

## Report

---

# Groundwater Monitoring Union Station Seattle, Washington

March 4, 2002

Prepared for

**Union Station Associates**  
**2401 Utah Avenue South, Suite 305**  
**Seattle, WA 98134**

Prepared by



**LANDAU ASSOCIATES, INC.**

# TABLE OF CONTENTS

	<u>Page</u>
1.0 INTRODUCTION	1-1
1.1 SITE DESCRIPTION	1-1
1.2 CONSENT DECREE REQUIREMENTS FOR GROUNDWATER MONITORING	1-3
2.0 GROUNDWATER MONITORING	2-1
2.1 GROUNDWATER LEVEL MONITORING	2-1
2.2 GROUNDWATER SAMPLING, ANALYSIS PROCEDURES, AND MODIFICATIONS	2-1
3.0 GROUNDWATER MONITORING RESULTS	3-1
3.1 GROUNDWATER ELEVATIONS	3-1
3.2 CHEMICAL ANALYSIS RESULTS	3-2
4.0 EVALUATION OF RESULTS	4-1
4.1 CALCULATION OF SCREENING LEVELS BASED ON BACKGROUND FOR SOME CONSTITUENTS	4-1
4.1.1 Arsenic	4-1
4.1.2 Petroleum Hydrocarbons and Related Constituents	4-1
4.2 SUMMARY OF RESULTS	4-2
4.2.1 Statistical Methodology	4-2
4.2.2 Compliance Evaluation	4-3
4.2.2.1 Monitoring Well MW-101R	4-3
4.2.2.2 Monitoring Well MW-102R	4-4
4.2.2.3 Monitoring Well MW-104	4-4
4.2.2.4 Monitoring Well MW-105	4-4
4.2.2.5 Monitoring Well MW-107R	4-5
4.2.2.6 Monitoring Well 108R	4-5
4.3 SUMMARY OF EXCEEDANCES	4-5
4.3.1 Gasoline-Range Petroleum Hydrocarbons	4-5
4.3.2 Diesel-Range Petroleum Hydrocarbons	4-6
4.3.3 Benzene	4-6
4.3.4 Acenaphthene	4-7
4.3.5 Bis(2-ethylhexyl)phthalate	4-7
4.3.6 Arsenic	4-7
4.3.7 Chromium	4-8
4.4 POTENTIAL UPGRADIENT SOURCES FOR PETROLEUM HYDROCARBON CONTAMINATION IN GROUNDWATER	4-8
5.0 CONCLUSIONS AND RECOMMENDATIONS	5-1
5.1 SUMMARY OF CONCLUSIONS	5-1
5.2 RECOMMENDATIONS	5-2
6.0 USE OF THIS REPORT	6-1
7.0 REFERENCES	7-1

## APPENDICES

- A Approval Letters
- B Data Validation Technical Memorandums
- C Screening Levels Based on Background

## LIST OF FIGURES

<u>Figure</u>	<u>Title</u>
1-1	Vicinity Map
1-2	Union Station Groundwater Monitoring Well Locations
3-1	Groundwater Elevation Contours: September 2000
3-2	Groundwater Elevation Contours: December 2000
3-3	Groundwater Elevation Contours: March 2001
3-4	Groundwater Elevation Contours: June 2001
3-5	Groundwater Elevations - October 1997 through June 2001
3-6	Diesel-Range Petroleum Hydrocarbons Concentrations
3-7	Gasoline-Range Petroleum Hydrocarbons Concentrations
3-8	Benzene Concentrations
3-9	Naphthalene (Method 8260) Concentrations
3-10	Acenaphthene Concentrations
3-11	Arsenic Concentrations
4-1	Locations of Potential Upgradient Sources of Petroleum Contamination

## LIST OF TABLES

<u>Table</u>	<u>Title</u>
1-1	Consent Decree Groundwater Monitoring and Remediation
2-1	Monitoring Well Summary, Union Station
2-2	Quarterly Groundwater Elevation Summary, September 2000 to June 2001, Union Station
2-3	Summary of Groundwater Analytical Data, 06/99 to 06/01, Union Station
4-1	Statistical Summary of Groundwater Data, Union Station
4-2	Summary of Exceedances
4-3	Summary of Potential Upgradient Sources of Petroleum Contamination

## 1.0 INTRODUCTION

This report describes the groundwater monitoring that has been performed at the Union Station property from September 2000 through June 2001. The groundwater monitoring was performed in accordance with Prospective Purchaser Consent Decree 97-2-18936-5SEA between the Washington State Department of Ecology (Ecology) and Union Station Associates and with the associated *Union Station Property Cleanup Action Plan* (CAP; Landau Associates 1997). Groundwater monitoring completed prior to September 2000 is described in a separate report (Landau Associates 2000). The groundwater monitoring results are compared to groundwater cleanup levels established for the property. Based on evaluation of these results, changes to the groundwater monitoring frequency are recommended.

### 1.1 SITE DESCRIPTION

The Union Station property consists of three parcels located in Seattle, Washington. Figure 1-1 provides a vicinity map; Figure 1-2 shows the Union Station property. The property spans six city blocks and includes portions of the grade level beneath elevated viaduct portions of South Jackson Street, South Airport Way, and 4<sup>th</sup> Avenue S.

The property was originally part of the South Seattle industrial neighborhood. In 1874, the Seattle Gaslight Company constructed a coal gasification plant at the property on pilings over the mudflats of Duwamish Bay. The area surrounding the pile-supported facility was filled prior to about 1912. Around the turn of the century, Vulcan Iron Works manufactured iron, brass, and steel on the Southern portion of the property. In 1910, the gasification plant was demolished, the property was leveled for construction of the Union Station railroad station, and Vulcan Iron Works was relocated to make room for new tracks leading to Union Station. Union Station served passengers until 1971, when Union Pacific discontinued passenger operations at the property. From 1971 until the purchase of the property by Union Station Associates in 1997 the property was essentially dormant. The Southernmost terminus of the downtown Seattle transit project bus tunnel was completed at the property along 5<sup>th</sup> Avenue S. in 1990.

In 1991, the property was placed on the Washington Hazardous Sites List. Subsequently, a remedial investigation/feasibility study (RI/FS; Landau Associates and Hart Crowser 1996) was conducted.

The RI included review of the property's industrial history to confirm that the investigation included areas likely to have contamination, evaluation of existing soil and groundwater sampling information, and analysis of new groundwater samples. The RI compared chemical testing results for soil and groundwater to screening levels and identified constituents of concern that required additional



evaluation. The RI identified carcinogenic polycyclic aromatic hydrocarbons (cPAHs) from the coal gasification process, and metals from the coal gasification process and from the foundry, within fill soil that was placed on the former tideflat surface during operation of the historic industries. Groundwater analysis results from tests during the RI and from supplemental monitoring performed after the RI and before the Consent Decree showed that groundwater screening levels for cPAHs, petroleum hydrocarbons, benzene, and arsenic were exceeded in samples from some wells at the property. Arsenic, however, was found in an upgradient well at concentrations exceeding those found in property wells. There were also strong indications that a source or sources of petroleum hydrocarbons existed upgradient of the property. No pesticides, polychlorinated biphenyls (PCBs), herbicides, or evidence of dense non-aqueous phase liquids (DNAPL) were detected.

The RI findings were used to develop alternatives to remediate the property. The evaluations of these alternatives were included in the FS. The FS defined cleanup standards, developed and evaluated four cleanup action alternatives, and identified a preferred cleanup action alternative that would adequately protect human health and the environment. Soil cleanup levels were conservatively based on residential use conditions, although the property was zoned international district mixed and planned property use was commercial with limited potential for direct contact. The point of compliance for soil is throughout the property. Groundwater cleanup levels were based on protection of marine surface water. The point of compliance for groundwater is the property boundary and extends from the uppermost level of the saturated zone vertically to the lowest most depth that could potentially be affected by the property. The point of compliance established for groundwater at the property is shown on Figure 1-2. The cleanup action selected by Ecology includes paving, construction soil excavation, groundwater monitoring, contingent groundwater remediation, and institutional controls.

In 1997, Ecology and Union Station Associates entered into a Prospective Purchaser Consent Decree for the property. Since that time, Union Station Associates has implemented the selected remedial action for the property. Paving and construction soil excavation were completed as part of property redevelopment. A restrictive covenant implementing the required institutional controls was recorded on the property deed. Groundwater monitoring began in October 1997 and is described in the remainder of this document.

Property redevelopment is in progress. A parking garage has been completed on the south parcel. A parking garage and building foundations have been constructed on the main parcel. At the main parcel, the Union Station building has been renovated and four new buildings have been completed. An additional building on the north parcel is in the planning stage.

## **1.2 CONSENT DECREE REQUIREMENTS FOR GROUNDWATER MONITORING**

Groundwater monitoring requirements for the property are described in the CAP and are summarized in Table 3 from the CAP identified as Table 1-1 in this report. Monitoring wells originally included in the monitoring program were HC-101, HC-102, HC-103, MW-104, MW-105, MW-106, MW-107, and upgradient background wells B-4 and B-6. As described in a previous report (Landau Associates 2000), some of these wells were replaced with monitoring wells in similar locations prior to or during the monitoring period. In addition, Ecology approved suspension of water quality monitoring in well HC-103 (Ecology 2000). Monitoring wells currently included in the groundwater quality and groundwater level monitoring program are MW-101R, MW-102R, MW-104, MW-105, MW-107R, MW-108R, and upgradient background wells B-4 and B-6R. HC-103 is monitored only for groundwater level.

Quarterly groundwater monitoring is required for 8 quarters beginning within 3 months of the effective date of the Consent Decree. The CAP established that groundwater monitoring frequency be reduced to annual if the upper 95 percent confidence limit on the mean (UCL) for results from compliance monitoring wells is less than or equal to cleanup levels. The CAP also requires that quarterly sampling be performed for 8 quarters beginning the first quarter after all foundations are completed. After the 8 quarters are complete, frequency may be reduced to annual if the UCL is less than or equal to cleanup levels. Annual monitoring is then required until foundation loading (building completion) is complete, plus 3 additional years. The CAP also specifies procedures to be implemented if any sample exceeds cleanup levels during annual monitoring and if no exceedances occur.

A report documenting groundwater monitoring for 8 quarters after foundation construction was submitted to Ecology in August 2000 (Landau Associates 2000). After review of the report, Ecology required an additional year of quarterly monitoring (Ecology 2000). This report presents results for the additional 4 quarters of monitoring required by Ecology. Groundwater data from the past 8 quarters is used for the statistical evaluation.

## **2.0 GROUNDWATER MONITORING**

The groundwater monitoring program consists of both water level and water quality monitoring. The Union Station groundwater monitoring network for water quality currently is comprised of eight monitoring wells: upgradient wells B-4 and B-6R, and property wells MW-101R, MW-102R, MW-104, MW-105, MW-107R, and MW-108R. The monitoring network for groundwater levels includes the 8 wells monitored for water quality plus one additional monitoring well, HC-103, which is now monitored for groundwater levels only. The location of the monitoring wells is shown on Figure 1-2. Monitoring was conducted in September 2000, December 2000, March 2001, and June 2001. Procedures used for groundwater monitoring, which include water level monitoring, groundwater sampling, and laboratory analysis, were consistent with those described in the CAP. Modifications to these procedures included changes to the cyanide analysis method and the method of laboratory sample handling for cPAH and semivolatile organic compound (SVOC) samples previously approved by Ecology (Landau Associates 2000). Additional modifications to these procedures, approved by Ecology, were the addition of analysis for weak acid dissociable cyanide to the list of analytes and use of monitoring well HC-103 only for water level measurements (Ecology 2000), beginning with the 4<sup>th</sup> quarter 2000 sampling event. A copy of the approval letter is included in Appendix A.

### **2.1 GROUNDWATER LEVEL MONITORING**

At each well location, prior to purging and sample collection, the groundwater level was measured from a surveyed reference point using an electric water level indicator and recorded on a Groundwater Sample Collection Form. Table 2-1 provides a summary of well installation dates, well coordinates, and well elevation information, including top and bottom of screen. Groundwater levels for the monitoring period are summarized in Table 2-2.

### **2.2 GROUNDWATER SAMPLING, ANALYSIS PROCEDURES, AND MODIFICATIONS**

Groundwater sampling procedures were consistent with those described in CAP. Prior to sample collection, each well was slowly purged using a peristaltic pump with dedicated tubing or a disposable bailer. Because most of the wells at the Union Station site are low-yield and produce groundwater with moderate to high turbidity, each well was purged at rates of less than 1 liter per minute to help minimize turbidity. Field parameters such as pH, temperature, conductivity, and turbidity were measured and recorded about every 2 minutes during purging. Purging continued until at least three well volumes had been removed or until the well was purged dry.

Sampling was started when sufficient volume became available in the well. Four replicates of field parameters were collected during sampling, if possible; however, due to low-yield conditions at some locations, sufficient volume for all replicates could not be obtained and priority was given to filling sample bottles. For these locations, field parameters obtained at the end of purging were used for sample quality control purposes. In order to minimize turbidity during sampling, a target flow rate of less than 0.2 liter per minute was used during sample collection. All purging and sampling information was recorded on a Groundwater Sample Collection Form as specified in the CAP.

Field instruments were calibrated and maintained in accordance with the manufacturer's instructions and the quality assurance/quality control (QA/QC) requirements identified in the CAP. Purge water was discharged into the King County sanitary sewer system. A copy of the faxed approval and extension approval from King County for the discharge are included in Appendix A.

Groundwater samples were analyzed at Analytical Resources, Inc. (ARI) in Seattle, Washington, for gasoline-, diesel-, and motor oil-range petroleum hydrocarbons, cPAHs, SVOCs, volatile organic compounds (VOCs), dissolved metals, total dissolved solids (TDS), total suspended solids (TSS), total cyanide, and (beginning December 2000) weak acid dissociable cyanide. Major ion analyses were conducted during the June 2001 sampling event. If sufficient volume for all sampling was not available, a decision was made on the priority of each analysis for each affected location. Table 2-3 summarizes the results of the laboratory analyses performed for each sample. Analytical results are discussed in Sections 3.2 and 4.2.

