result. An "E" qualifer means that the reported value is an estimated concentration. Only one result for this project was flagged with an "E", and had a reported benzene concentration greatly exceeding any other reported benzene concentration.

Concentrations on the laboratory report are expressed in mg/L (milligrams per liter), which correspond to parts per million (ppm). Concentrations in this text are discussed in parts per billion (ppb), which are 1,000 times smaller than a ppm. The concentration in ppb for a given well can be calculated by multiplying the concentration listed on the laboratory report in mg/L (ppm) by 1,000.

The compounds discussed in this section are presented either individually or in groups of related compounds in order to simplify their discussion.

#### **4.1 Trichloroethylene, Dichloroethylene**

TCE is a common solvent or parts degreaser used in automotive body shops, dry cleaners, and pulp and paper industries and in the manufacture of paints, adhesives, and textiles. It may also be found in solvents available for consumer use. It is desirable in part due to its low flammability, low flash point, and superior cleansing ability. It is the most frequently found contaminant at hazardous waste sites on the Environmental Protection Agency's (EPA) National Priorities List (NPL). The concentration of TCE reported in water supply wells throughout the study area is presented in Figure 3.

TCE was reported above the detection limit in 51 of the wells sampled during this study. Of these, 16 were reported to contain TCE in concentrations exceeding the state MCL for TCE of 5 ppb. For reference for the purpose of visualizing this level of contamination, 5 ppb is equivalent to several drops of TCE dissolved in a swimming pool full of water. One gallon of TCE, completely dissolved and dispersed at a uniform concentration of 5 ppb to a depth of 100 feet, could contaminate about 25 acres.

Figure 3 presents the extent of TCE contamination as determined using analytical data collected during this study. The plume identified by a dashed line in Figure 3 delineates the area within which TCE was reported at levels above the detection limit. Wells containing TCE at levels above the MCL are further limited to a narrow width within that plume. The orientation of the plume of TCE in groundwater presented in the figure, in our opinion, confirms the northwesterly direction of groundwater flow, which was measured independently and is discussed in Section 2.0 of this report.

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The currently measured concentrations of TCE decrease with distance to the northwest (i.e., downgradient, in the direction in which the groundwater flows) of the Holder/McCall property boundary. TCE concentrations then increase in the vicinity of the 6-Mile Truck Shop well, and again decrease downgradient from that location. As discussed in Section 2.0 of this report, this situation suggests that there may be multiple source areas for TCE: in the vicinity of the McCall, Holder, Walsky, and 6-Mile Truck Shop properties located at approximately 6.5-mile New Richardson Highway.

At the current time, there is insufficient data from wells in the northwest corner of the 6-Mile Village Subdivision to draw a farthest downgradient end to the TCE plume. However, additional current and historical data is available from the results of sampling of wells for the Arctic Surplus Superfund Site, which is located across the Old Richardson Highway to the north of 6-Mile Village. Sampling of both water supply wells and monitoring wells along the southern and northern boundaries of the Arctic Surplus site, beginning as early as July 1990, have not shown any consistent, recurring instances of TCE either along the southern or northern boundary of the site, implying that the plume of TCE-contaminated groundwater in the 6-Mile area does not extend significantly beyond the northern end of the 6-Mile Village Subdivision.

Additional evidence for the absence of more widespread groundwater contamination in the area was obtained during this current study from the analysis of samples from seven water supply wells on Faultline Avenue and Badger Road, in the vicinity of McPeak's Badger Store (about  $\frac{1}{4}$  mile north of the Arctic Surplus Superfund site). No TCE was detected in any of those samples.

TCE is known to chemically degrade in the environment to other compounds. These breakdown products include 1,1-dichloroethylene, cis-1,2-dichloroethylene, and trans-1,2-dichloroethylene. All three of these compounds were detected in samples collected during this study. Cis-1,2-dichloroethylene was the most prevalent of these three compounds, occurring in 30 of the wells,

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followed by 1,1-dichloroethylene detected in 17 wells, and trans-1,2-dichloroethylene detected in nine wells. No occurrences of dichloroethylene (DCE) exceeded the drinking water MCLs, which are 70, 100, and 7 ppb for the cis-1,2, trans-1,2, and 1,1 isomers of DCE, respectively. The distribution of these three DCE compounds in wells throughout the study area generally corresponds to the location of the TCE plume shown in Figure 2. The highest concentrations of DCE were usually found in the wells with the higher TCE concentrations, and the DCE was generally present at a relatively low percentage of the TCE concentration. However, exceptions occurred where only DCE was present, or it was present at a higher concentration than TCE. The highest concentrations of DCE compounds in the vicinity of the suspected source areas were reported in the well located at the former 6-Mile Truck Shop facility. Only cis-1,2-dichloroethylene was reported above the detection limit in wells upgradient of that location, and only at low (J-flagged or estimated) concentrations, supporting the hypothesis that at least two separate source areas of TCE may exist.

Compared with historical data from well samples collected in the vicinity of the 6.5-Mile Richardson properties, TCE concentrations have dropped in the Holder well (from 29 ppb in 1989 to 7.2 ppb in 1994 to 5.41 ppb and 5.42 ppb in 1995); dropped in the Mason well (from 21 ppb in 1989 to 4.8 ppb in 1994 to 4.6 ppb in 1995) remained essentially constant in the Pailing well (9.9 ppb in 1989, 8.8 ppb in 1994, 8.4 ppb in 1995); and increased in the 6-Mile Truck Shop and ESI wells (from 19 ppb to 22 ppb and from 14 ppb to 19.6 ppb, respectively, in 1994 and 1995). Four other water supply wells in that area (Palmer, McAdoo, Baker, and Averett) have remained at or below the detection limit for TCE in 1994, 1995, and in two cases, 1987. Only one confirmation sample has been collected to date from a well which contained TCE. The concentration of TCE reported in October 1995 was about 15 percent lower than the concentration reported in June 1995.

Concentrations of the cis- and trans-1,2-dichloroethylene compounds have either remained constant or have dropped in each of the wells for which historical data exists.

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A comparison of TCE concentrations versus well depths could be made only where at least two wells, one shallow and one deep, were located in close proximity to each other. Depth information, when known, was provided by property owners and was available for only about half the wells in the study area. This information is presented in Table 4. Five groupings of shallow and deep wells were identified within the TCE plume area: four within the Six Mile Village subdivision and one along Eskimo Museum Lane. The information yielded by such a comparison is inconclusive with regards to whether TCE concentrations may be greater in shallow or deep wells at any one location. Three of the groups of wells suggested that TCE concentrations were greater at depth, and one pair suggested that concentrations were greater in the shallow well. One grouping of three shallow wells and one deep well showed TCE concentrations in the shallow wells less than, equal to, and greater than that reported in the deep well. One must consider, however, the location of wells used in this kind of comparison in relation to each other and to the TCE plume as a whole. While the discussion presented here allows for some general insight on TCE concentration versus well depth, the variability of TCE concentrations in wells that may be closer to or farther from either the suspected source areas or the edge of the plume may detract from the reliability of the resulting conclusions.

The distribution of TCE with depth is a matter of considerable interest, since TCE is denser than water (in technical terms, a dense, nonaqueous phase liquid, or DNAPL, commonly also referred to as a "sinker"). In theory, if a sufficiently large quantity of TCE was spilled at the ground surface, it would infiltrate the soil to the water table and then sink through the soils below the water table, eventually forming a "pool" of liquid TCE on top of the bedrock underlying the aquifer, or pooling on any lower permeability layers within the aquifer. This behavior contrasts with that of oils or fuels, which are less dense than water, and tend to form a layer of liquid product which floats on top of the water table. In the scenario above, if a quantity of TCE sufficiently large to sink deep into the aquifer was spilled, one would expect to find similar concentrations of TCE dissolving into the groundwater both at shallow and deep depths in the aquifer immediately downgradient of the source area.

As a compound like pure TCE (not TCE dissolved in groundwater) passes vertically through the soil, either above or below the water table after it is spilled, a portion of it leaves a residual of liquid TCE in the pore spaces of the soil through which it passes (theoretically, this residual can range from about 1 to 6 cups of TCE per cubic foot of soil). Once all of the spilled TCE has been "trapped" as residual contamination in soil, it stops sinking. Groundwater moving horizontally through the soil containing residual TCE dissolves a small portion of the TCE (TCE is relatively insoluble in water). As this TCE-contaminated groundwater travels downgradient from the source area, the TCE gradually disperses both laterally and deeper into the aquifer. Therefore, if groundwater samples collected immediately downgradient of a source area indicate high concentrations of TCE in the shallow groundwater, and little or no TCE in deeper groundwater, this can be interpreted to mean that a relatively small quantity of TCE was spilled, and liquid TCE has not penetrated very deep into the aquifer. It is for this reason that our 1994 investigation concluded that the source area which appears to be present on the Holder property is at a fairly shallow depth. Since the inferred additional source area or areas farther downgradient have not yet been located, a conclusion regarding their depth can not yet be made.

Another point which should be understood is that once an organic compound such as TCE has been dissolved into the groundwater at low concentrations by water flowing through source area soils containing residual liquid TCE, the dissolved TCE tends to stay in solution. The TCE does not come out of solution and attach itself to sand and gravel soils typical of the aquifer in this area. Thus, in our opinion, there should be no measurable contamination of soil downgradient from the TCE source areas as the result of TCE being transported in the groundwater.

#### 4.2 Trichloroethane, Dichloroethane

The second grouping of chemical compounds reported by the laboratory in samples from the study area included 1,1,1-trichloroethane (TCA), and its breakdown products 1,1-dichloroethane (1,1-DCA) and chloroethane. TCA has also been found to chemically degrade to cis-1,2- and trans-1,2-dichloroethylene. Because these latter two DCE compounds are breakdown products

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of both TCE and TCA, their presence in samples within the study area does not allow for a conclusive determination of their source (or sources). TCA is used for metal degreasing and as a pesticide. TCA was detected above the detection limit in 40 wells, 1,1-DCA was detected in 44 wells, and chloroethane was detected in one well. Wells found to contain TCA generally also contained 1,1-DCA, at an average of about 80 percent of the TCA concentration. The distribution of TCA throughout the study area is presented in Figure 4. The highest TCA occurrence, 24 ppb, was well below the 200 ppb drinking water MCL for TCA. No MCLs have been established for 1,1-DCA or chloroethane, but the highest reported concentrations (6.4 and 0.69 ppb, respectively) were well below published  $10^{-6}$  risk-based concentrations for drinking water of 810 and 8,600 ppb, respectively.

The sample and a field duplicate collected from the Holder property water supply well for this study contained TCA at concentrations below 1 ppb. Samples collected from residences along Eskimo Museum Lane and Ensley Road did not contain TCA at concentrations above the detection limit. The sample collected at the 6-Mile Truck Shop property contained a reported 24 ppb TCA, which suggests that the source area for the majority of the TCA is separate from the most upgradient source of TCE. The distribution of TCA in wells throughout the study area follows the same trend of concentrations decreasing to the northwest (downgradient) from potential source areas that is seen with the TCE plume.

TCA has been historically present in one monitoring well on the McCall property, one monitoring well on the Walsky property, and in water supply wells at the 6-Mile Truck Shop and ESI properties. Compared with the 1994 data, results from the current study show that TCA concentrations have dropped in both of the water supply wells. Monitoring well sample results from 1995 were not available for inclusion in this report. Compared with the 1994 analytical results, 1,1-DCA concentrations have remained constant at the 6-Mile Truck Shop well, at approximately 6.5 ppb, and have risen slightly at the ESI well from 2.0 ppb to 2.69 ppb. The two residential water supply well confirmation samples collected to date show 25

percent and 50 percent lower concentrations of TCA reported in October, compared to results from earlier in the summer.

#### 4.3 Tetrachloroethylene

Tetrachloroethylene (PCE) was reported above the detection limit in 12 wells, only one of which, at 11 ppb, exceeded the state MCL of 5 ppb. PCE is most commonly used as a dry-cleaning or degreasing solvent. Eight wells along the Old Richardson Highway between Davison Street and Gianna's Court contained PCE, with the highest concentration at the north end of Davison Street and concentrations progressively dropping towards the northwest (downgradient). PCE has been found to chemically degrade to TCE and DCE; however, those compounds are generally not found in the same wells along the Old Richardson Highway as the PCE, with two exceptions where TCE was also present at low levels. The PCE occurrences in wells within the study area are, in our opinion, due to a source (or sources) that is unrelated to the suspected TCE and TCA source areas south of the New Richardson Highway. Figure 5 depicts the distribution of PCE throughout the study area.

PCE has not historically been reported in wells in the vicinity of 6.5-mile New Richardson Highway. There is not enough data concerning the distribution of PCE in wells along the Old Richardson Highway to determine whether they show a potential plume resulting from some as yet unidentified PCE source area.

#### 4.4 Fuel-Related Compounds

A number of the chemical compounds detected in samples collected throughout the study area are constituents of fuel (including both gasoline and home heating oil) or fuel additives, in addition to their potential uses as solvents or degreasers. Included in this category are benzene, toluene, ethylbenzene, and xylene (BTEX) compounds, 1,2-dichloroethane (1,2-DCA), chloromethane, naphthalene, 1,2,4-trimethylbenzene, and isopropylbenzene. Of these compounds, benzene had the greatest number of occurrences (17); however, its distribution

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throughout the study area did not suggest the presence of a single source and resulting plume. Rather its presence appears to be in isolated, unrelated locations. Four of the benzene occurrences exceeded the state MCL of 5 ppb. The distribution of benzene throughout the study area is presented in Figure 6. Toluene, ethylbenzene, and xylene compounds, each occurring in five or fewer wells, also appeared to be isolated occurrences, with none exceeding its respective MCL.

Naphthalene, 1,2,4-trimethylbenzene, and isopropylbenzene were each reported above the detection limit in four or fewer wells. None of these compounds has either a state or federal MCL. However, the highest levels reported for these compounds were each below 1 ppb, and in the case of naphthalene and 1,2,4-trimethylbenzene, were below  $10^{-6}$  risk-based concentrations for drinking water (no such concentration has been established for isopropylbenzene).

Chloromethane and 1,2-DCA were reported in 19 and 17 wells, respectively, throughout the study area. Chloromethane was present slightly above the detection limit, or at estimated values slightly below the detection limit, in several wells in the vicinity of the suspected TCE source areas and in wells in the 6-Mile Village subdivision. A number of wells between these two areas, however, were not reported to contain detectable levels of chloromethane. 1,2-DCA occurrences were also generally low, with only one reported above 1 ppb. The distribution of 1,2-DCA showed groupings of occurrences in the vicinity of Davison Street, along the Old Richardson Highway, and in the 6-Mile Village subdivision. None of the occurrences exceed the state MCL for 1,2-DCA of 5 ppb or the  $10^{-6}$  risk-based concentration for drinking water of 1.4 ppb for chloromethane. The occurrences do not appear to suggest the presence of a definable source or sources. That is, many 1,2-DCA occurrences are adjacent to or surrounded by other wells that were not reported to contain this compound. In addition, as described in Section 5.2.2, chloromethane was reported in a trip blank at 1.1 ppb, which exceeded the highest reported concentration of this compound in a sample from a well (0.82 ppb). In our

opinion, this suggests that at least some of the reported occurrences of chloromethane may represent laboratory contamination.

These fuel-related compounds have not historically been reported in the vicinity of the 6.5-mile New Richardson Highway properties. The distribution of these fuel-related compounds throughout the study area is not related to the source of TCE contamination; they apparently originate from other, separate sources. Many of these compounds were present as isolated occurrences, with any one well containing possibly one or two of these compounds. One well, with a reported benzene concentration of 172 ppb, did contain a number of these other fuel-related compounds at low concentrations. Only one potential source of fuel contamination is currently known within the study area, a spill of heating fuel at 1334 Sloan Street. Two exceedances of the MCL for benzene to the west and west-northwest of this property may be related to this spill, but additional investigation will be necessary to conclusively determine this. The two highest levels of benzene occur about 400 to 600 feet south (i.e., upgradient) of this area on Sloan Street, and are therefore not related to the known spill at 1334 Sloan. The absence of detected benzene concentrations farther upgradient of the two high occurrences near the south end of Sloan Street suggests that the source or sources are in the close vicinity of these two wells.

#### 4.5 Methylene Chloride (Dichloromethane)

Methylene chloride was reported above the detection limit, or at estimated values slightly below the detection limit, in 73 wells. Dichloromethane is a synonym for methylene chloride, and is the name under which this compound is reported on the attached laboratory reports. This compound was also reported to be present in each of the trip blank samples submitted with the project samples, and occasionally in the laboratory's instrument method blank samples. One sample, at a reported 6 ppb methylene chloride, exceeded the state MCL of 5 ppb. A second sample collected 2½ months later from the same well was reported to contain only 1.1 ppb

methylene chloride. The location of that sample is shown in Figure 5. No other methylene chloride occurrences are presented on that figure.

Methylene chloride has a variety of industrial and residential uses as a paint remover, degreaser, and aerosol propellant. Most significantly, it is used as an extraction agent in laboratory testing and is commonly reported at low levels in the results of testing of water samples, where it is attributable to contamination of the sample during the laboratory analysis procedure. The frequency and generally low concentrations at which it was detected in this study, particularly in the trip blank and instrument method blank samples, suggest that occurrences at or below approximately 2 ppb may be attributed to laboratory-introduced interferences. In the case of higher reported concentrations, at least a portion of the reported amount may be laboratory contamination. Samples containing methylene chloride at concentrations greater than 2 ppb are distributed in a grouping of six wells in the central portion of the study area, and an additional nine wells in the 6-Mile Village subdivision. The distribution of methylene chloride in the study area does not suggest the presence of a specific source area for this compound.

#### 4.6 Other Compounds

Four other compounds were reported in samples collected from the study area. O-dichlorobenzene was reported in three wells. At 1.8 ppb, the highest reported concentration of this compound was well below the state MCL of 600 ppb. It is used as a solvent, insecticide, metal polisher, for degreasing hides, and may also be an ingredient in toilet deodorizer cakes. The distribution of this compound in the study area does not suggest the presence of a specific source area. Total trihalomethanes (TTHM), bromodichloromethane (a fire extinguisher), and chloroform (a solvent or insecticide) were all reported to be present in only one well, at 3.5 ppb, 0.43 ppb, and 3.0 ppb, respectively. All of these reported concentrations are well below the state MCL of 100 ppb for each of these compounds. TTHM are a group of compounds, which include bromodichloromethane and chloroform, which can result from the chlorination of a water

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supply. The well in which these compounds were detected is chlorinated, and in our opinion this is the probable source of these three compounds.

## 5.0 QUALITY ASSURANCE/QUALITY CONTROL

### 5.1 Purpose

Quality Assurance (QA) and Quality Control (QC) procedures are used to assist in producing sampling, documentation, and laboratory data of known and acceptable quality and reliability. QA procedures, used to validate the analytical results, included laboratory quality control and the collection of field duplicate samples, at a frequency of 10 percent. Field duplicate samples are collected to evaluate the overall analytical precision (measured in relative percent difference, or RPD) of the sample collection and analysis procedures. These samples are submitted to the laboratory as "blind" duplicates; that is, the laboratory does not know that the pair of samples should yield nearly identical results. 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 analysis are above the method detection limits. Laboratory method blank analyses are performed by the laboratory to demonstrate the absence of laboratory contamination. Matrix spike and matrix spike duplicate analyses, and surrogate recoveries, are used by the laboratory to demonstrate the measure of their own precision and accuracy. Trip blanks shipped with water samples are used to determine if cross contamination may have occurred during shipment or storage.

### 5.2 Field QC Sample Results

Field QC samples consisted of field duplicates and trip blanks. Results are summarized below.

#### 5.2.1 Field Duplicate Samples

Field duplicate samples were collected in conjunction with ten residential well water samples. Duplicate sample results are presented following the original field sample results for a given well in Table 2. Table 5 presents a summary of precision calculations made for TCE, cis-1,2-dichloroethylene, TCA, 1,1-DCA, and benzene using results of analyses of samples and their field duplicate samples. The data quality objective for RPD is less than plus or minus 30

percent for volatiles in water. This 30 percent objective measures possible variation in sample collection and storage techniques, as well as in the laboratory analysis. A state-certified drinking water laboratory, such as the one used in this study, should be capable of precision within about plus or minus 5 to 10 percent.

A comparison of results for the five compounds listed above in the five pairs of samples in which the compounds were detected shows RPDs to be 12 percent or less. It is our opinion that the precision shown by these results indicates that the project data are reliable as reported by the laboratory, even where field duplicate samples were not collected to confirm laboratory precision.

### **5.2.2 Trip Blanks**

Trip blanks (consisting of a sample bottle, filled with organic-free water, which accompanies the actual samples during shipment and storage) were submitted for analysis with residential well samples. No volatile organic compounds were detected in the June 23 or August 1 trip blanks. Chloromethane was reported at 1.1 ppb in the August 2 trip blank (a concentration higher than any reported concentration of chloromethane from a well sample in this study). Methylene chloride (dichloromethane) was reported to be present in each of the 12 remaining trip blanks at concentrations ranging from 0.44 to 1.9 ppb. The presence of the methylene chloride is most likely due to laboratory contamination since, in our experience, it is a common laboratory contaminant. A discussion of the potential effects of dichloromethane on the reliability of the analytical results is presented in Section 4.5.

### **5.3 Laboratory QC Sample Results**

The analytical data obtained from Commercial Testing and Engineering were evaluated for accuracy, based on the summary statistics of percent recovery of surrogate spikes (internal standards), matrix spikes, and matrix spike duplicates. Reported deviations from the laboratory QC criteria were generally very slight. Adherence or deviations from laboratory QC criteria are

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summarized for each batch of samples on the first page of each data deliverables package in Appendix B. The laboratory QC deviations are minor and, in our opinion, do not detract from the overall reliability of the data.

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## 6.0 CONCLUSIONS

Based on the results of the groundwater assessment which are presented in this report, in conjunction with the results of previous studies, Shannon & Wilson offers the following conclusions.

- ▶ Trichloroethylene (TCE) is present in groundwater within the study area in a fairly well-defined plume about  $\frac{1}{4}$ -mile wide and 1.1-miles long. The data collected during this study are quite consistent in that there were only two wells outside of the defined plume area in which TCE was reported. In our opinion, these two exceptions, which were at low levels, may represent breakdown products from a separate, unrelated spill of tetrachloroethylene (PCE). Sixteen wells were reported to contain TCE above the state drinking water MCL of 5 ppb, based on 1995 data. These exceedances of the MCL were limited to a narrower width zone than the defined plume depicted in Figure 3 (which is based on reported detection of any concentration of TCE), and occurred only in the southeasterly 0.9 mile of the plume's length. One previously suspected source area for the TCE appears to be on the Holder property. The highest concentration of TCE reported during this study, however, was in the 6-Mile Truck Shop water supply well, suggesting the presence of other source areas farther down the plume.
- ▶ 1,1,1-trichloroethane (TCA) is present within the study area in a plume closely corresponding to that for TCE. The suspected source area for this TCA, however, appears to be at least  $\frac{1}{4}$ -mile downgradient of the most southeasterly suspected TCE source area. None of the wells sampled for this project contained TCA above or even approaching the state MCL of 200 ppb. The source for the TCA may be related to additional downgradient TCE source areas discussed above.

- ▶ Benzene occurrences in the 6-Mile Village Subdivision are likely the result of several unrelated releases, none of which appear to be related to the source or sources of TCE contamination. Four of the wells tested in this area contained benzene at concentrations exceeding the state MCL of 5 ppb.
- ▶ Tetrachloroethylene (PCE) was reported in 12 wells within the study area. There is not enough data for PCE in wells along the Old Richardson Highway to determine whether they may represent a separate potential plume resulting from some as yet unidentified PCE source area. The PCE contamination measured appears to be unrelated to the source or sources of TCE contamination.
- ▶ The reported presence of methylene chloride in wells at concentrations below approximately 2 ppb are likely the result of laboratory-introduced interferences. A follow-up sample collected at the well with the only result exceeding the state MCL of 5 ppb was reported to contain 1.1 ppb methylene chloride.
- ▶ Many of the compounds identified during this study have possible applications for household use, such as automotive supplies, paint strippers, and the like. While several compounds, such as TCE, TCA, and their breakdown products, can be identified in a fairly well defined plume, many of the occurrences of other chemical compounds within the study area cannot be conclusively traced to any one source. To attempt to determine the source for each of the chemical occurrences reported during this study would be close to impossible from both a technical and practical standpoint.
- ▶ The groundwater flow direction measured during our 1994 study, with water flowing to the northwest, agrees with the results of other work in the area. The orientation of the plume of TCE contamination is consistent with this groundwater flow direction. In our opinion, there is no reason to suspect that the regional groundwater flow direction has

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historically been, or in the future will be, significantly different than that which is currently known.



## 7.0 ADDITIONAL WORK CURRENTLY PLANNED OR IN PROGRESS

This report presents the results of the residential and commercial water supply well sampling tasks described in our May 16, 1995, proposal concerning additional groundwater assessments in the 6-mile Richardson Highway area which have been completed. Other tasks described in that proposal which are currently in progress or are planned are described below.

- ▶ Resampling of most of the ten previously installed groundwater monitoring wells has been completed, but laboratory results were not received in time to include in this report.
- ▶ Installation and sampling of three new clusters of shallow and deep monitoring wells will take place in the near future, as soon as permits can be obtained for drilling within public street rights-of-way. These wells will be installed within the boundaries of the TCE plume at: the corner of Smithson Street and Herbert Avenue, near the south end of Sloan Street, and in the access road on the north side of the New Richardson Highway. These wells are intended to provide information on the variation of TCE concentrations with depth, and to provide a means of sampling the groundwater without it having passed through a well pump or other water system components, which might result in a slight reduction in the reported concentration.
- ▶ Samples will be collected from wells with concentrations of TCE or other compounds which were reported to be just under or over the MCLs, to confirm the original results. Two of these samples have already been collected, and results are included in this report. In addition, samples will be collected from any well which exceeded an MCL and analyzed for indicators of contamination from septic system leachate.
- ▶ Once right-of-entry has been obtained, additional groundwater monitoring wells and/or temporary groundwater probes will be installed and sampled in order to attempt to locate

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one or more suspected additional sources of TCE downgradient of the farthest southeast known occurrence of TCE.

- Based on the results of the work described above, a program of periodically resampling water supply wells and/or monitoring wells will be established to monitor changes in concentration with time.

Results of the work described above will be described in future addendums to this interim report.

## 8.0 LIMITATIONS

The conclusions we have presented in this interim report are based on the sampling and analysis that has been performed to date. They should not be construed as a guarantee of the soil and/or groundwater quality at the site. Our sampling was intended to confirm the presence or absence of selected contaminants at the locations sampled. It is possible that our subsurface tests do not represent the highest levels of contamination, particularly since the selection of sampling locations was limited to the availability of existing water supply wells for use as sampling points. In addition, no conclusions can be drawn on the presence or absence of contaminants for which no laboratory analyses were run. As a result, the analysis and sampling performed can only provide you with our judgment as to the environmental characteristics of the site, and in no way guarantees that an agency or its staff will reach the same conclusions.

The observed levels of contamination may be dependent on seasonal fluctuations of the groundwater table and/or the general passage of time. Changes can also occur due to activities on the properties within the study area. The data presented in this report should be considered representative only of the time the data was collected. In addition, changes in government codes, regulations, or laws may occur. Because of such changes beyond our control, our observations and interpretations may need to be revised. If substantial time has elapsed between submission of this report and the start of activities or action based upon it, we recommend that this report be reviewed to determine the applicability of the conclusions considering the time lapsed or changed conditions.

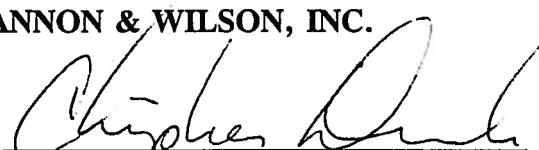
This report was prepared for the exclusive use of the Alaska Department of Environmental Conservation, and their representatives, in the study of potential contamination in accordance with the scope of work. If it is made available to others, it should be for information on factual data only and not as a warranty of described conditions, such as interpretations and discussions

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of subsurface conditions included in this report. In addition, data depicted in figures in this report are based on extrapolation from often widely-spaced sample locations. These figures are presented for discussion purposes only, and not as any guarantee of the conditions depicted.

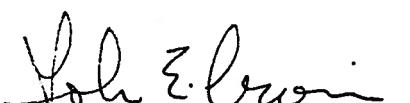
**SHANNON & WILSON, INC.**

By:



Christopher Darrah  
Geologist

Reviewed by:

  
John Cronin  
Vice President  
Environmental Services/Hydrogeology

CBD:JEC/laf

INTERIM RPT/#188.11/2/95.cbd/laf

Table 1. Well Location and Resident Contact Information.

Address	Name	Mailing Address	Phone	Legal Description	Sample Number
Smithson St.					
1309	Attempt to contact yielded no response from owner				
1319	Miller, Steve	1319 Smithson	99705	488-9423	B4,L3, Six Mile Village
		North Pole, AK			72912-927-070
1323	Alloway, Howard (Tenant)	1323 Smithson	99705		B4,L4, Six Mile Village
		North Pole, AK			72912-927-071
1323	Miller, Steve (Owner)	1319 Smithson	99705	488-9423	
		North Pole, AK			
1331	Hart, Kamy	1331 Smithson	99705	488-5295	B4,L6, Six Mile Village
		North Pole, AK			7294-724-034
1338	Thompson (Tupek)			488-3718	B3,127, Six Mile Village
					Well blocked by debris
1341	Kerner, David	P.O. Box 75165	Fairbanks, AK 99707	488-4408	B4,L8, Six Mile Village
		1345 Smithson	99705	488-3833	72912-926-063
1345	Hurst, Harmon				7294-724-030
	Hurst, confirmation				72912-1011-111
1353	Bennett, Peggy	P.O. Box 58416	Fairbanks, AK 99711	488-3446	B4,L10-11, Six Mile Village
					7294-802-043
1354	Attempt to contact yielded no response from owner				
1357	Dickinson, Sadie	1357 Smithson	99705	488-3587	B4,L12, Six Mile Village
		North Pole, AK			72912-926-053
1358	Mattice, Steve	1358 Smithson	99705	488-9222	B3,L23-24, Six Mile Village
		North Pole, AK			7294-628-028
1361	Crawford, Roy	P.O. Box 56057	Fairbanks, AK 99711	488-3392	B4,L13-14, Six Mile Village
					7294-626-015
1362	Heize, Charles	P.O. Box 58257	Fairbanks, AK 99711	488-5675	B3,L20-21, Six Mile Village
					7294-623-008
1369	Quigley, Devia	1369 Smithson	99705	None	B4,L15, Six Mile Village
		North Pole, AK			72912-1011-109
1378	Conley, Wanita	1374 Leslie	99705	488-6482	B3,L18-19, Six Mile Village
		North Pole, AK			72912-1002-093
Sloan St.					
1299	Martin, Vincent (Tenant)	P.O. Box 58580	Fairbanks, AK 99711	488-7165	TL-2109, Six Mile Village
		P.O. Box 58487	Fairbanks, AK 99711	488-0198	72912-1015-118
1299	Ronald Schumann (Owner)				
1301	Miller, Ken	1301 Sloan	99705	488-1320	B5,L1, Six Mile Village
		North Pole, AK			7294-802-042
1304	Molon, Cherokee	P.O. Box 58044	Fairbanks, AK 99711-044	479-6125 (W) 488-2525 (H)	
			North Pole, AK		
1308	Owen, James	1308 Sloan	99705	488-2305 or 488-0626	B1,L2, Six Mile Village
					72912-928-084
1309	Kingsbury, Ernest	1309 Sloan	99705	488-0547	B5,L2, Six Mile Village
					7294-724-032
1320	Langley, Bill & Ruth	P.O. Box 58197	Fairbanks, AK 99711	488-2478	B2,L1-2, Six Mile Village
	Langley duplicate sample				7294-801-040
1329	Gelineau, Lemuel	1329 Sloan	99705	488-7729	B3,L6, Six Mile Village
	Gelineau duplicate				72912-926-054
1330	Schmidt, Gary	P.O. Box 58215	Fairbanks, AK 99711	488-0553 (H) 456-1998 (W)	B2,L4, Six Mile Village
		P.O. Box 61096	Fairbanks, AK 99706	488-4321	B3,L7-8, Six Mile Village
1333	Moon, Evelyn		Middletown, PA 17057	(717) 939-2203	B2,L5, Six Mile Village
					Well inaccessible
1334	Winfrey, Michael	17 Theodore Ave	Fairbanks, AK 99707	488-0341	B2,L6, Six Mile Village
			North Pole, AK		7294-628-027
1338	Silva, Mike & Patricia	P.O. Box 74281	99705	488-5905	B2,L7, Six Mile Village
					7294-801-020
1342	Simmler, George	1342 Sloan	North Pole, AK 99705	488-6908	B3,L9-10, Six Mile Village
					7294-628-026
1343	McCarty, Sam	1343 Sloan			
1346	Attempt to contact yielded no response from owner				
1348	Conley, Wanita	1374 Leslie	99705	488-6482	B2,L9, Six Mile Village
					72912-925-048
1349	Moore, Robert (Tenant)	1349 Sloan	99705	488-1896	B3,L11, Six Mile Village
					7294-724-031
1349	Burns, Joe (Owner)	23 Hitchcock #103	Santa Barbara, CA	(805) 563-1464	
1353	Attempt to contact yielded no response from owner				



Table 1, cont. Well Location and Resident Contact Information.

Address	Name	Mailing Address	Phone	Legal Description	Sample Number
Sloan St., cont.					
1354 Beaudreault, Autumn	1354 Sloan P.O. Box 74233	North Pole, AK 99705 Fairbanks, AK 99707	488-8857 488-2597	B2, L10, Six Mile Village B3, L13-14, Six Mile Village	7294-623-006 7294-623-009
1357 Ward, Lori					72912-1011-110
Ward, confirmation					
1365 Attempt to contact yielded no response from owner					
1366 Gentleman, Dennis	P. O. Box 55233	North Pole, AK 99705	488-6634	B2, L12-15, Six Mile Village	7294-623-005
1369 Riddle, John	1369 Sloan	North Pole, AK 99705	488-6482	B3, L16, Six Mile Village	72912-925-047
1373 Attempt to contact yielded no response from owner					
Leslie St.					
1316 Bowers, Joe	1316 Leslie	North Pole, AK 99705	488-3830	B1, L6, Six Mile Village	Refused sampling
1320 Monzula, Donald	1320 Leslie	North Pole, AK 99705	488-9674	B1, L7, Six Mile Village	7294-802-044
1324 Hunt, Susan	1324 Leslie	North Pole, AK 99705	488-1228	B1, L8, Six Mile Village	7294-724-035
1325 Childress, Dale	1325 Leslie	North Pole, AK 99705	488-4095 (H), 456-6217 (W)	B2, L3, Six Mile Village	72912-926-062
1328 Daniels, Shirley (N. well)	P. O. Box 71412	Fairbanks, AK 997070	488-6434	B1, L9A-11A, Six Mile Village	7294-628-023
Daniels, N. well duplicate					
1348 Dunehew, Leslie	1358 Leslie	North Pole, AK 99705	488-6690	B1, L14A, Six Mile Village	7294-628-025
Dunehew, duplicate					
1357 Hermann, Carolyn	1357 Leslie	North Pole, AK 99705	488-1796	B2, L11, Six Mile Village	72912-1012-116
1358 Dunehew, Leslie	1358 Leslie	North Pole, AK 99705	488-6690	B1, L12A-16A, Six Mile Village	7294-801-019
1362 Attempt to contact yielded no response from owner					
1363 Conley, Wanita	1374 Leslie	North Pole, AK 99705	488-6482	B2, L12, Six Mile Village	7294-1003-094
1374 Conley, Wanita	1374 Leslie	North Pole, AK 99705	488-6482	B1, L20, Six Mile Village	72912-925-046
1378 Conley, Wanita	1374 Leslie	North Pole, AK 99705	488-6482	B1, L21, Six Mile Village	72912-1002-092
Herbert Av.					
836 Carter, Thellon	P. O. Box 58225	Fairbanks, AK 99711	None	TL-2134	72912-927-069
841 Pruitt, Eiolia	841 Herbert	North Pole, AK 99705	488-2138	B3, L2, Six Mile Village	7294-724-029
842 Bowers, Timothy					
847 McNeil, Andy	P. O. Box 58370	Fairbanks, AK 99711	488-8643	B5, L4, Six Mile Village	Well inaccessible
Conley Av.					
842 Powell, William	P. O. Box 72994	Fairbanks, AK 99707	488-6010	TL-2801	7294-626-014
886 Denny, Dale	886 Conley Ave	North Pole, AK 99705	488-2441	Tr. 2, Groff	72912-925-052
891 Pereski, Wallie	891 Conley Ave	North Pole, AK 99705	488-2799	Tr. 3, Groff	72912-925-051
899 Snyder, Steve	P. O. Box 58104	Fairbanks, AK 99711	488-3849 (H), 479-2972 (W)	TL-2846	72912-927-075
Giannas Ct.					
1322 Daniel, Wayne	1322 Gianna's Ct	North Pole, AK 99705	452-9612 (Pager)	B1, L11, George Wayne	72912-1002-089
1331 Groom, Bob (Tenant)	P. O. Box 56876	North Pole, AK 99705	None		72912-1009-106
Groom, duplicate					72912-1009-107
1331 Monroe, Carole (Owner)	P. O. Box 55954	North Pole, AK 99705	None		
1361 Guimond, Ramona (Tenant)	1361 Gianna's Ct.	North Pole, AK 99705	488-7640	B1, L8, George Wayne	7294-801-021



Table 1, cont. Well Location and Resident Contact Information.