Landau Associates recommended that groundwater samples be analyzed for weak acid dissociable cyanide in addition to total cyanide because the cyanide criteria are based on weak acid dissociable cyanide. Ecology agreed to addition of the weak acid dissociable cyanide analysis. Ecology requested that total cyanide analysis be continued in order to evaluate whether any correlation may be made between total cyanide analysis and weak acid dissociable cyanide analysis (Ecology 2000).

Ecology agreed to suspend water quality monitoring at monitoring well HC-103 because HC-103 monitors groundwater from approximately the same part of the property as MW-104. Water level monitoring in HC-103 was continued and the well has been maintained in a serviceable state as required by Ecology (Ecology 2000).

### **3.0 GROUNDWATER MONITORING RESULTS**

As described in Section 2.0, the Union Station groundwater level monitoring network consists of nine monitoring wells that are screened within the shallow fill at and near the property. Eight of the monitoring wells are also used for groundwater quality monitoring. The following sections describe the results of the groundwater level and water quality monitoring conducted during the monitoring period.

#### **3.1 GROUNDWATER ELEVATIONS**

Groundwater elevations measured during the past four quarters are listed in Table 2-2 and groundwater elevation contours for each of these quarters are shown on Figures 3-1 through 3-4. Groundwater elevations at and near the property generally fluctuate about 1 to 2 ft seasonally with higher groundwater elevations occurring during December and March and lower elevations occurring during June and September. Previous groundwater elevation contours indicate a groundwater high near well B-6 and replacement well B-6R, and a groundwater low near wells MW-104 and MW-105.

Elevation contours from 1999 and 2000 indicate that groundwater flow was generally from the vicinity of off-property wells B-4, B-6, and B-6R toward the onsite well locations.

The groundwater elevation contours for September and December 2000 show a pattern similar to that of earlier monitoring events. We interpret the patterns at the northern end of the property (Figures 3-1 and 3-2) to be in part due to the east-west-trending zone of coarse upland fill that was placed parallel to the former shoreline just south of South Jackson Street (Landau Associates and Hart Crowser 1996). Groundwater elevations since October 1997 in each well are shown on Figure 3-5. In March 2001, a change occurred in the groundwater elevation in well B-4 relative to other wells. The water level elevation in monitoring well B-4 decreased significantly relative to the other wells. This decrease changed the configuration of groundwater elevations and elevation contours used to infer groundwater flow direction.

The reason for the change in groundwater elevation at B-4 is not known; however, there are several possible explanations for the apparent change in relative groundwater elevation in this well. These possible contributing reasons are summarized in this section. There was an earthquake on February 28, 2001, centered approximately 60 miles southwest of downtown Seattle. A Landau Associates representative visited the Union Station property after the earthquake to visually inspect the wells. No indications of settlement or disturbance (such as cracks in the concrete/asphalt around the wells, or cracks in the PVC casings, etc., that would suggest the need for re-survey) were observed in and around the wells and well monuments. Also, Landau Associates observed no indications of earthquake-related settlement or disturbance to the wells during subsequent quarterly sampling visits. A second possible

contribution is the amount of precipitation. The precipitation from October 2000 to September 2001 was about 63 percent of the long-term mean precipitation at the Seattle-Tacoma Airport weather station, the nearest weather station with complete precipitation data. Precipitation at the property is expected to be similar to that at the airport. Variations in annual precipitation would be expected, however, to have a similar effect on all monitoring well. A third possible contributing reason is dewatering activities in the area of the property. The changes observed in contours (Figures 3-1, 3-2, 3-3, and 3-4) and groundwater elevations (Figure 3-5) between the late 2000 (Figures 3-1 and 3-2) and early 2001 (Figures 3-3 and 3-4) monitoring events suggest some type of groundwater extraction at or east of the property. We contacted representatives of Union Station Associates, King County (for the International District Station), and property owners east of the property and have identified no sump pumping, temporary dewatering, or other groundwater withdrawal. We did confirm that dewatering was conducted during the construction of the parking facility adjacent to the King Street Station west of the Union Station property in about mid 2000. Although the dewatering was in the same groundwater zone of coarse fill and is the type of activity that could contribute to the observed pattern changes, the location west (downgradient) of the property makes it more difficult to attribute the observed change in groundwater elevations to this dewatering. Groundwater elevations collected in December 2001 show a pattern that suggests a return to patterns observed in 2000.

Wells B-4 and B-6R have served as upgradient/reference wells and are used to provide information on upgradient conditions that could influence groundwater quality at the property. The fill soil that encompasses the shallow groundwater zone to the south of South Jackson Street is physically and chemically heterogeneous. Groundwater flow direction and quality in this zone is likely to be influenced by many historic activities as discussed in section 4.4. Use of information from both upgradient wells is important to represent the variety of groundwater quality conditions likely to be present along the approximately 1,700-ft eastern property boundary.

## **3.2 CHEMICAL ANALYSIS RESULTS**

ARI conducted the analyses of the groundwater samples using the analytical procedures referenced in Section 2.2. Following receipt of the analytical results, the data was validated as described in Appendix A of the CAP. The results of the data validation performed by Landau Associates, and a summary of the data qualifiers, are presented in four technical memorandums (one per quarterly sampling event) in Appendix B.

A summary of the analytical results (with data qualifiers added as appropriate) for the past 8 quarterly sampling events at each well is provided in Table 2-3. The associated laboratory data reports

are maintained at Landau Associates' office in Edmonds, Washington. The analytical methods, cleanup levels, and practical quantitation limits (PQLs) are also shown in Table 2-3.

PQLs for most constituents are listed in the CAP. For those constituents without a PQL in the CAP, a PQL was determined. For diesel-, motor oil-, and gasoline-range hydrocarbons, the PQL was calculated from ARI's method detection limit. For other constituents, the PQL was based on the method reporting limit and PQLs listed in the CAP for similar compounds. Analysis for some constituents, including naphthalene, was performed using both Method 8260 (VOCs) and Method 8270 (SVOCs). Results for both methods are included in Table 2-3. An evaluation of compliance with cleanup or screening levels is provided in Section 4.2.

Weak acid dissociable cyanide has been analyzed for 3 quarters. During these 3 quarters, total cyanide concentrations were all less than the PQL, although there were detections above the reporting limit. There was only one detection of weak acid dissociable cyanide (at the reporting limit, 5 µg/L) in MW-101R during the December 2000 sampling event. The total cyanide concentration in MW-101R that quarter was 16 µg/L. There was no apparent correlation between the total and weak acid dissociable cyanide concentrations.

Graphs showing concentrations over time at all wells were constructed for six constituents: diesel- and gasoline-range petroleum hydrocarbons, benzene, naphthalene, acenaphthene, and arsenic. These constituents were selected because they consistently have detections above the PQL in at least several wells and, therefore, can be used for comparisons of concentrations between wells or over time. Concentration graphs for these six constituents are shown on Figures 3-6 through 3-11.

The concentrations of diesel- and gasoline-range petroleum hydrocarbons, naphthalene, and acenaphthalene during the past 4 quarters are significantly higher in monitoring wells B-4 and MW-101R than in other wells indicating an offsite source for these and related constituents. The concentrations of gasoline- and diesel-range petroleum hydrocarbons in these wells were at the highest levels measured in June 2000. Concentrations appear to be decreasing since that time. Concentrations of benzene, a typical gasoline component, are highest in monitoring wells MW-105, B-4, and MW-101R. The concentration of arsenic is consistently higher in background monitoring well B-6R than in other wells and appears to be increasing.

## **4.0 EVALUATION OF RESULTS**

Cleanup levels for most constituents are listed in the CAP. For a few constituents, the 90<sup>th</sup> percentile value of concentrations measured in one of the background wells was calculated, as described in Section 4.1. Procedures to be used to evaluate exceedance of cleanup levels are described in the CAP. The CAP specifies that basic statistical parameters such as mean and median be developed and that the UCL be calculated for compliance well data to evaluate exceedance of cleanup levels. As discussed below, prior to compliance evaluation of the monitoring data (section 4.2.2), screening levels for some constituents were calculated based on concentrations found in one of the background wells during the monitoring period.

### **4.1 CALCULATION OF SCREENING LEVELS BASED ON BACKGROUND FOR SOME CONSTITUENTS**

#### **4.1.1 ARSENIC**

Arsenic is present in several wells, including background well B-6R, at levels above the cleanup level listed in the CAP. The highest concentrations are generally found in background well B-6R. Therefore, a natural background-based groundwater screening level was calculated in accordance with WAC 173-340-700(4)(d) and the Ecology Toxics Cleanup Program guidance document, *Statistical Guidance for Ecology Site Managers* (Ecology 1992), using MTCASat97 Background Module and the concentrations found in background well B-6R from October 1997 to June 2001. The printed report for the background calculations showing the screening level based on the 90<sup>th</sup> percentile value as well as the data upon which it is based is included in Appendix C. The background-based screening level was used for comparison with data from all property monitoring wells because it is considered to represent conditions that could be present upgradient of the property.

#### **4.1.2 PETROLEUM HYDROCARBONS AND RELATED CONSTITUENTS**

Diesel- and gasoline-range petroleum hydrocarbons and related constituents such as benzene and acenaphthene appear to be migrating onto the property from offsite. As shown on Figures 3-6 through 3-11 and in Table 2-3, concentrations of these constituents in background well B-4, except for benzene, generally exceed concentrations found in property wells. No cleanup levels are included in the CAP for diesel-, gasoline-, or motor oil-range petroleum hydrocarbons. The process described in Section 4.1.1 above for calculating the screening level based on the 90<sup>th</sup> percentile value was also used for diesel- and gasoline-range petroleum hydrocarbons, benzene, and acenaphthene. Screening levels were calculated



based on concentrations found in background well B-4 from October 1997 to June 2001. These screening levels, in addition to the cleanup levels specified in the CAP, if any, were used for evaluation of data from property well. Motor oil-range petroleum hydrocarbons were not detected in property wells; therefore, a background-based screening level was not calculated. For other petroleum-related constituents that also appear to be migrating onto the property from offsite, background-based screening levels were not calculated because concentrations in property wells do not exceed the cleanup levels designated in the CAP.

## 4.2 SUMMARY OF RESULTS

Following completion of the last 8 quarterly monitoring events at the main parcel (performed between September 1999 and June 2001), a statistical evaluation was performed to determine compliance with the cleanup levels and, if appropriate, background-based screening levels at each well. In accordance with the CAP, the methodology used for demonstrating statistical compliance followed statistical methods from the Ecology Toxics Cleanup Program guidance document, *Statistical Guidance for Ecology Site Managers* (Ecology 1992), the *Supplement to Statistical Guidance for Ecology Site Managers* (Ecology 1993), and Model Toxics Control Act [MTCA; WAC-173-340-720(8)] using MTCASat97 compliance module. In general, compliance was determined by calculating the UCL for each detected compound at each well and comparing it to the cleanup level. For petroleum-related constituents and arsenic that appear to be migrating onto the property from offsite, the UCL was also compared to the screening level. If the UCL was less than or equal to the cleanup or screening level, then it was determined that the well was in compliance for that constituent. In some cases, no UCL was calculated because the analyte was not detected or all of the detected values were less than the PQL, as described below. A summary of cleanup and screening levels and the calculated UCLs for each well is provided in Table 4-1.

### 4.2.1 STATISTICAL METHODOLOGY

In accordance with Ecology's guidance documents, the procedure for calculating the UCL was determined based on the percent of nondetected values and detected values less than the PQL (i.e., censored data) within a data set, as follows:

- **Case 1:** If the data set contained up to 15 percent censored data, the UCL was calculated. Prior to performing the calculation, the nondetected values were replaced by a value of half the detection limit and the detected values less than the PQL were replaced by a value of the detection limit. The distribution of the sample data was then determined (i.e., normal or lognormal distribution) and the appropriate UCL calculation was made. Ecology's software

package (MTCASat, Version 3.0) was used to determine the distribution of each data set and to calculate the UCL.

- **Case 2:** If the data set contained between 15 percent and 50 percent censored data, the UCL was calculated directly using MTCASat, Version 3.0. Censored data was addressed by Cohen's method directly in MTCASat.
- **Case 3:** If the data set contained more than 50 percent but less than 100 percent censored data, the UCL was set equal to the maximum concentration in the data set.

No guidance is available for performing statistical evaluations on data sets that contain 100 percent censored data. For this evaluation, if a compound was not detected in any of the wells during the 8 quarterly events, then no further evaluation was performed for that compound and the compound was omitted from Table 4-1. If a compound was detected at least once during the 8 quarterly events in at least one of the property wells, the constituent was included in the statistical summary provided in Table 4-1. For those wells where the constituent was not detected, the following procedure was performed:

- **Case 0:** If the data set contained 100 percent censored data, no UCL was calculated and the well was determined to be in compliance.

Table 4-1 lists the statistical procedure (coded by case number) applied to each well data set. Also included in Table 4-1 are the percentages of censored and uncensored data for each well.

The data set used in each statistical evaluation consisted of eight data points (i.e., the 8 quarterly sampling events from June 1999 to June 2001).

## 4.2.2 COMPLIANCE EVALUATION

In accordance with the CAP, a comparison of the UCL to the cleanup level for each compound detected at each well was performed. For some petroleum-related constituents and arsenic, the UCL was also compared to a screening level based on concentrations in background well B-4 or B-6R. The results of the evaluation for each onsite well are discussed below and summarized in Table 4-2.