Address	Name	Mailing Address	Phone	Legal Description	Sample Number
Gianna's Ct, cont.					
1361 Gintz, Noreen (Owner)	2970 Varsity Circle P.O. Box 58629	Honolulu, HI 96826 Fairbanks, AK 99711	(808) 943-2026 488-8260	B1, L6, George Wayne	72912-926-058
1370 Boulon, Jeffrey	2271 Badger Rd.	North Pole, AK 99705	488-6301	B1, L7, George Wayne	7294-801-039
1373 Knutson, Lee (Tenant)	1171 Grenac Rd	Fairbanks, AK 99709			
1373 Wayne Gentz (Owner)					
Warner Rd.					
1354 Arena, Michael	1354 Warner Rd	North Pole, AK 99705	488-1393	TL-2114	72912-926-059
1359 Attempt to contact yielded no response from owner					
1362 Crawford, Orlin	1362 Warner Rd.	North Pole, AK 99705	488-8204	TL-2149	72912-928-077
Crawford duplicate					72912-928-078
1368 Attempt to contact yielded no response from owner					
1389 Ketzler, Don & Nancy	P.O. Box 71793	Fairbanks, AK 99707	488-2134	TL-2809	7294-626-017
1395 Davis, Joann	1395 Warner Rd.	North Pole, AK 99705	488-2607	TL-2808	7294-626-010
Davis duplicate sample					7294-626-011
Warner Lane					
919 Hahn, Jon	919 Warner Lane P.O. Box 57234	North Pole, AK 99705	488-7376 488-5620	TL-2807 TL-2847	7294-626-012 72912-928-079
929 Ravenscroft, Scott		North Pole, AK 99705			
945 Massingill, Owen	945 Warner Lane	North Pole, AK 99705	488-6928	TL-2810	72912-927-076
TR-3 Attempt to contact yielded no response from owner					
Wescott Lane					
1436 Conley, Mike	1436 Wescott Lane	North Pole, AK 99705	488-6482	TL-2862	72912-1003-095
Conley duplicate					
1463 Averett, Kent	1463 Wescott Lane	North Pole, AK 99705	488-0295	TL-2821	72912-1003-096
Davison St.					7294-623-004
1431 Apparently unoccupied, access blocked by fence					
1443 Attempt to contact yielded no response from owner					
1446 Elsberg, Carita	1441 Old Richardson Hw	North Pole, AK 99705	488-9720	B1, Richardson Park	72912-926-061
1451 Attempt to contact yielded no response from owner					
1454 Tarpenning, Lloyd	P.O. Box 58217	Fairbanks, AK 99711	488-9210	E-12, B2, Richardson Park	72912-927-066
Tarpenning duplicate					
1457 Hanifen, Sherill	P.O. Box 72252	Fairbanks, AK 99707	488-2361 (H), 456-6661 (W)	B3 NE, Richardson Park	72912-927-067
1463 Erichson, Rex	P.O. Box 71977	Fairbanks, AK 99707	488-6677	B4, Richardson Park	72912-926-064
Erichson duplicate					
1467 Attempt to contact yielded no response from owner					
1468 Ortiz, Rafael	P.O. Box 35518	Fort Wainwright, AK 99703	488-9215	B35, L1A, Richardson Park	72912-927-068
1477 Davison, Donald	P.O. Box 58249	Fairbanks, AK 99711-0249	488-0224	B26, L4, Richardson Park	72912-1002-091
1478 Cornell, James	4061 Mailard Way	Fairbanks, AK 99709	479-7399 (H), 474-4074 (W)	B26, L2-3, Richardson Park	72912-928-080
1484 Wawryko, Jan	P.O. Box 72445	Fairbanks, AK 99707	488-1826	B26, L2-3, Richardson Park	72912-928-081
1491 Rollins, Betty	1491 Davison St.	North Pole, AK 99705	488-6614	TL-2826	Sampled by owner
1492 Walsh, Gary	P.O. Box 80862	Fairbanks, AK 99708	488-0258	B24, L1,6, Richardson Park	72912-926-060



Table 1, cont. Well Location and Resident Contact Information.

Address	Name	Mailing Address	Phone	Legal Description	Sample Number
Davison St., cont.					
1506 McAdoo, Don	1506 Davison St.	North Pole, AK 99705	488-0238	B25, L4, Richardson Park	72912-928-082
1518 Baker, Lawrence	1518 Davison St.	North Pole, AK 99705	488-4975 (H), 474-5244 (W)		72912-1003-098
1569 Holder, Bob	P.O. Box 10653	Fairbanks, AK 99710	488-6449		7294-801-018
	Holder duplicate sample				7294-801-036
Ster Avenue					
1032 Richardson, Brad	P.O. Box 70733	Fairbanks, AK 99707	488-0424 (H), 488-3300 (W)		72912-1002-090
Old Richardson Hwy.					
TL-2108 Moss, Delbert	1205 Pueblo St.	North Pole, AK 99705	488-6583	TL-2108	
TL-2107 Owen, James	1308 Sloan	North Pole, AK 99705	488-0626	TL-2107	Unable to locate well 72912-928-085
1289 Schumann, Doug	1289 Old Richardson Hw	North Pole, AK 99705	488-0198	TL-2109	
903 Johnson, Vernon	P.O. Box 58469	Fairbanks, AK 99711	488-9335	TL-2121	72912-1011-112
903 Johnson, Vernon Sr. (Owner)	P.O. Box 58469	Fairbanks, AK 99711	488-6333		72912-1002-098
933 Graham, John	2120 Badger Rd	North Pole, AK 99705	488-6524	TL-2115	72912-925-049
1360 Buck, Davis new well	1360 Old Richardson Hw	North Pole, AK 99705	488-0516 (H), 353-1645 (W)	TL-2130	72912-926-056
Buck, Davis old well					72912-926-057
1361 Attempt to contact yielded no response from owner					
1375 Shaw, Monroe	1375 Old Richardson Hw	North Pole, AK 99705	488-9489	TL-2124	72912-927-074
1391 Simpkin, Richard	1391 Old Richardson Hw	North Pole, AK 99705	488-2185	TL-2812	72912-927-065
1401 Rollins, Betty			488-6614	TL-2859	72912-927-072
Ensley Rd.					
922 Meeker, Ken	P.O. Box 72892	Fairbanks, AK 99707	488-9112	L1, Ziegler	7294-623-001
930 Palmer, Kari	930 Ensley	North Pole, AK 99705	488-7794	L2, Ziegler	7294-801-038
Eskimo Museum Lane					
1530 Linda Mason	P.O. Box 58445	Fairbanks, AK 99705	488-6650	TL-2818	7294-801-037
1540 Palling, Dennis	P.O. Box 58603	Fairbanks, AK 99711	548-7433	TL-2836	7294-802-046
New Richardson Hwy.					
1375 Kaeko Onno (Old Club Tokyo)	829 Richardson Hwy.	North Pole, AK 99705	488-9539	TL-2858	7294-626-013
1410 Koop, Paul	1410 Richardson Hwy.	North Pole, AK 99705	479-3321 (H)	Tr. 4, Groff	72912-1003-097
1430 Grieme, Wayne	P.O. Box 55722	North Pole, AK 99705	488-3083	Tr. 5, Groff	7294-623-007
1438 ESI Office	1438 Richardson Hwy.	North Pole, AK 99705	488-4575	Tr. 6, Groff	7294-623-002
1438 ESI shop					7294-623-003
1455 Anderson, Wayne (Tenant)	1901 Cheechako Dr.	Fairbanks, AK 99709	474-8957 (H), 488-0780 (W)		72912-928-083
1455 Ziegler, Robert (Owner)	P.O. Box 44	Lone Pine, MT 59848	(406) 741-3301		
1488 Van Hallen, Richard	P.O. Box 56536	North Pole, AK 99705	488-4023 (H), 488-4524 (W)	TL-2828, TL-2850	72912-1005-099
1531 Whitney, Maxine (Eskimo Museum, R.A.L. Mechanical)			TL-2843		Refused sampling



Table 2. Summary of Volatile Organic Compounds by EPA Method 502.2 Reported above the Method Detection Limit (in ug/L, or ppb)

X-0729-08

Table 2. Summary of Volatile Organic Compounds by EPA Method 502.2 Reported above the Method Detection Limit (in ug/L, or ppb)

Address	Name	Sample	MCL	5	70	100	200	8,600*	810*	5	7	1.4*	1,500*	3*	-	600	75	5	5	1,000	700	10,000	100	100	100
Smithson St.		Trichloroethylene	Cis-1,2-Dichloroethylene	Trans-1,2-Dichloroethylene	1,1,1-Trichloroethane	Chloroethane	1,1-Dichloroethane	Tetrachloroethylene	1,2-Dichloroethane	1,1-Dichloroethylene	Chloromethane	Naphthalene	1,2,4-Trimethylbenzene	Isopropylbenzene	o-Dichlorobenzene	1,4-Dichlorobenzene	Methylene Chloride (Dichloromethane)	Benzene	Toluene	Ethylbenzene	Xylenes	TTHM	Bromodichloromethane	Chloroform	
1309		Attempt to contact yielded no response from owner																							
+ 1319	Miller, Steve	72912-927-070	3.5	0.67	<0.50	1.7	<0.50	1.1	<0.50	0.50	0.34 J	<0.50	<0.50	<0.50	<0.50	0.56	1.8	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
1323	Allaway, Howard	72912-927-071	1.5	0.37 J	<0.50	0.62	<0.50	0.61	<0.50	<0.50	0.77	0.64	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
1331	Hart, Kany	7294-724-034	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.46 J	<0.50	3.6	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
1338	Thompson (Tipek)	Well blocked by debris																							
1341	Kerner, David	72912-926-063	0.43 J	0.41 J	<0.50	0.50	<0.50	0.48 J	0.32 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	1.1	2.1	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
1345	Hurst, Harmon	7294-724-030	<0.50	0.38 J	<0.50	21.4 D	<0.50	0.67	0.96	<0.50	2.3	0.37 J	<0.50	<0.50	<0.50	<0.50	6.0	0.39 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
	Hurst, confirmation	72912-1011-111	<0.50	0.46 J	<0.50	10	<0.50	0.89	1.1	<0.50	1.7	<0.50	<0.50	<0.50	<0.50	1.1	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
1353	Bennett, Peggy	7294-802-043	0.36 J	0.41 J	<0.50	6.8	<0.50	0.72	0.80	<0.50	0.93	0.51	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
1354		Attempt to contact yielded no response from owner																							
1357	Dickinson, Sadie	72912-926-053	<0.50	3.0 J	<0.50	0.50	<0.50	0.37 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.64	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
1358	Mattice, Steve	7294-628-028	1.82	<0.20	<0.20	1.29	<0.50	0.92	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	4.26	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20		
/ 1361	Crawford, Roy	7294-626-015	<0.20	<0.20	<0.20	<0.50	<0.20	<0.20	<0.50	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.37	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20		
1362	Hezze, Charles	7294-623-008	1.70	<0.20	<0.20	1.37	<0.50	1.01	<0.20	<0.20	<0.50	<0.20	<0.20	<0.20	<0.20	<0.30	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20		
1369	Quigley, Devia	72912-1011-109	0.76	0.39 J	<0.50	0.52	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	1.1	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
1378	Conley, Vanita	72912-1002-093	1.4	0.63	<0.50	<0.50	<0.50	1.1	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	1.4	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
Sloan St.																									
1399	Martin, Vincent	72912-1015-118	<0.50	<0.50	<0.50	<0.50	<0.50	0.31 J	<0.50	<0.50	0.53 J	<0.50	<0.50	1.8	0.36 J	0.30 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
1301	Miller, Kent	7294-802-042	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.56	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50			
1304	Moton, Cherokee	72912-1015-119	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.44 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50			
1308	Owen, James	72912-928-084	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.42 J	<0.50	<0.50	<0.50	<0.50	2.7	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
1320	Langlev, Bill & Ruth	7294-801-040	0.76	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.82	<0.50	<0.50	<0.50	<0.50	0.51	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50			
	Langlev duplicate sample	7294-801-041	0.79	<0.50	<0.50	0.79	<0.50	<0.50	<0.50	0.82	<0.50	<0.50	<0.50	<0.50	0.36 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50			
1329	Gelineau, Lemuel	72912-926-054	1.2	0.87	<0.50	1.8	<0.50	1.6	<0.50	1.5	<0.50	0.74	0.34 J	<0.50	<0.50	0.82	12	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
	Gelineau duplicate	72912-926-055	1.2	0.82	<0.50	1.6	<0.50	1.5	<0.50	0.94	0.34 J	<0.50	<0.50	<0.50	<0.50	0.98	11	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
1330	Schmidt, Gary	72912-925-050	1.3	0.30 J	<0.50	0.39 J	<0.50	0.38 J	<0.50	0.46 J	<0.50	<0.50	<0.50	<0.50	0.74	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50			
1333	Moon, Evelyn	7294-626-016	1.43	<0.20	<0.20	2.31	<0.50	1.50	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	4.11	15.5	0.90	<0.20	0.26	<1.00	<0.20	<0.20	<0.20		
1334	Winfrey, Michael	7294-628-027	0.96	<0.20	0.38	<0.50	0.30	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.30	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20			
1338	Silva, Mike & Patricia	7294-801-020	2.2	0.58	<0.50	0.58	<0.50	0.71	<0.20	<0.20	<0.50	0.53	<0.50	<0.50	<0.50	0.32 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
1342	Simmler, George	72912-926-055	1.2	0.58	<0.50	0.58	<0.50	0.71	<0.20	<0.20	<0.50	0.53	<0.50	<0.50	<0.50	0.98	11	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
1343	McCarthy, Sam	7294-628-026	5.98	<0.20	2.99	<0.20	1.31	<0.20	<0.20	<0.20	<0.50	0.33	<0.30	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20			
1346		Attempt to contact yielded no response from owner																							
1348	Conley, Wanita	72912-925-048	2.8	1.0	0.32 J	0.70	<0.50	1.3	<0.50	<0.50	<0.50	0.74	1.6	<0.50	<0.50	0.50	0.74	1.6	<0.50	<0.50	<0.50	<0.50	<0.50		
1349	Moore, Robert	7294-724-031	0.72	1.0	<0.50	3.5	<0.50	1.6	<0.50	<0.50	0.54	0.36 J	<0.50	<0.50	<0.50	2.7	0.44 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
1353		Attempt to contact yielded no response from owner																							
' 1354	Beaudreault, Autumn	7294-623-006	8.70	<0.20	0.50	3.94	<0.50	2.62	<0.20	<0.20	<0.50	2.98	44.7	<0.30	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20			
4 1357	Ward, Lori	7294-623-009	10.6	<0.20	0.30	6.38	<0.50	2.62	<0.20	<0.20	<0.50	2.73	0.39	<0.30	<0.20	<0.20	1.00	<0.20	<0.20	<0.20	<0.20	<0.20			
	Ward, confirmation	72912-1011-110	8.9	1.3	<0.50	4.8																			

Table 2, cont. Summary of Volatile Organic Compounds by EPA Method 502.2 Reported above the Method Detection Limit (in ug/L or ppb).

X-0729-08

Table 2, cont. Summary of Volatile Organic Compounds by EPA Method 502.2 Reported above the Method Detection Limit (in ug/L or ppb)

Address	Name	Sample Number	Table 2, cont. Summary of Volatile Organic Compounds by EPA Method 502.2 Reported above the Method Detection Limit (in ug/L or ppb)																							
			MCL	5	70	100	200	8,600*	810*	5	5	7	1.4*	1,500*	3*	-	600	75	5	5	1,000	700	10,000	100	100	
Davison St., cont.																										
1463 Erickson, Rex		72912-1002-086	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
Erickson duplicate		72912-1002-087	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
1467		Attempt to contact yielded no response from owner																								
1468 Ortiz, Rafael		72912-927-068	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
1477 Davison, Donald		72912-1002-091	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
1478 Cornell, James		72912-928-080	<0.50	0.33 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
1484 Wawrytko, Jan		72912-928-081	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
1491 Rollins, Betty		Sampled by owner																								
1492 Walsh, Gary		72912-926-060	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
1506 McAdoo, Don		72912-928-082	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
1518 Baker, Lawrence		72912-1003-098	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
1569 Holder, Bob		7294-801-018	5.41	0.41 J	<0.50	<0.50	0.86	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
Holder duplicate sample		7294-801-036	5.42	0.40 J	<0.50	0.95	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
Stier Avenue																										
1032 Erickson, Brad		72912-1002-090	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
Old Richardson Hwy.																										
Tl-2108 Moss, Delbert		Unable to locate well																								
Tl-2107 Owen, James		72912-928-085	0.66	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
1289 Schumann, Doug		72912-1011-112	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
903 Johnson, Vernon		72912-1002-098	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
933 Graham, John		72912-925-049	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
1360 Buck, Davis new well		72912-926-056	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
Buck, Davis old well		72912-926-057	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
1361		Attempt to contact yielded no response from owner																								
1375 Shaw, Monte		72912-927-074	0.52	<0.50	<0.50	<0.50	<0.50	2.1	0.64 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
1391 Simpkin, Richard		72912-927-065	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	2.3	0.45 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
1401 Rollins, Betty		72912-927-																								

Table 3. Frequency of Occurrences of VOC Compounds.

	Number of Occurrences	Maximum Concentration	MCL
Trichloroethylene	51	22 D	5
Cis-1,2-Dichloroethylene	30	3	70
Trans-1,2-Dichloroethylene	9	1.1	100
1,1,1-Trichloroethane	40	24 D	200
Chloroethane	1	0.69	8,600*
1,1-Dichloroethane	44	6.4	810*
Tetrachloroethylene	12	11	5
1,2-Dichloroethane	19	1.1	5
1,1-Dichloroethylene	17	4.5	7
Chloromethane	19	0.82	1.4*
Naphthalene	4	0.57	1,500*
1,2,4-Trimethylbenzene	2	0.38	3*
Isopropylbenzene	1	0.38	-
o-Dichlorobenzene	3	1.8	600
Methylene Chloride	73	6	5
Benzene	19	172 E	5
Toluene	5	2.82	1,000
Ethylbenzene	2	0.77	700
Xylenes	3	3.17	10,000
TTHM	1	3.5	100
Bromodichloromethane	1	0.43 J	100
Chloroform	1	3.0	100

Notes: J = Estimated concentration. Sample result was below method detection limit.  
D = Secondary dilution required for sample to fall within calibration range.  
E = Estimated concentration.  
\* Compound does not have a listed MCL. The value listed here corresponds to a 10 (-6) risk-based concentration developed by the USEPA

Table 4. Well Depth Compared to TCE and Benzene Results.

Address	Name	Well Depth Ft.	Trichloroethylene ug/L	Benzene ug/L
Smithson St.				
1309	No Sample Collected		73	
1319 Miller	NK	3.5	1.8	
1323 Alloway	NK	1.5	0.64	
1331 Hart	NK	<0.50	<0.50	
1338 Thompson (Tupek)	Well blocked by debris			
1341 Kerner	40	0.43 J	2.1	
1345 Hurst	30	<0.50	0.39 J~	
1353 Bennett	35	0.36 J	<0.50	
1354	No Sample Collected			
1357 Dickinson	23	<0.50	<0.50	
1358 Mattice	NK	1.82	<0.20	
1361 Crawford	38	<0.20	<0.20	
1362 Hetze	NK	1.70	<0.20	
1369 Quigley	43	0.76	<0.50	
1378 Conley	50	1.4	<0.50	
Sloan St.				
1299 Martin	NK	<0.50	<0.50	
1301 Miller	NK	<0.50	<0.50	
1304 Moton	NK			
1308 Owen	60	<0.50	<0.50	
1309 Kingsbury	NK	<0.50	<0.50	
1320 Langley	68	0.76	<0.50	
Langley duplicate		0.79	<0.50	
1329 Gelineau	30	1.2	12	
Gelineau duplicate		1.2	11	
1330 Schmidt	90-120	1.3	<0.50	
1333 Moon	NK	1.43	15.5	
1334 Winfrey	No Sample Collected			
1338 Silva	60	0.96	<0.20	
1342 Simmler	NK	2.2	0.32 J	
1343 McCarty	85	5.98	0.33	
1346	No Sample Collected			
1348 Conley	40	2.8	1.6	
1349 Moore	NK	0.72	0.44 J	
1353	No Sample Collected			
1354 Beaudreault	40	8.70	44.7	
1357 Ward	NK	10.6	0.39	
1365	No Sample Collected			
1366 Gentleman	40	10.1	172	
1369 Riddle	NK	3.1	<0.50	
1373	No Sample Collected			
Leslie St.				
1316 Bowers	No Sample Collected			
1320 Monzulla	60	<0.50	<0.50	
1324 Hunt	NK	<0.50	<0.50	
1325 Childress	23	0.13	<0.50	
1328 Daniels, N. well	NK	<0.20	<0.20	
Daniels, N. well dup.		<0.20	<0.20	
1328 Daniels, S. well	NK	<0.20	<0.20	
1348 Dunehew	95	0.83	<0.50	
Dunehew, duplicate		0.85	<0.50	

Table 4, cont. Well Depth Compared to TCE and Benzene Results.

Address	Name	Well Depth Ft.	Trichloroethylene ug/L	Benzene ug/L
Leslie St., cont.				
1357 Hermann		100	8.5	<0.50
1358 Dunehew		95	2.7	<0.50
1362	No Sample Collected			
1363 Conley		104	5.5	<0.50
1374 Conley		107	4.6	<0.50
1378 Conley		39	8.3	<0.50
Herbert Av.				
836 Carter		85	1.1	0.48 J
841 Pruitt		NK	0.37 J	1.6
842 Bowers	No Sample Collected			
847 McNeil		25	1.2	<0.50
Conley Av.				
842 Powell		40	5.06	<0.20
885 Denny		40	6.3	<0.50
891 Pereski		32	4.1	<0.50
899 Snyder		20	0.57	<0.50
Gianna's Ct.				
1322 Daniel		50	<0.50	<0.50
1331 Groom		62	<0.50	<0.50
Groom duplicate			<0.50	<0.50
1361 Guimond		NK	0.32 J	<0.50
1370 Bouton		NK	<0.50	<0.50
1373 Knutsen		40	1.1	<0.50
Warner Rd.				
1354 Arena		NK	0.41 J	<0.50
1359	No Sample Collected			
1362 Crawford		NK	<0.50	<0.50
Crawford duplicate			<0.50	<0.50
1368	No Sample Collected			
1389 Ketzler		NK	0.37	<0.20
1395 Davis		NK	0.33	<0.20
Davis duplicate			0.30	<0.20
Warner Lane				
919 Hahn		30	0.29	<0.20
929 Ravenscroft		NK	<0.50	<0.50
945 Massingill		30	<0.50	<0.50
TR-3	No Sample Collected			
Wescott Lane				
1436 Conley		21	<0.50	<0.50
Conley duplicate			<0.50	<0.50
1463 Averett		95	<0.20	<0.20
Davison St.				
1431	No Sample Collected			
1443	No Sample Collected			
1446 Elsberg		NK	<0.50	<0.50
1451	No Sample Collected			
1454 Tarppening		50	<0.50	<0.50
Tarppening duplicate			<0.50	<0.50
1457 Hanifen		NK	<0.50	<0.50
1463 Erichson		50	<0.50	<0.50
Erichson duplicate			<0.50	<0.50

Table 4, cont. Well Depth Compared to TCE and Benzene Results.

Address	Name	Well Depth Ft.	Trichloroethylene ug/L	Benzene ug/L
Davison St., cont.				
1467		No Sample Collected		
1468 Ortiz		NK	<0.50	<0.50
1477 Davison		66	<0.50	<0.50
1478 Cornell		NK	<0.50	<0.50
1484 Wawrytko		NK	<0.50	<0.50
1491 Rollins		Sampled by Owner		
1492 Walsh		20	<0.50	<0.50
1506 McAdoo		NK	<0.50	<0.50
1518 Baker		57	<0.50	<0.50
1569 Holder ✓		40	5.41 14	<0.50
Holder duplicate			5.42 14	<0.50
Stier Avenue				
1032 Erichson		50	<0.50	<0.50
Old Richardson Hwy.				
TL-2108 Moss		No Sample Collected		
TL-2107 Owen		NK	0.66	<0.50
1289 Schumann		31	<0.50	<0.50
903 Johnson		NK	<0.50	<0.50
933 Braham		50	<0.50	<0.50
1360 Buck, Davis new well		35	<0.50	<0.50
Buck, Davis old well		35	<0.50	<0.50
1361		No Sample Collected		
1375 Shaw		NK	0.52	<0.50
1391 Simpkin		40	<0.50	<0.50
1401 Rollins		NK	<0.50	<0.50
Ensley Rd.				
922 Meeker		48	<0.20	<0.20
930 Palmer		30	0.33 J	<0.50
Eskimo Museum Lane				
1530 Mason		36	4.57 15	<0.50
1540 Pailing		100	8.4 14	<0.50
New Richardson Hwy.				
1375 Old Club Tokyo		NK	<0.20	<0.20
1410 Koop		NK	12 17	<0.50
1430 Grieme		60	13 14.1 14	0.37
1438 ESI Office ✓		NK	14 19.6 14	0.32
ESI Shop ✓		NK	15 8.31 20	0.24
1455 Anderson ✓		30	16 22 D 14	0.45
1488 Van Hatten		NK	<0.50	<0.50
1531 Whitney		No Sample Collected		

NK = Well depth information not known or provided by owner or resident.

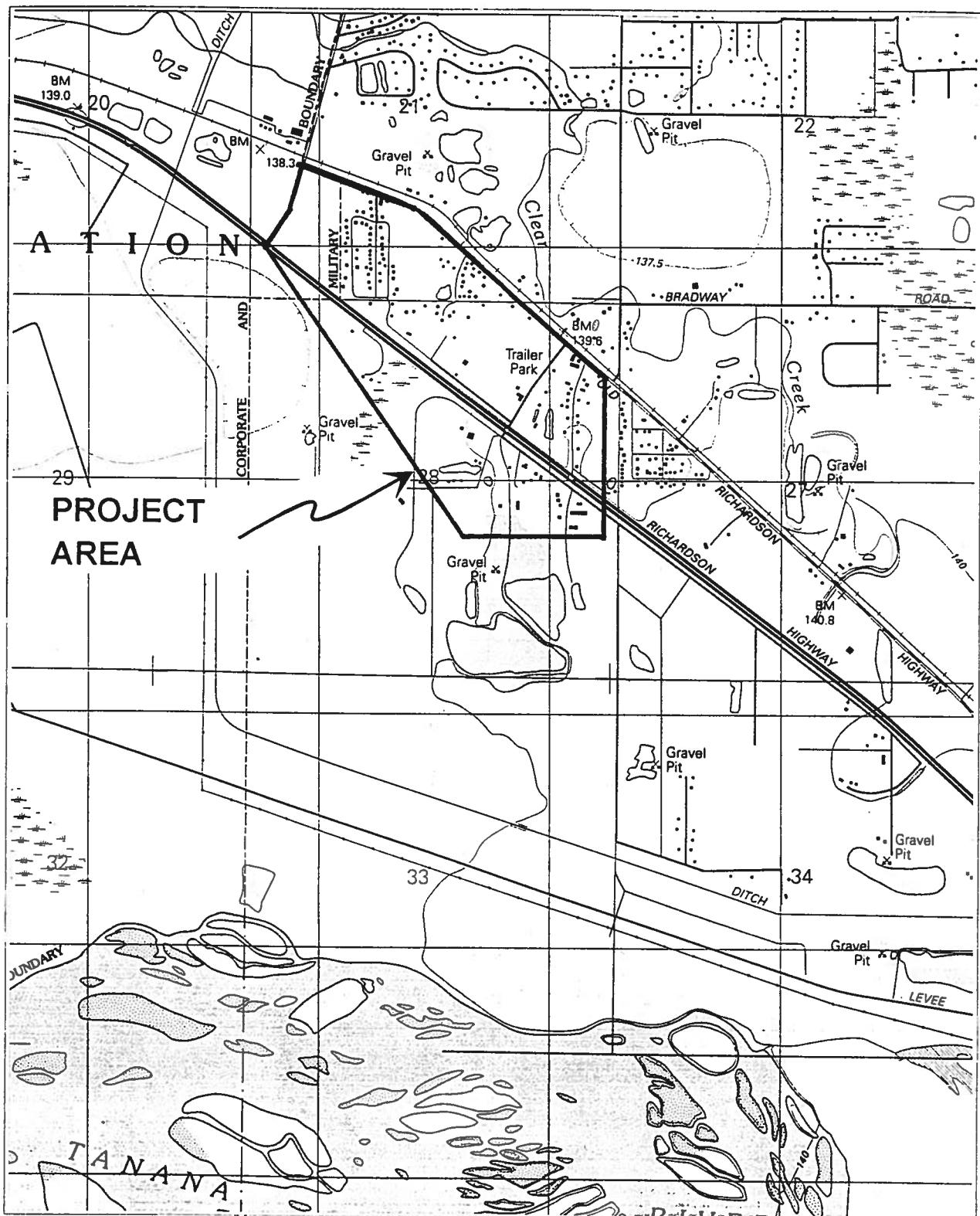
Table 5. Precision Calculations for Samples and Their Duplicates.

Address	Sample Number	Trichloroethylene ug/l	Cis-1,2-Di-chloroethylene ug/l	1,1,1-Trichloro-ethane ug/l	1,1-Dichloro-ethane ug/l	Benzene ug/l
1320 Sloan	7294-801-040	0.76	<0.50	<0.50	<0.50	<0.50
1320 Sloan dup.	7294-801-041	0.79	<0.50	0.79	<0.50	<0.50
1329 Sloan	72912-926-054	1.2	0.87	1.8	1.6	12
1329 Sloan dup.	72912-926-055	1.2	0.82	1.6	1.5	11
1328 Leslie	7294-628-023	<0.20	<0.20	<0.20	6%	9%
1328 Leslie dup.	7294-628-024	<0.20	<0.20	<0.20	NA	NA
1348 Leslie	72912-1012-116	0.83	<0.50	<0.50	0.58	<0.50
1348 Leslie dup.	72912-1012-117	0.85	<0.50	<0.50	0.58	<0.50
1331 Gianna's Ct.	72912-1009-106	<0.50	<0.50	<0.50	0%	NA
1331 Gianna's Ct. dup.	72912-1009-107	<0.50	NA	NA	NA	NA
1395 Warner Rd.	7294-626-010	0.33	<0.20	0.21	0.56	<0.20
1395 Warner Rd. dup.	7294-626-011	0.30	<0.20	0.22	0.58	<0.20
1436 Wescott Lane	72912-1003-095	<0.50	<0.50	<0.50	-5%	NA
1436 Wescott Lane dup.	72912-1003-096	<0.50	<0.50	<0.50	<0.50	<0.50
1454 Davison St.	72912-927-066	<0.50	<0.50	<0.50	NA	NA
1454 Davison St. dup.	72912-927-067	<0.50	NA	NA	NA	NA
1463 Davison St. dup.	72912-1002-086	<0.50	<0.50	<0.50	<0.50	<0.50
1463 Davison St. dup.	72912-1002-087	<0.50	<0.50	<0.50	<0.50	<0.50
1569 Davison St.	7294-801-018	5.41	0.41 J	0.86	<0.50	<0.50
1569 Davison St. dup.	7294-801-036	5.42	0.40 J	0.95	<0.50	<0.50
	RPD	0%	2%	-10%	NA	NA

Note: RPD = Relative Percent Difference.

NA = RPD could only be calculated when one or both of the sample results were reported above the method detection limit.

J = Estimated concentration. Sample result was below method detection limit.



Adapted from USGS Fairbanks (D-2) S E, Alaska,  
1992. Approximate scale 1:25,000



Groundwater Assessment  
Six Mile Richardson Highway  
Fairbanks, Alaska

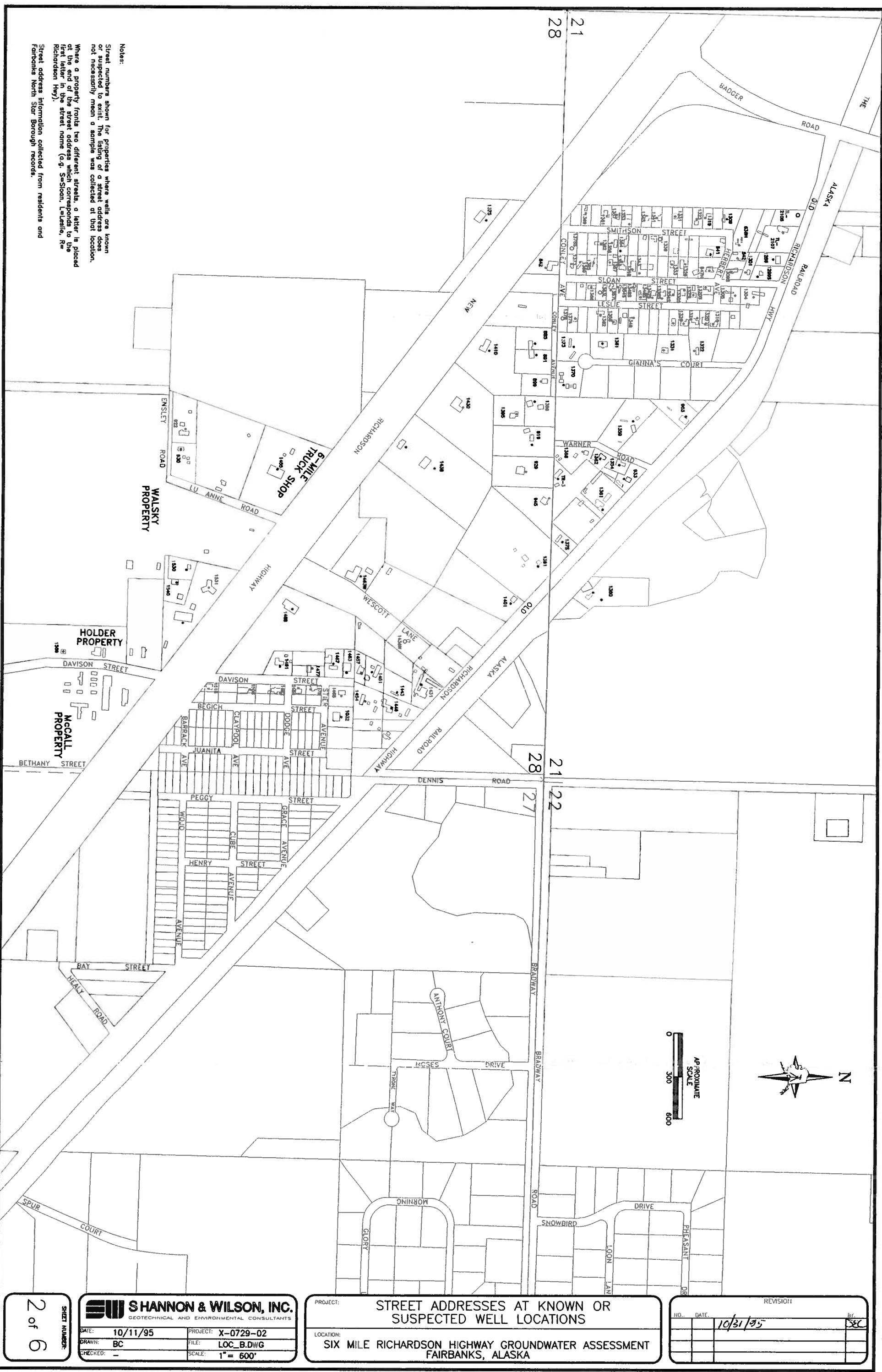
SITE LOCATION MAP

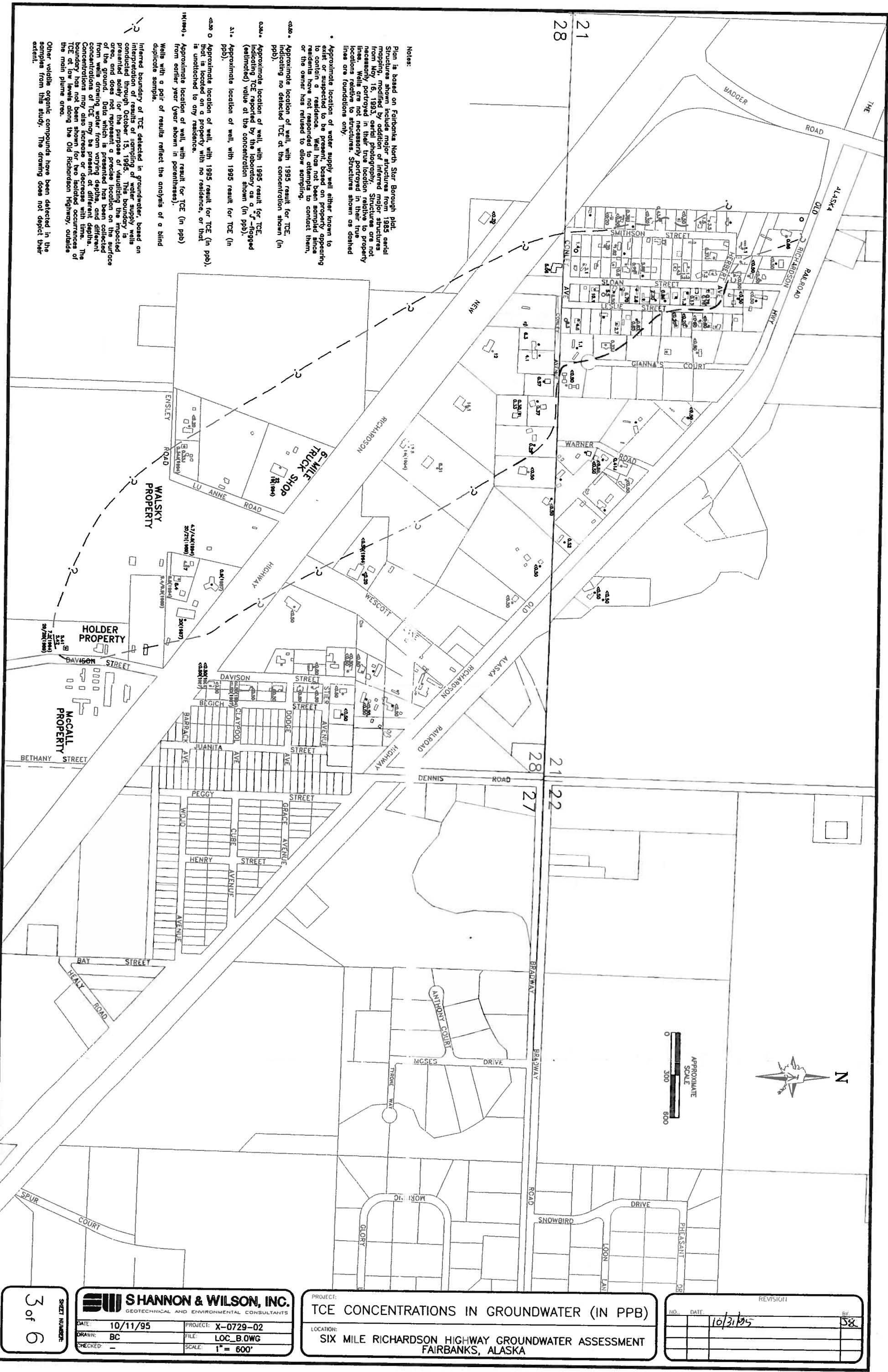
October 1995

X-0729-08

SHANNON & WILSON, INC.  
GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS

Figure 1





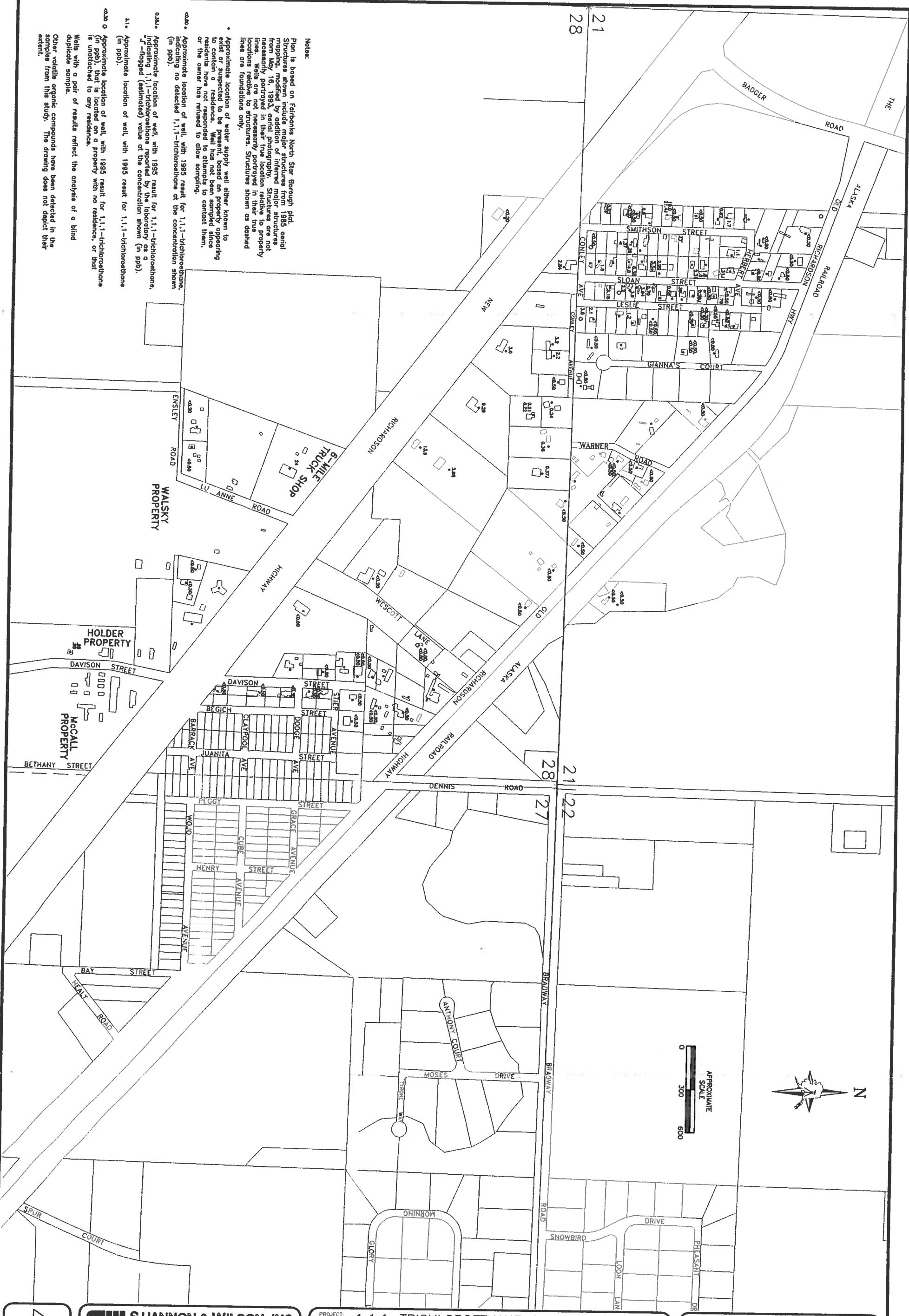
Notes

- Plum Run is based on Rainiers North Star Borough plot. Structures shown include major structures from 1985 aerial mapping, modified by addition of inferred major structures from May 16, 1993, aerial photography. Structures are not necessarily portrayed in their true location relative to property lines. Wells are not necessarily portrayed in their true locations relative to structures. Structures shown as dashed lines are foundations only.
- Approximate location of water supply well either known to exist or suspected to be present based on property appearing to contain a residence. Well has not been sampled since residents have not responded to attempts to contact them, or the owner has refused to allow sampling.
- Approximate location of well, with 1985 result for 1,1,1-trichloroethane

Approximate location of well with 1995 result for 1,1,1-trichloroethane, indicating no detected 1,1,1-trichloroethane at the concentration shown (in ppb).

1.1. Approximate location of well, with 1995 result for 1,1,1-trichloroethane (in ppb).

Other volatile organic compounds have been detected in the samples from this study. The drawing does not depict their extent.



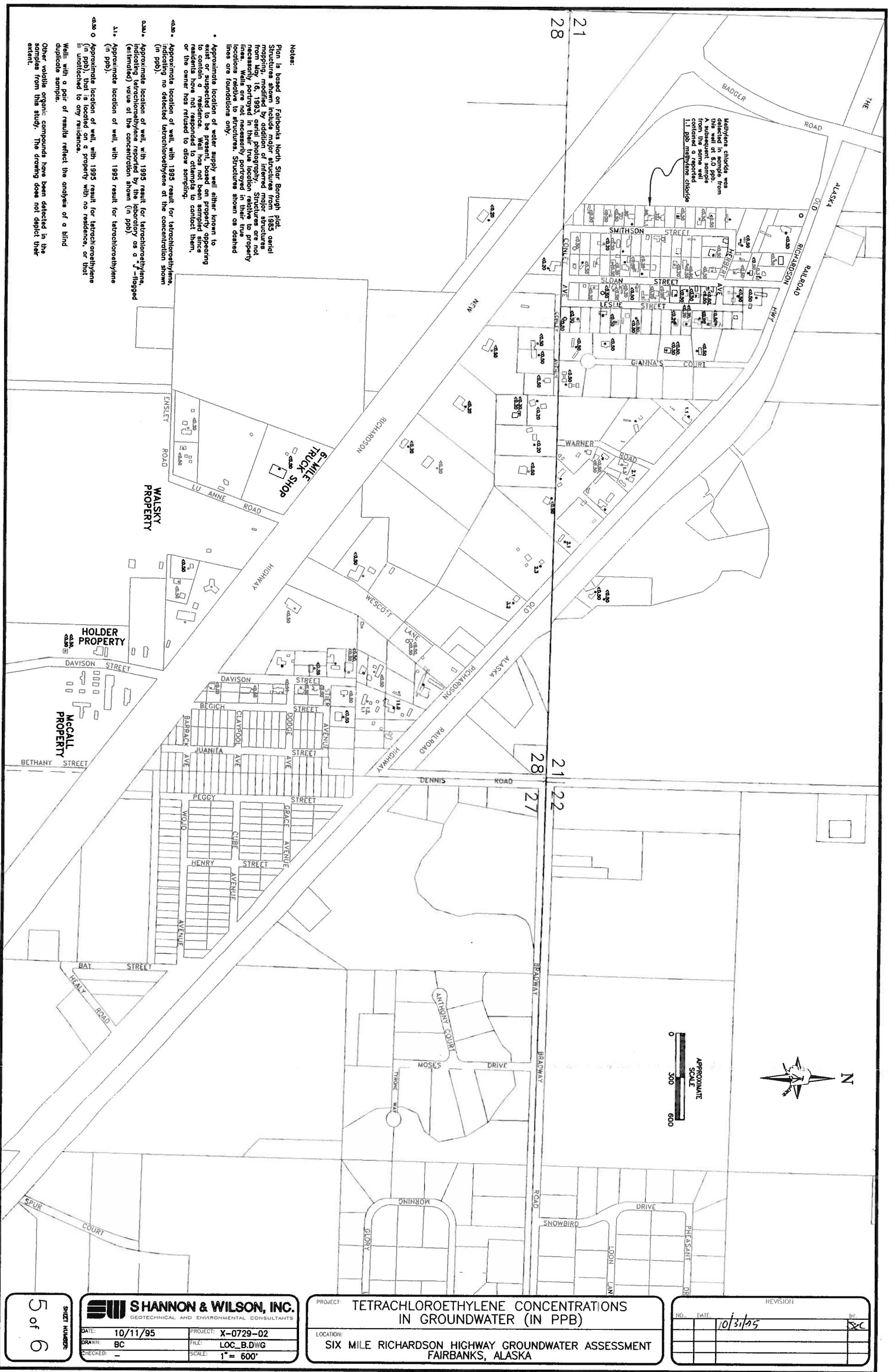
APPROXIMATE  
SCALE

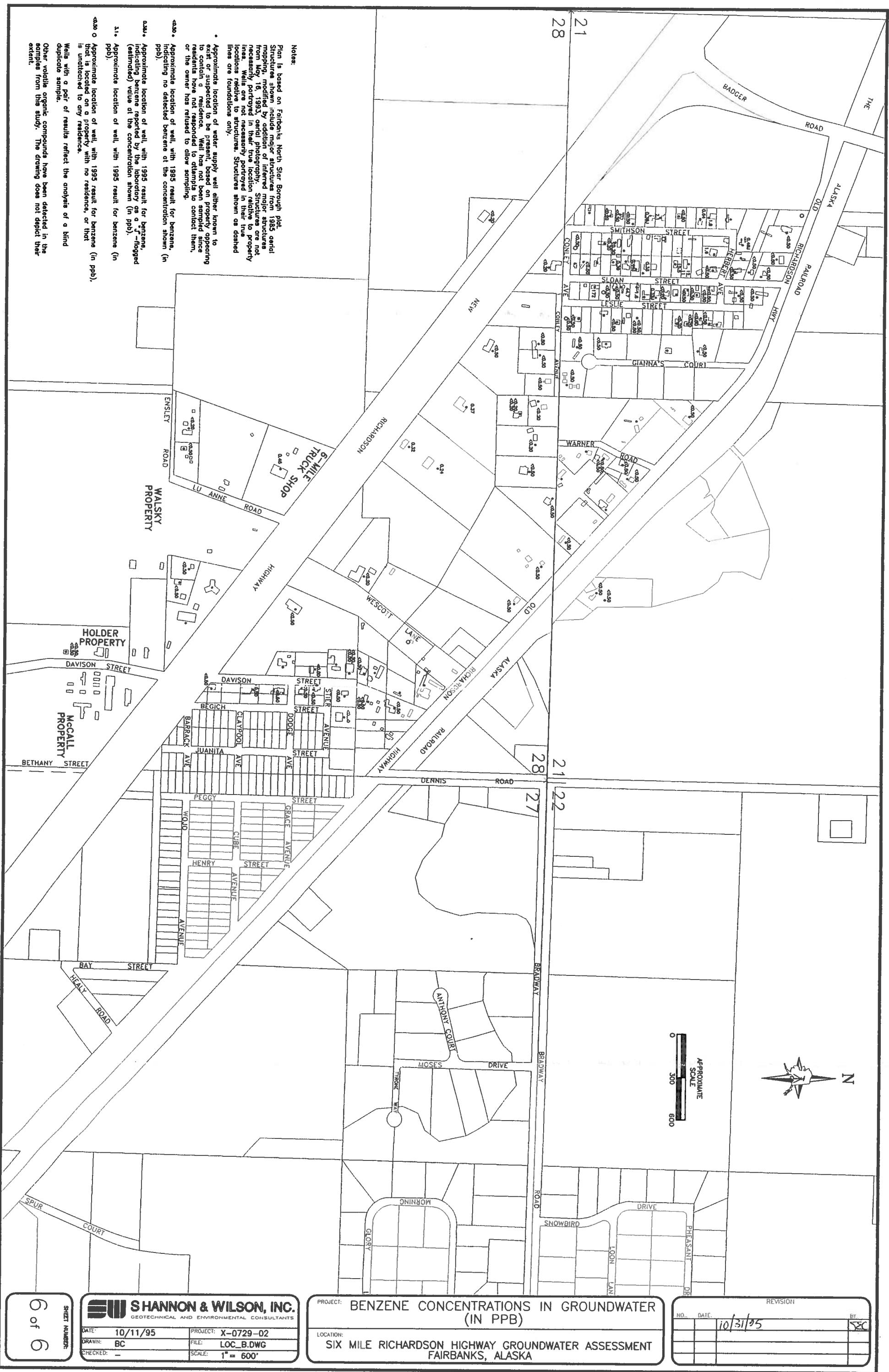
<b>SU</b> SHANNON & WILSON, INC.			
GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS			
DATE	10/11/95	PROJECT:	X-0729-02
DRAWN:	BC	FILE:	LOC_B.0WG
CHECKED:	-	SCALE:	1" = 600'

PROJECT: 1,1,1-TRICHLOROETHANE CONCENTRATIONS  
IN GROUNDWATER (IN PPB)

LOCATION: SIX MILE RICHARDSON HIGHWAY GROUNDWATER ASSESSMENT  
FAIRBANKS, ALASKA

		REVISION	
NO..	DATE.		BY
	10/3/95		JSC





Appendix  
A

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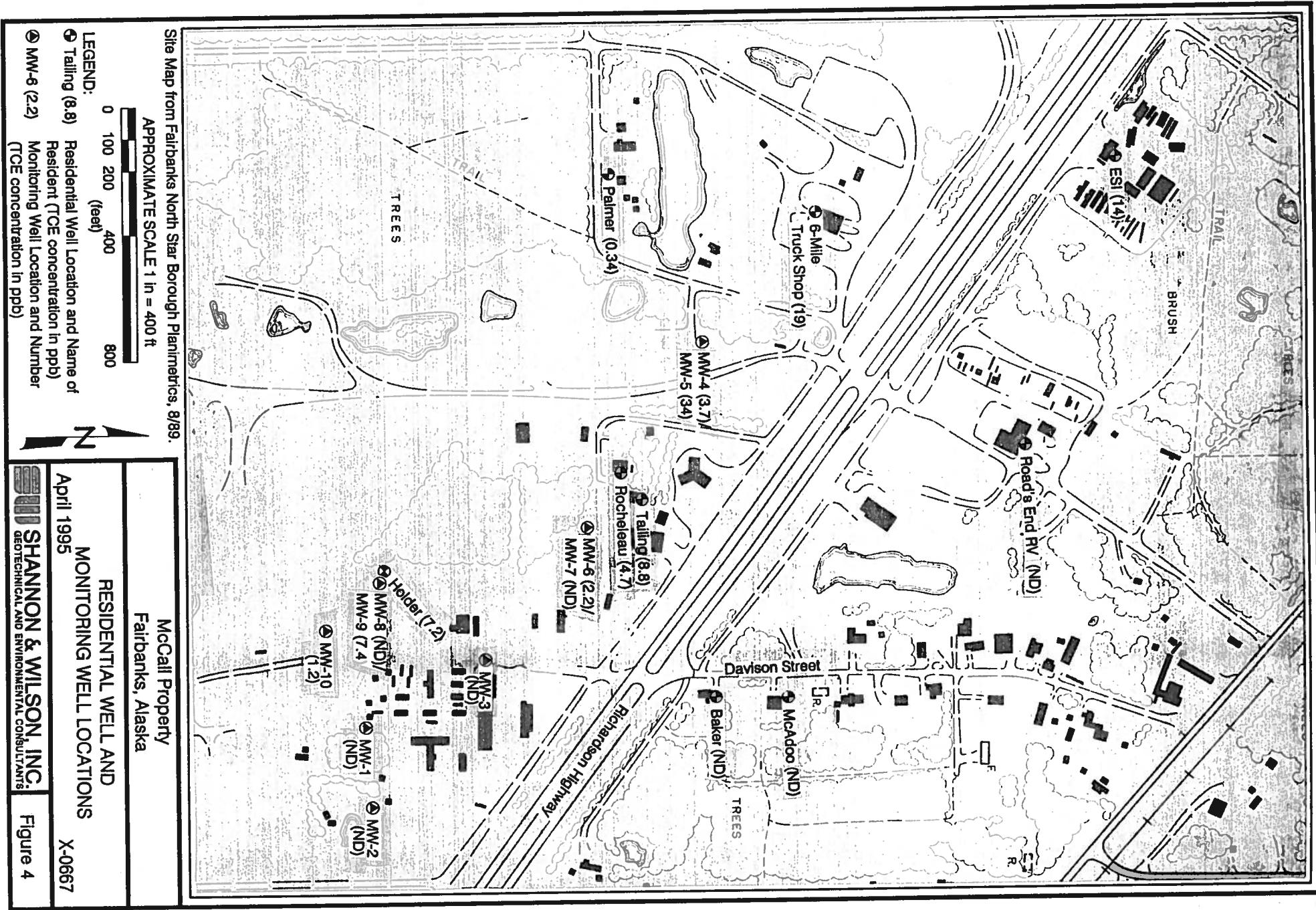




TABLE 5  
Summary of Analytical Results for Monitoring Well Water Samples (EPA 502.2)

Sample Number	Location	Well Depth (ft)	Result (ug/l)	Compound
667-1219-101	MW-1	27	ND	
667-1219-201	MW-2	28	5.5	1,1,1 Trichloroethane
			0.63	1,1-Dichloroethane
667-1219-301	MW-3	28	ND	
667-1220-401	MW-4	80	3.7	Trichloroethylene
667-1220-501	MW-5	30	3.6	1,1,1 Trichloroethane
			0.71	Benzene
			34 D	Trichloroethylene
			0.83	1,1-Dichloroethane
			1.8	cis-1,2-Dichloroethylene
667-1122-601	MW-6	30	2.2	Trichloroethylene
			0.52	Bromomethane
667-1122-701	MW-7	80	ND	
11/22 Trip blank			ND	
667-1220-801	MW-8	80	ND	
667-1220-901	MW-9	30	7.4	Trichloroethylene
			0.58	cis-1,2-Dichloroethylene
667-1220-902	dup of -901		7.2	Trichloroethylene
			1.8	Chloromethane
			0.59	cis-1,2-Dichloroethylene
667-1128-1001	MW-10	30	1.2	Trichloroethylene
12/19 Trip blank			1.5	TTHM
			1.5	Chloroform
			1.4	Bromomethane

NOTES:  
Tables list only detected compounds.  
ND indicates no compounds were detected.

D indicates a secondary dilution.



**TABLE 2**  
**Summary of Analytical Results for Residential Well Samples (EPA 502.2)**

Sample Number	Location	Well Depth (ft)	Result (ug/l)	Compound
667-913-001	McAdoo	30	ND	
667-913-002	Holder	40	7.2 0.43 J	Trichloroethylene cis-1,2-Dichloroethylene
667-913-003	Road's End RV	?	ND	
667-913-004	Palmer	18	0.34 J	Trichloroethylene
667-913-005	Rochelleau	36	4.7 1.0	Trichloroethylene 1,2-Dibromo 3-Chloropropane
667-913-006	duplicate of -005		4.8	Trichloroethylene
667-913-007	Tailing	100	8.8 0.41 J	Trichloroethylene Fluorotrichloromethane
9/13 Trip blank			ND	
667-914-008	ESI	?	14 17 2.0	Trichloroethylene 1,1,1 Trichloroethane 1,1 Dichloroethane
			0.96 0.33 J	cis-1,2-Dichloroethylene trans-1,2 Dichloroethylene
667-926-009	Baker	48	ND	
9/26 Trip blank			1.8	Dichlormethane
667-916-010	6-Mile Truck Shop	30	19 46 D 0.44 J	Trichloroethylene 1,1,1 Trichloroethane 1,1 Dichloroethylene
			0.36 J 6.8 1.5 1.1 2.0	Benzene 1,1 Dichloroethane cis-1,2-Dichloroethylene trans-1,2 Dichloroethylene Dichlormethane
			0.21 J	Toluene



TABLE 1  
Volatile Organics in Water (a)  
(all concentrations in ppb)

Location (MCL) (b)	Date	Sample Number	Benzene	Ethyl-benzene	Toluene	Xylenes	Acetone	Chloro-ethane	1,1-Dichloro-ethane	1,2-Dichloro-ethane	1,1,1-Trichloro-ethane	Trichloro-ethene	Tetrachloro-ethene	Trichloro-fluoromethane
			(5)	(660)	(2000)	(440)			(5)	(200)	(5)			
North Pit, DEC (a)	10/09/86	100986-9	13	30	590	125	150	<22	<10	<12	94	<9	<6	~31
North Pit, Polytechnic	10/02/86	60963-5 60963-6 60964-1	- - -	- - -	- - -	- - -	- - -	- - -	- - -	37.0 67.0 49.0	16.0 19.0 12.0	10.0 7.0 12.0	- - -	
Eskimo Museum, DEC	03/31/87	033187-4	<1.0	<1.0	<1.0	<2.0	-	-	-	<0.5	<0.5	0.9	-	-
R-A-L Mechanical, DEC	03/31/87	033187-1	<1.0	<1.0	<1.0	<2.0	-	-	-	<0.5	<0.5	20.	-	-
B-1	09/07/89	220-907-B101	<0.2	<0.2	<0.2	<0.6	-	<2.0	<0.2	<0.2	<0.4	<0.2	<0.2	<2.0
B-2	09/08/89	220-908-B21	0.6	1.1	12	4.9	-	14	0.5	0.5	1.0	<0.2	<0.2	<2.0
B-3	09/08/89	220-908-B31	0.9	0.2	1.8	1.2	-	<2.0	<0.2	<0.2	<0.4	<0.2	<0.2	<2.0
North Pit Surface Water	09/22/89	220-922-01	0.4	0.9	130	4.2	-	<2.0	<0.2	0.3	0.8	<0.2	<0.2	16
North Pit Bottom Water	09/22/89	220-922-02	6.1	9.0	2500	42	-	<2.0	<0.2	2.4	3.6	<0.2	<0.2	62
On-Site Water Supply Well, 59 ft.	09/22/89	220-922-04	<0.2	<0.2	<0.2	<0.6	-	<2.0	<0.2	<0.2	<0.4	<0.2	<0.2	<2.0
Off-Site Well, Bonilla, 40 ft.	10/02/89	220-102-01	<0.2	<0.2	<0.2	<0.6	-	<2.0	<0.2	<0.2	<0.4	21/20	<0.2	<2.0
Off-Site Well, Bonilla, 100 ft.	10/02/89	220-102-02	<0.2	<0.2	<0.2	<0.6	-	<2.0	<0.2	<0.2	<0.4	9.9/9.4	<0.2	<2.0
Off-Site Well, Holder, 40 ft.	10/04/89	220-104-01	<0.2	<0.2	<0.2	<0.6	-	<2.0	<0.2	<0.2	<0.4	29/26	0.2	<2.0

(a) See laboratory reports for analytical methods.

(b) Levels for those compounds for which values have been established.

Maximum Contaminant Levels provided for benzene, 1,2-dichloroethane, 1,1,1-trichloroethane, and trichloroethene.

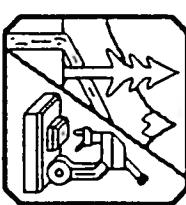
Proposed Maximum Contaminant Levels provided for ethylbenzene, toluene, and xylenes.



Appendix

B





# NORTHERN TESTING LABORATORIES, INC.

3330 INDUSTRIAL AVENUE  
FAIRBANKS, ALASKA 99701  
2505 FAIRBANKS STREET  
ANCHORAGE, ALASKA 99503

(907) 456-3116 • FAX 456-3125  
(907) 277-8378 • FAX 274-9645

Commercial Testing & Engineering  
5633 B. Street  
Anchorage AK 99518

Attn: Michelle Turner

Our Lab #: A138973  
Location/Project: 95.9144-1  
Your Sample ID: Water  
Sample Matrix:  
Comments: 7294-623-000

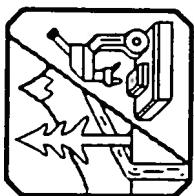
Report Date: 07/11/95  
Date Arrived: 07/07/95  
Date Sampled: 06/23/95  
Time Sampled: 1500  
Collected By:

\* Definitions \*

ND = Non Detected  
H = Above Regulatory Max.  
E = Estimated Value  
M = Matrix Interference  
D = Lost to Dilution  
MDL = Method Detection Limit

Lab	Number	Method	Parameter	Units	Result	*	MDL	Date Prepared	Date Analyzed
A138973	502.2/524.2	Benzene		ug/L	<MDL	0.20		07/07/95	
		Bromobenzene		ug/L	<MDL	0.20			
		Bromo-chloromethane		ug/L	<MDL	0.30			
		Bromo-dichloromethane		ug/L	<MDL	0.20			
		Bromoform		ug/L	<MDL	0.50			
		Bromo-methane		ug/L	<MDL	0.50			
		n-Butylbenzene		ug/L	<MDL	0.20			
		s-Butylbenzene		ug/L	<MDL	0.20			
		tert-Butylbenzene		ug/L	<MDL	0.20			
		Carbon Tetrachloride		ug/L	<MDL	0.20			
		Chlorobenzene		ug/L	<MDL	0.20			
		Dibromo-chloromethane		ug/L	<MDL	0.20			
		Chloroethane		ug/L	<MDL	0.50			
		Chloroform		ug/L	<MDL	0.20			
		Chloro-methane		ug/L	<MDL	0.50			
		o-Chloro-toluene		ug/L	<MDL	0.20			
		p-Chloro-toluene		ug/L	<MDL	0.20			
		Dibromo-methane		ug/L	<MDL	0.20			
		1,4-Dichloro-benzene		ug/L	<MDL	0.20			
		1,3-Dichloro-benzene		ug/L	<MDL	0.20			
		o-Dichloro-benzene		ug/L	<MDL	0.20			
		Dichloro-difluoromethane		ug/L	<MDL	0.50			
		1,1-Dichloro-ethane		ug/L	<MDL	0.20			
		1,1-Dichloro-ethane		ug/L	<MDL	0.20			
		cis-1,2-Dichloro-ethylene		ug/L	<MDL	0.20			
		trans-1,2-Dichloro-ethylene		ug/L	<MDL	0.20			
		Methylene Chloride		ug/L	<MDL	0.50			
		1,2-Dichloropropane		ug/L	<MDL	0.20			
		1,3-Dichloropropane		ug/L	<MDL	0.20			
		2,2-Dichloropropane		ug/L	<MDL	0.20			

Reported By: Anthony J. Lange  
Chemistry Supervisor



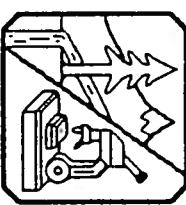
# NORTHERN TESTING LABORATORIES, INC.