### 4.2.2.1 Monitoring Well MW-101R

At monitoring well MW-101R, UCLs were calculated for diesel-range hydrocarbons, gasoline-range hydrocarbons, arsenic, and several SVOCs and VOCs. No UCL was calculated for the other constituents because all of the data for these constituents were censored (below the PQL). The UCLs for benzene, acenaphthene, and arsenic exceeded the cleanup levels included in the CAP, but were less than the background-based screening levels. The UCL for gasoline-range hydrocarbons (9,500 µg/L) exceeded the background-based screening level (8,330 µg/L). There is no cleanup level for gasoline-range petroleum hydrocarbons in the CAP. The UCLs for gasoline-range petroleum hydrocarbons,

benzene, and acenaphthene were about 30 percent greater than the UCLs calculated based on the 8 quarters from June 1998 to June 2000, indicating that the concentrations of these constituents have increased. The UCLs for diesel-range petroleum hydrocarbons and arsenic were not significantly different from the previously calculated UCLs.

#### **4.2.2.2 Monitoring Well MW-102R**

At monitoring well MW-102R, UCLs were calculated for arsenic, acenaphthene, bis(2-ethylhexyl)phthalate, and naphthalene. No UCL was calculated for the other constituents because all of the data for these constituents were censored. The UCLs for bis(2-ethylhexyl)phthalate (65 µg/L) and arsenic (8.9 µg/L) exceeded the cleanup levels included in the CAP (10 µg/L and 4 µg/L, respectively). Bis(2-ethylhexyl)phthalate was detected in only one of the eight samples. The UCL for arsenic was less than the background-based screening level. The UCLs were similar to the UCLs calculated based on the 8 quarters from June 1998 to June 2000.

#### **4.2.2.3 Monitoring Well MW-104**

For monitoring well MW-104, UCLs were calculated for diesel-range hydrocarbons and several SVOCs and VOCs. No UCL was calculated for the other constituents because all of the data for these constituents were censored. Only the UCL for bis(2-ethylhexyl)phthalate (65 µg/L) exceeded the cleanup level included in the CAP (10 µg/L). Bis(2-ethylhexyl)phthalate was detected in only one of the eight samples. The UCL for bis(2-ethylhexyl)phthalate was the same as the UCL calculated based on the 8 quarters from June 1998 to June 2000.

#### **4.2.2.4 Monitoring Well MW-105**

For monitoring well MW-105, UCLs were calculated for diesel-range hydrocarbons, gasoline-range hydrocarbons, arsenic, and several SVOCs and VOCs. No UCL was calculated for the other constituents because all of the data for these constituents were censored. The UCL for benzene (376 µg/L) exceeded the cleanup level included in the CAP and the background-based screening level (217 µg/L). The UCL for arsenic (18 µg/L) exceeded the cleanup level included in the CAP, but did not exceed the background-based screening level. The UCL for gasoline-range petroleum hydrocarbons increased by about 10 percent; the UCLs for the other constituents were not significantly different from those calculated based on the 8 quarters from June 1998 to June 2000.

#### **4.2.2.5 Monitoring Well MW-107R**

For monitoring well MW-107R, UCLs were calculated for diesel-range hydrocarbons, gasoline-range hydrocarbons, arsenic, copper, and several SVOCs and VOCs . No UCL was calculated for the other constituents because all of the data for these constituents were censored. The UCL for arsenic (8 µg/L) exceeded the cleanup level included in the CAP, but not the background-based screening level. The UCLs for diesel-range and gasoline-range petroleum hydrocarbons were about half of the UCLs calculated based on the 8 quarters from June 1998 to June 2000. The UCL for arsenic was not significantly different from the previously calculated UCL.

#### **4.2.2.6 Monitoring Well 108R**

For monitoring well MW-108R, UCLs were calculated for naphthalene, 2-methylnaphthalene, arsenic, chromium, and selenium. No UCLs were calculated for the other constituents because all the data for these constituents were censored. Only the UCLs for arsenic (12 µg/L) and chromium (68 µg/L) exceeded the cleanup levels included in the CAP (4 µg/L and 50 µg/L, respectively). The UCL for arsenic was less than the background-based screening level. Chromium was detected in only one of the eight samples. The UCLs for chromium and arsenic are not significantly different from the UCLs calculated based on the 8 quarters from June 1998 to June 2000.

### **4.3 SUMMARY OF EXCEEDANCES**

Several constituents were identified in the previous sections as exceeding cleanup levels or background-based screening levels. Each of these constituents is discussed below.

#### **4.3.1 GASOLINE-RANGE PETROLEUM HYDROCARBONS**

Gasoline-range petroleum hydrocarbons are constituents of gasoline and are typically found in groundwater contaminated with gasoline. They can also be associated with coal gasification plants. There is no cleanup level for gasoline-range petroleum hydrocarbons in the CAP. The UCL for gasoline-range petroleum hydrocarbons in well MW-101R is 9,500 µg/L. Gasoline-range petroleum hydrocarbons were detected at lower concentrations in wells MW-105 and MW-107R. Gasoline-range petroleum hydrocarbons have also been detected consistently in samples from background well B-4 at concentrations from 2,400 µg/L to 9,000 µg/L. Although the background-based screening level used for comparison (8,330 µg/L) was calculated based on the data from background well B-4, it is likely that the data from B-4 does not reflect the maximum concentration in groundwater migrating onto the property. The fact that the concentrations in three wells (MW-101R, MW-105, and the background well B-4) have

increased and the concentration in a fourth (MW-107R) has decreased indicates that there are multiple sources. Possible offsite sources are discussed in Section 4.4. Although the concentration of gasoline-range petroleum hydrocarbons in well MW-101R is greater than the background-based screening level, it does not represent contamination originating from the property and, therefore, should not trigger implementation of groundwater treatment or prevent reduction of the groundwater monitoring frequency.

#### **4.3.2 DIESEL-RANGE PETROLEUM HYDROCARBONS**

Diesel-range petroleum hydrocarbons are constituents of diesel and are typically found in groundwater contaminated with diesel. Diesel-range petroleum hydrocarbons were detected in wells MW-101R, MW-104, MW-105, and MW-107R. Diesel-range petroleum hydrocarbons have also been detected consistently in samples from background well B-4, at concentrations from 2,300 µg/L to 7,700 µg/L. Based on the measured concentrations, the background-based screening level is 6,586 µg/L. There were no exceedances of the background-based screening level. The presence of diesel-range petroleum hydrocarbons in a background well indicates that there is a source or sources of diesel upgradient of the property.

#### **4.3.3 BENZENE**

Benzene is a constituent of gasoline and is typically found in groundwater contaminated from relatively recent spills of gasoline. It can also be associated with coal gasification plants; however, groundwater testing prior to and during the RI did not indicate that benzene was present at the property from the coal gasification plant formerly located on the property. In addition, gasoline and other gasoline-related constituents, such as ethylbenzene, toluene, xylenes, and substituted benzenes, are also detected in property monitoring wells, making it likely that the source of the benzene is gasoline. Benzene, along with other petroleum-related constituents, is apparently migrating in groundwater to the property from offsite. Benzene has been detected consistently in samples from background well B-4 at concentrations from 94 µg/L to 260 µg/L. Although the background-based screening level used for comparison (212 µg/L) was calculated based on the data from background well B-4, it is likely that the data from B-4 does not reflect the maximum concentration in groundwater migrating onto the property. The UCLs for wells MW-101 and MW-105 exceed the CAP cleanup level. The UCL for well MW-105 also exceeds the background-based screening level. These exceedances do not represent contamination originating from the property and, therefore, should not trigger implementation of groundwater treatment or prevent reduction of the groundwater monitoring frequency.

#### **4.3.4 ACENAPHTHENE**

Acenaphthene is a typical constituent of diesel. Acenaphthene was detected in wells MW-101, MW-102R, MW-104, MW-105, and MW-107R. Acenaphthene has also been consistently detected in samples from background well B-4, at concentrations from 180 µg/L to 450 µg/L. Based on the measured concentrations, the background-based screening level is 456 µg/L. The UCL for well MW-101 exceeds the CAP cleanup level, but is less than the screening level. The presence of acenaphthene in a background well indicates that there is a source or sources of acenaphthene upgradient of the site. The exceedance of the CAP cleanup level does not represent contamination originating from the property and, therefore, should not trigger implementation of groundwater treatment or prevent reduction of the groundwater monitoring frequency.

#### **4.3.5 BIS(2-ETHYLHEXYL)PHTHALATE**

Bis(2-ethylhexyl)phthalate is a common industrial chemical used to make plastics more flexible. It was detected above the PQL three times in property wells and once in background wells during the 8 quarters of monitoring. Each detection was in a different well. The uncensored detections in property wells and in the background well all occurred during the same sampling event and were all qualified as estimated values during data validation due to poor precision in the field duplicate. Because there was only one uncensored data value in each of three property wells, the maximum detected value was used as the UCL, in accordance with MTCA statistical guidance. In two of the wells, MW-102 and MW-104, the maximum detected value (and, therefore, the UCL) exceeded the cleanup level. The source of the occasional detections has not been determined; however, it may be related to new plastic sampling or laboratory equipment. It is unlikely that the sporadic detections are representative of bis(2-ethylhexyl)phthalate in groundwater at the property. Therefore, the two detections above the cleanup level should not trigger implementation of groundwater treatment or prevent reduction of the groundwater monitoring frequency.

#### **4.3.6 ARSENIC**

Arsenic is a naturally occurring metal in soil and groundwater. Ecology determined that a typical background concentration in soil is 7 mg/kg in the Puget Sound region (Ecology 1994). Arsenic was detected at concentrations above the PQL in all property wells except MW-104 and in background well B-6R. Because the CAP cleanup level is equal to the PQL, these detections resulted in the UCLs exceeding the CAP cleanup level. Based on the concentrations measured in well B-6R, the background-based screening level is 32 µg/L. There are no exceedances of the background-based screening level.

The presence of arsenic in a background well at concentrations greater than those found in property wells indicates that arsenic is migrating onto the property from upgradient. The exceedances of the CAP cleanup level do not represent contamination originating from the property and, therefore, should not trigger implementation of groundwater treatment or prevent reduction of the groundwater monitoring frequency.

#### **4.3.7 CHROMIUM**

Chromium is a naturally occurring metal in soil and groundwater. Ecology determined that a typical background concentration in soil is 48 mg/kg in the Puget Sound region (Ecology 1994). There was one detection of chromium above the PQL in groundwater from property wells during the 8-quarter monitoring period, in MW-108. Because there was only one uncensored data value for this well, the maximum detected value was used as the UCL, in accordance with MTCA statistical guidance. The maximum detected value (and, therefore, the UCL) exceeds the cleanup level, which is equal to the PQL. It is unlikely that the single uncensored detection is representative of chromium present in groundwater at the property at a level above the cleanup level. Therefore, the single detection should not trigger implementation of groundwater treatment or prevent reduction of the groundwater monitoring frequency.

#### **4.4 POTENTIAL UPGRADIENT SOURCES FOR PETROLEUM HYDROCARBON CONTAMINATION IN GROUNDWATER**

Landau Associates reviewed R.L. Polk city street directories, a VISTA Information Solutions regulatory database report, and Ecology files for information on sites upgradient from the Union Station property that may be potential sources for petroleum hydrocarbon contamination in groundwater. Sites identified as having a moderate to high potential to have impacted groundwater are shown on Figure 4-1 and listed in Table 4-3.

Landau Associates reviewed street directories for the City of Seattle for the years 1920, 1930, 1940, 1951, 1960, 1970, 1980, and 1990. The historical sites identified as having the greatest potential for impacting groundwater quality at the Union Station property include:

- Jay's Union Service Station and Rhodes Domes Stadium Service Station, which operated at 500 South Jackson Street
- McKales Corp Gas Station, which operated at 320 5<sup>th</sup> Avenue S.
- KS Serv Gas Station, which operated at 720 5<sup>th</sup> Avenue S.

These locations are adjacent to and upgradient of the Union Station property. Several automobile repair shops that may have impacted groundwater were also identified. These historical sites

of interest adjacent to and upgradient of the Union Station property are considered to have moderate potential for impacting the groundwater at the property, although contamination has not been confirmed at the sites.

VISTA Information Solutions (VISTA) provided a report summarizing information about sites in the specified area that were identified in state or federal databases as having recognized environmental conditions; available Ecology records were reviewed for those sites.

VISTA identified the East-West Investments property, on 6<sup>th</sup> Avenue S. and South Lane Street, as being listed on the Washington Toxic Cleanup Program Site Register and containing at least one leaking underground storage tank (LUST). Ecology records indicate that this was the site of a former Standard Oil gas station in the 1940s. Soil at this site was contaminated with petroleum hydrocarbons. Groundwater contamination was not documented. At the time of the Ecology file review, there were no records of remedial activities at this site. The potential for activities at this site to impact groundwater quality at the south end of the Union Station property is considered high.

VISTA identified the Rex Hotel, located at 657 South King Street, as being listed on the Washington Toxic Cleanup Program Site Register and containing at least one LUST. The tank was closed in place in 1993 and the free product that had accumulated around the tank was removed at the time of closure. No further remedial action was performed, but information in Ecology records suggest that contaminant migration and groundwater contamination were thought to be unlikely due to the clay present in the subsurface at the Rex Hotel site. The known release of free product and the hotel's location upgradient from the Union Station property makes the potential for contamination from this site to impact the groundwater quality at the south end of the Union Station property moderate.

VISTA identified the Texaco Station, located at 511 South Dearborn Street, as the site of at least one UST and one LUST. Information regarding the LUST at this site was filed under the name of the former Shell Station. The first LUST was discovered in December 1990. Seven USTs were removed along with about 880 yd<sup>3</sup> of contaminated soil in 1992. A combined soil vapor extraction and pump-and-treat system was implemented to treat contaminated groundwater. Groundwater concentrations of gasoline-range petroleum hydrocarbons up to 50,000 µg/L and diesel-range petroleum hydrocarbons up to 3,160 µg/L were found at this site. Due to the known groundwater contamination and location east of the southern portion of the Union Station property, the potential for the Texaco/Shell Station to impact groundwater quality at the Union Station property is considered moderate.