3330 INDUSTRIAL AVENUE  
2505 FAIRBANKS STREET  
FAIRBANKS, ALASKA 99701

(907) 456-3116 • FAX 456-3125  
(907) 277-8378 • FAX 274-9645

Lab Number	Method	Parameter	Units	Result *	MDL	Date Prepared	Date Analyzed
A138973	502.2/524.2	1,1-Dichloropropene	ug/L	<MDL	0.20	07/07/95	
		1,3-Dichloropropene	ug/L	<MDL	0.20		
		Ethylibenzene	ug/L	<MDL	0.20		
		1,2-Dibromoethane	ug/L	<MDL	0.20		
		Fluorotrichloromethane	ug/L	<MDL	0.20		
		Hexachlorobutadiene	ug/L	<MDL	0.20		
		Isopropylbenzene	ug/L	<MDL	0.20		
		p-Isopropyltoluene	ug/L	<MDL	0.20		
		Naphthalene	ug/L	<MDL	0.20		
		n-Propylbenzene	ug/L	<MDL	0.20		
		Styrene	ug/L	<MDL	0.20		
		1,1,1,2-Tetrachloroethane	ug/L	<MDL	0.20		
		1,1,2,2-Tetrachloroethane	ug/L	<MDL	0.20		
		Tetrachloroethylene	ug/L	<MDL	0.20		
		Total Trihalomethane	ug/L	<MDL	1.00		
		Toluene	ug/L	<MDL	0.30		
		1,2,3-Trichlorobenzene	ug/L	<MDL	0.20		
		1,2,4-Trichlorobenzene	ug/L	<MDL	0.20		
		1,1,1-Trichloroethane	ug/L	<MDL	0.20		
		1,1,2-Trichloroethane	ug/L	<MDL	0.20		
		Trichloroethylene	ug/L	<MDL	0.20		
		1,2,3-Trichloropropane	ug/L	<MDL	0.20		
		1,2,4-Trimethylbenzene	ug/L	<MDL	0.20		
		1,3,5-Trimethylbenzene	ug/L	<MDL	0.20		
		Vinyl Chloride	ug/L	<MDL	0.50		
		m,p-Xylenes	ug/L	<MDL	0.20		
		o-Xylene	ug/L	<MDL	0.20		
		Surrogate Recovery	%	93			

  
Reported By: Anthony J. Lange  
Chemistry Supervisor



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Commercial Testing & Engineering  
5633 B. Street  
Anchorage AK 99518

922 Ensley

Attn: Michelle Turner Ken Meeker

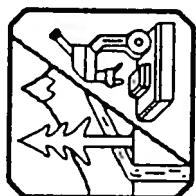
Our Lab #: A138974  
Location/Project: Your Sample ID: 95.9144-2  
Sample Matrix: Water  
Comments: 7294-623-001

Report Date: 07/11/95  
Date Arrived: 07/07/95  
Date Sampled: 06/23/95  
Time Sampled: 1554  
Collected By:

\* Definitions \*  
ND = Non Detected  
H = Above Regulatory Max.  
E = Estimated Value  
M = Matrix Interference  
D = Lost to Dilution  
MDL = Method Detection Limit

Lab Number	Method	Parameter	Units	Result	Date Analyzed	Date Prepared
A138974	502.2/524.2	Benzene	ug/L	<MDL	0.20	07/07/95
		Bromobenzene	ug/L	<MDL	0.20	
		Bromochloromethane	ug/L	<MDL	0.30	
		Bromodichloromethane	ug/L	<MDL	0.20	
		Bromoform	ug/L	<MDL	0.50	
		Bromomethane	ug/L	<MDL	0.50	
		n-Butylbenzene	ug/L	<MDL	0.20	
		s-Butylbenzene	ug/L	<MDL	0.20	
		tert-Butylbenzene	ug/L	<MDL	0.20	
		Carbon Tetrachloride	ug/L	<MDL	0.20	
		Chlorobenzene	ug/L	<MDL	0.20	
		Dibromochloromethane	ug/L	<MDL	0.20	
		Chloroethane	ug/L	<MDL	0.50	
		Chloroform	ug/L	<MDL	0.20	
		Chloromethane	ug/L	<MDL	0.50	
		o-Chlorotoluene	ug/L	<MDL	0.20	
		p-Chlorotoluene	ug/L	<MDL	0.20	
		Dibromomethane	ug/L	<MDL	0.20	
		1,4-Dichlorobenzene	ug/L	<MDL	0.20	
		1,3-Dichlorobenzene	ug/L	<MDL	0.20	
		o-Dichlorobenzene	ug/L	<MDL	0.20	
		Dichlorodifluoromethane	ug/L	<MDL	0.50	
		1,1-Dichlorethane	ug/L	<MDL	0.20	
		1,2-Dichlorethane	ug/L	<MDL	0.20	
		cis-1,2-Dichloroethylene	ug/L	<MDL	0.20	
		trans-1,2-Dichloroethylene	ug/L	<MDL	0.20	
		Methylene Chloride	ug/L	<MDL	0.50	
		1,2-Dichloropropane	ug/L	<MDL	0.20	
		1,3-Dichloropropane	ug/L	<MDL	0.20	
		2,2-Dichloropropane	ug/L	<MDL	0.20	

Reported By: Anthony J. Lange  
Chemistry Supervisor



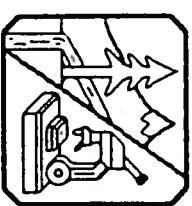
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2505 FAIRBANKS STREET  
FAIRBANKS, ALASKA 99701

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Lab Number	Method	Parameter	Units	Result *	MDL	Date Prepared	Date Analyzed
A138974	502.2/524.2	1,1-Dichloropropane	ug/L	<MDL	0.20	07/07/95	
		1,3-Dichloropropene	ug/L	<MDL	0.20		
		Ethylbenzene	ug/L	<MDL	0.20		
		1,2-Dibromoethane	ug/L	<MDL	0.20		
		Fluorotrichloromethane	ug/L	<MDL	0.20		
		Hexachlorobutadiene	ug/L	<MDL	0.20		
		Isopropylbenzene	ug/L	<MDL	0.20		
		p-Isopropyltoluene	ug/L	<MDL	0.20		
		Naphthalene	ug/L	<MDL	0.20		
		n-Propylbenzene	ug/L	<MDL	0.20		
		Styrene	ug/L	<MDL	0.20		
		1,1,1,2-Tetrachloroethane	ug/L	<MDL	0.20		
		1,1,2,2-Tetrachloroethane	ug/L	<MDL	0.20		
		Tetrachloroethylene	ug/L	<MDL	0.20		
		Total Trihalomethane	ug/L	<MDL	1.00		
		Toluene	ug/L	<MDL	0.30		
		1,2,3-Trichlorobenzene	ug/L	<MDL	0.20		
		1,2,4-Trichlorobenzene	ug/L	<MDL	0.20		
		1,1,1-Trichloroethane	ug/L	<MDL	0.20		
		1,1,2-Trichloroethane	ug/L	<MDL	0.20		
		Trichloroethylene	ug/L	<MDL	0.20		
		1,2,3-Trichloropropane	ug/L	<MDL	0.20		
		1,2,4-Trimethylbenzene	ug/L	<MDL	0.20		
		1,3,5-Trimethylbenzene	ug/L	<MDL	0.20		
		Vinyl Chloride	ug/L	<MDL	0.50		
		m,p-Xylenes	ug/L	<MDL	0.20		
		o-Xylene	ug/L	<MDL	0.20		
		Surrogate Recovery	%	94			

*[Signature]*  
Reported By: Anthony J. Lange  
Chemistry Supervisor



# NORTHERN TESTING LABORATORIES, INC.

FAIRBANKS, ALASKA 99701  
ANCHORAGE, ALASKA 99503

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(907) 277-8378 • FAX 274-9645

Commercial Testing & Engineering  
5633 B. Street  
Anchorage AK 99518

1438 New Richardson

Attn: Michelle Turner

ESI Office

Our Lab #: A138975  
Location/Project: 95.9144-3  
Your Sample ID: 95.9144-3  
Sample Matrix: Water  
Comments: 7294-623-002

Report Date: 07/11/95  
Date Arrived: 07/07/95  
Date Sampled: 06/23/95  
Time Sampled: 1610  
Collected By:

\* Definitions \*

ND = Non Detected

H = Above Regulatory Max.

E = Estimated Value

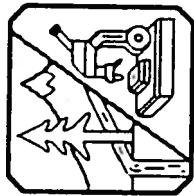
M = Matrix Interference

D = Lost to Dilution

MDL = Method Detection Limit

Lab Number	Method	Parameter	Units	Result	MDL	Date Prepared	Date Analyzed
A138975	502.2/524.2	Benzene	ug/L	0.32	0.20	07/07/95	
		Bromobenzene	ug/L	<MDL	0.20		
		Bromochloromethane	ug/L	<MDL	0.30		
		Bromodichloromethane	ug/L	<MDL	0.20		
		Bromoform	ug/L	<MDL	0.50		
		Bromomethane	ug/L	<MDL	0.50		
		n-Butylbenzene	ug/L	<MDL	0.20		
		s-Butylbenzene	ug/L	<MDL	0.20		
		tert-Butylbenzene	ug/L	<MDL	0.20		
		Carbon Tetrachloride	ug/L	<MDL	0.20		
		Chlorobenzene	ug/L	<MDL	0.20		
		Dibromochloromethane	ug/L	<MDL	0.20		
		Chloroethane	ug/L	<MDL	0.50		
		Chloroform	ug/L	<MDL	0.20		
		Chloromethane	ug/L	<MDL	0.50		
		o-Chlorotoluene	ug/L	<MDL	0.20		
		p-Chlorotoluene	ug/L	<MDL	0.20		
		Dibromomethane	ug/L	<MDL	0.20		
		1,4-Dichlorobenzene	ug/L	<MDL	0.20		
		1,3-Dichlorobenzene	ug/L	<MDL	0.20		
		o-Dichlorobenzene	ug/L	<MDL	0.20		
		Dichlorodifluoromethane	ug/L	<MDL	0.50		
		1,1-Dichloroethane	ug/L	2.69	0.20		
		1,2-Dichloroethane	ug/L	<MDL	0.20		
		1,1-Dichloroethylene	ug/L	0.32	0.20		
		cis-1,2-Dichloroethylene	ug/L	<MDL	0.20		
		trans-1,2-Dichloroethylene	ug/L	0.47	0.20		
		Methylene Chloride	ug/L	<MDL	0.50		
		1,2-Dichloropropane	ug/L	<MDL	0.20		
		1,3-Dichloropropane	ug/L	<MDL	0.20		
		2,2-Dichloropropane	ug/L	<MDL	0.20		

Reported By: Anthony J. Lange  
Chemistry Supervisor



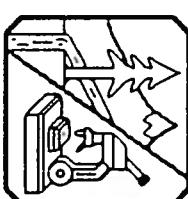
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Lab Number	Method	Parameter	Units	Result *	MDL	Date Prepared	Date Analyzed
A138975	502.2/524.2	1,1-Dichloropropene	ug/L	<MDL	0.20	07/07/95	
		1,3-Dichloropropene	ug/L	<MDL	0.20		
		Ethylbenzene	ug/L	<MDL	0.20		
		1,2-Dibromoethane	ug/L	<MDL	0.20		
		Fluorotrichloromethane	ug/L	<MDL	0.20		
		Hexachlorobutadiene	ug/L	<MDL	0.20		
		Isopropylbenzene	ug/L	<MDL	0.20		
		p-Isopropyltoluene	ug/L	<MDL	0.20		
		Naphthalene	ug/L	<MDL	0.20		
		n-Propylbenzene	ug/L	<MDL	0.20		
		Styrene	ug/L	<MDL	0.20		
		1,1,1,2-Tetrachloroethane	ug/L	<MDL	0.20		
		1,1,2,2-Tetrachloroethane	ug/L	<MDL	0.20		
		Tetrachloroethylene	ug/L	<MDL	0.20		
		Total Trihalomethane	ug/L	<MDL	1.00		
		Toluene	ug/L	<MDL	0.30		
		1,2,3-Trichlorobenzene	ug/L	<MDL	0.20		
		1,2,4-Trichlorobenzene	ug/L	<MDL	0.20		
		1,1,1-Trichloroethane	ug/L	13.9	0.20		
		1,1,2-Trichloroethane	ug/L	<MDL	0.20		
		Trichloroethylene	ug/L	19.6	H	0.20	
		1,2,3-Trichloropropane	ug/L	<MDL	0.20		
		1,2,4-Trimethylbenzene	ug/L	<MDL	0.20		
		1,3,5-Trimethylbenzene	ug/L	<MDL	0.20		
		Vinyl Chloride	ug/L	<MDL	0.50		
		m,p-Xylenes	ug/L	<MDL	0.20		
		o-Xylene	ug/L	<MDL	0.20		
		Surrogate Recovery	%	94			

Reported By: Anthony J. Lange  
Chemistry Supervisor



# NORTHERN TESTING LABORATORIES, INC.

3330 INDUSTRIAL AVENUE  
2505 FAIRBANKS STREET  
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ANCHORAGE, ALASKA 99503

(907) 456-3116 • FAX 456-9645  
(907) 277-8378 • FAX 274-9645

Commercial Testing & Engineering  
5633 B. Street  
Anchorage AK 99518

Attn: Michelle Turner      1438 New Richardson  
                        ESI Shrp  
Collected By:

Our Lab #: A138976

Location/Project:

Your Sample ID: 95.9144-4

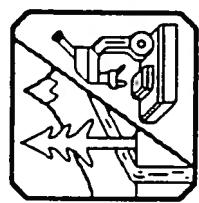
Sample Matrix: Water

Comments: 7294-623-003

\* Definitions \*  
ND = Non Detected  
H = Above Regulatory Max.  
E = Estimated Value  
M = Matrix Interference  
D = Lost to Dilution  
MDL = Method Detection Limit

Lab Number	Method	Parameter	Units	Result	MDL	Date Prepared	Date Analyzed
A138976	502.2/524.2	Benzene	ug/L	0.24	0.20	07/07/95	
		Bromobenzene	ug/L	<MDL	0.20		
		Bromoform	ug/L	<MDL	0.30		
		Bromomethane	ug/L	<MDL	0.20		
		n-Butylbenzene	ug/L	<MDL	0.50		
		s-Butylbenzene	ug/L	<MDL	0.20		
		tert-Butylbenzene	ug/L	<MDL	0.20		
		Carbon Tetrachloride	ug/L	<MDL	0.20		
		Chlorobenzene	ug/L	<MDL	0.20		
		Dibromochloromethane	ug/L	<MDL	0.20		
		Chloroethane	ug/L	<MDL	0.50		
		Chloroform	ug/L	<MDL	0.20		
		Chloromethane	ug/L	<MDL	0.50		
		o-Chlorotoluene	ug/L	<MDL	0.20		
		p-Chlorotoluene	ug/L	<MDL	0.20		
		Dibromomethane	ug/L	<MDL	0.20		
		1,4-Dichlorobenzene	ug/L	<MDL	0.20		
		1,3-Dichlorobenzene	ug/L	<MDL	0.20		
		o-Dichlorobenzene	ug/L	<MDL	0.20		
		Dichlorodifluoromethane	ug/L	<MDL	0.50		
		1,1-Dichloroethane	ug/L	2.23	0.20		
		1,2-Dichloroethylene	ug/L	<MDL	0.20		
		cis-1,2-Dichloroethylene	ug/L	<MDL	0.20		
		trans-1,2-Dichloroethylene	ug/L	<MDL	0.20		
		Methylene Chloride	ug/L	3.19	0.50		
		1,2-Dichloropropane	ug/L	<MDL	0.20		
		1,3-Dichloropropane	ug/L	<MDL	0.20		
		2,2-Dichloropropane	ug/L	<MDL	0.20		

*RJL*  
Reported By: Anthony J. Lange  
Chemistry Supervisor



# NORTHERN TESTING LABORATORIES, INC.

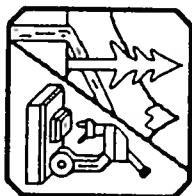
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FAIRBANKS, ALASKA 99701  
ANCHORAGE, ALASKA 99503

3330 INDUSTRIAL AVENUE  
2505 FAIRBANKS STREET

Lab Number	Method	Parameter	Units	Result	*	MDL	Date Prepared	Date Analyzed
A138976	502.2/524.2	1,1-Dichloropropane	ug/L	<MDL		0.20	07/07/95	
		1,3-Dichloropropane	ug/L	<MDL		0.20		
		Ethylbenzene	ug/L	0.20		0.20		
		1,2-Dibromoethane	ug/L	<MDL		0.20		
		Fluorotrichloromethane	ug/L	<MDL		0.20		
		Hexachlorobutadiene	ug/L	<MDL		0.20		
		Isopropylbenzene	ug/L	<MDL		0.20		
		p-Isopropyltoluene	ug/L	<MDL		0.20		
		Naphthalene	ug/L	0.57		0.20		
		n-Propylbenzene	ug/L	<MDL		0.20		
		Styrene	ug/L	<MDL		0.20		
		1,1,1,2-Tetrachloroethane	ug/L	<MDL		0.20		
		1,1,2,2-Tetrachloroethane	ug/L	<MDL		0.20		
		Tetrachloroethylene	ug/L	<MDL		0.20		
		Total Trihalomethane	ug/L	<MDL		1.00		
		Toluene	ug/L	0.73		0.30		
		1,2,3-Trichlorobenzene	ug/L	<MDL		0.20		
		1,2,4-Trichlorobenzene	ug/L	<MDL		0.20		
		1,1,1-Trichloroethane	ug/L	5.98		0.20		
		1,1,2-Trichloroethane	ug/L	<MDL		0.20		
		Trichloroethylene	ug/L	8.31	H	0.20		
		1,2,3-Trichloropropane	ug/L	<MDL		0.20		
		1,2,4-Trimethylbenzene	ug/L	0.38		0.20		
		1,3,5-Trimethylbenzene	ug/L	<MDL		0.20		
		Vinyl Chloride	ug/L	<MDL		0.50		
		m,p-Xylenes	ug/L	0.71		0.20		
		o-Xylene	ug/L	0.37		0.20		
		Surrogate Recovery	%	94				

Reported By: Anthony J. Lange  
Chemistry Supervisor



**NORTHERN TESTING LABORATORIES, INC.**  
3330 INDUSTRIAL AVENUE  
2505 FAIRBANKS STREET  
FAIRBANKS, ALASKA 99701  
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(907) 277-8378 • FAX 274-9645

Commercial Testing & Engineering  
5633 B. Street  
Anchorage AK 99518

Attn: Michelle Turner

1463 West Avenue

Our Lab #:

A138977

Location/Project:

95-9144-5

Your Sample ID:

Water

Sample Matrix:

Comments: 7294-623-004

Time Sampled: 06/23/95

Report Date: 07/11/95  
Date Arrived: 07/07/95  
Date Sampled: 06/23/95  
Collected By: 1650

\* Definitions \*  
ND = Non Detected  
H = Above Regulatory Max.  
E = Estimated Value  
M = Matrix Interference  
D = Lost to Dilution  
MDL = Method Detection Limit

Lab

Number	Method	Parameter	Units	Result	*	MDL	Date Prepared	Date Analyzed
A138977	502.2/524.2	Benzene	ug/L	<MDL	0.20		07/07/95	
		Bromobenzene	ug/L	<MDL	0.20			
		Bromodichloromethane	ug/L	<MDL	0.30			
		Bromoform	ug/L	<MDL	0.20			
		Bromomethane	ug/L	<MDL	0.50			
		n-Butylbenzene	ug/L	<MDL	0.20			
		s-Butylbenzene	ug/L	<MDL	0.20			
		tert-Butylbenzene	ug/L	<MDL	0.20			
		Carbon Tetrachloride	ug/L	<MDL	0.20			
		Chlorobenzene	ug/L	<MDL	0.20			
		Dibromochloromethane	ug/L	<MDL	0.20			
		Chloroethane	ug/L	<MDL	0.20			
		Chloroform	ug/L	<MDL	0.50			
		Chloromethane	ug/L	<MDL	0.20			
		o-Chlorotoluene	ug/L	<MDL	0.50			
		p-Chlorotoluene	ug/L	<MDL	0.20			
		Dibromomethane	ug/L	<MDL	0.20			
		1,4-Dichlorobenzene	ug/L	<MDL	0.20			
		1,3-Dichlorobenzene	ug/L	<MDL	0.20			
		o-Dichlorobenzene	ug/L	<MDL	0.20			
		Dichlorodifluoromethane	ug/L	<MDL	0.20			
		1,1-Dichloroethane	ug/L	<MDL	0.50			
		1,2-Dichloroethane	ug/L	<MDL	0.20			
		1,1-Dichloroethylene	ug/L	<MDL	0.20			
		cis-1,2-Dichloroethylene	ug/L	<MDL	0.20			
		trans-1,2-Dichloroethylene	ug/L	<MDL	0.20			
		Methylene Chloride	ug/L	3.28	0.50			
		1,2-Dichloropropane	ug/L	<MDL	0.20			
		1,3-Dichloropropane	ug/L	<MDL	0.20			
		2,2-Dichloropropane	ug/L	0.20				

Reported By: Anthony J. Lange  
Chemistry Supervisor

# NORTHERN TESTING LABORATORIES, INC.

3330 INDUSTRIAL AVENUE  
2505 FAIRBANKS STREET

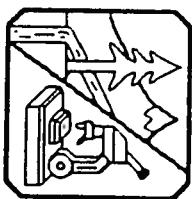
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Lab Number	Method	Parameter	Units	Result *	MDL	Date Prepared	Date Analyzed
A138977	502.2/524.2	1,1-Dichloropropene	ug/l	<MDL	0.20	07/07/95	
		1,3-Dichloropropene	ug/l	<MDL	0.20		
		Ethylbenzene	ug/l	<MDL	0.20		
		1,2-Dibromoethane	ug/l	<MDL	0.20		
		Fluorotrichloromethane	ug/l	<MDL	0.20		
		Hexachlorobutadiene	ug/l	<MDL	0.20		
		Isopropylbenzene	ug/l	<MDL	0.20		
		P-Isopropyltoluene	ug/l	<MDL	0.20		
		Naphthalene	ug/l	<MDL	0.20		
		n-Propylbenzene	ug/l	<MDL	0.20		
		Styrene	ug/l	<MDL	0.20		
		1,1,1,2-Tetrachloroethane	ug/l	<MDL	0.20		
		Tetrachloroethylene	ug/l	<MDL	0.20		
		Total Trihalomethane	ug/l	<MDL	1.00		
		Toluene	ug/l	<MDL	0.30		
		1,2,3-Trichlorobenzene	ug/l	<MDL	0.20		
		1,2,4-Trichlorobenzene	ug/l	<MDL	0.20		
		1,1,1-Trichloroethane	ug/l	<MDL	0.20		
		1,1,2-Trichloroethane	ug/l	<MDL	0.20		
		Trichloroethylene	ug/l	<MDL	0.20		
		1,2,3-Trichloropropane	ug/l	<MDL	0.20		
		1,2,4-Trimethylbenzene	ug/l	<MDL	0.20		
		1,3,5-Trimethylbenzene	ug/l	<MDL	0.20		
		Vinyl Chloride	ug/l	<MDL	0.50		
		m,p-Xylenes	ug/l	<MDL	0.20		
		o-Xylene	ug/l	<MDL	0.20		
		Surrogate Recovery	\$				89

*[Signature]*  
Reported By: Anthony J. Lange  
Chemistry Supervisor



# NORTHERN TESTING LABORATORIES, INC.

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ANCHORAGE, ALASKA 99503

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Commercial Testing & Engineering  
5633 B. Street  
Anchorage AK 99518

Report Date: 07/11/95  
Date Arrived: 07/07/95  
Date Sampled: 06/23/95  
Time Sampled: 1720  
Collected By:

Attn: Michelle Turner

1366 Sloan

Gentleman

Our Lab #:

A138978

Location/Project:

Your Sample ID:

95.9144-6

Sample Matrix:

Water

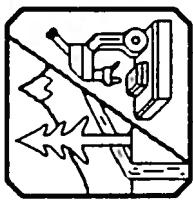
Comments:

7294-623-005. Insufficient sample to analyze diluted.

\* Definitions \*  
ND = Non Detected  
H = Above Regulatory Max.  
E = Estimated Value  
M = Matrix Interference  
D = Lost to Dilution  
MDL = Method Detection Limit

Lab Number	Method	Parameter	Units	Result	* MDL	Date Prepared	Date Analyzed
A138978	502.2/524.2	Benzene	ug/L	172 E	0.20	07/07/95	
		Bromobenzene	ug/L	<MDL	0.20		
		Bromochloromethane	ug/L	<MDL	0.30		
		Bromodichloromethane	ug/L	<MDL	0.20		
		Bromoform	ug/L	<MDL	0.50		
		Bromomethane	ug/L	<MDL	0.50		
		n-Butylbenzene	ug/L	<MDL	0.20		
		s-Butylbenzene	ug/L	<MDL	0.20		
		tert-Butylbenzene	ug/L	<MDL	0.20		
		Carbon Tetrachloride	ug/L	<MDL	0.20		
		Chlorobenzene	ug/L	<MDL	0.20		
		Dibromochloromethane	ug/L	<MDL	0.20		
		Chloroethane	ug/L	<MDL	0.20		
		Chloroform	ug/L	<MDL	0.50		
		Chloromethane	ug/L	<MDL	0.20		
		o-Chlorotoluene	ug/L	<MDL	0.50		
		p-Chlorotoluene	ug/L	<MDL	0.20		
		Dibromomethane	ug/L	<MDL	0.20		
		1,4-Dichlorobenzene	ug/L	<MDL	0.20		
		1,3-Dichlorobenzene	ug/L	<MDL	0.20		
		o-Dichlorobenzene	ug/L	<MDL	0.20		
		Dichlorodifluoromethane	ug/L	<MDL	0.20		
		1,1-Dichloroethane	ug/L	<MDL	0.50		
		1,2-Dichloroethane	ug/L	3.03	0.20		
		1,1-Dichloroethylene	ug/L	<MDL	0.20		
		cis-1,2-Dichloroethylene	ug/L	0.22	0.20		
		trans-1,2-Dichloroethylene	ug/L	<MDL	0.20		
		Methylene Chloride	ug/L	0.81	0.20		
		1,2-Dichloropropane	ug/L	2.39	0.50		
		1,3-Dichloropropane	ug/L	<MDL	0.20		
		2,2-Dichloropropane	ug/L	<MDL	0.20		

*[Signature]*  
Reported By: Anthony J. Lange  
Chemistry Supervisor



# NORTHERN TESTING LABORATORIES, INC.

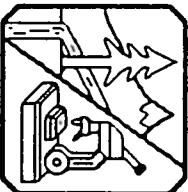
3330 INDUSTRIAL AVENUE  
2505 FAIRBANKS STREET

FAIRBANKS, ALASKA 99701  
ANCHORAGE, ALASKA 99503

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Lab Number	Method	Parameter	Units	Result *	MDL	Date Prepared	Date Analyzed
A138978	502.2/524.2	1,1-Dichloropropene	ug/l	<MDL	0.20		07/07/95
		1,3-Dichloropropene	ug/l	<MDL	0.20		
		Ethylbenzene	ug/l	0.77	0.20		
		1,2-Dibromoethane	ug/l	<MDL	0.20		
		Fluorotrichloromethane	ug/l	<MDL	0.20		
		Hexachlorobutadiene	ug/l	<MDL	0.20		
		Isopropylbenzene	ug/l	0.38	0.20		
		p-Isopropyltoluene	ug/l	<MDL	0.20		
		Naphthalene	ug/l	0.25	0.20		
		n-Propylbenzene	ug/l	<MDL	0.20		
		Styrene	ug/l	<MDL	0.20		
		1,1,1,2-Tetrachloroethane	ug/l	<MDL	0.20		
		1,1,2,2-Tetrachloroethane	ug/l	<MDL	0.20		
		Tetrachloroethylene	ug/l	<MDL	0.20		
		Total Trihalomethane	ug/l	<MDL	1.00		
		Toluene	ug/l	2.82	0.30		
		1,2,3-Trichlorobenzene	ug/l	<MDL	0.20		
		1,2,4-Trichlorobenzene	ug/l	<MDL	0.20		
		1,1,1-Trichloroethane	ug/l	3.18	0.20		
		1,1,2-Trichloroethane	ug/l	<MDL	0.20		
		Trichloroethylene	ug/l	10.1	H	0.20	
		1,2,3-Trichloropropane	ug/l	<MDL	0.20		
		1,2,4-Trimethylbenzene	ug/l	0.25	0.20		
		1,3,5-Trimethylbenzene	ug/l	<MDL	0.20		
		Vinyl Chloride	ug/l	<MDL	0.50		
		m,p-Xylenes	ug/l	1.47	0.20		
		o-Xylene	ug/l	1.70	0.20		
		Surrogate Recovery	%	94			

  
Reported By: Anthony J. Lange  
Chemistry Supervisor



# NORTHERN TESTING LABORATORIES, INC.

FAIRBANKS, ALASKA 99701  
ANCHORAGE, ALASKA 99503

3330 INDUSTRIAL AVENUE  
2505 FAIRBANKS STREET

(907) 456-3116 • FAX 456-3125  
(907) 277-8378 • FAX 274-9645

Commercial Testing & Engineering  
5633 B. Street  
Anchorage AK 99518

1354 Sloan

Attn: Michelle Turner  
Beaudreau

Our Lab #: A138979  
Location/Project: Your Sample ID: 95-9144-7  
Sample Matrix: Water  
Comments: 7294-623-006

\* Definitions \*  
ND = Non Detected  
H = Above Regulatory Max.  
E = Estimated Value  
M = Matrix Interference  
D = Lost to Dilution  
MDL = Method Detection Limit

Lab Number	Method	Parameter	Units	Result	* MDL	Date Prepared	Date Analyzed
A138979	502.2/524.2	Benzene	ug/L	44.7	H	0.20	07/08/95
		Bromobenzene	ug/L	<MDL	0.20		
		Bromochloromethane	ug/L	<MDL	0.30		
		Bromodichloromethane	ug/L	<MDL	0.20		
		Bromoform	ug/L	<MDL	0.50		
		Bromomethane	ug/L	<MDL	0.50		
		n-Butylbenzene	ug/L	<MDL	0.20		
		s-Butylbenzene	ug/L	<MDL	0.20		
		tert-Butylbenzene	ug/L	<MDL	0.20		
		Carbon Tetrachloride	ug/L	<MDL	0.20		
		Chlorobenzene	ug/L	<MDL	0.20		
		Dibromochloromethane	ug/L	<MDL	0.20		
		Chloroethane	ug/L	<MDL	0.50		
		Chloroform	ug/L	<MDL	0.20		
		Chloromethane	ug/L	<MDL	0.50		
		o-Chlorotoluene	ug/L	<MDL	0.20		
		p-Chlorotoluene	ug/L	<MDL	0.20		
		Dibromomethane	ug/L	<MDL	0.20		
		1,4-Dichlorobenzene	ug/L	<MDL	0.20		
		1,3-Dichlorobenzene	ug/L	<MDL	0.20		
		o-Dichlorobenzene	ug/L	<MDL	0.20		
		Dichlorodifluoromethane	ug/L	<MDL	0.20		
		1,1-Dichloroethane	ug/L	2.62	0.20		
		1,2-Dichloroethane	ug/L	<MDL	0.20		
		1,1-Dichloroethylene	ug/L	<MDL	0.20		
		cis-1,2-Dichloroethylene	ug/L	<MDL	0.20		
		trans-1,2-Dichloroethylene	ug/L	<MDL	0.20		
		Methylene Chloride	ug/L	0.50	0.20		
		1,2-Dichloropropane	ug/L	2.98	0.50		
		1,3-Dichloropropane	ug/L	<MDL	0.20		
		2,2-Dichloropropene	ug/L	<MDL	0.20		

Reported By: Anthony J. Lange  
Chemistry Supervisor



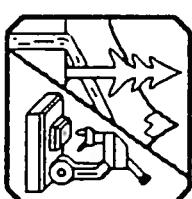
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2505 FAIRBANKS STREET  
FAIRBANKS, ALASKA 99701  
ANCHORAGE, ALASKA 99503

(907) 456-3116 FAX 456-3125  
(907) 277-8378 FAX 274-3645

Lab Number	Method	Parameter	Units	Result *	MDL	Date Prepared	Date Analyzed
A138979	502.2/524.2	1,1-Dichloropropene	ug/L	<MDL	0.20	07/08/95	
		1,3-Dichloropropene	ug/L	<MDL	0.20		
		Ethylbenzene	ug/L	<MDL	0.20		
		1,2-Dibromoethane	ug/L	<MDL	0.20		
		Fluorotrichloromethane	ug/L	<MDL	0.20		
		Hexachlorobutadiene	ug/L	<MDL	0.20		
		Isopropylbenzene	ug/L	<MDL	0.20		
		p-Isopropyltoluene	ug/L	<MDL	0.20		
		Naphthalene	ug/L	<MDL	0.20		
		n-Propylbenzene	ug/L	<MDL	0.20		
		Styrene	ug/L	<MDL	0.20		
		1,1,1,2-Tetrachloroethane	ug/L	<MDL	0.20		
		1,1,2,2-Tetrachloroethane	ug/L	<MDL	0.20		
		Tetrachloroethylene	ug/L	<MDL	0.20		
		Total Trihalomethane	ug/L	<MDL	1.00		
		Toluene	ug/L	<MDL	0.30		
		1,2,3-Trichlorobenzene	ug/L	<MDL	0.20		
		1,2,4-Trichlorobenzene	ug/L	<MDL	0.20		
		1,1,1-Trichloroethane	ug/L	3.94	0.20		
		1,1,2-Trichloroethane	ug/L	<MDL	0.20		
		Trichloroethylene	ug/L	8.70	H	0.20	
		1,2,3-Trichloropropane	ug/L	<MDL	0.20		
		1,2,4-Trichlorobenzene	ug/L	<MDL	0.20		
		1,3,5-Trimethylbenzene	ug/L	<MDL	0.20		
		Vinyl Chloride	ug/L	<MDL	0.50		
		m,p-Xylenes	ug/L	<MDL	0.20		
		o-Xylene	ug/L	<MDL	0.20		
		Surrogate Recovery	ug/L		89		

*[Signature]*  
Reported By: Anthony J. Lange  
Chemistry Supervisor



# NORTHERN TESTING LABORATORIES, INC.

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2505 FAIRBANKS STREET  
FAIRBANKS, ALASKA 99701  
ANCHORAGE, ALASKA 99503

(907) 456-3116 • FAX 456-3125  
(907) 277-8378 • FAX 274-9645

Commercial Testing & Engineering  
5633 B. Street  
Anchorage AK 99518

Attn: Michelle Turner  
Wayne Brieme

1430 New Richardson  
Comments: 7294-623-007

Our Lab #: A138980  
Location/Project: Your Sample ID: 95.9144-8  
Sample Matrix: Water

Collected By:

\* Definitions \*  
ND = Non Detected  
H = Above Regulatory Max.  
E = Estimated Value  
M = Matrix Interference  
D = Lost to Dilution  
MDL = Method Detection Limit

Lab Number	Method	Parameter	Units	Result	MDL	Date Prepared	Date Analyzed
A138980	502.2/524.2	Benzene	ug/L	0.37	0.20	07/08/95	
		Bromobenzene	ug/L	<MDL	0.20		
		Bromochloromethane	ug/L	<MDL	0.30		
		Bromodichloromethane	ug/L	<MDL	0.20		
		Bromoform	ug/L	<MDL	0.50		
		Bromomethane	ug/L	<MDL	0.50		
		n-Butylbenzene	ug/L	<MDL	0.20		
		s-Butylbenzene	ug/L	<MDL	0.20		
		tert-Butylbenzene	ug/L	<MDL	0.20		
		Carbon Tetrachloride	ug/L	<MDL	0.20		
		Chlorobenzene	ug/L	<MDL	0.20		
		Dibromochloromethane	ug/L	<MDL	0.20		
		Chloroethane	ug/L	<MDL	0.50		
		Chloroform	ug/L	<MDL	0.20		
		Chloromethane	ug/L	<MDL	0.50		
		o-Chlorotoluene	ug/L	<MDL	0.20		
		p-Chlorotoluene	ug/L	<MDL	0.20		
		Dibromomethane	ug/L	<MDL	0.20		
		1,4-Dichlorobenzene	ug/L	<MDL	0.20		
		1,3-Dichlorobenzene	ug/L	<MDL	0.20		
		o-Dichlorobenzene	ug/L	<MDL	0.20		
		Dichlorodifluoromethane	ug/L	<MDL	0.50		
		1,1-Dichloroethane	ug/L	2.11	0.20		
		1,2-Dichloroethane	ug/L	<MDL	0.20		
		1,1-Dichloroethylene	ug/L	<MDL	0.20		
		cis-1,2-Dichloroethylene	ug/L	<MDL	0.20		
		trans-1,2-Dichloroethylene	ug/L	0.38	0.20		
		Methylene chloride	ug/L	2.46	0.50		
		1,2-Dichloropropane	ug/L	<MDL	0.20		
		1,3-Dichloropropane	ug/L	<MDL	0.20		
		2,2-Dichloropropane	ug/L	0.20			

*[Signature]*  
Reported By: Anthony J. Lange  
Chemistry Supervisor



# NORTHERN TESTING LABORATORIES, INC.

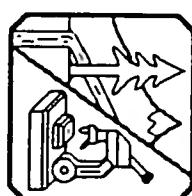
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ANCHORAGE, ALASKA 99503

3330 INDUSTRIAL AVENUE  
2505 FAIRBANKS STREET

Lab Number	Method	Parameter	Units	Result *	MDL	Date Prepared	Date Analyzed
A138980	502.2 / 524.2	1,1-Dichloropropane	ug/L	<MDL	0.20	07/08/95	
		1,3-Dichloropropane	ug/L	<MDL	0.20		
		Ethylbenzene	ug/L	<MDL	0.20		
		1,2-Dibromoethane	ug/L	<MDL	0.20		
		Fluorotrichloromethane	ug/L	<MDL	0.20		
		Hexachlorobutadiene	ug/L	<MDL	0.20		
		Isopropylbenzene	ug/L	<MDL	0.20		
		p-Isopropyltoluene	ug/L	<MDL	0.20		
		Naphthalene	ug/L	<MDL	0.20		
		n-Propylbenzene	ug/L	<MDL	0.20		
		Styrene	ug/L	<MDL	0.20		
		1,1,1,2-Tetrachloroethane	ug/L	<MDL	0.20		
		1,1,2,2-Tetrachloroethane	ug/L	<MDL	0.20		
		Tetrachloroethylene	ug/L	<MDL	0.20		
		Total Trihalomethane	ug/L	<MDL	1.00		
		Toluene	ug/L	<MDL	0.30		
		1,2,3-Trichlorobenzene	ug/L	<MDL	0.20		
		1,2,4-Trichlorobenzene	ug/L	<MDL	0.20		
		1,1,1-Trichloroethane	ug/L	9.29	0.20		
		1,1,2-Trichloroethane	ug/L	<MDL	0.20		
		Trichloroethylene	ug/L	14.1	H	0.20	
		1,2,3-Trichloropropane	ug/L	<MDL	0.20		
		1,2,4-Trimethylbenzene	ug/L	<MDL	0.20		
		1,3,5-Trimethylbenzene	ug/L	<MDL	0.20		
		Vinyl Chloride	ug/L	<MDL	0.50		
		m,p-Xylenes	ug/L	<MDL	0.20		
		o-Xylene	ug/L	<MDL	0.20		
		Surrogate Recovery	%	98			

  
Reported By: Anthony J. Lange  
Chemistry Supervisor



# NORTHERN TESTING LABORATORIES, INC.

FAIRBANKS, ALASKA 99701  
ANCHORAGE, ALASKA 99503

(907) 456-3116 FAX 456-3125  
(907) 277-8378 FAX 274-9845

Commercial Testing & Engineering  
5633 B. Street  
Anchorage AK 99518

Attn: Michelle Turner      1362 Smithson  
Our Lab #:      Charles Hetze  
Location/Project:      A138981  
Your Sample ID:      95.9144-9  
Sample Matrix:      Water  
Comments: 7294-623-008

Report Date: 07/11/95  
Date Arrived: 07/07/95  
Date Sampled: 06/23/95  
Time Sampled: 1830  
Collected By:

\* Definitions \*

ND = Non Detected

H = Above Regulatory Max.