The Assisted Living Facility, located on the 700 block of 6<sup>th</sup> Avenue S., was not identified by VISTA, but the following information was obtained from Ms. Kathy Goetz Troost of Shannon & Wilson. Soil and groundwater were investigated on the northwest portion of the site where a gas station reportedly operated from 1919 to 1946. Gasoline- and diesel-range hydrocarbons, methylene chloride, and several



PAHs were detected in the soil at concentrations exceeding MTCA Method A cleanup levels (Shannon & Wilson 1996). Gasoline-range hydrocarbons and benzene, ethylbenzene, toluene, and xylenes (BETX) were detected in the groundwater at concentrations exceeding the MTCA Method A cleanup levels. Free product, identified as very old, poorly refined gasoline, was noted on the groundwater at two locations during the soil and groundwater investigation. A limited amount of contaminated soil was excavated from the Assisted Living Facility site; however, there was no available documentation regarding the remediation of soil and groundwater in the contaminated northwest corner of the property. Due to the close proximity of this property and the general west to southwest groundwater flow direction, the potential for the Assisted Living Facility to impact groundwater quality at the south end of the Union Station property is considered high.

Sanborn fire insurance maps for 1969 were also reviewed for the specified area. The fire insurance maps showed the use of properties and identified locations where gasoline and oil tanks were present. The following additional properties (Table 4-3) were identified as having activities with relatively high potential for resulting in contamination of groundwater by petroleum products:

- gasoline and oil station on the northeast corner of the 5<sup>th</sup> Ave. S. and South Dearborn St. intersection
- gasoline and oil station on the northwest corner of the 6<sup>th</sup> Ave. S. and South Dearborn St. intersection
- automobile service and repair station on the northeast corner of the 5<sup>th</sup> Ave. S. and South King St. intersection
- automobile service and repair station on the southwest corner of the 7<sup>th</sup> Ave. S. and South Jackson St. intersection
- automobile service and repair station on the southeast corner of the 7<sup>th</sup> Ave. S. and South Jackson St. intersection
- automobile service and repair station on the northwest corner of the Airport Way S. and South Plummer St. intersection
- machine shop on the north side of South Weller St. between 5<sup>th</sup> Ave. S. and 6<sup>th</sup> Ave. S.
- machine shop on the northwest corner of the 7<sup>th</sup> Ave. S. and South Lane St. intersection
- machine shop on the southeast corner of the 8<sup>th</sup> Ave. S. and South Weller St. intersection.

## 5.0 CONCLUSIONS AND RECOMMENDATIONS

Twelve quarters of groundwater monitoring after completion of foundations at the main parcel have been completed. Evaluation of the data indicates that no constituents originating from the property are consistently present in property monitoring wells at concentrations that exceed cleanup levels. Accordingly, groundwater treatment should not be implemented and it is appropriate to reduce the groundwater monitoring frequency to annual as provided in the CAP.

### 5.1 SUMMARY OF CONCLUSIONS

As summarized in Table 1-1, the CAP provides for reducing the groundwater monitoring frequency to annual if, after 8 quarters of quarterly monitoring beginning the first quarter after all foundations are completed, the UCL for each constituent is less than or equal to cleanup levels. Twelve quarters of quarterly monitoring have been completed following foundation completion at the main parcel. There is no indication that construction at the south parcel has impacted groundwater quality. Although a few constituents have been detected at concentrations exceeding cleanup or screening levels in one or two wells, these detections do not indicate that contaminants originating from the property are present in groundwater at concentrations above the cleanup levels. Several sites upgradient of the Union Station property have been identified that may be sources of contaminants migrating in the groundwater onto the Union Station property (Section 4.4).

Evaluation of the groundwater monitoring data indicates that there is at least one and probably several upgradient sources of the gasoline- and diesel-range petroleum hydrocarbons and related constituents that are migrating in groundwater to the property. Concentrations of several of these constituents in background well B-4 were used to evaluate compliance in property wells. Background-based screening levels for gasoline- and diesel-range petroleum hydrocarbons, acenaphthalene, and benzene were calculated using the well B-4 data. The background-based screening levels were used to evaluate compliance for these constituents. The contamination from offsite resulted in an exceedance of screening levels for gasoline-range petroleum hydrocarbons in MW-101R and benzene in MW-105; however, because these exceedances do not represent contamination originating on the property, they should not be used to trigger groundwater treatment or preclude reduction of groundwater monitoring frequency.

Arsenic was detected in most property wells and in background well B-6/B-6R. Evaluation of the data indicates that arsenic is migrating in groundwater to the property. A background-based screening level was calculated using the well B-6/B-6R data and was used to evaluate compliance. There were no exceedances of the background-based screening level.

Several other constituents, including bis(2-ethylhexyl)phthalate and chromium, were detected sporadically in one or two wells at concentrations that exceed the cleanup levels. These occasional detections do not indicate that these constituents are present in groundwater at the property at concentrations that exceed the cleanup levels. Therefore, these detections should not trigger groundwater treatment or preclude reduction of groundwater monitoring frequency.

## **5.2 RECOMMENDATIONS**

Based on evaluation of the past 8 quarters of groundwater monitoring at the main parcel, we recommend:

- The frequency of groundwater monitoring be reduced to annual
- Annual groundwater monitoring be performed beginning in June 2002 because monitoring data show that the highest concentrations of the constituents of interest generally occur in the June sampling.

## 6.0 USE OF THIS REPORT

This report has been prepared for the exclusive use of Union Station Associates for specific application to the Union Station property groundwater monitoring program. No other party is entitled to rely on the information, conclusions, and recommendations included in this document without the express written consent of Landau Associates. Further, the reuse of information, conclusions, and recommendations provided herein for extensions of the project or for any other project, without review and authorization by Landau Associates, shall be at the user's sole risk. Landau Associates warrants that within the limitations of scope, schedule, and budget, our services have been provided in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions as this project. We make no other warranty, either express or implied.

This document has been prepared under the supervision and direction of the following key staff.

LANDAU ASSOCIATES, INC.

By:



Kristy J. Hendrickson, P.E.  
Principal

KJH/tam

## 7.0 REFERENCES

Ecology. 2000. Letter to K.J.Hendrickson, Landau Associates, Edmonds, Washington, re: *Union Station - Report, Groundwater Monitoring, Union Station, Seattle, Washington, dated August 31, 2000*. D.L. South, Senior Engineer, Toxics Cleanup Program, Washington State Department of Ecology, Bellevue, Washington. November 22.

Ecology. 1994. *Natural Background Soil Metals Concentrations in Washington State*. Toxics Cleanup Program, Department of Ecology, October 1994, Publication #94-115).

Ecology. 1993. Memorandum to Interested Parties re: *Supplement to Statistical Guidance for Ecology Site Managers*. C.L.Fleskes, Manager, Toxics Cleanup Program, Washington State Department of Ecology, Olympia, Washington. August 11.

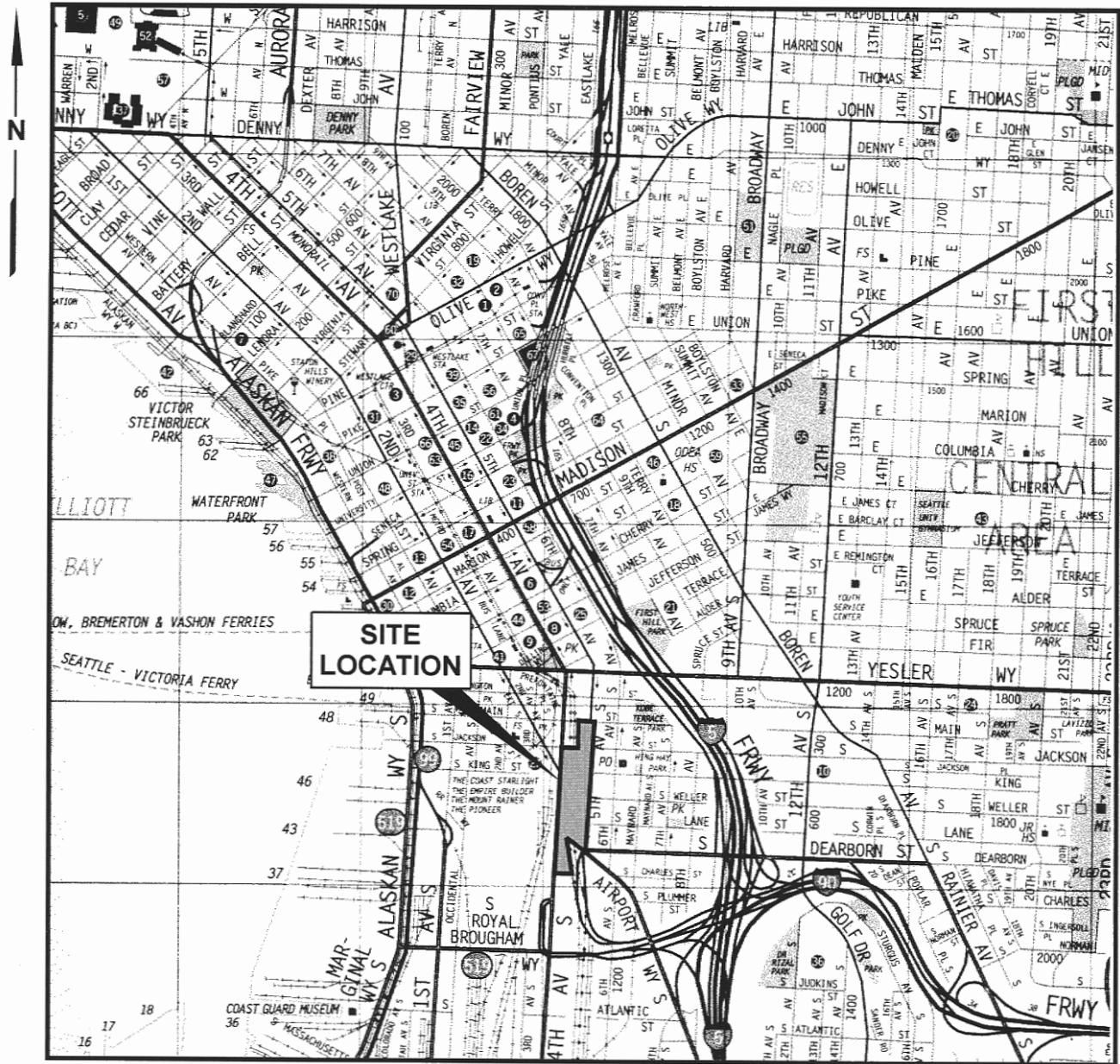
Ecology. 1992. *Statistical Guidance for Ecology Site Managers*. Toxics Cleanup Program, Washington State Department of Ecology. August.

Landau Associates. 2000. *Report, Groundwater Monitoring, Union Station, Seattle, Washington*. Prepared for Union Station Associates. August 31.

Landau Associates. 1997. *Cleanup Action Plan, Union Station Property, Seattle, Washington*. Prepared for Union Station Associates, LLC, Seattle, WA and Marten & Brown, LLP, Seattle, WA. July 28.

Landau Associates and Hart Crowser. 1996. *Report, Focused Remedial Investigation and Feasibility Study, Union Station, Seattle, Washington*. Prepared for Nitze-Stagen, Seattle, WA and Marten & Brown, Seattle, WA. July 1.

Shannon & Wilson. 1996. Personal communication (telephone conversation with Kathy Goetz Troost, Shannon and Wilson, re: Assisted Living Facility). B. Butler, Landau Associates, Inc., Edmonds, Washington.

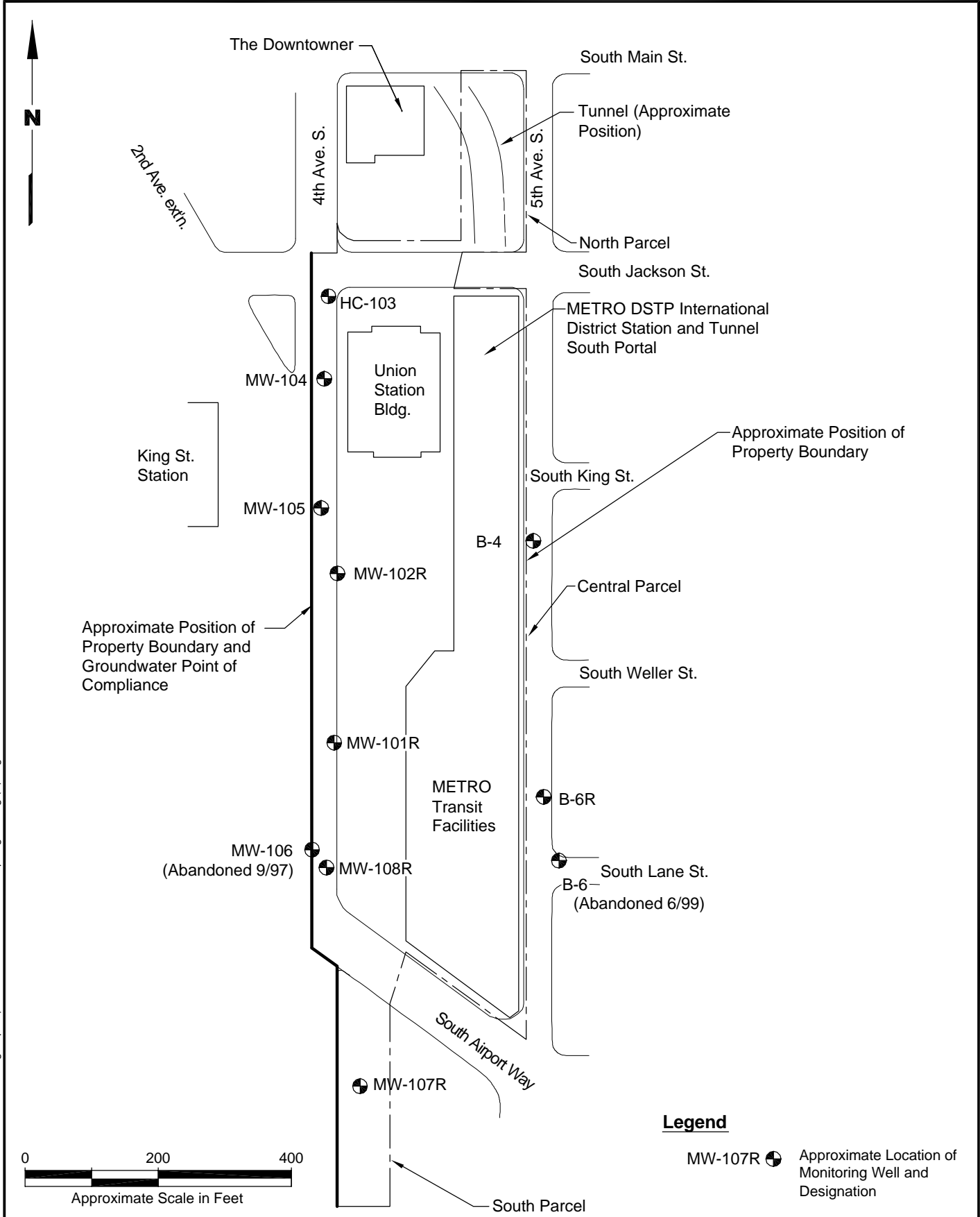


Union Station  
Seattle, Washington

Vicinity Map

Figure  
1-1

Union Station/Groundwater Monitoring Report | T:\429\02\030\GWMoni01Rpt\Fig1-2.dwg (A) "Figure 1-2" 3/1/2002

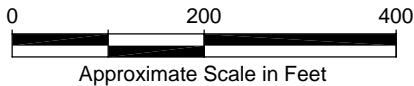


Union Station  
Seattle, WA

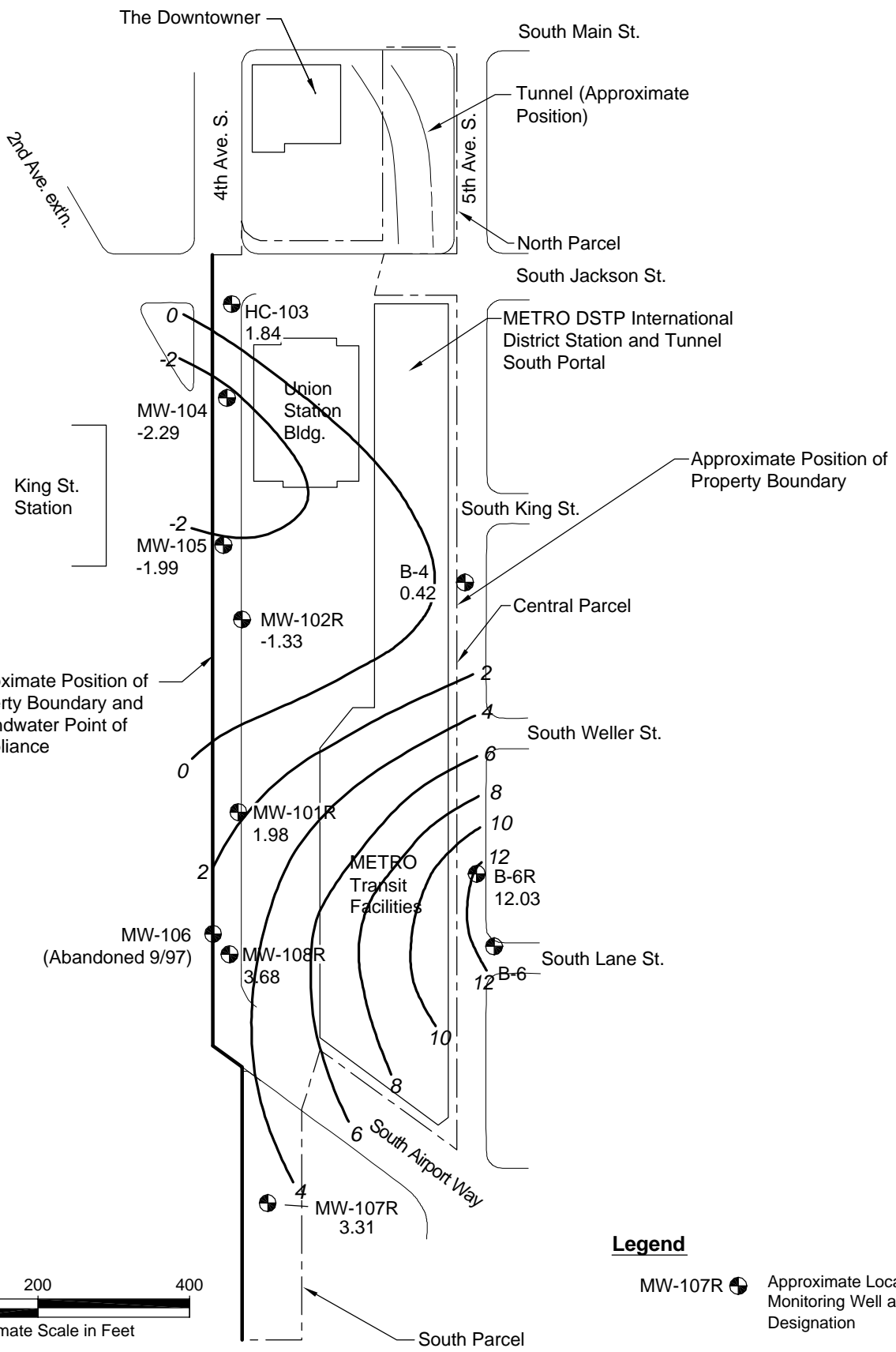
**Union Station Groundwater  
Monitoring Well Locations**

Figure  
**1-2**

Union Station Associates/2001 GW Monitoring Report | T:\429\002\030\GWMon\01Rpt\Figs.dwg (A) "September 2000" 3/1/2002



Approximate Position of Property Boundary and Groundwater Point of Compliance



**Legend**

MW-107R Approximate Location of Monitoring Well and Designation



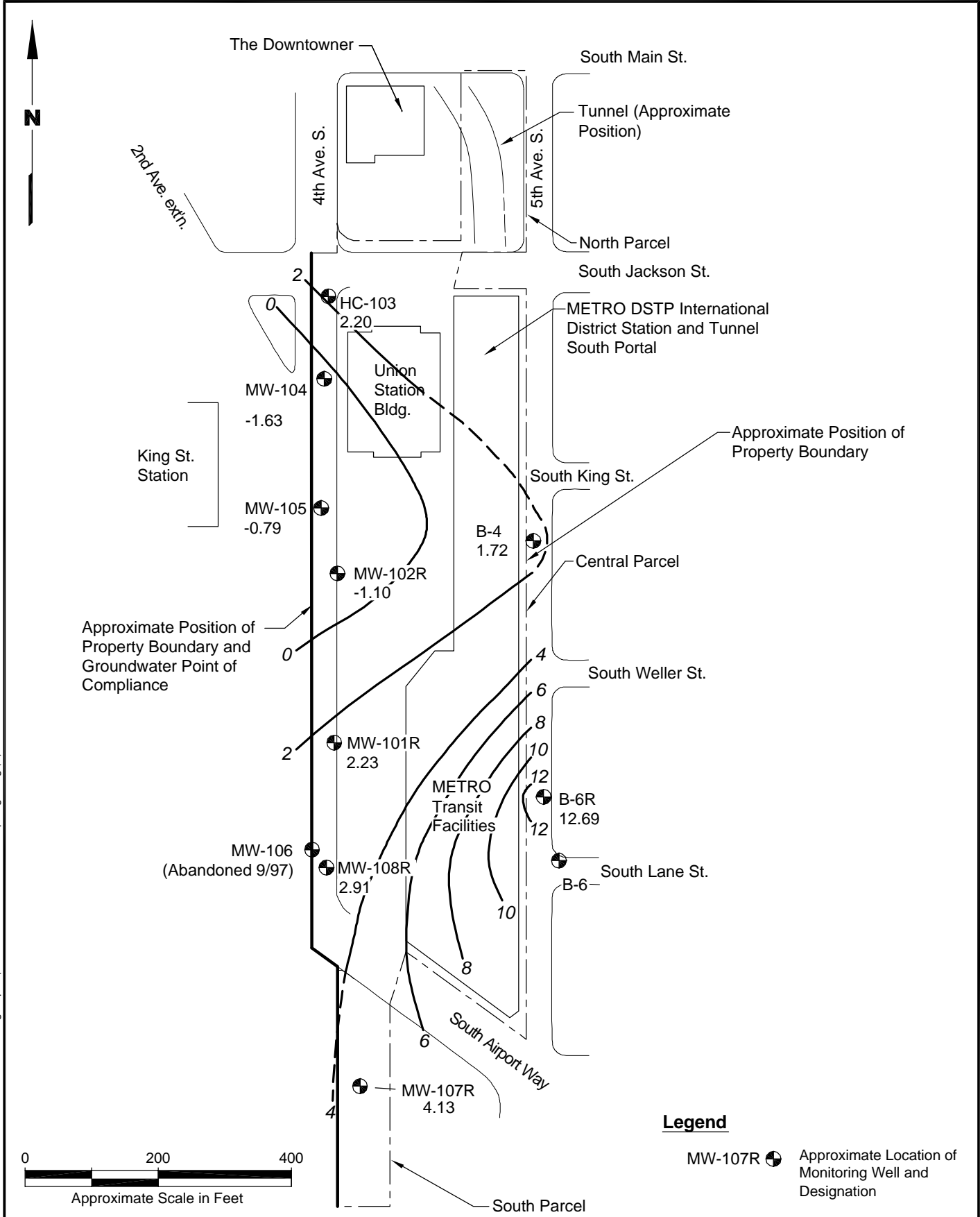
Union Station  
Seattle, Washington

**Groundwater Elevation Contours  
September 2000**

Figure  
**3-1**



Union Station Associates/2001 GW Monitoring Report | T:\429\002\030\GWMon\01Rpt\Figs.dwg (A) "December 2000" 3/1/2002

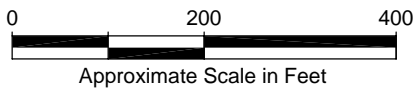


Union Station  
Seattle, Washington

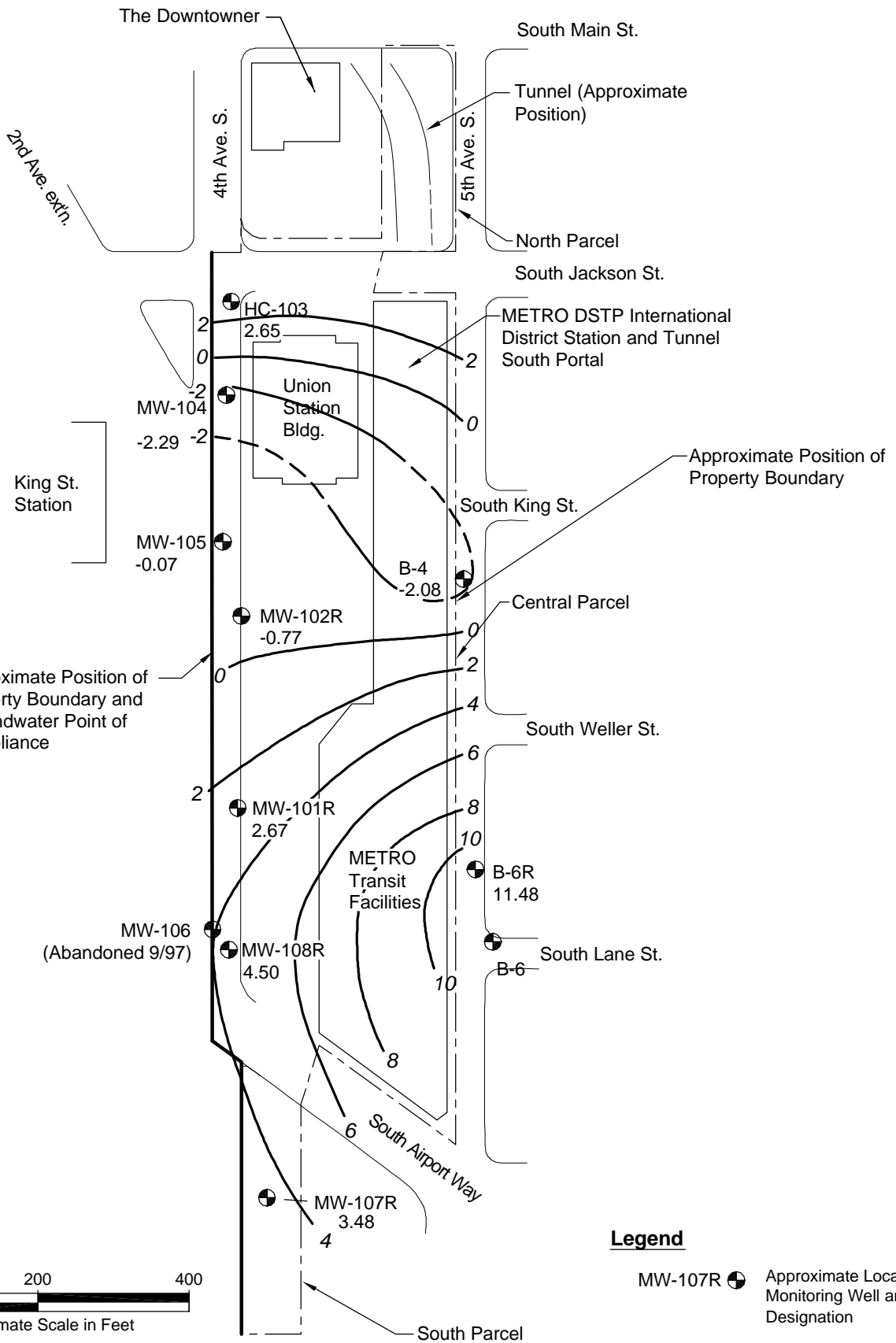
**Groundwater Elevation Contours  
December 2000**