E = Estimated Value

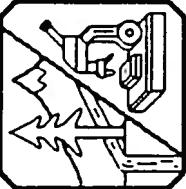
M = Matrix Interference

D = Lost to Dilution

MDL = Method Detection Limit

Lab	Number	Method	Parameter	Units	Result	* MDL	Date Prepared	Date Analyzed
A138981	502.2/524.2	Benzene		ug/L	<MDL	0.20	07/08/95	
		Bromobenzene		ug/L	<MDL	0.20		
		Bromochloromethane		ug/L	<MDL	0.30		
		Bromodichloromethane		ug/L	<MDL	0.20		
		Bromoform		ug/L	<MDL	0.50		
		Bromomethane		ug/L	<MDL	0.50		
		n-Butylbenzene		ug/L	<MDL	0.20		
		s-Butylbenzene		ug/L	<MDL	0.20		
		tert-Butylbenzene		ug/L	<MDL	0.20		
		Carbon Tetrachloride		ug/L	<MDL	0.20		
		Chlorobenzene		ug/L	<MDL	0.20		
		Dibromochloromethane		ug/L	<MDL	0.20		
		Chloroethane		ug/L	<MDL	0.50		
		Chloroform		ug/L	<MDL	0.20		
		Chloromethane		ug/L	<MDL	0.50		
		o-Chlorotoluene		ug/L	<MDL	0.20		
		p-Chlorotoluene		ug/L	<MDL	0.20		
		Dibromomethane		ug/L	<MDL	0.20		
		1,4-Dichlorobenzene		ug/L	<MDL	0.20		
		1,3-Dichlorobenzene		ug/L	<MDL	0.20		
		o-Dichlorobenzene		ug/L	<MDL	0.20		
		Dichlorodifluoromethane		ug/L	<MDL	0.20		
		1,1-Dichloroethane		ug/L	<MDL	0.50		
		1,2-Dichloroethane		ug/L	1.01	0.20		
		cis-1,2-Dichloroethylene		ug/L	<MDL	0.20		
		trans-1,2-Dichloroethylene		ug/L	<MDL	0.20		
		Methylene Chloride		ug/L	<MDL	0.50		
		1,2-Dichloropropane		ug/L	<MDL	0.20		
		1,3-Dichloropropane		ug/L	<MDL	0.20		
		2,2-Dichloropropene		ug/L	<MDL	0.20		

*[Signature]*  
Reported By: Anthony J. Lange  
Chemistry Supervisor



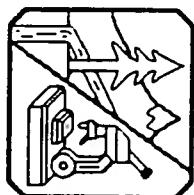
# NORTHERN TESTING LABORATORIES, INC.

3330 INDUSTRIAL AVENUE  
2505 FAIRBANKS STREET  
FAIRBANKS, ALASKA 99701

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(907) 277-8378 • FAX 274-9645

Lab Number	Method	Parameter	Units	Result *	MDL	Date Prepared	Date Analyzed
A138981 502.2/524.2	1,1-Dichloropropene	ug/L	<MDL	0.20	07/08/95		
	1,3-Dichloropropene	ug/L	<MDL	0.20			
	Ethylbenzene	ug/L	<MDL	0.20			
	1,2-Dibromoethane	ug/L	<MDL	0.20			
	Fluorotrichloromethane	ug/L	<MDL	0.20			
	Hexachlorobutadiene	ug/L	<MDL	0.20			
	Isopropylbenzene	ug/L	<MDL	0.20			
	P-Isopropyltoluene	ug/L	<MDL	0.20			
	Naphthalene	ug/L	<MDL	0.20			
	n-Propylbenzene	ug/L	<MDL	0.20			
	Styrene	ug/L	<MDL	0.20			
	1,1,1,2-Tetrachloroethane	ug/L	<MDL	0.20			
	1,1,2,2-Tetrachloroethane	ug/L	<MDL	0.20			
	Tetrachloroethylene	ug/L	<MDL	0.20			
	Total Trihalomethane	ug/L	<MDL	1.00			
	Toluene	ug/L	<MDL	0.30			
	1,2,3-Trichlorobenzene	ug/L	<MDL	0.20			
	1,2,4-Trichlorobenzene	ug/L	<MDL	0.20			
	1,1,1-Trichloroethane	ug/L	1.37	0.20			
	1,1,2-Trichloroethane	ug/L	<MDL	0.20			
	Trichloroethylene	ug/L	1.70	0.20			
	1,2,3-Trichloropropane	ug/L	<MDL	0.20			
	1,2,4-Trichlorobenzene	ug/L	<MDL	0.20			
	1,3,5-Trimethylbenzene	ug/L	<MDL	0.20			
	Vinyl Chloride	ug/L	<MDL	0.50			
	m,p-Xylenes	ug/L	<MDL	0.20			
	o-Xylene	ug/L	<MDL	0.20			
	Surrogate Recovery	%	92				

*[Signature]*  
Reported By: Anthony J. Lange  
Chemistry Supervisor



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2805 FAIRBANKS STREET

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ANCHORAGE, ALASKA 99503

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(907) 277-8378 FAX 274-9645

Commercial Testing & Engineering  
5633 B. Street  
Anchorage AK 99518

Attn: Michelle Turner  
Our Lab #: A138982  
Location/Project: 1357 Sloan  
Your Sample ID: 95.9144-10  
Sample Matrix: Water  
Comments: 7294-623-009

Lab

Number Method Parameter

Units

Result \*

MDL

Date Prepared

Date Analyzed

Number	Method	Parameter	Units	Result	*	MDL	Date Prepared	Date Analyzed
A138982	502.2/524.2	Benzene	ug/L	0.39	0.20	<MDL	0.20	07/08/95
		Bromobenzene	ug/L	<MDL	0.20	<MDL	0.30	
		Bromodichloromethane	ug/L	<MDL	0.20	<MDL	0.20	
		Bromoform	ug/L	<MDL	0.50	<MDL	0.50	
		Bromomethane	ug/L	<MDL	0.50	<MDL	0.50	
		n-Butylbenzene	ug/L	<MDL	0.20	<MDL	0.20	
		s-Butylbenzene	ug/L	<MDL	0.20	<MDL	0.20	
		tert-Butylbenzene	ug/L	<MDL	0.20	<MDL	0.20	
		Carbon Tetrachloride	ug/L	<MDL	0.20	<MDL	0.20	
		Chlorobenzene	ug/L	<MDL	0.20	<MDL	0.20	
		Dibromochloromethane	ug/L	<MDL	0.20	<MDL	0.20	
		Chloroethane	ug/L	<MDL	0.50	<MDL	0.50	
		Chloroform	ug/L	<MDL	0.20	<MDL	0.20	
		o-Chlorotoluene	ug/L	<MDL	0.50	<MDL	0.50	
		p-Chlorotoluene	ug/L	<MDL	0.20	<MDL	0.20	
		Dibromomethane	ug/L	<MDL	0.20	<MDL	0.20	
		1,4-Dichlorobenzene	ug/L	<MDL	0.20	<MDL	0.20	
		1,3-Dichlorobenzene	ug/L	<MDL	0.20	<MDL	0.20	
		o-Dichlorobenzene	ug/L	<MDL	0.20	<MDL	0.20	
		Dichlorodifluoromethane	ug/L	<MDL	0.20	<MDL	0.20	
		1,1-Dichloroethane	ug/L	<MDL	0.50	<MDL	0.50	
		1,2-Dichloroethane	ug/L	2.62	0.20	<MDL	0.20	
		1,1-Dichloroethylene	ug/L	0.22	0.20	<MDL	0.20	
		cis-1,2-Dichloroethylene	ug/L	0.20	0.20	<MDL	0.20	
		trans-1,2-Dichloroethylene	ug/L	0.30	0.20	<MDL	0.20	
		Methylene chloride	ug/L	2.73	0.50	<MDL	0.20	
		1,2-Dichloropropane	ug/L	<MDL	0.20	<MDL	0.20	
		1,3-Dichloropropane	ug/L	<MDL	0.20	<MDL	0.20	
		2,2-Dichloropropane	ug/L	0.20	0.20	<MDL	0.20	

*[Signature]*  
Reported By: Anthony J. Lange  
Chemistry Supervisor

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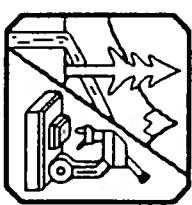
FAIRBANKS, ALASKA 99701  
 ANCHORAGE, ALASKA 99503

3330 INDUSTRIAL AVENUE  
 2505 FAIRBANKS STREET



Lab Number	Method	Parameter	Units	Result *	MDL	Date Prepared	Date Analyzed
A138982	502.2/524.2	1,1-Dichloropropene	ug/L	<MDL	0.20	07/08/95	
		1,3-Dichloropropene	ug/L	<MDL	0.20		
		Ethylbenzene	ug/L	<MDL	0.20		
		1,2-Dibromoethane	ug/L	<MDL	0.20		
		Fluorotrichloromethane	ug/L	<MDL	0.20		
		Hexachlorobutadiene	ug/L	<MDL	0.20		
		Isopropylbenzene	ug/L	<MDL	0.20		
		p-Isopropyltoluene	ug/L	<MDL	0.20		
		Naphthalene	ug/L	<MDL	0.20		
		n-Propylbenzene	ug/L	<MDL	0.20		
		Styrene	ug/L	<MDL	0.20		
		1,1,1,2-Tetrachloroethane	ug/L	<MDL	0.20		
		1,1,2,2-Tetrachloroethane	ug/L	<MDL	0.20		
		Tetrachloroethylene	ug/L	<MDL	0.20		
		Total Trihalomethane	ug/L	<MDL	1.00		
		Toluene	ug/L	<MDL	0.30		
		1,2,3-Trichlorobenzene	ug/L	<MDL	0.20		
		1,2,4-Trichlorobenzene	ug/L	<MDL	0.20		
		1,1,1-Trichloroethane	ug/L	6.38	0.20		
		1,1,2-Trichloroethane	ug/L	<MDL	0.20		
		Trichloroethylene	ug/L	10.6	0.20		
		1,2,3-Trichloropropane	ug/L	<MDL	0.20		
		1,2,4-Trimethylbenzene	ug/L	<MDL	0.20		
		1,3,5-Trimethylbenzene	ug/L	<MDL	0.20		
		Vinyl Chloride	ug/L	<MDL	0.50		
		m,p-Xylenes	ug/L	<MDL	0.20		
		o-Xylene	ug/L	<MDL	0.20		
		Surrogate Recovery	%	94			

Reported By: Anthony J. Lange  
 Chemistry Supervisor



# NORTHERN TESTING LABORATORIES, INC.

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2505 FAIRBANKS STREET

FAIRBANKS, ALASKA 99701  
ANCHORAGE, ALASKA 99503

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(907) 277-8378 • FAX 274-9645

Commercial Testing & Engineering  
5633 B. Street  
Anchorage AK 99518

Report Date: 07/11/95  
Date Arrived: 07/07/95  
Date Sampled: 06/26/95  
Time Sampled: 1630  
Collected By:

Attn: Michelle Turner  
1395 Warner  
Bob & Joanne Davis

Our Lab #: A138983

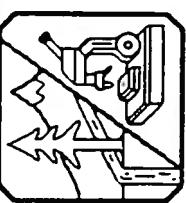
Location/Project: Your Sample ID: 95.9144-11  
Sample Matrix: Water  
Comments: 7294-626-010

\* Definitions \*

ND = Non Detected  
H = Above Regulatory Max.  
E = Estimated Value  
M = Matrix Interference  
D = Lost to Dilution  
MDL = Method Detection Limit

Lab	Number	Method	Parameter	Units	Result	MDL	Date Prepared	Date Analyzed
A138983	502.2/524.2	Benzene		ug/L	<MDL	0.20	07/08/95	
		Bromobenzene		ug/L	<MDL	0.20		
		Bromodichloromethane		ug/L	<MDL	0.30		
		Bromoform		ug/L	<MDL	0.20		
		Bromomethane		ug/L	<MDL	0.50		
		n-Butylbenzene		ug/L	<MDL	0.50		
		s-Butylbenzene		ug/L	<MDL	0.20		
		tert-Butylbenzene		ug/L	<MDL	0.20		
		Carbon Tetrachloride		ug/L	<MDL	0.20		
		Chlorobenzene		ug/L	<MDL	0.20		
		Dibromochloromethane		ug/L	<MDL	0.20		
		Chloroethane		ug/L	<MDL	0.50		
		Chloroform		ug/L	<MDL	0.20		
		o-Chlorotoluene		ug/L	<MDL	0.50		
		p-Chlorotoluene		ug/L	<MDL	0.20		
		Dibromomethane		ug/L	<MDL	0.20		
		1,4-Dichlorobenzene		ug/L	<MDL	0.20		
		1,3-Dichlorobenzene		ug/L	<MDL	0.20		
		o-Dichlorobenzene		ug/L	<MDL	0.20		
		Dichlorodifluoromethane		ug/L	<MDL	0.50		
		1,1-Dichloroethane		ug/L	0.56	0.20		
		1,2-Dichloroethylene		ug/L	<MDL	0.20		
		cis-1,2-Dichloroethylene		ug/L	<MDL	0.20		
		trans-1,2-Dichloroethylene		ug/L	<MDL	0.20		
		Methylene Chloride		ug/L	3.45	0.50		
		1,2-Dichloropropane		ug/L	<MDL	0.20		
		1,3-Dichloropropane		ug/L	<MDL	0.20		
		2,2-Dichloropropane		ug/L	<MDL	0.20		

*[Signature]*  
Reported By: Anthony J. Lange  
Chemistry Supervisor



# NORTHERN TESTING LABORATORIES, INC.

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2505 FAIRBANKS STREET  
FAIRBANKS, ALASKA 99701

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Lab Number	Method	Parameter	Units	Result *	MDL	Date Prepared	Date Analyzed
A138983	502.2 / 524.2	1,1-Dichloropropene	ug/L	<MDL	0.20	07/08/95	
		1,3-Dichloropropene	ug/L	<MDL	0.20		
		Ethylbenzene	ug/L	<MDL	0.20		
		1,2-Dibromoethane	ug/L	<MDL	0.20		
		Fluorotrichloromethane	ug/L	<MDL	0.20		
		Hexachlorobutadiene	ug/L	<MDL	0.20		
		Isopropylbenzene	ug/L	<MDL	0.20		
		p-Isopropyltoluene	ug/L	<MDL	0.20		
		Naphthalene	ug/L	<MDL	0.20		
		n-Propylbenzene	ug/L	<MDL	0.20		
		Styrene	ug/L	<MDL	0.20		
		1,1,1,2-Tetrachloroethane	ug/L	<MDL	0.20		
		1,1,2,2-Tetrachloroethane	ug/L	<MDL	0.20		
		Tetrachloroethylene	ug/L	<MDL	0.20		
		Total Trihalomethane	ug/L	<MDL	1.00		
		Toluene	ug/L	<MDL	0.30		
		1,2,3-Trichlorobenzene	ug/L	<MDL	0.20		
		1,2,4-Trichlorobenzene	ug/L	<MDL	0.20		
		1,1,1-Trichloroethane	ug/L	0.21	0.20		
		1,1,2-Trichloroethane	ug/L	<MDL	0.20		
		Trichloroethylene	ug/L	0.33	0.20		
		1,2,3-Trichloropropane	ug/L	<MDL	0.20		
		1,2,4-Trimethylbenzene	ug/L	<MDL	0.20		
		1,3,5-Trimethylbenzene	ug/L	<MDL	0.50		
		Vinyl Chloride	ug/L	<MDL	0.20		
		m,p-Xylenes	ug/L	<MDL	0.20		
		o-Xylene	ug/L	<MDL	0.20		
		Surrogate Recovery	%	93			

  
Reported By: Anthony J. Lange  
Chemistry Supervisor



# NORTHERN TESTING LABORATORIES, INC.

3330 INDUSTRIAL AVENUE  
FAIRBANKS, ALASKA 99701  
2505 FAIRBANKS STREET  
ANCHORAGE, ALASKA 99503

(907) 456-3116 • FAX 456-3125  
(907) 277-8378 • FAX 274-9645

Commercial Testing & Engineering  
5633 B. Street  
Anchorage AK 99518

Attn: Michelle Turner      1395 Warner  
Our Lab #: A138984      Bob & Joanne Davis  
Location/Project: Duplicate Sample  
Your Sample ID: 95.9144-12  
Sample Matrix: Water  
Comments: 7294-626-011

Report Date: 07/11/95  
Date Arrived: 07/07/95  
Date Sampled: 06/26/95  
Time Sampled: 1635  
Collected By:

\* Definitions \*  
ND = Non Detected  
H = Above Regulatory Max.  
E = Estimated Value  
M = Matrix Interference  
D = Lost to Dilution  
MDL = Method Detection Limit

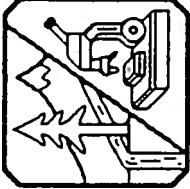
Lab	Number	Method	Parameter	Units	Result	* MDL	Date Prepared	Date Analyzed
A138984	502.2 / 524.2	Benzene		ug/L	<MDL	0.20	07/08/95	
		Bromobenzene		ug/L	<MDL	0.20		
		Bromodichloromethane		ug/L	<MDL	0.30		
		Bromoform		ug/L	<MDL	0.20		
		Bromomethane		ug/L	<MDL	0.50		
		n-Butylbenzene		ug/L	<MDL	0.50		
		s-Butylbenzene		ug/L	<MDL	0.20		
		tert-Butylbenzene		ug/L	<MDL	0.20		
		Carbon Tetrachloride		ug/L	<MDL	0.20		
		Chlorobenzene		ug/L	<MDL	0.20		
		Dibromochloromethane		ug/L	<MDL	0.20		
		Chloroethane		ug/L	<MDL	0.50		
		Chloroform		ug/L	<MDL	0.20		
		o-Chlorotoluene		ug/L	<MDL	0.50		
		p-Chlorotoluene		ug/L	<MDL	0.20		
		Dibromomethane		ug/L	<MDL	0.20		
		1,4-Dichlorobenzene		ug/L	<MDL	0.20		
		1,3-Dichlorobenzene		ug/L	<MDL	0.20		
		o-Dichlorobenzene		ug/L	<MDL	0.20		
		Dichlorodifluoromethane		ug/L	<MDL	0.20		
		1,1-Dichloroethane		ug/L	<MDL	0.50		
		1,2-Dichloroethane		ug/L	0.58	0.20		
		1,1-Dichloroethylene		ug/L	<MDL	0.20		
		cis-1,2-Dichloroethylene		ug/L	<MDL	0.20		
		trans-1,2-Dichloroethylene		ug/L	<MDL	0.20		
		Methylene Chloride		ug/L	3.00	0.50		
		1,2-Dichloropropane		ug/L	<MDL	0.20		
		1,3-Dichloropropane		ug/L	<MDL	0.20		
		2,2-Dichloropropane		ug/L	<MDL	0.20		

Reported By: Anthony J. Lange  
Chemistry Supervisor

# NORTHERN TESTING LABORATORIES, INC.

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 2505 FAIRBANKS STREET



Lab Number	Method	Parameter	Units	Result *	MDL	Date Prepared	Date Analyzed
A138984	502.2 / 524.2	1,1-Dichloropropene	ug/L	<MDL	0.20	07/08/95	07/08/95
		1,3-Dichloropropene	ug/L	<MDL	0.20		
		Ethylbenzene	ug/L	<MDL	0.20		
		1,2-Dibromoethane	ug/L	<MDL	0.20		
		Fluorotrichloromethane	ug/L	<MDL	0.20		
		Hexachlorobutadiene	ug/L	<MDL	0.20		
		Isopropylbenzene	ug/L	<MDL	0.20		
		p-Isopropyltoluene	ug/L	<MDL	0.20		
		Naphthalene	ug/L	<MDL	0.20		
		n-Propylbenzene	ug/L	<MDL	0.20		
		Styrene	ug/L	<MDL	0.20		
		1,1,1,2-Tetrachloroethane	ug/L	<MDL	0.20		
		1,1,2,2-Tetrachloroethane	ug/L	<MDL	0.20		
		Tetrachloroethylene	ug/L	<MDL	0.20		
		Total Trihalomethane	ug/L	<MDL	1.00		
		Toluene	ug/L	<MDL	0.30		
		1,2,3-Trichlorobenzene	ug/L	<MDL	0.20		
		1,2,4-Trichlorobenzene	ug/L	<MDL	0.20		
		1,1,1-Trichloroethane	ug/L	0.22	0.20		
		1,1,2-Trichloroethane	ug/L	<MDL	0.20		
		Trichloroethylene	ug/L	0.30	0.20		
		1,2,3-Trichloropropane	ug/L	<MDL	0.20		
		1,2,4-Trimethylbenzene	ug/L	<MDL	0.20		
		Vinyl Chloride	ug/L	<MDL	0.50		
		m,p-Xylenes	ug/L	<MDL	0.20		
		o-Xylene	ug/L	<MDL	0.20		
		Surrogate Recovery	%	91			

*[Signature]*  
 Reported By: Anthony J. Lange  
 Chemistry Supervisor



# NORTHERN TESTING LABORATORIES, INC.

3330 INDUSTRIAL AVENUE  
FAIRBANKS, ALASKA 99701  
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Commercial Testing & Engineering  
5633 B. Street  
Anchorage AK 99518

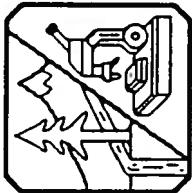
Attn: Michelle Turner      919 Warner  
Our Lab #: A138985  
Location/Project: Your Sample ID: 95.9144-13  
Sample Matrix: Water  
Comments: 7294-626-012

Report Date: 07/11/95  
Date Arrived: 07/07/95  
Date Sampled: 06/26/95  
Time Sampled: 1645  
Collected By:

\* Definitions \*  
ND = Non Detected  
H = Above Regulatory Max.  
E = Estimated Value  
M = Matrix Interference  
D = Lost to Dilution  
MDL = Method Detection Limit

Lab Number	Method	Parameter	Units	Result	*	MDL	Date Prepared	Date Analyzed
A138985	502.2/524.2	Benzene	ug/L	<MDL	0.20		07/08/95	
		Bromobenzene	ug/L	<MDL	0.20			
		Bromochloromethane	ug/L	<MDL	0.30			
		Bromodichloromethane	ug/L	<MDL	0.20			
		Bromoform	ug/L	<MDL	0.50			
		Bromomethane	ug/L	<MDL	0.50			
		n-Butylbenzene	ug/L	<MDL	0.20			
		s-Butylbenzene	ug/L	<MDL	0.20			
		tert-Butylbenzene	ug/L	<MDL	0.20			
		Carbon Tetrachloride	ug/L	<MDL	0.20			
		Chlorobenzene	ug/L	<MDL	0.20			
		Dibromochloromethane	ug/L	<MDL	0.20			
		Chloroethane	ug/L	<MDL	0.50			
		Chloroform	ug/L	<MDL	0.20			
		Chloromethane	ug/L	<MDL	0.50			
		o-Chlorotoluene	ug/L	<MDL	0.20			
		p-Chlorotoluene	ug/L	<MDL	0.20			
		Dibromomethane	ug/L	<MDL	0.20			
		1,4-Dichlorobenzene	ug/L	<MDL	0.20			
		1,3-Dichlorobenzene	ug/L	<MDL	0.20			
		c-Dichlorobenzene	ug/L	<MDL	0.20			
		Dichlorodifluoromethane	ug/L	<MDL	0.20			
		1,1-Dichloroethane	ug/L	<MDL	0.50			
		1,2-Dichloroethane	ug/L	<MDL	0.20			
		1,1-Dichloroethylene	ug/L	<MDL	0.20			
		cis-1,2-Dichloroethylene	ug/L	<MDL	0.20			
		trans-1,2-Dichloroethylene	ug/L	<MDL	0.20			
		Methylene Chloride	ug/L	<MDL	0.20			
		1,2-Dichloropropane	ug/L	<MDL	0.20			
		1,3-Dichloropropane	ug/L	<MDL	0.20			
		2,2-Dichloropropane	ug/L	<MDL	0.20			

*[Signature]*  
Reported By: Anthony J. Lange  
Chemistry Supervisor



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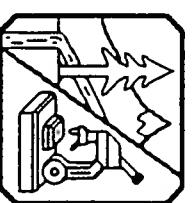
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FAIRBANKS, ALASKA 99701  
ANCHORAGE, ALASKA 99503

3330 INDUSTRIAL AVENUE  
2605 FAIRBANKS STREET

Lab Number	Method	Parameter	Units	Result *	MDL	Date Prepared	Date Analyzed
A138985	502.2/524.2	1,1-Dichloropropene	ug/L	<MDL	0.20	07/08/95	
		1,3-Dichloropropene	ug/L	<MDL	0.20		
		Ethylbenzene	ug/L	<MDL	0.20		
		1,2-Dibromoethane	ug/L	<MDL	0.20		
		Fluorotrichloromethane	ug/L	<MDL	0.20		
		Hexachlorobutadiene	ug/L	<MDL	0.20		
		Isopropylbenzene	ug/L	<MDL	0.20		
		p-Isopropyltoluene	ug/L	<MDL	0.20		
		Naphthalene	ug/L	<MDL	0.20		
		n-Propylbenzene	ug/L	<MDL	0.20		
		Styrene	ug/L	<MDL	0.20		
		1,1,1,2-Tetrachloroethane	ug/L	<MDL	0.20		
		1,1,2,2-Tetrachloroethane	ug/L	<MDL	0.20		
		Tetrachloroethylene	ug/L	<MDL	0.20		
		Total Trihalomethane	ug/L	<MDL	1.00		
		Toluene	ug/L	<MDL	0.30		
		1,2,3-Trichlorobenzene	ug/L	<MDL	0.20		
		1,2,4-Trichlorobenzene	ug/L	<MDL	0.20		
		1,1,1-Trichloroethane	ug/L	0.36	0.20		
		1,1,2-Trichloroethane	ug/L	<MDL	0.20		
		Trichloroethylene	ug/L	0.29	0.20		
		1,2,3-Trichloropropane	ug/L	<MDL	0.20		
		1,2,4-Trimethylbenzene	ug/L	<MDL	0.20		
		Vinyl Chloride	ug/L	<NDL	0.50		
		m,p-Xylenes	ug/L	<MDL	0.20		
		o-Xylene	ug/L	<MDL	0.20		
		Surrogate Recovery	%	99			

  
Reported By: Anthony J. Lange  
Chemistry Supervisor



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Commercial Testing & Engineering  
5633 B. Street  
Anchorage AK 99518

1375

Richardson  
Kaeko Ono

Attn: Michelle Turner

Our Lab #: A138986  
Location/Project: Your Sample ID: 95.9144-14  
Sample Matrix: Water  
Comments: 7294-626-013

Report Date: 07/11/95  
Date Arrived: 07/07/95  
Date Sampled: 06/26/95  
Time Sampled: 1740  
Collected By:

\* Definitions \*

ND = Non Detected

H = Above Regulatory Max.

E = Estimated Value

M = Matrix Interference

D = Lost to Dilution

MDL = Method Detection Limit

Lab	Number	Method	Parameter	Units	Result	MDL	Date Prepared	Date Analyzed
A138986	502.2/524.2	Benzene		ug/L	<MDL	0.20		07/08/95
		Bromobenzene		ug/L	<MDL	0.20		
		Bromochloromethane		ug/L	<MDL	0.30		
		Bromodichloromethane		ug/L	<MDL	0.20		
		Bromoform		ug/L	<MDL	0.50		
		Bromomethane		ug/L	<MDL	0.50		
		n-Butylbenzene		ug/L	<MDL	0.20		
		s-Butylbenzene		ug/L	<MDL	0.20		
		tert-Butylbenzene		ug/L	<MDL	0.20		
		Carbon Tetrachloride		ug/L	<MDL	0.20		
		Chlorobenzene		ug/L	<MDL	0.20		
		Dibromochloromethane		ug/L	<MDL	0.20		
		Chloroethane		ug/L	<MDL	0.50		
		Chloroform		ug/L	<MDL	0.20		
		Chloromethane		ug/L	<MDL	0.50		
		o-Chlorotoluene		ug/L	<MDL	0.20		
		p-Chlorotoluene		ug/L	<MDL	0.20		
		Dibromomethane		ug/L	<MDL	0.20		
		1,4-Dichlorobenzene		ug/L	<MDL	0.20		
		1,3-Dichlorobenzene		ug/L	<MDL	0.20		
		o-Dichlorobenzene		ug/L	<MDL	0.20		
		Dichlorodifluoromethane		ug/L	<MDL	0.50		
		1,1-Dichloroethane		ug/L	<MDL	0.20		
		1,2-Dichloroethane		ug/L	<MDL	0.20		
		1,1-Dichloroethylene		ug/L	<MDL	0.20		
		cis-1,2-Dichloroethylene		ug/L	<MDL	0.20		
		trans-1,2-Dichloroethylene		ug/L	<MDL	0.20		
		Methylene chloride		ug/L	3.67	0.50		
		1,2-Dichloropropane		ug/L	<MDL	0.20		
		1,3-Dichloropropane		ug/L	<MDL	0.20		
		2,2-Dichloropropane		ug/L	<MDL	0.20		

*[Signature]*  
Reported By: Anthony J. Lange  
Chemistry Supervisor

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Lab Number	Method	Parameter	Units	Result *	MDL	Date Prepared	Date Analyzed
A138986	502.2/524.2	1,1-Dichloropropene	ug/L	<MDL	0.20		07/08/95
		1,3-Dichloropropene	ug/L	<MDL	0.20		
		Ethylbenzene	ug/L	<MDL	0.20		
		1,2-Dibromoethane	ug/L	<MDL	0.20		
		Fluorotrichloromethane	ug/L	<MDL	0.20		
		Hexachlorobutadiene	ug/L	<MDL	0.20		
		Isopropylbenzene	ug/L	<MDL	0.20		
		P-Isopropyltoluene	ug/L	<MDL	0.20		
		Naphthalene	ug/L	<MDL	0.20		
		n-Propylbenzene	ug/L	<MDL	0.20		
		Styrene	ug/L	<MDL	0.20		
		1,1,1,2-Tetrachloroethane	ug/L	<MDL	0.20		
		1,1,2,2-Tetrachloroethane	ug/L	<MDL	0.20		
		Tetrachloroethylene	ug/L	<MDL	0.20		
		Total Trihalomethane	ug/L	<MDL	1.00		
		Toluene	ug/L	<MDL	0.30		
		1,2,3-Trichlorobenzene	ug/L	<MDL	0.20		
		1,2,4-Trichlorobenzene	ug/L	<MDL	0.20		
		1,1,1-Trichloroethane	ug/L	<MDL	0.20		
		1,1,2-Trichloroethane	ug/L	<MDL	0.20		
		Trichloroethylene	ug/L	<MDL	0.20		
		1,2,3-Trichloropropane	ug/L	<MDL	0.20		
		1,2,4-Trimethylbenzene	ug/L	<MDL	0.20		
		1,3,5-Trimethylbenzene	ug/L	<MDL	0.20		
		Vinyl Chloride	ug/L	<MDL	0.50		
		m,p-Xylenes	ug/L	<MDL	0.20		
		o-Xylene	ug/L	<MDL	0.20		
		Surrogate Recovery	%	93			

Reported By: Anthony J. Lange  
Chemistry Supervisor



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Commercial Testing & Engineering  
5633 B. Street  
Anchorage AK 99518

Report Date: 07/11/95  
Date Arrived: 07/07/95  
Date Sampled: 06/26/95  
Time Sampled: 1810  
Collected By:

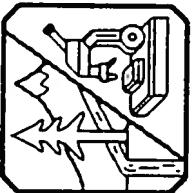
Attn: Michelle Turner Bill Conley  
& Sheryl Powell

Our Lab #: A138987  
Location/Project: Your Sample ID: 95.9144-15  
Sample Matrix: Water  
Comments: 7294-626-014

\* Definitions \*  
ND = Non Detected  
H = Above Regulatory Max.  
E = Estimated Value  
M = Matrix Interference  
D = Lost to Dilution  
MDL = Method Detection Limit

Lab Number	Method	Parameter	Units	Result	* MDL	Date Prepared	Date Analyzed
A138987	502.2/524.2	Benzene	ug/L	<MDL	0.20	07/08/95	
		Bromobenzene	ug/L	<MDL	0.20		
		Bromodichloromethane	ug/L	<MDL	0.30		
		Bromoform	ug/L	<MDL	0.20		
		Bromomethane	ug/L	<MDL	0.50		
		n-Butylbenzene	ug/L	<MDL	0.20		
		s-Butylbenzene	ug/L	<MDL	0.20		
		tert-Butylbenzene	ug/L	<MDL	0.20		
		Carbon Tetrachloride	ug/L	<MDL	0.20		
		Chlorobenzene	ug/L	<MDL	0.20		
		Dibromochloromethane	ug/L	<MDL	0.20		
		Chloroethane	ug/L	<MDL	0.50		
		Chloroform	ug/L	<MDL	0.20		
		Chloromethane	ug/L	<MDL	0.50		
		o-Chlorotoluene	ug/L	<MDL	0.20		
		p-Chlorotoluene	ug/L	<MDL	0.20		
		Dibromomethane	ug/L	<MDL	0.20		
		1,4-Dichlorobenzene	ug/L	<MDL	0.20		
		1,3-Dichlorobenzene	ug/L	<MDL	0.20		
		o-Dichlorobenzene	ug/L	<MDL	0.20		
		Dichlorodifluoromethane	ug/L	<MDL	0.50		
		1,1-Dichloroethane	ug/L	1.70	0.20		
		1,2-Dichloroethane	ug/L	<MDL	0.20		
		1,1-Dichloroethylene	ug/L	<MDL	0.20		
		cis-1,2-Dichloroethylene	ug/L	<MDL	0.20		
		trans-1,2-Dichloroethylene	ug/L	0.21	0.20		
		Methylene Chloride	ug/L	3.52	0.50		
		1,2-Dichloropropane	ug/L	<MDL	0.20		
		1,3-Dichloropropane	ug/L	<MDL	0.20		
		2,2-Dichloropropane	ug/L	<MDL	0.20		

RL  
Reported By: Anthony J. Lange  
Chemistry Supervisor



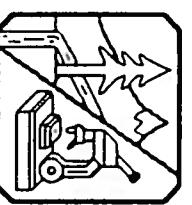
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Lab Number	Method	Parameter	Units	Result *	MDL	Date Prepared	Date Analyzed
A138987	502.2/524.2	1,1-Dichloropropene	ug/L	<MDL	0.20	07/08/95	
		1,3-Dichloropropene	ug/L	<MDL	0.20		
		Ethylbenzene	ug/L	<MDL	0.20		
		1,2-Dibromoethane	ug/L	<MDL	0.20		
		Fluorotrichloromethane	ug/L	<MDL	0.20		
		Hexachlorobutadiene	ug/L	<MDL	0.20		
		Isopropylbenzene	ug/L	<MDL	0.20		
		p-Isopropyltoluene	ug/L	<MDL	0.20		
		Naphthalene	ug/L	<MDL	0.20		
		n-Propylbenzene	ug/L	<MDL	0.20		
		Styrene	ug/L	<MDL	0.20		
		1,1,1,2-Tetrachloroethane	ug/L	<MDL	0.20		
		1,1,2,2-Tetrachloroethane	ug/L	<MDL	0.20		
		Tetrachloroethylene	ug/L	<MDL	0.20		
		Total Trihalomethane	ug/L	<MDL	1.00		
		Toluene	ug/L	<MDL	0.30		
		1,2,3-Trichlorobenzene	ug/L	<MDL	0.20		
		1,2,4-Trichlorobenzene	ug/L	<MDL	0.20		
		1,1,1-Trichloroethane	ug/L	2.84	0.20		
		1,1,2-Trichloroethane	ug/L	<MDL	0.20		
		Trichloroethylene	ug/L	5.06	H	0.20	
		1,2,3-Trichloropropane	ug/L	<MDL	0.20		
		1,2,4-Trimethylbenzene	ug/L	<MDL	0.20		
		1,3,5-Trimethylbenzene	ug/L	<MDL	0.20		
		Vinyl Chloride	ug/L	<MDL	0.50		
		m,p-Xylenes	ug/L	<MDL	0.20		
		o-Xylene	ug/L	<MDL	0.20		
		Surrogate Recovery	%	99			

Reported By: Anthony J. Lange  
Chemistry Supervisor



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Commercial Testing & Engineering  
5633 B. Street  
Anchorage AK 99518

Report Date: 07/11/95  
Date Arrived: 07/07/95  
Date Sampled: 06/26/95  
Time Sampled: 1905  
Collected By:

Attn: Michelle Turner 1361 Smithson  
Rey Crawford

\* Definitions \*  
ND = Non Detected  
H = Above Regulatory Max.  
E = Estimated Value  
M = Matrix Interference  
D = Lost to Dilution  
MDL = Method Detection Limit

Our Lab #: A138988  
Location/Project: Your Sample ID: 95.9144-16  
Sample Matrix: Water  
Comments: 7294-626-015

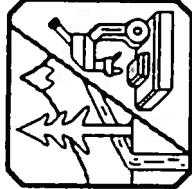
Lab	Date Prepared	Date Analyzed			
Number	Method	Parameter	Units	Result	MDL
A138988	502.2/524.2	Benzene	ug/L	<MDL	0.20
		Bromobenzene	ug/L	<MDL	0.20
		Bromochloromethane	ug/L	<MDL	0.30
		Bromoform	ug/L	<MDL	0.20
		Bromomethane	ug/L	<MDL	0.50
		n-Butylbenzene	ug/L	<MDL	0.50
		s-Butylbenzene	ug/L	<MDL	0.20
		tert-Butylbenzene	ug/L	<MDL	0.20
		Carbon Tetrachloride	ug/L	<MDL	0.20
		Chlorobenzene	ug/L	<MDL	0.20
		Dibromochloromethane	ug/L	<MDL	0.20
		Chloroethane	ug/L	<MDL	0.50
		Chloroform	ug/L	<MDL	0.20
		Chloromethane	ug/L	<MDL	0.50
		o-Chlorotoluene	ug/L	<MDL	0.20
		p-Chlorotoluene	ug/L	<MDL	0.20
		Dibromomethane	ug/L	<MDL	0.20
		1,4-Dichlorobenzene	ug/L	<MDL	0.20
		1,3-Dichlorobenzene	ug/L	<MDL	0.20
		o-Dichlorobenzene	ug/L	<MDL	0.20
		Dichlorodifluoromethane	ug/L	<MDL	0.50
		1,1-Dichloroethane	ug/L	<MDL	0.20
		1,2-Dichloroethane	ug/L	<MDL	0.20
		1,1-Dichloroethylene	ug/L	<MDL	0.20
		cis-1,2-Dichloroethylene	ug/L	<MDL	0.20
		trans-1,2-Dichloroethylene	ug/L	<MDL	0.20
		Methylene Chloride	ug/L	4.26	0.50
		1,2-Dichloropropane	ug/L	<MDL	0.20
		1,3-Dichloropropane	ug/L	<MDL	0.20
		2,2-Dichloropropane	ug/L	<MDL	0.20

*[Signature]*  
Reported By: Anthony J. Lange  
Chemistry Supervisor

# NORTHERN TESTING LABORATORIES, INC.

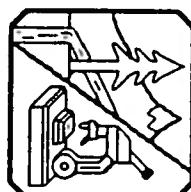
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Lab Number	Method	Parameter	Units	Result *	MDL	Date Prepared	Date Analyzed
A138988	502.2/524.2	1,1-Dichloropropene	ug/L	<MDL	0.20	07/08/95	
		1,3-Dichloropropene	ug/L	<MDL	0.20		
		Ethylbenzene	ug/L	<MDL	0.20		
		1,2-Dibromoethane	ug/L	<MDL	0.20		
		Fluorotrichloromethane	ug/L	<MDL	0.20		
		Hexachlorobutadiene	ug/L	<MDL	0.20		
		Isopropylbenzene	ug/L	<MDL	0.20		
		P-Isopropyltoluene	ug/L	<MDL	0.20		
		Naphthalene	ug/L	<MDL	0.20		
		n-Propylbenzene	ug/L	<MDL	0.20		
		Styrene	ug/L	<MDL	0.20		
		1,1,1,2-Tetrachloroethane	ug/L	<MDL	0.20		
		1,1,2,2-Tetrachloroethane	ug/L	<MDL	0.20		
		Tetrachloroethylene	ug/L	<MDL	0.20		
		Total Trihalomethane	ug/L	<MDL	1.00		
		Toluene	ug/L	0.37	0.30		
		1,2,3-Trichlorobenzene	ug/L	<MDL	0.20		
		1,2,4-Trichlorobenzene	ug/L	<MDL	0.20		
		1,1,1-Trichloroethane	ug/L	<MDL	0.20		
		1,1,2-Trichloroethane	ug/L	<MDL	0.20		
		Trichloroethylene	ug/L	<MDL	0.20		
		1,2,3-Trichloropropane	ug/L	<MDL	0.20		
		1,2,4-Trimethylbenzene	ug/L	<MDL	0.20		
		1,3,5-Trimethylbenzene	ug/L	<MDL	0.20		
		Vinyl Chloride	ug/L	<MDL	0.50		
		m,p-Xylenes	ug/L	<MDL	0.20		
		o-Xylene	ug/L	<MDL	0.20		
		Surrogate Recovery	%	94			

  
Reported By: Anthony J. Lange  
Chemistry Supervisor



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Commercial Testing & Engineering  
5633 B. Street  
Anchorage AK 99518

1333 Sloan

Attn: Michelle Turner

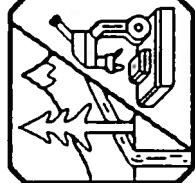
Kietl Moon

Our Lab #: A138989  
Location/Project: 95-9144-17  
Your Sample ID: Water  
Sample Matrix:  
Comments: 7294-626-016

\* Definitions \*  
ND = Non Detected  
H = Above Regulatory Max.  
E = Estimated Value  
M = Matrix Interference  
D = Lost to Dilution  
MDL = Method Detection Limit

Lab Number	Method	Parameter	Units	Result	*	MDL	Date Prepared	Date Analyzed
A138989	502.2/524.2	Benzene	ug/L	15.5	H	0.20	07/08/95	
		Bromobenzene	ug/L	<MDL	0.20			
		Bromochloromethane	ug/L	<MDL	0.30			
		Bromodichloromethane	ug/L	<MDL	0.20			
		Bromoform	ug/L	<MDL	0.50			
		Bromomethane	ug/L	<MDL	0.50			
		n-Butylbenzene	ug/L	<MDL	0.20			
		s-Butylbenzene	ug/L	<MDL	0.20			
		tert-Butylbenzene	ug/L	<MDL	0.20			
		Carbon Tetrachloride	ug/L	<MDL	0.20			
		Chlorobenzene	ug/L	<MDL	0.20			
		Dibromochloromethane	ug/L	<MDL	0.20			
		Chloroethane	ug/L	<MDL	0.50			
		Chloroform	ug/L	<MDL	0.20			
		Chloromethane	ug/L	<MDL	0.50			
		o-Chlorotoluene	ug/L	<MDL	0.20			
		p-Chlorotoluene	ug/L	<MDL	0.20			
		Dibromomethane	ug/L	<MDL	0.20			
		1,4-Dichlorobenzene	ug/L	<MDL	0.20			
		1,3-Dichlorobenzene	ug/L	<MDL	0.20			
		o-Dichlorobenzene	ug/L	<MDL	0.20			
		Dichlorodifluoromethane	ug/L	<MDL	0.20			
		1,1-Dichloroethane	ug/L	<MDL	0.50			
		1,2-Dichloroethane	ug/L	1.50	0.20			
		cis-1,2-Dichloroethylene	ug/L	<MDL	0.20			
		trans-1,2-Dichloroethylene	ug/L	<MDL	0.20			
		1,1-Dichloroethylene	ug/L	<MDL	0.20			
		Methylene Chloride	ug/L	4.11	0.50			
		1,2-Dichloropropane	ug/L	<MDL	0.20			
		1,3-Dichloropropane	ug/L	<MDL	0.20			
		2,2-Dichloropropane	ug/L	<MDL	0.20			

Reported By: Anthony J. Lange  
Chemistry Supervisor



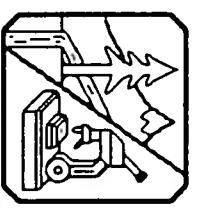
# NORTHERN TESTING LABORATORIES, INC.

3330 INDUSTRIAL AVENUE  
2505 FAIRBANKS STREET  
FAIRBANKS, ALASKA 99701  
ANCHORAGE, ALASKA 99503

(907) 456-3116 • FAX 456-3125  
(907) 277-8378 • FAX 274-9645

Lab Number	Method	Parameter	Units	Result *	MDL	Date Prepared	Date Analyzed
A138989	502.2/524.2	1,1-Dichloropropene	ug/L	<MDL	0.20		
		1,3-Dichloropropene	ug/L	<MDL	0.20		
		Ethylbenzene	ug/L	<MDL	0.20		
		1,2-Dibromoethane	ug/L	<MDL	0.20		
		Fluorotrichloromethane	ug/L	<MDL	0.20		
		Hexachlorobutadiene	ug/L	<MDL	0.20		
		Isopropylbenzene	ug/L	<MDL	0.20		
		p-Isopropyltoluene	ug/L	<MDL	0.20		
		Naphthalene	ug/L	<MDL	0.20		
		n-Propylbenzene	ug/L	<MDL	0.20		
		Styrene	ug/L	<MDL	0.20		
		1,1,1,2-Tetrachloroethane	ug/L	<MDL	0.20		
		1,1,2,2-Tetrachloroethane	ug/L	<MDL	0.20		
		Tetrachloroethylene	ug/L	<MDL	0.20		
		Total Trihalomethane	ug/L	<MDL	1.00		
		Toluene	ug/L	0.90	0.30		
		1,2,3-Trichlorobenzene	ug/L	<MDL	0.20		
		1,2,4-Trichlorobenzene	ug/L	<MDL	0.20		
		1,1,1-Trichloroethane	ug/L	2.31	0.20		
		1,1,2-Trichloroethane	ug/L	<MDL	0.20		
		Trichloroethylene	ug/L	1.43	0.20		
		1,2,3-Trichloropropane	ug/L	<MDL	0.20		
		1,2,4-Trimethylbenzene	ug/L	<MDL	0.20		
		1,3,5-Trimethylbenzene	ug/L	<MDL	0.50		
		Vinyl Chloride	ug/L	0.26	0.20		
		m,p-Xylenes	ug/L	<MDL	0.20		
		o-Xylene	ug/L	95			
		Surrogate Recovery	%				

  
Reported By: Anthony J. Lange  
Chemistry Supervisor



# NORTHERN TESTING LABORATORIES, INC.

3330 INDUSTRIAL AVENUE  
FAIRBANKS, ALASKA 99701  
2505 FAIRBANKS STREET  
ANCHORAGE, ALASKA 99503

(907) 456-3116 • FAX 456-3125  
(907) 277-8378 • FAX 274-9645

Commercial Testing & Engineering  
5633 B. Street  
Anchorage AK 99518

Report Date: 07/11/95  
Date Arrived: 07/07/95  
Date Sampled: 06/26/95  
Time Sampled: 1945  
Collected By:

Attn: Michelle Turner 1389 Warner  
Our Lab #: Nancy Ketzler

A138990

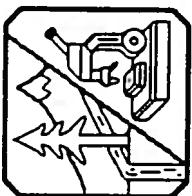
Location/Project:

Your Sample ID: 95-9144-18  
Sample Matrix: Water  
Comments: 7294-626-017

\* Definitions \*  
ND = Non Detected  
H = Above Regulatory Max.  
E = Estimated Value  
M = Matrix Interference  
D = Lost to Dilution  
MDL = Method Detection Limit

Lab Number	Method	Parameter	Units	Result	MDL	Date Prepared	Date Analyzed
A138990	502.2/524.2	Benzene	ug/L	<MDL	0.20	07/08/95	
		Bromobenzene	ug/L	<MDL	0.20		
		Bromodichloromethane	ug/L	<MDL	0.30		
		Bromoform	ug/L	<MDL	0.20		
		Bromomethane	ug/L	<MDL	0.50		
		n-Butylbenzene	ug/L	<MDL	0.50		
		s-Butylbenzene	ug/L	<MDL	0.20		
		tert-Butylbenzene	ug/L	<MDL	0.20		
		Carbon Tetrachloride	ug/L	<MDL	0.20		
		Chlorobenzene	ug/L	<MDL	0.20		
		Dibromochloromethane	ug/L	<MDL	0.20		
		Chloroethane	ug/L	<MDL	0.50		
		Chloroform	ug/L	<MDL	0.20		
		Chloromethane	ug/L	<MDL	0.50		
		o-Chlorotoluene	ug/L	<MDL	0.20		
		p-Chlorotoluene	ug/L	<MDL	0.20		
		Dibromomethane	ug/L	<MDL	0.20		
		1,4-Dichlorobenzene	ug/L	<MDL	0.20		
		1,3-Dichlorobenzene	ug/L	<MDL	0.20		
		o-Dichlorobenzene	ug/L	<MDL	0.20		
		Dichlorodifluoromethane	ug/L	<MDL	0.50		
		1,1-Dichloroethane	ug/L	0.22	0.20		
		1,2-Dichloroethylene	ug/L	<MDL	0.20		
		cis-1,2-Dichloroethylene	ug/L	<MDL	0.20		
		trans-1,2-Dichloroethylene	ug/L	<MDL	0.20		
		Methylene Chloride	ug/L	3.92	0.50		
		1,2-Dichloropropane	ug/L	<MDL	0.20		
		1,3-Dichloropropane	ug/L	<MDL	0.20		
		2,2-Dichloropropane	ug/L	<MDL	0.20		

Signature  
Reported By: Anthony J. Lange  
Chemistry Supervisor



# NORTHERN TESTING LABORATORIES, INC.

3330 INDUSTRIAL AVENUE  
2505 FAIRBANKS STREET  
FAIRBANKS, ALASKA 99701

(907) 456-3116 • FAX 456-3125  
(907) 277-8378 • FAX 274-9645

Lab Number	Method	Parameter	Units	Result *	MDL	Date Prepared	Date Analyzed
A138990	502.2/524.2	1,1-Dichloropropene	ug/L	<MDL	0.20		
		1,3-Dichloropropene	ug/L	<MDL	0.20		
		Ethylbenzene	ug/L	<MDL	0.20		
		1,2-Dibromoethane	ug/L	<MDL	0.20		
		Fluorotrichloromethane	ug/L	<MDL	0.20		
		Hexachlorobutadiene	ug/L	<MDL	0.20		
		Isopropylbenzene	ug/L	<MDL	0.20		
		p-Isopropyltoluene	ug/L	<MDL	0.20		
		Naphthalene	ug/L	<MDL	0.20		
		n-Propylbenzene	ug/L	<MDL	0.20		
		Styrene	ug/L	<MDL	0.20		
		1,1,1,2-Tetrachloroethane	ug/L	<MDL	0.20		
		1,1,2,2-Tetrachloroethane	ug/L	<MDL	0.20		
		Tetrachloroethylene	ug/L	<MDL	0.20		
		Total Trihalomethane	ug/L	<MDL	0.20		
		Toluene	ug/L	<MDL	1.00		
		1,2,3-Trichlorobenzene	ug/L	<MDL	0.30		
		1,2,4-Trichlorobenzene	ug/L	<MDL	0.20		
		1,1,1-Trichloroethane	ug/L	<MDL	0.20		
		1,1,2-Trichloroethane	ug/L	0.24	0.20		
		Trichloroethylene	ug/L	<MDL	0.20		
		1,2,3-Trichloropropane	ug/L	0.37	0.20		
		1,2,4-Trimethylbenzene	ug/L	<MDL	0.20		
		1,3,5-Trimethylbenzene	ug/L	<MDL	0.20		
		Vinyl Chloride	ug/L	<MDL	0.20		
		m,p-Xylenes	ug/L	<MDL	0.50		
		o-Xylene	ug/L	<MDL	0.20		
		Surrogate Recovery	%	<MDL	0.20		

Reported By: Anthony J. Lange  
Chemistry Supervisor

Sample Received:		Relinquished By:	Relinquished By:	Relinquished By:
Number of Contaminants		Sample:	Sample:	Sample:
COC Seal/Matc Y/N/NA		Printed Name: <i>Jony L. M. Avi</i>	Date: <i>7/19/95</i>	Date:
Temperature:		Received By:	Received By:	Received at Laboratory By:
Tumaround Required:		Signatures:	Signatures:	Signatures:
Data Deliverables Required:		Printed Name:	Printed Name:	Printed Name:
Initial Lab Test Level:		Date:	Date:	Date:

14

-009	X	-10	X	
-008		-9		
-007		-8		
-006		-7		
-005		-6		
-004		-5		
-003		-4		
-002		-3		
-001		-2		
q5. q144 - 1	C/245 1500	1	WATER X	1850
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**Commercial Testing & Engineering Co.**  
Environmental Laboratory Services

PO#: \_\_\_\_\_

**Reports to:**

CT + E ENVIRONMENTAL SERVICES, INC.  
200 WEST POTTER DR.  
ANCHORAGE, AK 99518

Phone: (907) 562-2343 Fax: (907) 561-5301

Contact person for questions concerning these samples:

RUSH

## CHAIN OF CUSTODY

CT&E Ref: \_\_\_\_\_

**Invoice to:**

CT + E ENVIRONMENTAL SERVICES  
ATTN: JOYCE DOUGHTY  
200 W. POTTER DR.  
ANCHORAGE, AK 99518

**Laboratory:**

Page 2 of 2  
Commercial Testing & Engineering Co.  
200 W. POTTER DR.  
Anchorage, AK 99518  
Phone (907) 562-2343 Fax: (907) 561-5301

Special Instructions: \_\_\_\_\_

MICHELLE TURNER  
RUSH SAMPLES

Phone: (907) 562-2343

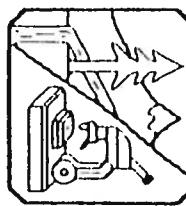
Fax: (907) 561-5301

Project Name/Number

Sampled By:

Lab #	Sample #	Date/Time Sampled	# of Containers	Sample Matrix	Comments
95. 9144	-11	6/26/95 1630	1	WATER X	7294 - 626 - 010
	-12	1635		X	- 011
	-13	1645		X	- 012
	-14	1740		X	- 013
	-15	1810		X	- 014
	-16	1905		X	- 015
	-17	1925		X	- 016
	-18	1945		X	- 017
95. 2693	-11			X	TELLER SCHOOL

Sample Receipt:	Relinquished By:	Relinquished By:	Relinquished By:
18 Number of Containers	Signature: <i>Judy L. Mauer</i> Time: 1200 Printed Name: JUDY L. MAUER Date: 7/1/95	Signature: _____ Time: _____ Printed Name: _____ Date: _____	Signature: _____ Time: _____ Printed Name: _____ Date: _____
— COC Seals/Intact Y/N/NA			
— Temperature	Received By: _____	Received By: _____	Received at Laboratory By: _____
ACM Turnaround Required	Signature: _____ Time: _____ Printed Name: _____ Date: _____	Signature: _____ Time: _____ Printed Name: _____ Date: _____	Signature: _____ Time: _____ Printed Name: _____ Date: _____
— Data Deliverables Required Level I Level II Level III	Printed Name: _____ Date: _____	Printed Name: _____ Date: _____	Printed Name: _____ Date: _____



**NORTHERN TESTING LABORATORIES, INC.**  
3330 INDUSTRIAL AVENUE  
FAIRBANKS, ALASKA 99701  
ANCHORAGE, ALASKA 99503

(907) 456-3115 • FAX 456-3125  
(907) 277-8378 • FAX 274-9645

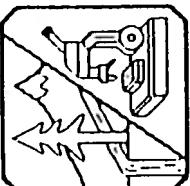
Commercial Testing & Engineering  
5633 B. Street  
Anchorage AK 99518

Attn: Michelle Turner      Shirley Daniels  
1328 Leslie      Shirley Daniels  
Northwell

\* Definitions \*  
ND = Non Detected  
H = Above Regulatory Max.  
E = Estimated Value  
M = Matrix Interference  
D = Lost to Dilution  
MDL = Method Detection Limit

Lab Number	Method	Parameter	Units	Result	MDL	Date Prepared	Date Analyzed
A139028	502.2/524.2	Benzene	ug/L	<MDL	0.20	07/13/95	
		Bromobenzene	ug/L	<MDL	0.20		
		Bromochloromethane	ug/L	<MDL	0.30		
		Bromodichloromethane	ug/L	<MDL	0.20		
		Bromoform	ug/L	<MDL	0.50		
		Bromomethane	ug/L	<MDL	0.50		
		n-Butylbenzene	ug/L	<MDL	0.20		
		s-Butylbenzene	ug/L	<MDL	0.20		
		tert-Butylbenzene	ug/L	<MDL	0.20		
		Carbon Tetrachloride	ug/L	<MDL	0.20		
		Chlorobenzene	ug/L	<MDL	0.20		
		Dibromochloromethane	ug/L	<MDL	0.20		
		Chloroethane	ug/L	<MDL	0.50		
		Chloroform	ug/L	<MDL	0.20		
		Chloromethane	ug/L	<MDL	0.50		
		o-Chlorotoluene	ug/L	<MDL	0.20		
		p-Chlorotoluene	ug/L	<MDL	0.20		
		Dibromomethane	ug/L	<MDL	0.20		
		1,4-Dichlorobenzene	ug/L	<MDL	0.20		
		1,3-Dichlorobenzene	ug/L	<MDL	0.20		
		o-Dichlorobenzene	ug/L	<MDL	0.20		
		Dichlorodifluoromethane	ug/L	<MDL	0.20		
		1,1-Dichloroethane	ug/L	<MDL	0.50		
		1,2-Dichloroethane	ug/L	<MDL	0.20		
		1,1-Dichloroethylene	ug/L	<MDL	0.20		
		cis-1,2-Dichloroethylene	ug/L	<MDL	0.20		
		trans-1,2-Dichloroethylene	ug/L	<MDL	0.20		
		Methylene Chloride	ug/L	<MDL	0.50		
		1,2-Dichloropropane	ug/L	<MDL	0.20		
		1,3-Dichloropropane	ug/L	<MDL	0.20		
		2,2-Dichloropropene	ug/L	<MDL	0.20		

Reported By: Anthony J. Lange  
Chemistry Supervisor



# NORTHERN TESTING LABORATORIES, INC.

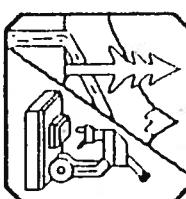
3330 INDUSTRIAL AVE ~~3330~~  
2505 FAIRBANKS STRE ~~2505~~

FAIRBANKS, ALASKA 99701  
ANCHORAGE, ALASKA 99503

(907) 456-3116 • FAX 456-3125  
(907) 277-8378 • FAX 274-9645

Lab Number	Method	Parameter	Units	Result	*	MDL	Date Prepared	Date Analyzed
A139028	502.2/524.2	1,1-Dichloroethane	ug/L	<MDL		0.20	07/13/95	
		1,3-Dichloropropane	ug/L	<MDL		0.20		
		Ethylbenzene	ug/L	<MDL		0.20		
		1,2-Dibromoethane	ug/L	<MDL		0.20		
		Fluorotrichloromethane	ug/L	<MDL		0.20		
		Hexachloroethadiene	ug/L	<MDL		0.20		
		Isopropylbenzene	ug/L	<MDL		0.20		
		p-Isopropyltoluene	ug/L	<MDL		0.20		
		Naphthalene	ug/L	<MDL		0.20		
		n-Propylbenzene	ug/L	<MDL		0.20		
		Styrene	ug/L	<MDL		0.20		
		1,1,1,2-Tetrachloroethane	ug/L	<MDL		0.20		
		1,1,2,2-Tetrachloroethane	ug/L	<MDL		0.20		
		Tetrachloroethylene	ug/L	<MDL		0.20		
		Total Trihalomethane	ug/L	<MDL		1.00		
		Toluene	ug/L	<MDL		0.30		
		1,2,3-Trichlorobenzene	ug/L	<MDL		0.20		
		1,2,4-Trichlorobenzene	ug/L	<MDL		0.20		
		1,1,1-Trichloroethane	ug/L	<MDL		0.20		
		1,1,2-Trichloroethane	ug/L	<MDL		0.20		
		Trichloroethylene	ug/L	<MDL		0.20		
		1,2,3-Trichloropropane	ug/L	<MDL		0.20		
		1,2,4-Trichloroethylbenzene	ug/L	<MDL		0.20		
		1,3,5-Triethylbenzene	ug/L	<MDL		0.20		
		Vinyl Chloride	ug/L	<MDL		0.50		
		m,p-Xylenes	ug/L	<MDL		0.20		
		o-Xylene	ug/L	<MDL		0.20		
		Surrogate Recovery	%	92				

*[Signature]*  
Reported By: Anthony J. Lange  
Chemistry Supervisor



# NORTHERN TESTING LABORATORIES, INC.

3330 INDUSTRIAL AVENUE  
FAIRBANKS, ALASKA 99701  
2505 FAIRBANKS STREET  
ANCHORAGE, ALASKA 99503

(907) 456-3116 • FAX 456-3125  
(907) 277-8378 • FAX 274-9845

Commercial Testing & Engineering  
5633 B. Street  
Anchorage AK 99518

1328

Leslie  
Shirley Daniels

Attn: Michelle Turner

North Well  
Duplicate Sample

Our Lab #: A139029  
Location/Project: P.O. #88869  
Your Sample ID: 95.9148-7  
Sample Matrix: Water  
Comments: 7294-628-024

Report Date: 07/18/95  
Date Arrived: 07/11/95  
Date Sampled: 06/28/95  
Time Sampled:  
Collected By:

\* Definitions \*

ND = Non Detected

H = Above Regulatory Max.

E = Estimated Value

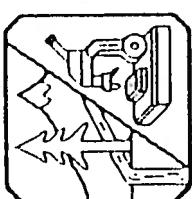
M = Matrix Interference

D = Lost to Dilution

MDL = Method Detection Limit

Lab Number	Method	Parameter	Units	Result	* MDL	Date Prepared	Date Analyzed
A139029	502.2/524.2	Benzene	ug/L	<MDL	0.20		07/13/95
		Bromobenzene	ug/L	<MDL	0.20		
		Bromochloromethane	ug/L	<MDL	0.30		
		Bromoform	ug/L	<MDL	0.20		
		Bromomethane	ug/L	<MDL	0.50		
		n-Butylbenzene	ug/L	<MDL	0.20		
		s-Butylbenzene	ug/L	<MDL	0.20		
		tert-Butylbenzene	ug/L	<MDL	0.20		
		Carbon Tetrachloride	ug/L	<MDL	0.20		
		Chlorobenzene	ug/L	<MDL	0.20		
		Dibromochloromethane	ug/L	<MDL	0.20		
		Chloroethane	ug/L	<MDL	0.50		
		Chloroform	ug/L	<MDL	0.20		
		Chloromethane	ug/L	<MDL	0.50		
		o-Chlorotoluene	ug/L	<MDL	0.20		
		p-Chlorotoluene	ug/L	<MDL	0.20		
		Dibromomethane	ug/L	<MDL	0.20		
		1,4-Dichlorobenzene	ug/L	<MDL	0.20		
		1,3-Dichlorobenzene	ug/L	<MDL	0.20		
		o-Dichlorobenzene	ug/L	<MDL	0.20		
		Dichlorodifluoromethane	ug/L	<MDL	0.50		
		1,1-Dichloroethane	ug/L	<MDL	0.20		
		1,2-Dichloroethylene	ug/L	<MDL	0.20		
		cis-1,2-Dichloroethylene	ug/L	<MDL	0.20		
		trans-1,2-Dichloroethylene	ug/L	<MDL	0.20		
		Methylene Chloride	ug/L	<MDL	0.50		
		1,2-Dichloropropane	ug/L	<MDL	0.20		
		1,3-Dichloropropane	ug/L	<MDL	0.20		
		2,2-Dichloropropane	ug/L	<MDL	0.20		

Reported By: Anthony J. Lange  
Chemistry Supervisor



# NORTHERN TESTING LABORATORIES, INC.

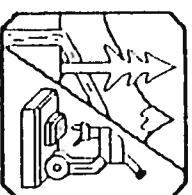
FAIRBANKS, ALASKA 99701  
ANCHORAGE, ALASKA 99503

3330 INDUSTRIAL AVENUE  
2905 FAIRBANKS STREET

(907) 456-3116 • FAX 456-3125  
(907) 277-6373 • FAX 271-9645

Lab Number	Method	Parameter	Units	Result *	MDL	Date Prepared	Date Analyzed
A139029	502.2/524.2	1,1-Dichloropropene	ug/L	<MDL	0.20	07/13/95	
		1,3-Dichloropropene	ug/L	<MDL	0.20		
		Ethylbenzene	ug/L	<MDL	0.20		
		1,2-Dibromoethane	ug/L	<MDL	0.20		
		Fluorotrichloromethane	ug/L	<MDL	0.20		
		Hexachlorobutadiene	ug/L	<MDL	0.20		
		Isopropylbenzene	ug/L	<MDL	0.20		
		p-Isopropyltoluene	ug/L	<MDL	0.20		
		Naphthalene	ug/L	<MDL	0.20		
		n-Propylbenzene	ug/L	<MDL	0.20		
		Styrene	ug/L	<MDL	0.20		
		1,1,1,2-Tetrachloroethane	ug/L	<MDL	0.20		
		1,1,2,2-Tetrachloroethane	ug/L	<MDL	0.20		
		Tetrachloroethylene	ug/L	<MDL	0.20		
		Total Trihalomethane	ug/L	<MDL	1.00		
		Toluene	ug/L	<MDL	0.30		
		1,2,3-Trichlorobenzene	ug/L	<MDL	0.20		
		1,2,4-Trichlorobenzene	ug/L	<MDL	0.20		
		1,1,1-Trichloroethane	ug/L	<MDL	0.20		
		1,1,2-Trichloroethylene	ug/L	<MDL	0.20		
		Trichloroethylene	ug/L	<MDL	0.20		
		1,2,3-Trichloropropane	ug/L	<MDL	0.20		
		1,2,4-Trimethylbenzene	ug/L	<MDL	0.20		
		1,3,5-Trimethylbenzene	ug/L	<MDL	0.50		
		Vinyl Chloride	ug/L	<MDL	0.20		
		m,p-Xylenes	ug/L	<MDL	0.20		
		o-Xylene	ug/L	<MDL	0.20		
		Surrogate Recovery	%	96			

  
Reported By: Anthony J. Lange  
Chemistry Supervisor



# NORTHERN TESTING LABORATORIES, INC.

3330 INDUSTRIAL AVENUE  
2505 FAIRBANKS STREET

FAIRBANKS, ALASKA 99701  
ANCHORAGE, ALASKA 99503

(907) 456-3115 • FAX 456-3125  
(907) 277-3378 • FAX 274-9645

Commercial Testing & Engineering  
5633 B. Street  
Anchorage AK 99518

Attn: Michelle Turner      1328 Leslie  
                               Shirley Daniels  
                               South Well

Comments:

A139030

P.O. #8869

95.9148-8

Water

7294-628-025

Report Date: 07/18/95  
Date Arrived: 07/11/95  
Date Sampled: 06/28/95  
Time Sampled:  
Collected By:

\* Definitions \*

ND = Non Detected

H = Above Regulatory Max.

E = Estimated Value

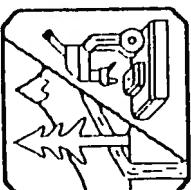
M = Matrix Interference

D = Lost to Dilution

MDL = Method Detection Limit

Lab Number	Method	Parameter	Units	Result	* MDL	Date Prepared	Date Analyzed
139030	502.2/524.2	Benzene	ug/L	<MDL	0.20	07/13/95	
		Bromobenzene	ug/L	<MDL	0.20		
		Bromochloromethane	ug/L	<MDL	0.30		
		Bromodichloromethane	ug/L	<MDL	0.20		
		Bromoform	ug/L	<MDL	0.50		
		Bromomethane	ug/L	<MDL	0.50		
		n-Butylbenzene	ug/L	<MDL	0.20		
		s-Butylbenzene	ug/L	<MDL	0.20		
		tert-Butylbenzene	ug/L	<MDL	0.20		
		Carbon Tetrachloride	ug/L	<MDL	0.20		
		Chlorobenzene	ug/L	<MDL	0.20		
		Dibromochloromethane	ug/L	<MDL	0.20		
		Chlorethane	ug/L	<MDL	0.50		
		Chloroform	ug/L	<MDL	0.20		
		Chloromethane	ug/L	<MDL	0.50		
		o-Chlorotoluene	ug/L	<MDL	0.20		
		p-Chlorotoluene	ug/L	<MDL	0.20		
		Dibromomethane	ug/L	<MDL	0.20		
		1,4-Dichlorobenzene	ug/L	<MDL	0.20		
		1,3-Dichlorobenzene	ug/L	<MDL	0.20		
		o-Dichlorobenzene	ug/L	<MDL	0.20		
		Dichlorodifluoromethane	ug/L	<MDL	0.50		
		1,1-Dichloroethane	ug/L	<MDL	0.20		
		1,2-Dichloroethane	ug/L	<MDL	0.20		
		1,1-Dichloroethylene	ug/L	<MDL	0.20		
		cis-1,2-Dichloroethylene	ug/L	<MDL	0.20		
		trans-1,2-Dichloroethylene	ug/L	<MDL	0.20		
		Methylene Chloride	ug/L	<MDL	0.50		
		1,2-Dichloropropane	ug/L	<MDL	0.20		
		1,3-Dichloropropane	ug/L	<MDL	0.20		
		2,2-Dichloropropane	ug/L	<MDL	0.20		

Reported By: Anthony J. Lange  
Chemistry Supervisor



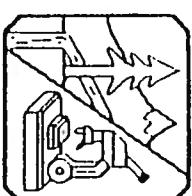
# NORTHERN TESTING LABORATORIES, INC.