Figure  
**3-2**

Union Station Associates/2001 GW Monitoring Report | T:\429002\030\GWMoni01Rpt\Figs.dwg (A) \*March 2001\* 3/1/2002



Approximate Position of Property Boundary and Groundwater Point of Compliance



**Legend**

MW-107R  Approximate Location of Monitoring Well and Designation

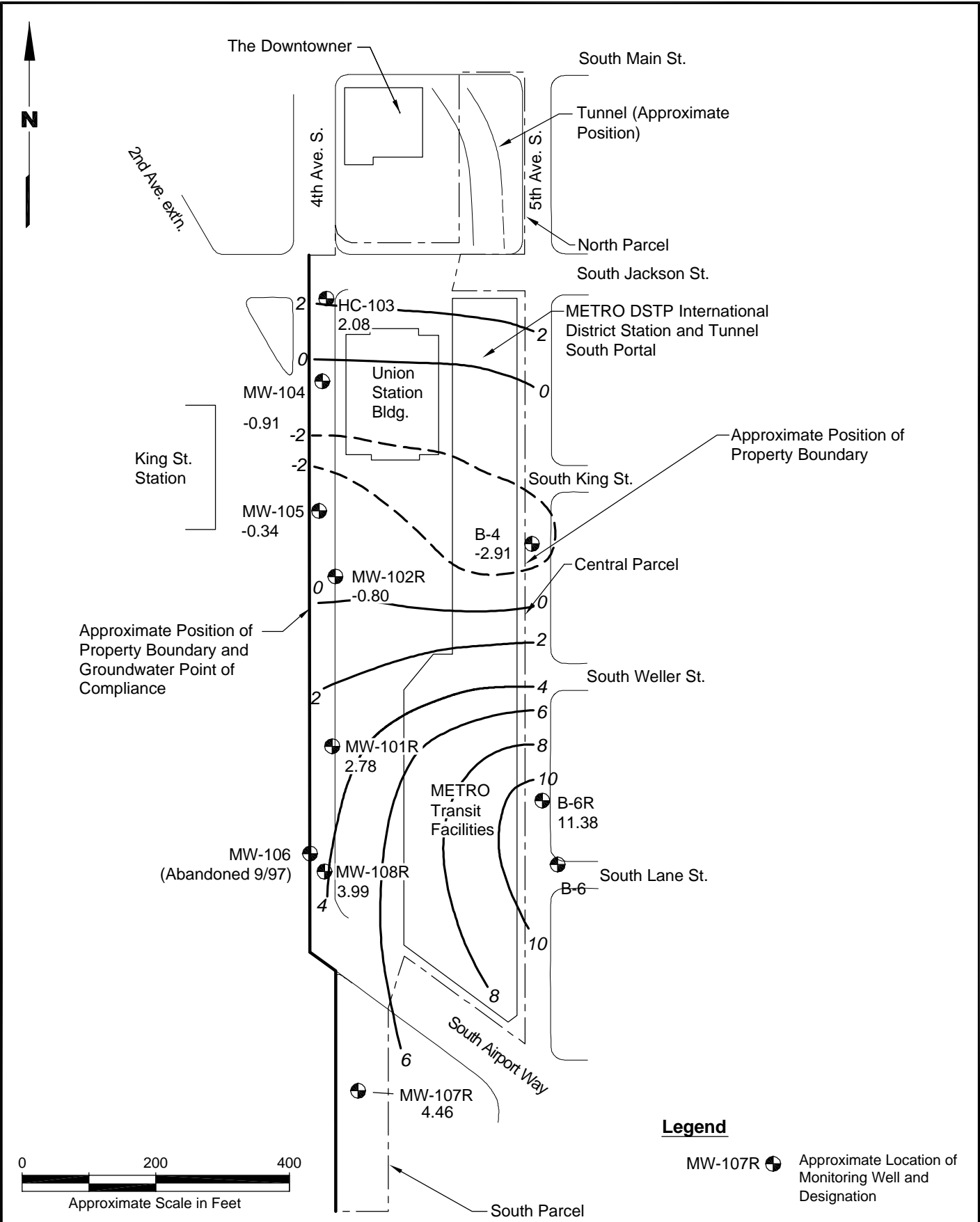


Union Station  
Seattle, Washington

**Groundwater Elevation Contours**  
**March 2001**

Figure  
**3-3**

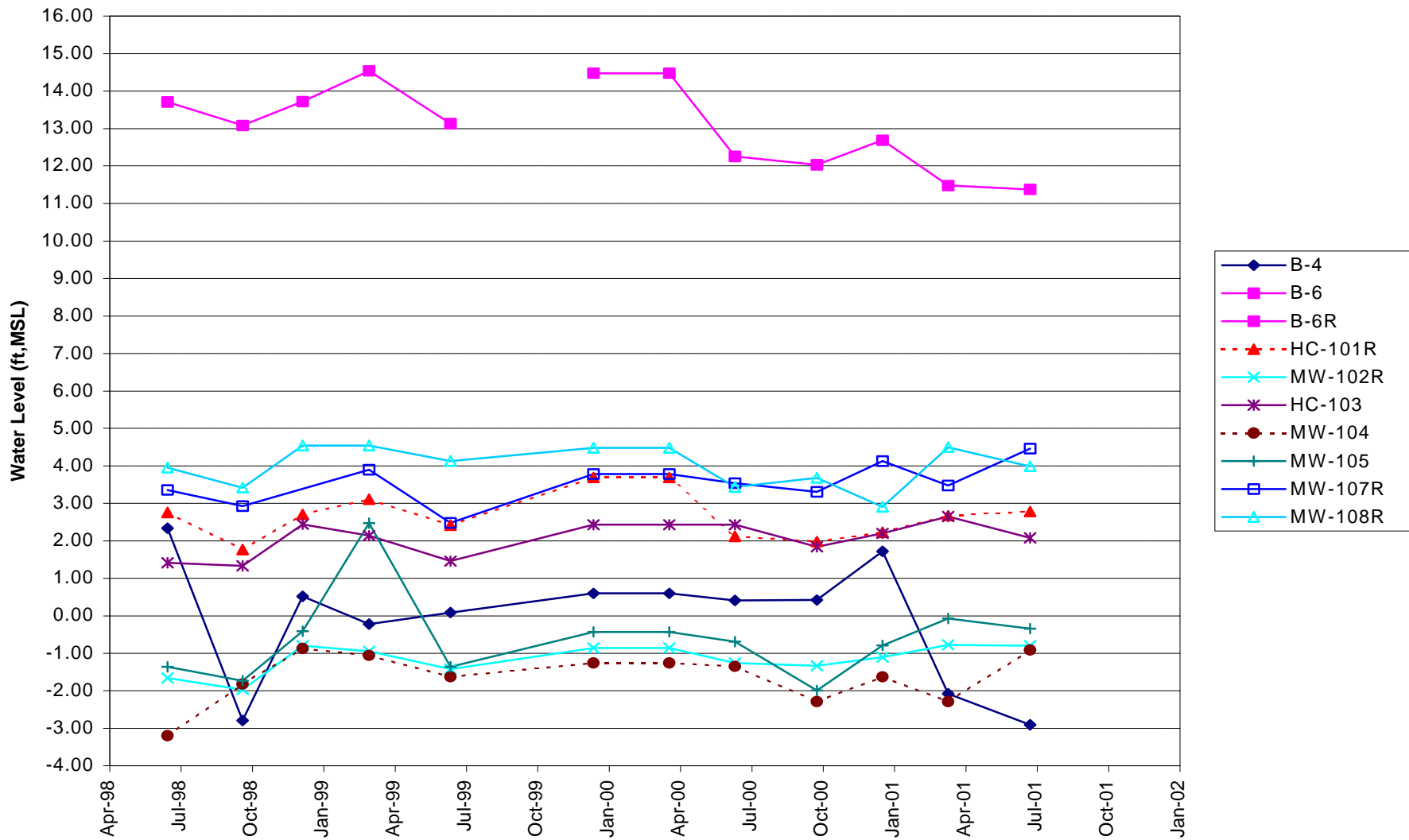
Union Station Associates/2001 GW Monitoring Report | T:\429002030\GWMoni01Rpt\Figs.dwg (A) \*June 2001\* 3/1/2002