3330 INDUSTRIAL AVENUE  
2505 FAIRBANKS STREET  
FAIRBANKS, ALASKA 99701

(907) 456-3116 • FAX 456-3125  
(907) 277-8378 • FAX 274-3645

Lab Number	Method	Parameter	Units	Result *	MDL	Date Prepared	Date Analyzed
A139030	502.2/524.2	1,1-Dichloropropene	ug/L	<MDL	0.20	07/13/95	
		1,3-Dichloropropene	ug/L	<MDL	0.20		
		Ethylbenzene	ug/L	<MDL	0.20		
		1,2-Dibromoethane	ug/L	<MDL	0.20		
		Fluorotrichloromethane	ug/L	<MDL	0.20		
		Hexachlorobutadiene	ug/L	<MDL	0.20		
		Isopropylbenzene	ug/L	<MDL	0.20		
		p-Isopropyltoluene	ug/L	<MDL	0.20		
		Naphthalene	ug/L	<MDL	0.20		
		n-Propylbenzene	ug/L	<MDL	0.20		
		Styrene	ug/L	<MDL	0.20		
		1,1,1,2-Tetrachloroethane	ug/L	<MDL	0.20		
		1,1,2,2-Tetrachloroethane	ug/L	<MDL	0.20		
		Tetrachloroethylene	ug/L	<MDL	0.20		
		Total Trihalomethane	ug/L	<MDL	1.00		
		Toluene	ug/L	<MDL	0.30		
		1,2,3-Trichlorobenzene	ug/L	<MDL	0.20		
		1,2,4-Trichlorobenzene	ug/L	<MDL	0.20		
		1,1,1-Trichloroethane	ug/L	<MDL	0.20		
		1,1,2-Trichloroethane	ug/L	<MDL	0.20		
		Trichloroethylene	ug/L	<MDL	0.20		
		1,2,3-Trichloropropane	ug/L	<MDL	0.20		
		1,2,4-Trimethylbenzene	ug/L	<MDL	0.20		
		1,3,5-Trimethylbenzene	ug/L	<MDL	0.20		
		Vinyl Chloride	ug/L	<MDL	0.50		
		m,p-Xylenes	ug/L	<MDL	0.20		
		o-Xylene	ug/L	<MDL	0.20		
		Surrogate Recovery	%	101			

Reported By: Anthony J. Lange  
Chemistry Supervisor



# NORTHERN TESTING LABORATORIES, INC.

FAIRBANKS, ALASKA 99701  
ANCHORAGE, ALASKA 99503

3330 INDUSTRIAL AVENUE  
2505 FAIRBANKS STREET

(907) 456-3116 FAX 456-3125  
(907) 277-3373 FAX 274-9845

Commercial Testing & Engineering  
5633 B. Street  
Anchorage AK 99518

1343 Sloan

Attn: Michelle Turner

Sue & Sam McCarthy

\* Definitions \*

ND = Non Detected

H = Above Regulatory Max.

E = Estimated Value

M = Matrix Interference

D = Lost to Dilution

MDL = Method Detection Limit

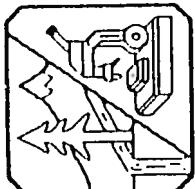
Lab Number	Method	Parameter	Units	Result	* MDL	Date Prepared	Date Analyzed
139031	502.2/524.2	Benzene	ug/L	0.33	0.20	07/13/95	
		Bromobenzene	ug/L	<MDL	0.20		
		Bromo-chloromethane	ug/L	<MDL	0.30		
		Bromo-dichloromethane	ug/L	<MDL	0.20		
		Bromoform	ug/L	<MDL	0.50		
		Bromomethane	ug/L	<MDL	0.50		
		n-Butylbenzene	ug/L	<MDL	0.20		
		s-Butylbenzene	ug/L	<MDL	0.20		
		tert-Butylbenzene	ug/L	<MDL	0.20		
		Carbon Tetrachloride	ug/L	<MDL	0.20		
		Chlorobenzene	ug/L	<MDL	0.20		
		Dibromochloromethane	ug/L	<MDL	0.20		
		Chloroethane	ug/L	<MDL	0.50		
		Chloroform	ug/L	<MDL	0.20		
		Chloromethane	ug/L	<MDL	0.50		
		o-Chlorotoluene	ug/L	<MDL	0.20		
		p-Chlorotoluene	ug/L	<MDL	0.20		
		Dibromomethane	ug/L	<MDL	0.20		
		1,4-Dichlorobenzene	ug/L	<MDL	0.20		
		1,3-Dichlorobenzene	ug/L	<MDL	0.20		
		o-Dichlorobenzene	ug/L	<MDL	0.20		
		Dichlorodifluoromethane	ug/L	<MDL	0.50		
		1,1-Dichloroethane	ug/L	1.31	0.20		
		1,2-Dichloroethane	ug/L	<MDL	0.20		
		cis-1,2-Dichloroethylene	ug/L	<MDL	0.20		
		trans-1,2-Dichloroethylene	ug/L	<MDL	0.20		
		Methylene Chloride	ug/L	<MDL	0.50		
		1,2-Dichloropropane	ug/L	<MDL	0.20		
		1,3-Dichloropropane	ug/L	<MDL	0.20		
		2,2-Dichloropropane	ug/L	<MDL	0.20		

Reported By: Anthony J. Lange  
Chemistry Supervisor

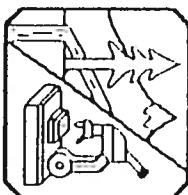
# NORTHERN TESTING LABORATORIES, INC.

3330 INDUSTRIAL AVENUE  
2505 FAIRBANKS STREET  
FAIRBANKS, ALASKA 99701

(907) 456-3116 • FAX 456-3125  
(907) 277-8378 • FAX 274-96-5



Lab Number	Method	Parameter	Units	Result *	MDL	Date Prepared	Date Analyzed
A139031 502.2/524.2	1,1-Dichloropropene	ug/L	<MDL	0.20		07/13/95	
	1,3-Dichloropropene	ug/L	<MDL	0.20			
	Ethylbenzene	ug/L	<MDL	0.20			
	1,2-Dibromoethane	ug/L	<MDL	0.20			
	Fluorotrichloromethane	ug/L	<MDL	0.20			
	Hexachlorobutadiene	ug/L	<MDL	0.20			
	Isopropylbenzene	ug/L	<MDL	0.20			
	p-Isopropyltoluene	ug/L	<MDL	0.20			
	Naphthalene	ug/L	<MDL	0.20			
	n-Propylbenzene	ug/L	<MDL	0.20			
	Styrene	ug/L	<MDL	0.20			
	1,1,1,2-Tetrachloroethane	ug/L	<MDL	0.20			
	1,1,2,2-Tetrachloroethane	ug/L	<MDL	0.20			
	Tetrachloroethylene	ug/L	<MDL	0.20			
	Total Trihalomethane	ug/L	<MDL	1.00			
	Toluene	ug/L	<MDL	0.30			
	1,2,3-Trichlorobenzene	ug/L	<MDL	0.20			
	1,2,4-Trichlorobenzene	ug/L	<MDL	0.20			
	1,1,1-Trichloroethane	ug/L	2.99	0.20			
	1,1,2-Trichloroethane	ug/L	<MDL	0.20			
	Trichloroethylene	ug/L	5.98	H	0.20		
	1,2,3-Trichloropropane	ug/L	<MDL	0.20			
	1,2,4-Trimethylbenzene	ug/L	<MDL	0.20			
	1,3,5-Trimethylbenzene	ug/L	<MDL	0.50			
	Vinyl Chloride	ug/L	<MDL	0.20			
	m,p-Xylenes	ug/L	<MDL	0.20			
	o-Xylene	ug/L	<MDL	0.20			
	Surrogate Recovery	%		93			



3330 INDUSTRIAL AVENUE  
FAIRBANKS STREET  
ANCHORAGE, ALASKA 99503

FARIBANKS, ALASKA 99701  
(907) 277-3378, FAX 274-9845

# NORTHERN TESTING LABORATORIES, INC.

Commercial Testing & Engineering  
5633 B. Street  
Anchorage AK 99518

1338 Sloan

Attn: Michelle Turner Mike & Patricia Silva

\* Definitions \*

ND = Non Detected

H = Above Regulatory Max.

E = Estimated Value

M = Matrix Interference

D = Lost to Dilution

MDL = Method Detection Limit

Our Lab #: A139032  
Location/Project: P.O. #8869  
Your Sample ID: 95.9148-10  
Sample Matrix: Water

Comments: 7294-628-027

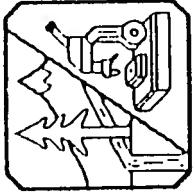
Lab Number	Method	Parameter	Units	Result	* MDL	Date Prepared	Date Analyzed
A139032	502.2/524.2	Benzene	ug/L	<MDL	0.20	07/13/95	
		Bromobenzene	ug/L	<MDL	0.20		
		Bromoform	ug/L	<MDL	0.30		
		Bromomethane	ug/L	<MDL	0.20		
		n-Butylbenzene	ug/L	<MDL	0.50		
		s-Butylbenzene	ug/L	<MDL	0.20		
		tert-Butylbenzene	ug/L	<MDL	0.20		
		Carbon Tetrachloride	ug/L	<MDL	0.20		
		Chlorobenzene	ug/L	<MDL	0.20		
		Dibromochloromethane	ug/L	<MDL	0.20		
		Dichloroethane	ug/L	<MDL	0.50		
		Dichloroform	ug/L	<MDL	0.20		
		Chloromethane	ug/L	<MDL	0.20		
		p-Chlorotoluene	ug/L	<MDL	0.50		
		Dibromomethane	ug/L	<MDL	0.20		
		1,4-Dichlorobenzene	ug/L	<MDL	0.20		
		1,3-Dichlorobenzene	ug/L	<MDL	0.20		
		O-Dichlorobenzene	ug/L	<MDL	0.20		
		Dichlorodifluoromethane	ug/L	<MDL	0.20		
		1,1-Dichloroethane	ug/L	0.30	0.20		
		1,2-Dichloroethane	ug/L	<MDL	0.20		
		1,1-Dichloroethylene	ug/L	<MDL	0.20		
		cis-1,2-Dichloroethylene	ug/L	<MDL	0.20		
		trans-1,2-Dichloroethylene	ug/L	<MDL	0.20		
		Methylene Chloride	ug/L	<MDL	0.50		
		1,2-Dichloropropane	ug/L	<MDL	0.20		
		1,3-Dichloropropane	ug/L	<MDL	0.20		
		2,2-Dichloropropane	ug/L	<MDL	0.20		

Reported By: Anthony J. Lange  
Chemistry Supervisor

# NORTHERN TESTING LABORATORIES, INC.

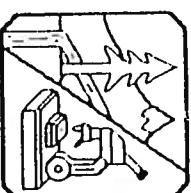
3330 INDUSTRIAL AVENUE  
2505 FAIRBANKS STREET  
ANCHORAGE, ALASKA 99503

FAIRBANKS, ALASKA 99701  
(907) 456-3116 • FAX 456-3125  
(907) 277-8378 • FAX 274-9645



Lab Number	Method	Parameter	Units	Result *	MDL	Date Prepared	Date Analyzed
A139032	502.2/524.2	1,1-Dichloropropene	ug/L	<MDL	0.20	07/13/95	
		1,3-Dichloropropene	ug/L	<MDL	0.20		
		Ethylbenzene	ug/L	<MDL	0.20		
		1,2-Dibromoethane	ug/L	<MDL	0.20		
		Fluorotrichloromethane	ug/L	<MDL	0.20		
		Hexachlorobutadiene	ug/L	<MDL	0.20		
		Isopropylbenzene	ug/L	<MDL	0.20		
		p-Isopropyltoluene	ug/L	<MDL	0.20		
		Naphthalene	ug/L	<MDL	0.20		
		n-Propylbenzene	ug/L	<MDL	0.20		
		Styrene	ug/L	<MDL	0.20		
		1,1,1,2-Tetrachloroethane	ug/L	<MDL	0.20		
		1,1,2,2-Tetrachloroethane	ug/L	<MDL	0.20		
		Tetrachloroethylene	ug/L	<MDL	0.20		
		Total Trihalomethane	ug/L	<MDL	1.00		
		Toluene	ug/L	<MDL	0.30		
		1,2,3-Trichlorobenzene	ug/L	<MDL	0.20		
		1,2,4-Trichlorobenzene	ug/L	<MDL	0.20		
		1,1,1-Trichloroethane	ug/L	0.38	0.20		
		1,1,2-Trichloroethane	ug/L	<MDL	0.20		
		Trichloroethylene	ug/L	0.96	0.20		
		1,2,3-Trichloropropane	ug/L	<MDL	0.20		
		1,2,4-Trimethylbenzene	ug/L	<MDL	0.20		
		1,3,5-Trimethylbenzene	ug/L	<MDL	0.20		
		Vinyl Chloride	ug/L	<MDL	0.50		
		m,p-Xylenes	ug/L	<MDL	0.20		
		o-Xylene	ug/L	<MDL	0.20		
		Surrogate Recovery	%	92			

Reported By: Anthony J. Lange  
Chemistry Supervisor



# NORTHERN TESTING LABORATORIES, INC.

3330 INDUSTRIAL AVENUE  
FAIRBANKS, ALASKA 99701  
ANCHORAGE, ALASKA 99503

(907) 456-3116, FAX 456-3125  
(907) 277-8378, FAX 271-9845

Commercial Testing & Engineering  
5633 B. Street  
Anchorage AK 99518

Attn: Michelle Turner    Steve & Phyllis Mattice  
1358 Smithson Matrix

Our Lab #: A139033

Location/Project: P.O. #8869

Your Sample ID: 95.9148-11

Sample Matrix: Water

Comments: 7294-628-028

Report Date: 07/18/95  
Date Arrived: 07/11/95  
Date Sampled: 06/29/95  
Time Sampled:  
Collected By:

\* Definitions \*  
ND = Non Detected

H = Above Regulatory Max.

E = Estimated Value

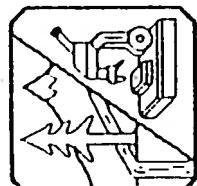
M = Matrix Interference

D = Lost to Dilution

MDL = Method Detection Limit

Lab Number	Method	Parameter	Units	Result	*	MDL	Date Prepared	Date Analyzed
A139033	502-2/524.2	Benzene	ug/L	<MDL	0.20		07/13/95	
		Bromobenzene	ug/L	<MDL	0.20			
		Bromochloromethane	ug/L	<MDL	0.30			
		Bromodichloromethane	ug/L	<MDL	0.20			
		Bromoform	ug/L	<MDL	0.50			
		Bromomethane	ug/L	<MDL	0.50			
		n-Butylbenzene	ug/L	<MDL	0.20			
		s-Butylbenzene	ug/L	<MDL	0.20			
		tert-Butylbenzene	ug/L	<MDL	0.20			
		Carbon Tetrachloride	ug/L	<MDL	0.20			
		Chlorobenzene	ug/L	<MDL	0.20			
		Dibromochloromethane	ug/L	<MDL	0.20			
		Chloroethane	ug/L	<MDL	0.50			
		Chloroform	ug/L	<MDL	0.20			
		Chloromethane	ug/L	<MDL	0.50			
		o-Chlorotoluene	ug/L	<MDL	0.20			
		p-Chlorotoluene	ug/L	<MDL	0.20			
		Dibromomethane	ug/L	<MDL	0.20			
		1,4-Dichlorobenzene	ug/L	<MDL	0.20			
		1,3-Dichlorobenzene	ug/L	<MDL	0.20			
		o-Dichlorobenzene	ug/L	<MDL	0.20			
		Dichlorodifluoromethane	ug/L	<MDL	0.50			
		1,1-Dichloroethylene	ug/L	0.92	0.20			
		cis-1,2-Dichloroethylene	ug/L	<MDL	0.20			
		trans-1,2-Dichloroethylene	ug/L	<MDL	0.20			
		Methylene Chloride	ug/L	<MDL	0.50			
		1,2-Dichloropropane	ug/L	<MDL	0.20			
		1,3-Dichloropropane	ug/L	<MDL	0.20			
		2,2-Dichloropropane	ug/L	<MDL	0.20			

Reported By: Anthony J. Lange  
Chemistry Supervisor



# NORTHERN TESTING LABORATORIES, INC.

3330 INDUSTRIAL AVENUE  
2505 FAIRBANKS STREET  
FAIRBANKS, ALASKA 99701

(907) 456-3116 • FAX 456-3125  
(907) 277-8378 • FAX 274-9645

Lab Number	Method	Parameter	Units	Result *	MDL	Date Prepared	Date Analyzed
A139033	502.2 / 524.2	1,1-DichloroPropene	ug/L	<MDL	0.20	07/13/95	
		1,3-DichloroPropene	ug/L	<MDL	0.20		
		Ethylbenzene	ug/L	<MDL	0.20		
		1,2-Dibromoethane	ug/L	<MDL	0.20		
		Fluorotrichloromethane	ug/L	<MDL	0.20		
		Hexachlorobutadiene	ug/L	<MDL	0.20		
		Isopropylbenzene	ug/L	<MDL	0.20		
		p-Isopropyltoluene	ug/L	<MDL	0.20		
		Naphthalene	ug/L	<MDL	0.20		
		n-Propylbenzene	ug/L	<MDL	0.20		
		Styrene	ug/L	<MDL	0.20		
		1,1,1,2-Tetrachloroethane	ug/L	<MDL	0.20		
		1,1,2,2-Tetrachloroethane	ug/L	<MDL	0.20		
		Tetrachloroethylene	ug/L	<MDL	0.20		
		Total Trihalomethane	ug/L	<MDL	1.00		
		Toluene	ug/L	<MDL	0.30		
		1,2,3-Trichlorobenzene	ug/L	<MDL	0.20		
		1,2,4-Trichlorobenzene	ug/L	<MDL	0.20		
		1,1,1-Trichloroethane	ug/L	1.29	0.20		
		1,1,2-Trichloroethane	ug/L	<MDL	0.20		
		Trichloroethylene	ug/L	1.82	0.20		
		1,2,3-Trichloropropane	ug/L	<MDL	0.20		
		1,2,4-Trichlorobenzene	ug/L	<MDL	0.20		
		1,3,5-Trimethylbenzene	ug/L	<MDL	0.20		
		Vinyl Chloride	ug/L	<MDL	0.50		
		m,p-Xylenes	ug/L	<MDL	0.20		
		o-Xylene	ug/L	<MDL	0.20		
		Surrogate Recovery	%	101			

Reported By: Anthony J. Lange  
Chemistry Supervisor

PO#:

8869

## CHAIN OF CUSTODY

95.9148

Reports to:

M. TURNER

200 W. POTTER ST.

ANCH, AK

99518

Phone:

Fax:

Contact person for questions concerning these samples:

M. TURNER

Special Instructions: PLEASE FAX RESULTS

CT&amp;E Ref:

Laboratory:

Page \_\_\_\_ of \_\_\_\_

CT&amp;E Environmental Services Inc.

200 W Potter Dr.

Anchorage, AK 99518-1605

Phone (907) 562-2343 Fax: (907) 561-5301

Phone: 562-2343Fax: 561-5301

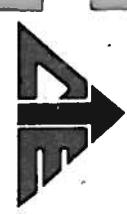
Project Name/Number

Sampled By:

Lab #	Sample #	Date/Time Sampled	# of Containers	Sample Matrix	Comments
	95.9148-1	7/06/95	2	WATER X	
	-2				NEED RESULTS
	-3				FAXED TO US
	-4				ON 7/13/95 by
	-5				5:00 pm.
	-6				
	-7				
	-8				
	-9				
	-10				
	-11				

Sample Receipt:	Relinquished By:	Relinquished By:	Relinquished By:
22 Number of Containers	Signature: <u>J. Magsaysay</u> Time: <u>0900</u> Printed Name: <u>J. Magsaysay</u> Date: <u>7/11/95</u>	Signature: _____ Time: _____ Printed Name: _____ Date: _____	Signature: _____ Time: _____ Printed Name: _____ Date: _____
COC Seals/Intact Y/N/NA	Received By: _____	Received By: _____	Received at Laboratory By: _____
Temperature	Received By: _____	Received By: _____	Received at Laboratory By: _____
Turnaround Required	Signature: _____ Time: _____	Signature: _____ Time: _____	Signature: _____ Time: _____
Data Deliverables Required Level I Level II Level III	Printed Name: _____ Date: _____	Printed Name: _____ Date: _____	Printed Name: _____ Date: _____





**CT&E Environmental Services Inc.**  
Laboratory Division

CT&E Ref.# 95-9178-1

Matrix WATER

Client Sample ID 7294-724-029

Client Name SHANNON & WILSON, INC.  
Ordered By CHRIS DARRAH  
Project Name MCCALLS  
PWSID X-729-4  
UA

841 Harbert  
Etolia Pruitt

Released By *[Signature]*

WORK Order	Printed Date	Collected Date	Received Date
16701	08/04/95 @ 16:00 hrs.	07/24/95 @ 15:44 hrs.	07/25/95 @ 10:20 hrs.
Technical Director STEPHEN C. EDE			

Sample Remarks: SAMPLE COLLECTED BY: CHRIS DARRAH. J- INDICATES AN ANALYTE DETECTED BELOW THE CALIBRATION RANGE.

Parameter	Results	QC	Qual	Units	Method	Allowable Limits	Ext. Date	Anal Date	Init
Volatile Organic Chem					EPA 502.2/524.2				
1,1,1 Trichloroethane	0.0011	mg/L		EPA 502.2/524.2	0.200	07/28/95	07/28/95	JBH	
1,1 Dichloroethylene	0.00050	U	mg/L	EPA 502.2/524.2	0.0070	07/28/95	07/28/95	JBH	
1,2 Dichloroethane	0.00050	U	mg/L	EPA 502.2/524.2	0.0050	07/28/95	07/28/95	JBH	
Carbon Tetrachloride	0.00050	U	mg/L	EPA 502.2/524.2	0.0050	07/28/95	07/28/95	JBH	
Vinyl Chloride	0.00050	U	mg/L	EPA 502.2/524.2	0.0020	07/28/95	07/28/95	JBH	
Benzene	0.0016	mg/L		EPA 502.2/524.2	0.0050	07/28/95	07/28/95	JBH	
1,4-Dichlorobenzene	0.00050	U	mg/L	EPA 502.2/524.2	0.0750	07/28/95	07/28/95	JBH	
Trichloroethylene	0.00037	J	mg/L	EPA 502.2/524.2	0.0050	07/28/95	07/28/95	JBH	
TTHM	0.00050	U	mg/L	EPA 502.2/524.2	0.100	07/28/95	07/28/95	JBH	
Bromobenzene	0.00050	U	mg/L	EPA 502.2/524.2	0.0050	07/28/95	07/28/95	JBH	
Bromo-chloromethane	0.00050	U	mg/L	EPA 502.2/524.2	0.0050	07/28/95	07/28/95	JBH	
Bromodichloromethane	0.00050	U	mg/L	EPA 502.2/524.2	0.0050	07/28/95	07/28/95	JBH	
Bromoform	0.00050	U	mg/L	EPA 502.2/524.2	0.0050	07/28/95	07/28/95	JBH	
Bromomethane	0.00050	U	mg/L	EPA 502.2/524.2	0.0050	07/28/95	07/28/95	JBH	
n-Butylbenzene	0.00050	U	mg/L	EPA 502.2/524.2	0.0050	07/28/95	07/28/95	JBH	
sec-Butylbenzene	0.00050	U	mg/L	EPA 502.2/524.2	0.0050	07/28/95	07/28/95	JBH	
tert-Butylbenzene	0.00050	U	mg/L	EPA 502.2/524.2	0.0050	07/28/95	07/28/95	JBH	
Chlorobenzene	0.00050	U	mg/L	EPA 502.2/524.2	0.0050	07/28/95	07/28/95	JBH	
Chlorodibromomethane	0.00050	U	mg/L	EPA 502.2/524.2	0.0050	07/28/95	07/28/95	JBH	
Chloroethane	0.00050	U	mg/L	EPA 502.2/524.2	0.0050	07/28/95	07/28/95	JBH	
Chloroform	0.00050	U	mg/L	EPA 502.2/524.2	0.0050	07/28/95	07/28/95	JBH	
Chloromethane	0.00043	J	mg/L	EPA 502.2/524.2	0.0050	07/28/95	07/28/95	JBH	
1,2Dibromo-3-Chloropropane	0.00050	U	mg/L	EPA 502.2/524.2	0.0050	07/28/95	07/28/95	JBH	
o-Chlorotoluene	0.00050	U	mg/L	EPA 502.2/524.2	0.0050	07/28/95	07/28/95	JBH	
p-Chlorotoluene	0.00050	U	mg/L	EPA 502.2/524.2	0.0050	07/28/95	07/28/95	JBH	
Dibromomethane	0.00050	U	mg/L	EPA 502.2/524.2	0.0050	07/28/95	07/28/95	JBH	
m-Dichlorobenzene	0.00050	U	mg/L	EPA 502.2/524.2	0.0050	07/28/95	07/28/95	JBH	
o-Dichlorobenzene	0.00050	U	mg/L	EPA 502.2/524.2	0.0050	07/28/95	07/28/95	JBH	
Dichlorodifluoromethane	0.00050	U	mg/L	EPA 502.2/524.2	0.0050	07/28/95	07/28/95	JBH	
1,1-Dichloroethane	0.00050	U	mg/L	EPA 502.2/524.2	0.0050	07/28/95	07/28/95	JBH	
cis-1,2-Dichloroethylene	0.00048	J	mg/L	EPA 502.2/524.2	0.0048	07/28/95	07/28/95	JBH	
trans-1,2-Dichloroethyl	0.00050	U	mg/L	EPA 502.2/524.2	0.0050	07/28/95	07/28/95	JBH	
Dichloromethane	0.00031	mg/L		EPA 502.2/524.2	0.0031	07/28/95	07/28/95	JBH	
1,2-Dichloropropane	0.00050	U	mg/L	EPA 502.2/524.2	0.0050	07/28/95	07/28/95	JBH	
1,3-Dichloropropene	0.00050	U	mg/L	EPA 502.2/524.2	0.0050	07/28/95	07/28/95	JBH	



CT&E Environmental Services Inc.

CT&E Ref. # 95-9178-1  
Matrix WATER  
Client Sample ID 7294-724-029

2, 2-Dichloropropane	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1, 1-Dichloropropene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1, 3-Dichloropropene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Ethylbenzene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Ethylenedibromide (EDB)	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Fluorotrichloromethane	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Hexachlorobutadiene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Isopropylbenzene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
p-Isopropyltoluene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Naphthalene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
n-Propylbenzene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Styrene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1,112-Tetrachloroethane	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1,122-Tetrachloroethane	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Tetrachloroethylene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Toluene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1, 2, 3-Trichlorobenzene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1, 2, 4-Trichlorobenzene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1, 1, 2-Trichloroethane	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1, 2, 3-Trichloropropane	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1, 2, 4-Trimethylbenzene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1, 3, 5-Trimethylbenzene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
p & m Xylene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
o-Xylene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH

\* See Special Instructions Above

\*\* See Sample Remarks Above

U = Undetected, Reported value is the practical quantification limit.

D = Secondary dilution.

UA = Unavailable  
NA = Not Analyzed  
LT = Less Than  
GT = Greater Than

CT&E Ref.#	95-9178-2
Matrix	WATER
Client Sample ID	7294-724-030
Client Name	SHANNON & WILSON, INC.
Ordered By	CHRIS DARAH
Project Name	MCALLIS
Project#	X-729-4
PWSID	UA

1345 Smithson  
Harmon Hurst

WORK Order 16701  
 Printed Date 08/04/95 @ 16:02 hrs.  
 Collected Date 07/24/95 @ 16:00 hrs.  
 Received Date 07/25/95 @ 10:20 hrs.  
 Technical Director STEPHEN C. EDE

Released By 

Sample Remarks: SAMPLE COLLECTED BY: CHRIS DARAH. J- INDICATES AN ANALYTE DETECTED BELOW THE CALIBRATION RANGE.

Parameter	Results	QC	Qual	Units	Method	Allowable Limits	Ext. Date	Anal Date	Init
Volatile Organic Chem					EPA 502.2/524.2				
1,1,1 Trichloroethane	0.0214	D	mg/L	EPA 502.2/524.2	0.200	08/03/95	08/03/95	JBH	
1,1 Dichloroethylene	0.0023		mg/L	EPA 502.2/524.2	0.0070	07/28/95	07/28/95	JBH	
1,2 Dichloroethane	0.00050	U	mg/L	EPA 502.2/524.2	0.0050	07/28/95	07/28/95	JBH	
Carbon Tetrachloride	0.00050	U	mg/L	EPA 502.2/524.2	0.0050	07/28/95	07/28/95	JBH	
Vinyl Chloride	0.00050	U	mg/L	EPA 502.2/524.2	0.0020	07/28/95	07/28/95	JBH	
Benzene	0.00039	J	mg/L	EPA 502.2/524.2	0.0050	07/28/95	07/28/95	JBH	
1,4-Dichlorobenzene	0.00050	U	mg/L	EPA 502.2/524.2	0.0750	07/28/95	07/28/95	JBH	
Trichloroethylene	0.00050	U	mg/L	EPA 502.2/524.2	0.0050	07/28/95	07/28/95	JBH	
THM	0.00050	U	mg/L	EPA 502.2/524.2	0.100	07/28/95	07/28/95	JBH	
Bromobenzene	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
Bromochloromethane	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
Bromodichloromethane	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
Bromoform	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
Bromomethane	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
n-Butylbenzene	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
sec-Butylbenzene	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
tert-Butylbenzene	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
Chlorobenzene	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
Chlorodibromomethane	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
Chloroethane	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
Chloroform	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
Chloromethane	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
1,2Dibromo-3-Chloropropane	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
o-Chlorotoluene	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
p-Chlorotoluene	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
Dibromomethane	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
m-Dichlorobenzene	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
o-Dichlorobenzene	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
Dichlorodifluoromethane	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
1,1-Dichloroethane	0.00067	J	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
cis-1,2-Dichloroethylene	0.00038	J	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
trans-1,2-Dichloroethyl	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
Dichloromethane	0.00060	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
1,2-Dichloropropene	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
1,3-Dichloropropene	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	



CT&E Environmental Services Inc.

CT&E Ref. # 95-9178-2  
Matrix WATER  
Client Sample ID 7294-724-030

2,2-Dichloropropane	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1,1-Dichloropropene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1,3-Dichloropropene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Ethylbenzene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Ethylenedibromide (EDB)	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Fluorotrichloromethane	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Hexachlorobutadiene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Isopropylbenzene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
p-Isopropyltoluene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Naphthalene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
n-Propylbenzene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Styrene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1,1,2-Tetrachloroethane	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1,1,2-Tetrachloroethane	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Tetrachloroethylene	0.00096	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Toluene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1,2,3-Trichlorobenzene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1,2,4-Trichlorobenzene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1,1,2-Trichloroethane	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1,2,3-Trichloropropane	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1,2,4-Trimethylbenzene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1,3,5-Trimethylbenzene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
p & m Xylene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
o-Xylene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH

\* See Special Instructions Above

\*\* See Sample Remarks Above

U = Undetected, Reported value is the practical quantification limit.  
D = Secondary dilution.

UA = Unavailable  
NA = Not Analyzed  
LT = Less Than  
GT = Greater Than

CT&E Ref.#	95.9178-3								
Matrix	WATER								
Client Sample ID	7294-724-031								
Client Name	SHANNON & WILSON, INC.								
Ordered By	CHRIS DARRAH								
Project Name	MCCALLS								
Project#	X-729-4								
PWSID	UA								
Owner:	Joe & Gloria Sloan								
Renter:	Robert Moore Burns								
Released By	<i>Stephen Paxton</i>								
Sample Remarks: SAMPLE COLLECTED BY: CHRIS DARRAH. J- INDICATES AN ANALYTE DETECTED BELOW THE CALIBRATION RANGE.									
Parameter	Results	QC Qual	Units	Method	Allowable Limits	Ext. Date	Anal Date	Init	
Volatile Organic Chem				EPA 502.2/524.2					
1,1,1 Trichloroethane	0.0035	mg/L	EPA 502.2/524.2	0.200	07/28/95	07/28/95	JBH		
1,1 Dichloroethylene	0.00054	mg/L	EPA 502.2/524.2	0.070	07/28/95	07/28/95	JBH		
1,2 Dichloroethane	0.00050	U	EPA 502.2/524.2	0.050	07/28/95	07/28/95	JBH		
Carbon Tetrachloride	0.00050	mg/L	EPA 502.2/524.2	0.050	07/28/95	07/28/95	JBH		
Vinyl Chloride	0.00050	U	EPA 502.2/524.2	0.020	07/28/95	07/28/95	JBH		
Benzene	0.00044	J	mg/L	EPA 502.2/524.2	0.050	07/28/95	07/28/95	JBH	
1,4-Dichlorobenzene	0.00050	U	mg/L	EPA 502.2/524.2	0.0750	07/28/95	07/28/95	JBH	
Trichloroethylene	0.0072	mg/L	EPA 502.2/524.2	0.050	07/28/95	07/28/95	JBH		
THM	0.00050	U	mg/L	EPA 502.2/524.2	0.100	07/28/95	07/28/95	JBH	
Bromobenzene	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
Bromochloromethane	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
Bromodichloromethane	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
Bromoform	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
Bromomethane	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
n-Butylbenzene	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
sec-Butylbenzene	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
tert-Butylbenzene	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
Chlorobenzene	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
Chlorodibromomethane	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
Chloroethane	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
Chloroform	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
Chloromethane	0.00036	J	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
1,2Dibromo-3-Chloropropane	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
o-Chlorotoluene	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
p-Chlorotoluene	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
Dibromomethane	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
m-Dichlorobenzene	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
o-Dichlorobenzene	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
Dichlorodifluoromethane	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
1,1-Dichloroethane	0.0016	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
cis-1,2-Dichloroethylene	0.0010	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
trans-1,2-Dichloroethyl	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
Dichloromethane	0.0027	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
1,2-Dichloropropene	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
1,3-Dichloropropane	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	



CT&amp;E Environmental Services Inc.

CT&amp;E Ref. # 95.9178-3

Matrix WATER

Client Sample ID 7294-724-031

2,2-Dichloropropane	0.0050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1,1-Dichloropropene	0.0050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1,3-Dichloropropene	0.0050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Ethybenzene	0.0050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Ethylene Dibromide (EDB)	0.0050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Fluorotrichloromethane	0.0050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Hexachlorobutadiene	0.0050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Isopropylbenzene	0.0050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
p-Isopropyltoluene	0.0050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Naphthalene	0.0050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
n-Propylbenzene	0.0050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Styrene	0.0050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1,1,2-Tetrachloroethane	0.0050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1,1,2-Tetrachloroethane	0.0050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Tetrachloroethylene	0.0050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Toluene	0.0050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1,2,3-Trichlorobenzene	0.0050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1,2,4-Trichlorobenzene	0.0050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1,1,2-Trichloroethane	0.0050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1,2,3-Trichloropropane	0.0050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1,2,4-Trimethylbenzene	0.0050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1,3,5-Trimethylbenzene	0.0050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
p & m Xylene	0.0050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
o-Xylene	0.0050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH

\* See Special Instructions Above

\*\* See Sample Remarks Above

U = Undetected, Reported value is the practical quantification limit.

D = Secondary dilution.

UA = Unavailable  
NA = Not Analyzed  
LT = Less Than  
GT = Greater Than

CT&E Ref. # 95-9178-4  
 Matrix WATER  
 Client Sample ID 7294-724-032

Client Name SHANNON & WILSON, INC.  
 Ordered By CHRIS DARRAH  
 Project Name MCCALLS  
 Project# X-729-4  
 PWSID UA

1309 Sloan  
 Ernest Kingsbury

Technical Director STEPHEN C. EDE  
 Released By Stephen Ede

Sample Remarks: SAMPLE COLLECTED BY: CHRIS DARRAH. J- INDICATES AN ANALYTE DETECTED  
 BELOW THE CALIBRATION RANGE.