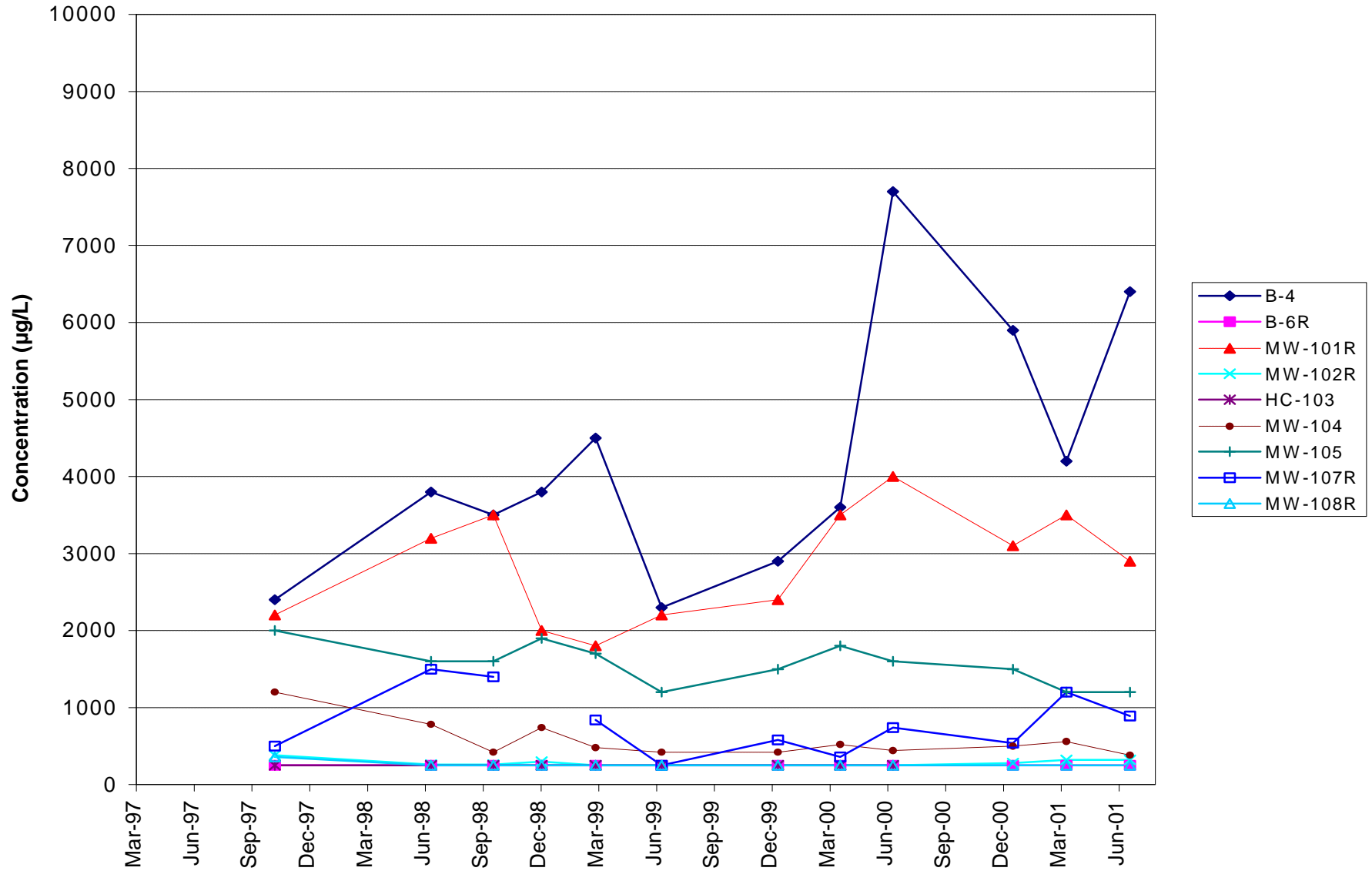


Union Station  
Seattle, Washington

**Groundwater Elevation Contours**  
**June 2001**

Figure  
**3-4**

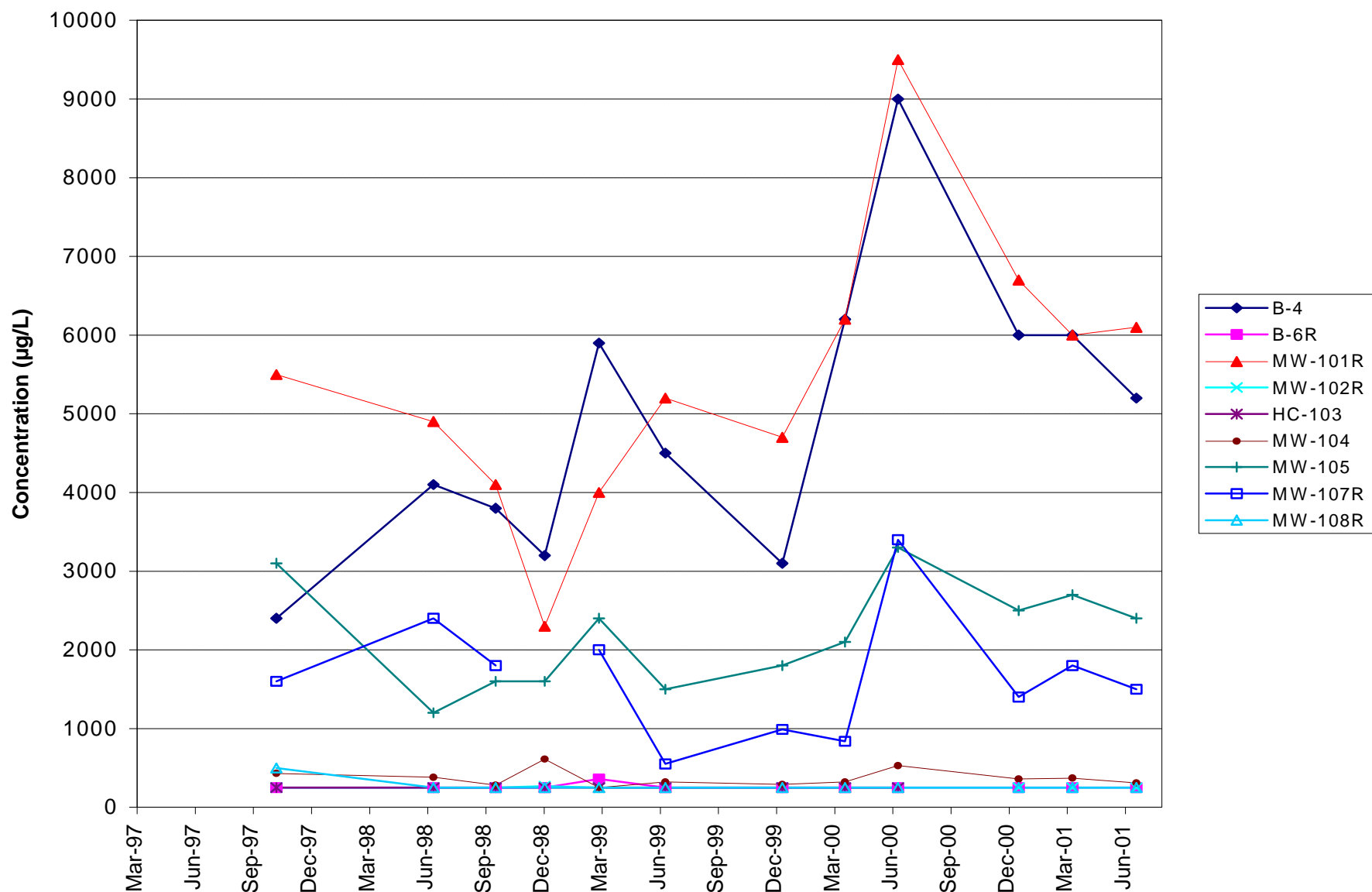




Union Station  
Seattle, Washington

**Diesel-Range Petroleum  
Hydrocarbons Concentrations**

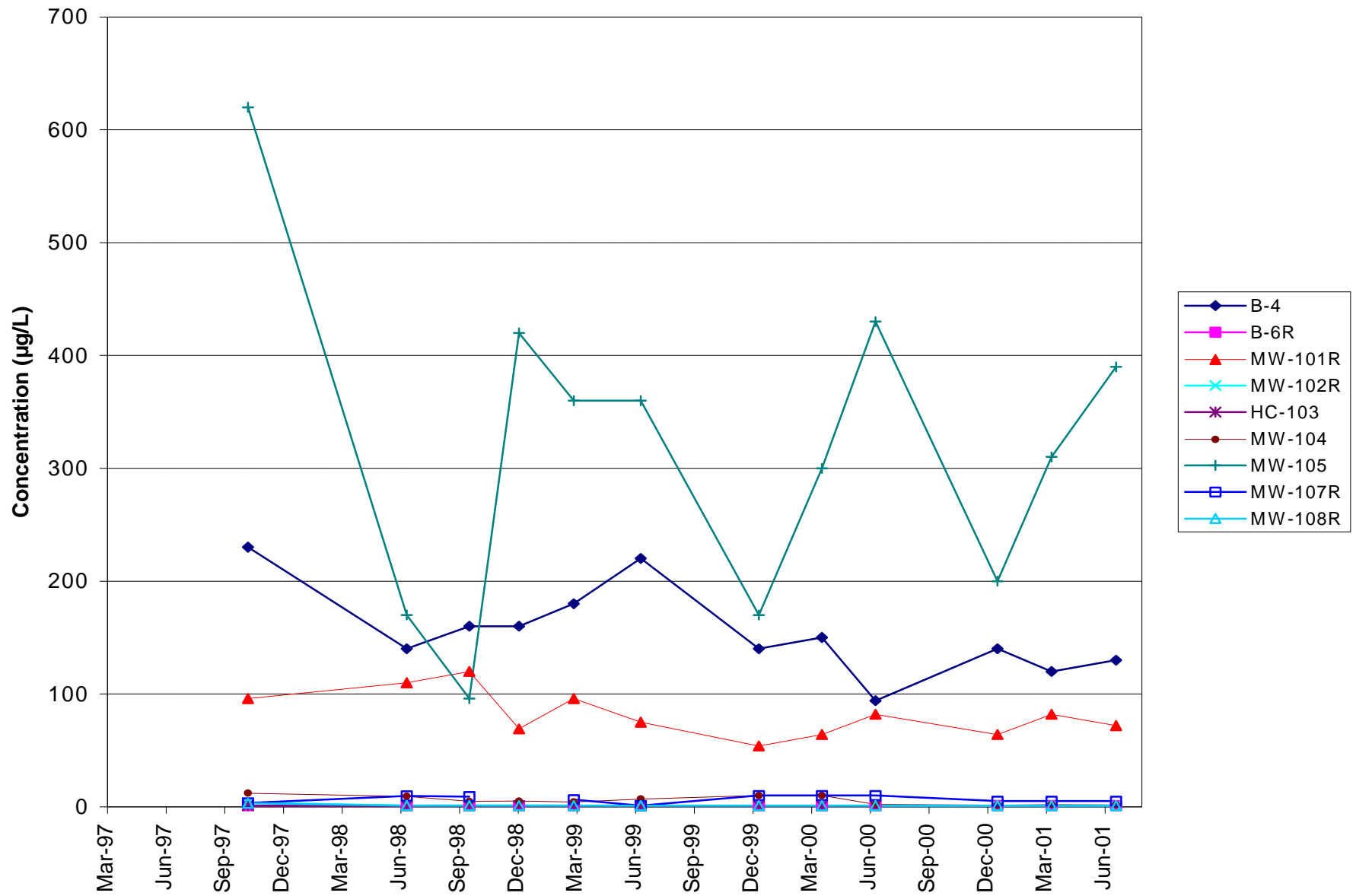
Figure  
**3-6**



Union Station  
Seattle, Washington

**Gasoline-Range Petroleum  
Hydrocarbons Concentrations**

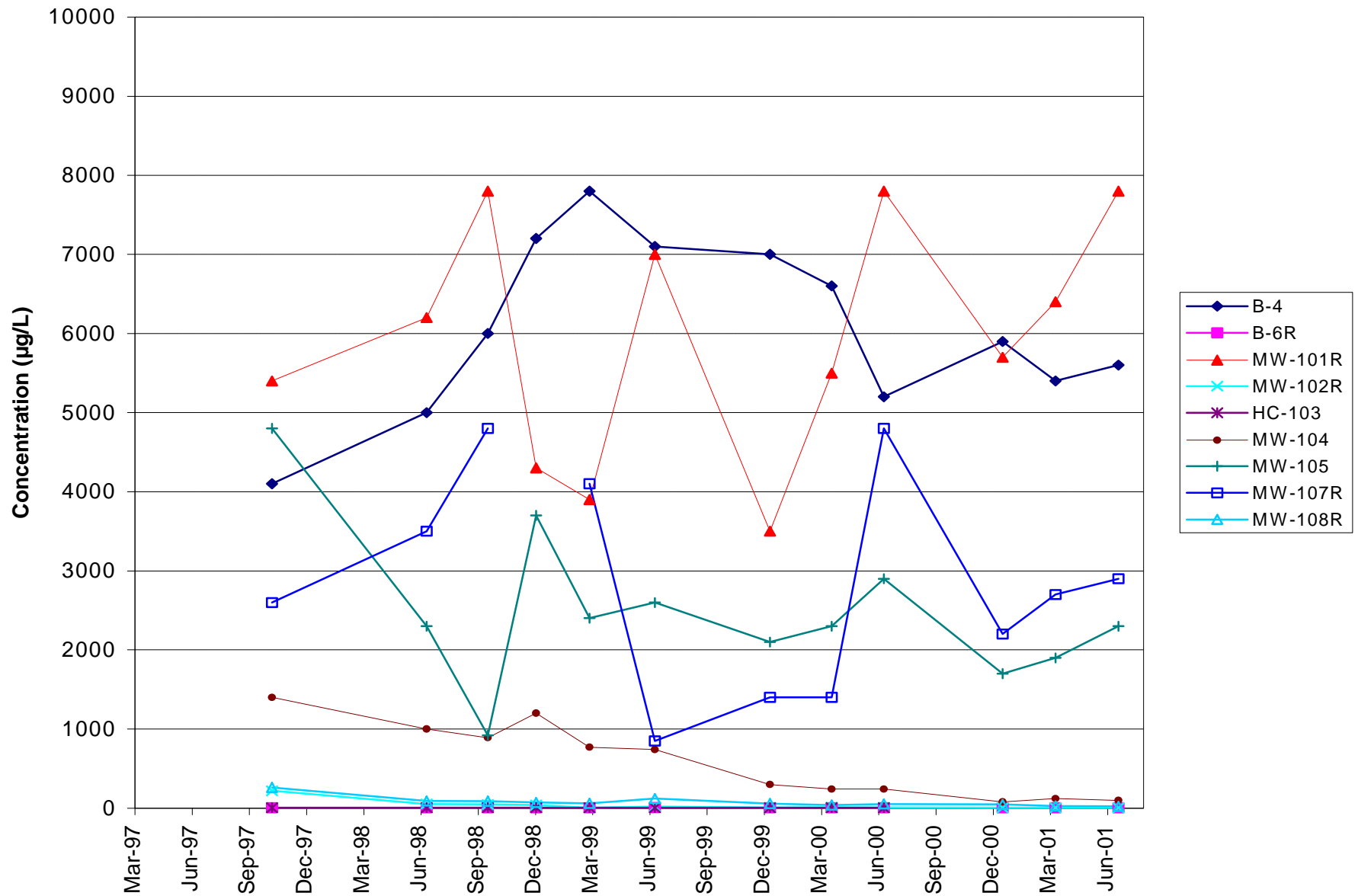
Figure  
**3-7**



Union Station  
Seattle, Washington

**Benzene Concentrations**

Figure  
**3-8**

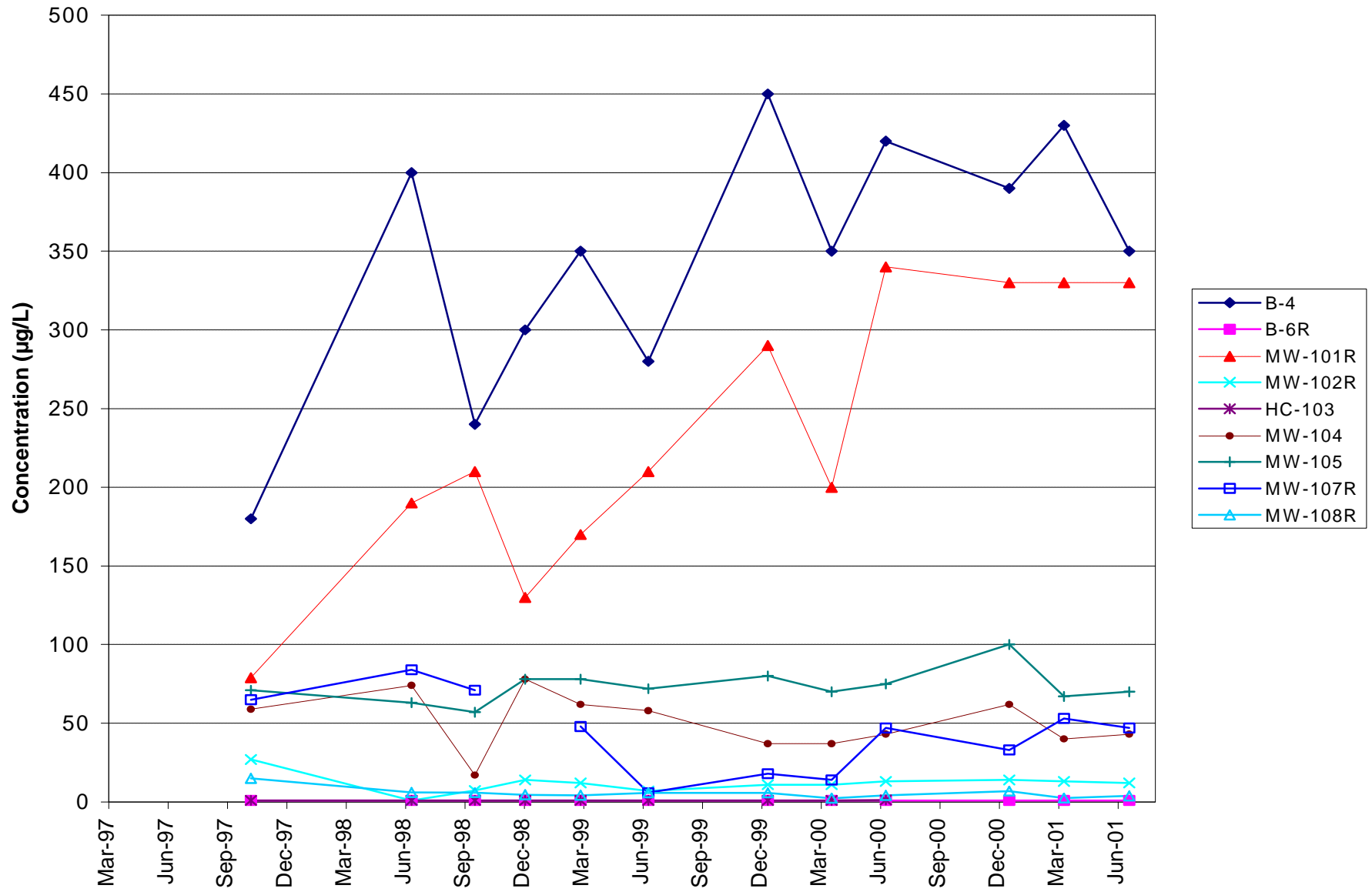


Union Station  
Seattle, Washington

**Naphthalene (Method 8260)  
Concentrations**

Figure  
3-9

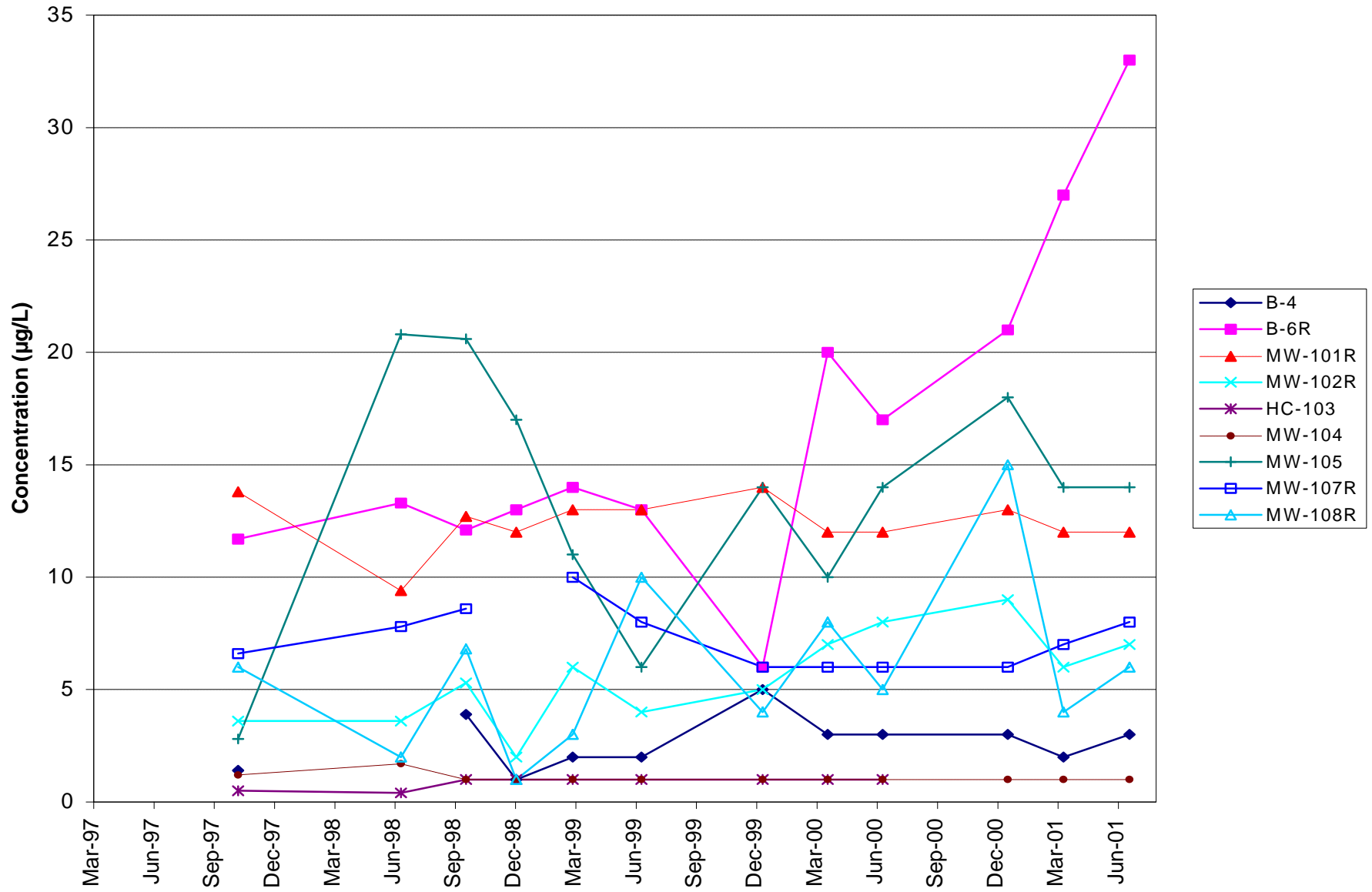




Union Station  
Seattle, Washington

**Acenaphthene Concentrations**

Figure  
3-10



Union Station  
Seattle, Washington

**Arsenic Concentrations**

Figure  
3-11

**TABLE 1-1  
CONSENT DECREE GROUNDWATER MONITORING AND REMEDIATION**

**Groundwater Monitoring**

Quarterly monitoring for 8 quarters beginning within 3 months of the effective date of the consent decree.

Calculate upper 95% confidence limit (UCL) using the eight quarters of data.

If UCL exceeds cleanup levels, implement groundwater treatment if directed by Ecology to prevent contamination from leaving the site. The parties anticipate that Ecology may revise this cleanup action plan to incorporate new cleanup standards if the cleanup standards are revised by an amendment to the regulations and Ecology determines the use of the new standards is appropriate.

If UCL is less than or equal to cleanup levels, commence annual monitoring.

Annual monitoring until all foundations are completed or until two years after any foundation construction is initiated.

Quarterly sampling for 8 quarters beginning the first quarter after all foundations are completed or the first quarter occurring two years after any foundation construction is initiated.

Calculate upper 95% confidence limit (UCL) using the last eight quarters of data.

If UCL exceeds cleanup levels, implement groundwater treatment if directed by Ecology to prevent contamination from leaving the site. The parties anticipate that Ecology may revise this cleanup action plan to incorporate new cleanup standards if the cleanup standards are revised by an amendment to the regulations and Ecology determines the use of the new standards is appropriate.

If UCL is less than or equal to cleanup levels, commence annual monitoring.

Annual monitoring until foundation loading (building construction) is complete plus 3 additional years.

If any sample exceeds cleanup levels, collect another sample 1 quarter later.

If the second sample is less than cleanup levels, return to annual monitoring .

If the second sample exceeds cleanup levels, commence quarterly monitoring for 1 year (see below).

If no exceedance of cleanup levels has occurred after 3 years, commence monitoring every 5 years.

Monitoring every 5 years.

If any sample exceeds cleanup levels, collect another sample 1 quarter later.

If the second sample is less than cleanup levels, return to annual monitoring for 1 year.

If the second sample exceeds cleanup levels commence quarterly monitoring for 1 year (see below).

If UCL is less than or equal to cleanup levels continue monitoring every 5 years so long as residual hazardous substance concentrations contained onsite exceed site cleanup levels [see WAC 173-340-360 (8)(b)].

Quarterly sampling for 1 year

At end of year, if UCL based on four quarters of data is less than cleanup levels, return to annual monitoring for 3 years

At end of year, if UCL based on four quarters of data is greater than cleanup levels and data show increasing trend and last sample exceeds twice the cleanup level, implement groundwater treatment if directed by Ecology to prevent contamination from leaving the site. Otherwise, continue monitoring for another four quarters.

If, after eight quarters of data have been collected, the UCL based on the eight quarters of data exceed the cleanup level, implement groundwater treatment if directed by Ecology to prevent contamination from leaving the site.

If, after eight quarters of data have been collected, the UCL based on the eight quarters of data is less than the cleanup level, continue monitoring for another four quarters.

If, at the end of the last four quarters, the UCL based on the last eight quarters of data exceeds the cleanup level, implement groundwater treatment if directed by Ecology to prevent contamination from leaving the site.

If, at the end of the last four quarters, the UCL based on the last eight quarters of data is less than the cleanup level, return to annual monitoring for 5 years. If there are no exceedances of cleanup levels during that time, return to monitoring every 5 years.

### **Groundwater Treatment**

Minimize present worth of capital and O&M costs to determine the size and estimated operating time of the system.