Parameter	Results	QC	Qual	Units	Method	Allowable Limits	Ext. Date	Anal Date	Init
Volatile Organic Chem					EPA 502.2/524.2				
1,1,1 Trichloroethane	0.00050	U	mg/L	EPA 502.2/524.2	0.200	07/28/95	07/28/95	JBH	
1,1 Dichloroethylene	0.00050	U	mg/L	EPA 502.2/524.2	0.0070	07/28/95	07/28/95	JBH	
1,2 Dichloroethane	0.00050	U	mg/L	EPA 502.2/524.2	0.0050	07/28/95	07/28/95	JBH	
Carbon Tetrachloride	0.00050	U	mg/L	EPA 502.2/524.2	0.0050	07/28/95	07/28/95	JBH	
Vinyl Chloride	0.00050	U	mg/L	EPA 502.2/524.2	0.0020	07/28/95	07/28/95	JBH	
Benzene	0.00050	U	mg/L	EPA 502.2/524.2	0.0050	07/28/95	07/28/95	JBH	
1,4-Dichlorobenzene	0.00050	U	mg/L	EPA 502.2/524.2	0.0750	07/28/95	07/28/95	JBH	
Trichloroethylene	0.00050	U	mg/L	EPA 502.2/524.2	0.0050	07/28/95	07/28/95	JBH	
TTHM	0.00050	U	mg/L	EPA 502.2/524.2	0.100	07/28/95	07/28/95	JBH	
Bromobenzene	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
Bromochloromethane	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
Bromodichloromethane	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
Bromoform	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
Bromomethane	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
n-Butylbenzene	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
sec-Butylbenzene	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
tert-Butylbenzene	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
Chlorobenzene	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
Chlorodibromomethane	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
Chloroethane	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
Chloroform	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
Chloromethane	0.00042	J	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
1,2Dibromo-3-Chloropropane	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
o-Chlorotoluene	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
p-Chlorotoluene	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
Dibromomethane	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
m-Dichlorobenzene	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
o-Dichlorobenzene	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
Dichlorodifluoromethane	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
1,1-Dichloroethane	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
cis-1,2-Dichloroethylben	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
trans-1,2-Dichloroethylben	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
Dichloromethane	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
1,2-Dichloropropane	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
1,3-Dichloropropane	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	



CT&E Environmental Services Inc.

CT&E Ref. # 95.9178-4  
Matrix WATER  
Client Sample ID 7294-724-032

2, 2-Dichloropropane	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1, 1-Dichloropropene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1, 3-Dichloropropene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Ethylbenzene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Ethylene Dibromide (EDB)	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Fluorotrichloromethane	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Hexachlorobutadiene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Isopropylbenzene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
p-Isopropyltoluene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Naphthalene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
n-Propylbenzene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Styrene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1,1,2-Tetrachloroethane	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1,1,2-Tetrachloroethane	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Tetrachloroethylene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Toluene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1, 2, 3-Trichlorobenzene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1, 2, 4-Trichlorobenzene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1, 1, 2-Trichloroethane	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1, 2, 3-Trichloropropane	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1, 2, 4-Trimethylbenzene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1, 3, 5-Trimethylbenzene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
p & m Xylene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
o-Xylene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH

\* See Special Instructions Above  
\*\* See Sample Remarks Above

U = Undetected, Reported value is the practical quantification limit.  
D = Secondary dilution.

UA = Unavailable  
NA = Not Analyzed  
LT = Less Than  
GT = Greater Than

CT&E Ref. # 95-9178-5  
 Matrix WATER  
 Client Sample ID 7294-724-033  
 Client Name SHANNON & WILSON, INC.  
 Ordered By CHRIS DARAH  
 Project Name MCCALLS  
 Project# X-729-4  
 PWSID UA

*B47 Herbert*  
*Andy McNeil*

Released By *Shawn Peters*

Sample Remarks: SAMPLE COLLECTED BY: CHRIS DARAH. J- INDICATES AN ANALYTE DETECTED BELOW THE CALIBRATION RANGE.

Parameter	Results	QC	Qual	Units	Method	Allowable Limits	Ext. Date	Anal Date	Init
Volatile Organic Chem					EPA 502.2/524.2				
1,1,1 Trichloroethane	0.00031	J	mg/L	EPA 502.2/524.2	0.200	07/28/95	07/28/95	JBH	
1,1 Dichloroethylene	0.00050	U	mg/L	EPA 502.2/524.2	0.0070	07/28/95	07/28/95	JBH	
1,2 Dichlorethane	0.00050	U	mg/L	EPA 502.2/524.2	0.0050	07/28/95	07/28/95	JBH	
Carbon Tetrachloride	0.00050	U	mg/L	EPA 502.2/524.2	0.0050	07/28/95	07/28/95	JBH	
Vinyl Chloride	0.00050	U	mg/L	EPA 502.2/524.2	0.0020	07/28/95	07/28/95	JBH	
Benzene	0.00050	U	mg/L	EPA 502.2/524.2	0.0050	07/28/95	07/28/95	JBH	
1,4-Dichlobenzene	0.00050	U	mg/L	EPA 502.2/524.2	0.0750	07/28/95	07/28/95	JBH	
Trichloroethylene	0.0012	mg/L	EPA 502.2/524.2	0.0050	07/28/95	07/28/95	JBH		
TTHM	0.00050	U	mg/L	EPA 502.2/524.2	0.100	07/28/95	07/28/95	JBH	
Bromobenzene	0.00050	U	mg/L	EPA 502.2/524.2	0.0700	07/28/95	07/28/95	JBH	
Bromochloroethane	0.00050	U	mg/L	EPA 502.2/524.2	0.0700	07/28/95	07/28/95	JBH	
Bromodichloromethane	0.00050	U	mg/L	EPA 502.2/524.2	0.0700	07/28/95	07/28/95	JBH	
Bromoform	0.00050	U	mg/L	EPA 502.2/524.2	0.0700	07/28/95	07/28/95	JBH	
Bromomethane	0.00050	U	mg/L	EPA 502.2/524.2	0.0700	07/28/95	07/28/95	JBH	
n-Butylbenzene	0.00050	U	mg/L	EPA 502.2/524.2	0.0700	07/28/95	07/28/95	JBH	
sec-Butylbenzene	0.00050	U	mg/L	EPA 502.2/524.2	0.0700	07/28/95	07/28/95	JBH	
tert-Butylbenzene	0.00050	U	mg/L	EPA 502.2/524.2	0.0700	07/28/95	07/28/95	JBH	
Chlorobenzene	0.00050	U	mg/L	EPA 502.2/524.2	0.0700	07/28/95	07/28/95	JBH	
Chlorodibromomethane	0.00050	U	mg/L	EPA 502.2/524.2	0.0700	07/28/95	07/28/95	JBH	
Chloroethane	0.00050	U	mg/L	EPA 502.2/524.2	0.0700	07/28/95	07/28/95	JBH	
Chloroform	0.00050	U	mg/L	EPA 502.2/524.2	0.0700	07/28/95	07/28/95	JBH	
Chloromethane	0.00035	J	mg/L	EPA 502.2/524.2	0.0700	07/28/95	07/28/95	JBH	
1,2Dibromo-3-Chloropropane	0.00050	U	mg/L	EPA 502.2/524.2	0.0700	07/28/95	07/28/95	JBH	
o-Chlorotoluene	0.00050	U	mg/L	EPA 502.2/524.2	0.0700	07/28/95	07/28/95	JBH	
p-Chlorotoluene	0.00050	U	mg/L	EPA 502.2/524.2	0.0700	07/28/95	07/28/95	JBH	
Dibromomethane	0.00050	U	mg/L	EPA 502.2/524.2	0.0700	07/28/95	07/28/95	JBH	
m-Dichlorobenzene	0.00050	U	mg/L	EPA 502.2/524.2	0.0700	07/28/95	07/28/95	JBH	
o-Dichlorobenzene	0.00050	U	mg/L	EPA 502.2/524.2	0.0700	07/28/95	07/28/95	JBH	
Dichlorodifluoromethane	0.00050	U	mg/L	EPA 502.2/524.2	0.0700	07/28/95	07/28/95	JBH	
1,1-Dichloroethane	0.00038	J	mg/L	EPA 502.2/524.2	0.0700	07/28/95	07/28/95	JBH	
cis-1,2-Dichloroethylben	0.00031	J	mg/L	EPA 502.2/524.2	0.0700	07/28/95	07/28/95	JBH	
trans-1,2-Dichloroethyl	0.00050	U	mg/L	EPA 502.2/524.2	0.0700	07/28/95	07/28/95	JBH	
Dichloromethane	0.00033	mg/L	EPA 502.2/524.2	0.0700	07/28/95	07/28/95	JBH		
1,2-Dichloropropane	0.00050	U	mg/L	EPA 502.2/524.2	0.0700	07/28/95	07/28/95	JBH	
1,3-Dichloropropane	0.00050	U	mg/L	EPA 502.2/524.2	0.0700	07/28/95	07/28/95	JBH	

WORK Order	16701
Printed Date	08/04/95 @ 16:03 hrs.
Collected Date	07/24/95 @ 17:15 hrs.
Received Date	07/25/95 @ 10:20 hrs.
Technical Director	STEPHEN C. EDE



CT&E Environmental Services Inc.

CT&E Ref. # 95-9178-5  
Matrix WATER  
Client Sample ID 7294-724-033

2, 2-Dichloropropane	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1, 1-Dichloropropene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1, 3-Dichloropropene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Ethylbenzene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Ethylenedibromide (EDB)	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Fluorotrichloromethane	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Hexachlorobutadiene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Isopropylbenzene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
p-Isopropyltoluene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Naphthalene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
n-Propylbenzene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Styrene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1112-Tetrachloroethane	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1122-Tetrachloroethane	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Tetrachloroethylene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Toluene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1, 2, 3-Trichlorobenzene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1, 2, 4-Trichlorobenzene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1, 1, 2-Trichloroethane	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1, 2, 3-Trichloropropane	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1, 2, 4-Trimethylbenzene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1, 3, 5-Trimethylbenzene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
p & m Xylene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
o-Xylene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH

\* See Special Instructions Above

\*\* See Sample Remarks Above

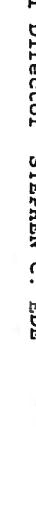
U = Undetected, Reported value is the practical quantification limit.

D = Secondary dilution.

UA = Unavailable  
NA = Not Analyzed  
LT = Less Than  
GT = Greater Than

CT&E Ref.# 95.9178-6  
 Matrix WATER  
 Client Sample ID 7294-034  
 Client Name SHANNON & WILSON, INC.  
 Ordered By CHRIS DARRAH  
 Project Name MCCALLS  
 Project# X-729-4  
 PWSID UA

1331 Swanson  
 Kamy Hart

WORK Order 16701  
 Printed Date 08/04/95 @ 13:51 hrs.  
 Collected Date 07/24/95 @ 17:25 hrs.  
 Received Date 07/25/95 @ 10:20 hrs.  
 Released By   
 Technical Director STEPHEN C. EDE

Sample Remarks: SAMPLE COLLECTED BY: CHRIS DARRAH. J- INDICATES AN ANALYTE DETECTED  
 BELOW THE CALIBRATION RANGE.

Parameter	Results	QC	Qual	Units	Method	Allowable Limits	Ext. Date	Anal Date	Init
Volatile Organic Chem					EPA 502.2/524.2				
1,1,1 Trichloroethane	0.00050	U	mg/L	EPA 502.2/524.2	0.200	07/28/95	07/28/95	JBH	
1,1 Dichloroethylene	0.00050	U	mg/L	EPA 502.2/524.2	0.0070	07/28/95	07/28/95	JBH	
1,2 Dichloroethane	0.00050	U	mg/L	EPA 502.2/524.2	0.0050	07/28/95	07/28/95	JBH	
Carbon Tetrachloride	0.00050	U	mg/L	EPA 502.2/524.2	0.0050	07/28/95	07/28/95	JBH	
Vinyl Chloride	0.00050	U	mg/L	EPA 502.2/524.2	0.0020	07/28/95	07/28/95	JBH	
Benzene	0.00050	U	mg/L	EPA 502.2/524.2	0.0050	07/28/95	07/28/95	JBH	
1,4-Dichlorobenzene	0.00050	U	mg/L	EPA 502.2/524.2	0.0750	07/28/95	07/28/95	JBH	
Trichloroethylene	0.00050	U	mg/L	EPA 502.2/524.2	0.0050	07/28/95	07/28/95	JBH	
THM	0.00050	U	mg/L	EPA 502.2/524.2	0.100	07/28/95	07/28/95	JBH	
Bromobenzene	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
Bromochloromethane	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
Bromodichloromethane	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
Bromoform	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
Bromomethane	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
n-Butylbenzene	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
sec-Butylbenzene	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
tert-Butylbenzene	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
Chlorobenzene	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
Chlorodibromomethane	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
Chloroethane	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
Chloroform	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
Chloromethane	0.00077	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
1,2-Dibromo-3-Chloropropane	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
o-Chlorotoluene	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
p-Chlorotoluene	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
Dibromomethane	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
m-Dichlorobenzene	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
o-Dichlorobenzene	0.00046	J	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
Dichlorodifluoromethane	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
1,1-Dichloroethane	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
cis-1,2-Dichloroethylene	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
trans-1,2-Dichloroethyl	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
Dichloromethane	0.0036	mg/L	EPA 502.2/524.2			07/28/95	07/28/95	JBH	
1,2-Dichloropropane	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
1,3-Dichloropropane	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	



CT&E Environmental Services Inc.

CT&E Ref.# 95-9178-6  
Matrix WATER  
Client Sample ID 7294-724-034

2,2-Dichloropropane	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1,1-Dichloropropene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1,3-Dichloropropene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Ethylbenzene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Ethylene Dibromide (EDB)	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Fluorotrichloromethane	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Hexachlorobutadiene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Isopropylbenzene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
p-Isopropyltoluene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Naphthalene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
n-Propylbenzene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Styrene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1112-Tetrachloroethane	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1122-Tetrachloroethane	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Tetrachloroethylene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Toluene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1,2,3-Trichlorobenzene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1,2,4-Trichlorobenzene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1,1,2-Trichloroethane	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1,2,3-Trichloropropane	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1,2,4-Trimethylbenzene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1,3,5-Trimethylbenzene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
P & m Xylene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
o-Xylene	0.00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH

\* See Special Instructions Above

\*\* See Sample Remarks Above

U = Undetected, Reported value is the practical quantification limit.  
D = Secondary dilution.

UA = Unavailable  
NA = Not Analyzed  
LT = Less Than  
GT = Greater Than

<b>CT&amp;E Ref.#</b>	95-9178-7
<b>Matrix</b>	WATER
<b>Client Sample ID</b>	7294-724-035
<b>Client Name</b>	SHANNON & WILSON, INC.
<b>Ordered By</b>	CHRIS DARRAH
<b>Project Name</b>	MCCALLS
<b>Project#</b>	X-729-4
<b>PWSID</b>	UA

Susan Hunt

Released By *Susan Hunt*

<b>WORK Order</b>	16701
<b>Printed Date</b>	08/04/95 @ 13:52 hrs.
<b>Collected Date</b>	07/24/95 @ 17:40 hrs.
<b>Received Date</b>	07/25/95 @ 10:20 hrs.

Sample Remarks: SAMPLE COLLECTED BY: CHRIS DARRAH. J- INDICATES AN ANALYTE DETECTED BELOW THE CALIBRATION RANGE.

Parameter	Results	QC	Qual	Units	Method	Allowable Limits	Ext. Date	Anal Date	Init
Volatile Organic Chem					EPA 502.2/524.2				
1,1,1 Trichloroethane	0.00050	U	mg/L	EPA 502.2/524.2	0.200	07/28/95	07/28/95	JBH	
1,1 Dichloroethylene	0.00050	U	mg/L	EPA 502.2/524.2	0.0070	07/28/95	07/28/95	JBH	
1,2 Dichloroethane	0.00050	U	mg/L	EPA 502.2/524.2	0.0050	07/28/95	07/28/95	JBH	
Carbon Tetrachloride	0.00050	U	mg/L	EPA 502.2/524.2	0.0050	07/28/95	07/28/95	JBH	
Vinyl Chloride	0.00050	U	mg/L	EPA 502.2/524.2	0.0020	07/28/95	07/28/95	JBH	
Benzene	0.00050	U	mg/L	EPA 502.2/524.2	0.0050	07/28/95	07/28/95	JBH	
1,4-Dichlorobenzene	0.00050	U	mg/L	EPA 502.2/524.2	0.0750	07/28/95	07/28/95	JBH	
Trichloroethylene	0.00050	U	mg/L	EPA 502.2/524.2	0.0050	07/28/95	07/28/95	JBH	
THM	0.00050	U	mg/L	EPA 502.2/524.2	0.100	07/28/95	07/28/95	JBH	
Bromobenzene	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
Bromochloromethane	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
Bromodichloromethane	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
Bromoform	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
Bromomethane	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
n-Butylbenzene	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
sec-Butylbenzene	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
tert-Butylbenzene	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
Chlorobenzene	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
Chlorodibromomethane	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
Chloroethane	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
Chloroform	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
Chloromethane	0.00040	J	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
1,2Dibromo-3-Chloropropane	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
o-Chlorotoluene	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
p-Chlorotoluene	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
Dibromomethane	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
m-Dichlorobenzene	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
o-Dichlorobenzene	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
Dichlorodifluoromethane	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
1,1-Dichloroethane	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
cis-1,2-Dichloroethylene	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
trans-1,2-Dichloroethyl	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
Dichloromethane	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
1,2-Dichloropropene	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	
1,3-Dichloropropene	0.00050	U	mg/L	EPA 502.2/524.2		07/28/95	07/28/95	JBH	



CT&E Environmental Services Inc.

CT&E Ref. # 95.9178-7  
Matrix WATER  
Client Sample ID 7294-724-035

2,2-Dichloropropane	0 . 00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1,1-Dichloropropene	0 . 00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1,3-Dichloropropene	0 . 00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Ethylbenzene	0 . 00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Ethylene Dibromide (EDB)	0 . 00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Fluorotrichloromethane	0 . 00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Hexachlorobutadiene	0 . 00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Isopropylbenzene	0 . 00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
P-Isopropyltoluene	0 . 00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Naphthalene	0 . 00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
n-Propylbenzene	0 . 00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Styrene	0 . 00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1,1,2-Tetrachloroethane	0 . 00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1,1,2,2-Tetrachloroethane	0 . 00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Tetrachloroethylene	0 . 00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
Toluene	0 . 00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1,2,3-Trichlorobenzene	0 . 00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1,2,4-Trichlorobenzene	0 . 00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1,1,2-Trichloroethane	0 . 00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1,2,3-Trichloropropane	0 . 00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1,2,4-Trimethylbenzene	0 . 00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
1,3,5-Trimethylbenzene	0 . 00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
p & m Xylene	0 . 00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH
o-Xylene	0 . 00050	U	mg/L	EPA 502.2/524.2	07/28/95	07/28/95	JBH

\* See Special Instructions Above

\*\* See Sample Remarks Above

U = Undetected, Reported value is the practical quantification limit.  
D = Secondary dilution.

UA = Unavailable  
NA = Not Analyzed  
LT = Less Than  
GT = Greater Than

CT&amp;E Ref.# 95.9178-8

Matrix OTHER

Client Sample ID LEVEL 1 QA/QC DATA PACKAGE-ORGANICS

Client Name SHANNON & WILSON, INC.  
 Ordered By CHRIS DARRAH  
 Project Name MCCALLS  
 Project# X-729-4  
 PWSID UA

WORK Order 16701  
 Printed Date 08/04/95 @ 16:07 hrs.  
 Collected Date 07/24/95 @ hrs.  
 Received Date 07/25/95 @ 10:20 hrs.  
 Technical Director STEPHEN C. EDE  
 Released By Stephen Ede

Sample Remarks: TECHNICAL/COMPLETENESS REQUIREMENTS MET EXCEPT FOR CONDITIONS LISTED.

\*\*524.2: SEE QC SUMMARY SHEET.

Parameter	Results	QC	Qual	Units	Method	Allowable Limits	Ext. Date	Anal Date	Init
<u>QA/QC Summary I</u>									

Organics.....I. Receipt  
Sample received in good condition unless noted.....II. Holding Time  
All holding times met unless noted

## Regulatory

.....III. Analysis

A. Calibration  
...All criteria metB. Blanks  
...All criteria metC. Spike Sample(s)  
...All criteria metD. Duplicate Sample(s)  
...All criteria metE. LabControl Sample(s)  
...All criteria met

\*\*NO

F. Surrogate(s)  
...All criteria metCertified by:  
  
K. MAHER

\* See Special Instructions Above

\*\* See Sample Remarks Above

U = Undetected, Reported value is the practical quantification limit.

D = Secondary dilution.

UA = Unavailable

NA = Not Analyzed

LT = Less Than

GT = Greater Than

**Environmental Laboratory Services**  
**Alaska Division of Commercial Testing and Engineering**  
**PURGABLE ORGANIC COMPOUNDS BY GC/M**  
**QUALITY CONTROL SUMMARY**

# PURGABLE ORGANIC COMPOUNDS BY GC/MS QUALITY CONTROL SUMMARY

Date: 08/03/95  
Method: 524.2

Analytical Lot: [MLA07170803]  
Instrument ID: VLA

9/178-2 x10

Surrogate Recoveries:		<u>Compound</u>			% Recovery (Limits)		
	d4-DCE	d8-TOL	4-BFB	d4-DCE (80-120%)	d8-TOL (80-120%)	4-BFB (80-120%)	
Blank 1	11.56	11.05	9.83	11.6	11.1	9.8	
CCV	11.15	10.29	10.35	11.2	10.3	10.4	
LCS	10.95	10.14	10.44	11.0	10.1	10.4	
LCS Dup	10.79	9.97	10.09	10.8	10.0	10.1	

Analysis:

- |                 |                          |            |
|-----------------|--------------------------|------------|
| A. Calibration: | Acceptance criteria met. | < 20% RSD  |
| B. Blanks :     | Acceptance criteria met. | < 0.5 µg/L |
| C. CCV:         | Acceptance criteria met. | ± 30 %D    |
| D. LCS:         | See other                | 70 -130 %  |
| E. LCS Dup:     | See other                | 70 -130 %  |
| F. Surrogates:  | Acceptance criteria met. | 80 -120 %  |
| G. Tume:        | Acceptance criteria met. | 70 -130 %  |

H. Other: LCS recoveries for bromomethane & chloroethane are (137% & 142% respectively), while LCS DUP recovery for chloroethane is 134 %. These recoveries are below QC limit. NOTE:CCV met all Q.C. Criteria.

DIRECTION TO QUANTITY 1/1 - Trichloroethane with  
CATIONIC POLYMER - 52% 8-9.5

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Commercial Testing and Engineering, both technically and for completeness, except for the conditions detailed above.

Signed: Tessie J. Heathman

Printed : JOSEPHINE B HEATHMAN

Data: 09/02/05

Date: 08/02/05



Volatile Sample QC Summary Page  
CT&E Environmental Services Inc.  
QA/QC Data Deliverables

Workorder Number:  
9178-22 x 10

Analysis: Volatile Organics  
Method: 524.2  
Matrix: Liquid

Analysis Lot Number: VKA 03/3080 8

Extraction Lot Number: 0808V1Y01

Assurance Notes:

## Acceptance Criteria

	Yes	No	N/A
A. Holding Time:			
All criteria met.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
All criteria met.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
All criteria met.	<input type="checkbox"/>	<input type="checkbox"/>	
All criteria met.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
80% - 120% Recovery	14 days from sample collection. TCLP extraction. 14 days from sample collection (or TCLP extraction) f		
B. Surrogates:			
All criteria met.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

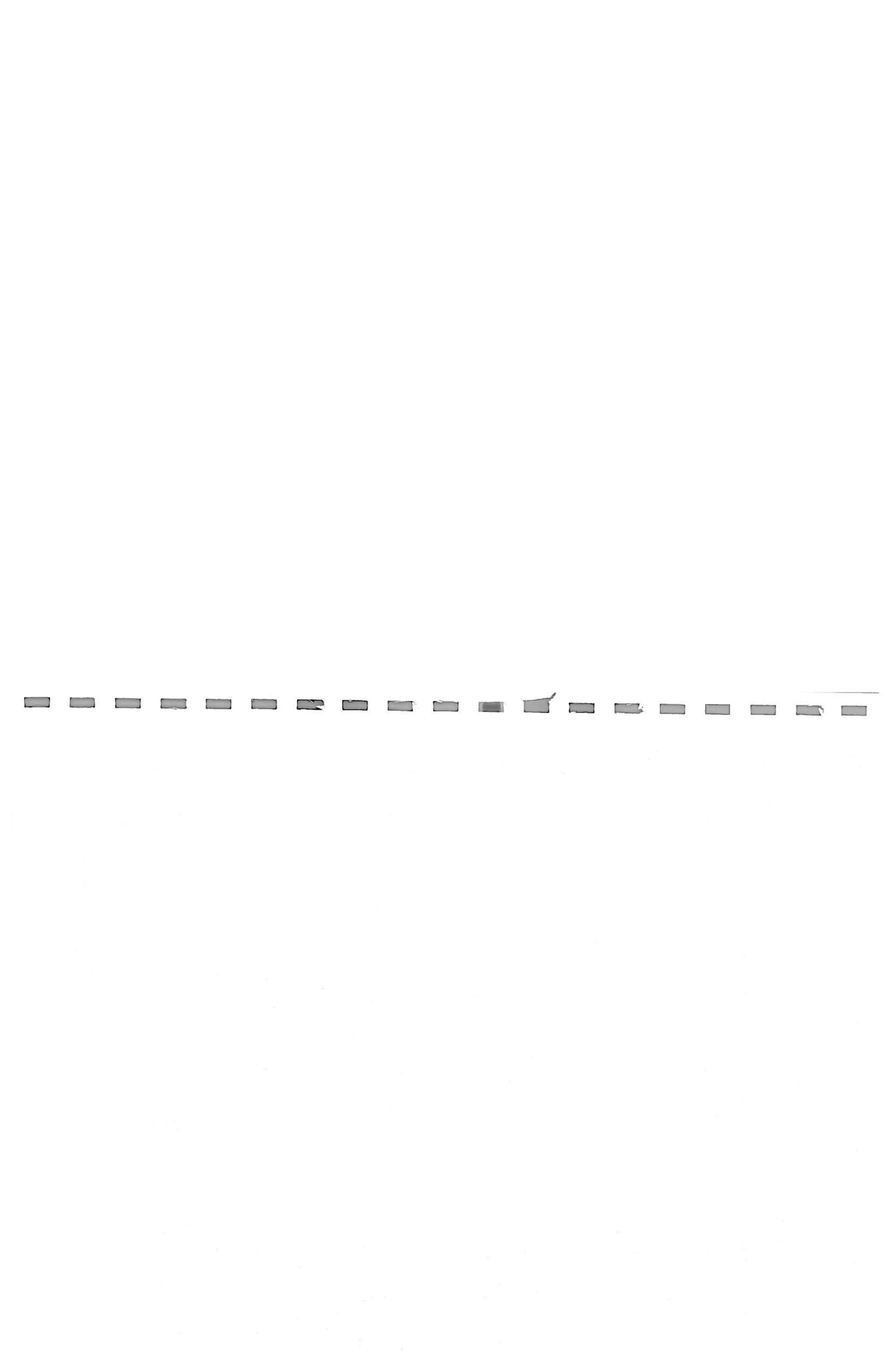
### C. Notes

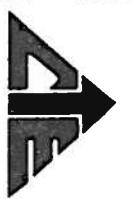
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I certify that except as specifically noted in this report, all statements and data appearing in this report are in conformance with the provisions of the Quality Assurance Plan (QAP) prepared by this firm and on file with the Alaska Department of Environmental Conservation.

*Sophie B. Skelton* Analyst's Signature  
Reviewer's Signature

Printed Name & Date: RACHELINE B. MEADMORE Printed Name & Date:  
8-3-95





**CT&E Environmental Services Inc.**  
Laboratory Division

**Laboratory Analysis Report**

Client Name SHANNON & WILSON-FAIRBANKS  
Ordered By CHRIS DARAH  
Project Name MCCALL  
Project# X-0729-01  
PWSID UA

1569 Davison  
Bob Holden

WORK Order 16871  
Printed Date 08/09/95 @ 18:36 hrs.  
Collected Date 08/01/95 @ 14:50 hrs.  
Received Date 08/02/95 @ 09:35 hrs.  
Technical Director STEPHEN C. EDE

Released By Stephen Ede

Sample Remarks: SAMPLE COLLECTED BY: M.A.S. QUOTE #2124. J-INDICATES AN ANALYTE  
DETECTED BELOW THE CALIBRATION RANGE.

Parameter	Results	QC	Qual	Units	Method	Allowable Limits	Ext. Date	Anal Date	Init
Volatile Organic Chem					EPA 502.2/524.2				
1,1,1 Trichloroethane	0.00086	mg/L	EPA	502.2/524.2	0.200	08/07/95	08/07/95	JBH	
1,1 Dichloroethylene	0.00050	U	mg/L	EPA	502.2/524.2	0.0070	08/07/95	08/07/95	JBH
1,2 Dichloroethane	0.00050	U	mg/L	EPA	502.2/524.2	0.0050	08/07/95	08/07/95	JBH
Carbon Tetrachloride	0.00050	U	mg/L	EPA	502.2/524.2	0.0050	08/07/95	08/07/95	JBH
Vinyl Chloride	0.00050	U	mg/L	EPA	502.2/524.2	0.0020	08/07/95	08/07/95	JBH
Benzene	0.00050	U	mg/L	EPA	502.2/524.2	0.0050	08/07/95	08/07/95	JBH
1,4-Dichlorobenzene	0.00050	U	mg/L	EPA	502.2/524.2	0.0750	08/07/95	08/07/95	JBH
Trichloroethylene	0.00541	mg/L	EPA	502.2/524.2	0.0050	08/07/95	08/07/95	JBH	
TTFM	0.00050	U	mg/L	EPA	502.2/524.2	0.100	08/07/95	08/07/95	JBH
Bromobenzene	0.00050	U	mg/L	EPA	502.2/524.2		08/07/95	08/07/95	JBH
Bromochloromethane	0.00050	U	mg/L	EPA	502.2/524.2		08/07/95	08/07/95	JBH
Bromodichloromethane	0.00050	U	mg/L	EPA	502.2/524.2		08/07/95	08/07/95	JBH
Bromoform	0.00050	U	mg/L	EPA	502.2/524.2		08/07/95	08/07/95	JBH
Bromomethane	0.00050	U	mg/L	EPA	502.2/524.2		08/07/95	08/07/95	JBH
n-Butylbenzene	0.00050	U	mg/L	EPA	502.2/524.2		08/07/95	08/07/95	JBH
sec-Butylbenzene	0.00050	U	mg/L	EPA	502.2/524.2		08/07/95	08/07/95	JBH
tert-Butylbenzene	0.00050	U	mg/L	EPA	502.2/524.2		08/07/95	08/07/95	JBH
Chlorobenzene	0.00050	U	mg/L	EPA	502.2/524.2		08/07/95	08/07/95	JBH
Chlorodibromomethane	0.00050	U	mg/L	EPA	502.2/524.2		08/07/95	08/07/95	JBH
Chloroethane	0.00050	U	mg/L	EPA	502.2/524.2		08/07/95	08/07/95	JBH
Chloroform	0.00050	U	mg/L	EPA	502.2/524.2		08/07/95	08/07/95	JBH
Chloromethane	0.00050	U	mg/L	EPA	502.2/524.2		08/07/95	08/07/95	JBH
1,2Dibromo-3-Chloropropane	0.00050	U	mg/L	EPA	502.2/524.2		08/07/95	08/07/95	JBH
o-Chlorotoluene	0.00050	U	mg/L	EPA	502.2/524.2		08/07/95	08/07/95	JBH
p-Chlorotoluene	0.00050	U	mg/L	EPA	502.2/524.2		08/07/95	08/07/95	JBH
Dibromomethane	0.00050	U	mg/L	EPA	502.2/524.2		08/07/95	08/07/95	JBH
m-Dichlorobenzene	0.00050	U	mg/L	EPA	502.2/524.2		08/07/95	08/07/95	JBH
o-Dichlorobenzene	0.00050	U	mg/L	EPA	502.2/524.2		08/07/95	08/07/95	JBH
Dichlorodifluoromethane	0.00050	U	mg/L	EPA	502.2/524.2		08/07/95	08/07/95	JBH
1,1-Dichloroethane	0.00050	U	mg/L	EPA	502.2/524.2		08/07/95	08/07/95	JBH
cis 1,2-Dichloroethylben	0.00041	J	mg/L	EPA	502.2/524.2		08/07/95	08/07/95	JBH
trans-1,2-Dichloroethyl	0.00050	U	mg/L	EPA	502.2/524.2		08/07/95	08/07/95	JBH
Dichloromethane	0.00050	U	mg/L	EPA	502.2/524.2		08/07/95	08/07/95	JBH
1,2-Dichloropropane	0.00050	U	mg/L	EPA	502.2/524.2		08/07/95	08/07/95	JBH
1,3-Dichloropropane	0.00050	U	mg/L	EPA	502.2/524.2		08/07/95	08/07/95	JBH



CT&amp;E Environmental Services Inc.

CT&E Ref. # 95-9184-1  
Matrix WATER  
Client Sample ID 7294-801-018

2,2-Dichloropropane	0.00050	U	mg/L	EPA 502.2/524.2	08/07/95	08/07/95	JBH
1,1-Dichloropropene	0.00050	U	mg/L	EPA 502.2/524.2	08/07/95	08/07/95	JBH
1,3-Dichloropropene	0.00050	U	mg/L	EPA 502.2/524.2	08/07/95	08/07/95	JBH
EthyLBenzene	0.00050	U	mg/L	EPA 502.2/524.2	08/07/95	08/07/95	JBH
Ethylene Dibromide (EDB)	0.00050	U	mg/L	EPA 502.2/524.2	08/07/95	08/07/95	JBH
Fluorotrichloromethane	0.00050	U	mg/L	EPA 502.2/524.2	08/07/95	08/07/95	JBH
Hexachlorobutadiene	0.00050	U	mg/L	EPA 502.2/524.2	08/07/95	08/07/95	JBH
Isopropylbenzene	0.00050	U	mg/L	EPA 502.2/524.2	08/07/95	08/07/95	JBH
P-Isopropyltoluene	0.00050	U	mg/L	EPA 502.2/524.2	08/07/95	08/07/95	JBH
Naphthalene	0.00050	U	mg/L	EPA 502.2/524.2	08/07/95	08/07/95	JBH
n-Propylbenzene	0.00050	U	mg/L	EPA 502.2/524.2	08/07/95	08/07/95	JBH
Styrene	0.00050	U	mg/L	EPA 502.2/524.2	08/07/95	08/07/95	JBH
1112-Tetrachloroethane	0.00050	U	mg/L	EPA 502.2/524.2	08/07/95	08/07/95	JBH
1122-Tetrachloroethane	0.00050	U	mg/L	EPA 502.2/524.2	08/07/95	08/07/95	JBH
Tetrachloroethylene	0.00050	U	mg/L	EPA 502.2/524.2	08/07/95	08/07/95	JBH
Toluene	0.00050	U	mg/L	EPA 502.2/524.2	08/07/95	08/07/95	JBH
1,2,3-Trichlorobenzene	0.00050	U	mg/L	EPA 502.2/524.2	08/07/95	08/07/95	JBH
1,2,4-Trichlorobenzene	0.00050	U	mg/L	EPA 502.2/524.2	08/07/95	08/07/95	JBH
1,1,2-Trichloroethane	0.00050	U	mg/L	EPA 502.2/524.2	08/07/95	08/07/95	JBH
1,2,3-Trichloropropane	0.00050	U	mg/L	EPA 502.2/524.2	08/07/95	08/07/95	JBH
1,2,4-Trimethylbenzene	0.00050	U	mg/L	EPA 502.2/524.2	08/07/95	08/07/95	JBH
1,3,5-Trimethylbenzene	0.00050	U	mg/L	EPA 502.2/524.2	08/07/95	08/07/95	JBH
p & m Xylene	0.00050	U	mg/L	EPA 502.2/524.2	08/07/95	08/07/95	JBH
o-Xylene	0.00050	U	mg/L	EPA 502.2/524.2	08/07/95	08/07/95	JBH

\* See Special Instructions Above  
\*\* See Sample Remarks Above

U = Undetected, Reported value is the practical quantification limit.  
D = Secondary dilution.

UA = Unavailable  
NA = Not Analyzed  
LT = Less Than  
GT = Greater Than