Performance monitoring.

Quarterly monitoring during groundwater treatment.

Plot data and do statistical evaluation as directed by Ecology to determine when to terminate treatment or when cleanup standards are met.

### **Post-Treatment Monitoring**

Quarterly monitoring for 8 quarters.

If UCL exceeds cleanup levels and trend analysis does not indicate decreasing trend, return to groundwater treatment.

If UCL exceeds cleanup levels and trend analysis indicates decreasing trend, continue monitoring quarterly. If UCL calculated using the last 8 quarters of data exceeds cleanup levels after 12 quarters of data have been collected, return to groundwater treatment.

If UCL is less than or equal to cleanup levels, commence annual monitoring for 3 years.

Annual monitoring for 3 years.

If any sample exceeds cleanup levels, collect another sample 1 quarter later.

If the second sample is less than cleanup levels return to annual monitoring.

If the second sample exceeds cleanup levels commence quarterly monitoring for 1 year and use triggers in quarterly monitoring above.

If no exceedance of cleanup levels has occurred after 3 years, commence monitoring every 5 years.

Monitoring every 5 years.

If any sample exceeds cleanup levels, collect another sample 1 quarter later.

If the second sample is less than cleanup levels return to monitoring every 5 years.

If the second sample exceeds cleanup levels commence quarterly monitoring (see above).

If UCL is less than or equal to cleanup levels, continue monitoring every 5 years so long as residual hazardous substance concentrations contained onsite exceed site cleanup levels [see WAC 173-340-360 (8)(b)].

Notes:

1. This table was prepared for and originally presented in the CAP.
2. As described in Appendix A of the CAP, alternate statistical methods may be used upon approval by Ecology.

**TABLE 2-1  
MONITORING WELL SUMMARY  
UNION STATION**

Well	Installation Date	Abandonment Date	Northing	Easting	Ground Surface Elevation (a)	Reference Elevation (b)	Top of Screen Elevation	Bottom of Screen Elevation	Top of Native Soil Elevation	Notes
HC-101	4-96	3-98	1583.27	1695.87	8.80	9.09	3.8	-6.2	NA	Well was damaged during construction activities and abandoned
MW-101R	3-98	N/A	1583.24	1695.87	9.77	9.06	2.8	-7.2	NA	Replacement well for HC-101; Boring could not be advanced beyond 16 ft BGS.
HC-102	4-96	3-98	1837.46	1700.69	9.30	8.64	4.3	-5.7	NA	Well was damaged during construction activities and abandoned
MW-102R	3-98	N/A	1837.26	1700.58	9.97	8.60	-3.7	-13.7	-14.7	Replacement well for HC-102.
HC-103	4-96	N/A	2253.49	1687.23	10.30	8.99	5.5	-4.5	NA	
MW-104	11-96	N/A	2129.50	1680.99	10.65	9.59	-0.1	-10.1	-12.6	
MW-105	11-96	N/A	1935.82	1676.45	10.07	8.92	-4.5	-14.0	-15.5	
MW-106	11-96	9-97	1422.63	1662.65	9.50	9.07	-1.0	-11.0	-13.5	Well was abandoned to accommodate construction.
MW-107	11-96	10-98	1048.59	1728.86	13.30	12.59	-1.7	-11.7	-12.7	Well was abandoned to accommodate construction.
MW-107R	2-99	N/A	1067.59	1734.64	12.99	12.43	-1.5	-7.0	-10.0	Replacement well for MW-107
MW-108	9-97	4-98	NA	NA	NA	NA	NA	NA	NA	damaged during construction activities and abandoned.
MW108R	4-98	N/A	1395.75	1684.25	9.56	8.78	-3.4	-13.4	-14.4	Replacement well for MW-108.
B-4	12-85	N/A	1886.32	1994.74	36.80	36.36	-4.6	-9.6	-12.1	
B-6	12-85	6-99	1406.35	2033.29	34.30	34.08	-0.9	-5.7	NA	Well was abandoned to accommodate construction.
B-6R	11-99	N/A	1501.99	2010.27	34.38	34.38	10.4	-9.6	-17.1	Replacement well for B-6.

NA = Not available  
N/A = Not applicable.

- (a) Ground surface elevation at time of well installation.
- (b) Reference elevation is used for measuring groundwater levels and represents most current survey information.

Note: All elevations are in feet, City of Seattle Datum.

**TABLE 2-2**  
**QUARTERLY GROUNDWATER ELEVATION SUMMARY**  
**SEPTEMBER 2000 TO JUNE 2001**  
**UNION STATION**

Well	Date	Reference Elevation (ft)	Depth to Water (ft)	Groundwater Elevation (ft)
B-4	9/26/2000	36.36	35.94	0.42
B-4	12/19/2000	36.36	34.64	1.72
B-4	3/13/2001	36.36	38.44	-2.08
B-4	6/26/2001	36.36	39.27	-2.91
B-6R	9/26/2000	34.38	22.35	12.03
B-6R	12/19/2000	34.38	21.69	12.69
B-6R	3/13/2001	34.38	22.90	11.48
B-6R	6/26/2001	34.38	23.00	11.38
MW-101R	9/26/2000	9.06	7.08	1.98
MW-101R	12/19/2000	9.06	6.83	2.23
MW-101R	3/13/2001	9.06	6.39	2.67
MW-101R	6/26/2001	9.06	6.28	2.78
MW-102R	9/26/2000	8.60	9.93	-1.33
MW-102R	12/19/2000	8.60	9.70	-1.10
MW-102R	3/13/2001	8.60	9.37	-0.77
MW-102R	6/26/2001	8.60	9.40	-0.80
HC-103	9/26/2000	8.99	7.15	1.84
HC-103	12/19/2000	8.99	6.79	2.20
HC-103	3/13/2001	8.99	6.34	2.65
HC-103	6/26/2001	8.99	6.91	2.08
MW-104	9/26/2000	9.59	11.88	-2.29
MW-104	12/19/2000	9.59	11.22	-1.63
MW-104	3/13/2001	9.59	11.88	-2.29
MW-104	6/26/2001	9.59	10.50	-0.91
MW-105	9/26/2000	8.92	10.91	-1.99
MW-105	12/19/2000	8.92	9.71	-0.79
MW-105	3/13/2001	8.92	8.99	-0.07
MW-105	6/26/2001	8.92	9.26	-0.34
MW-107R	9/26/2000	12.43	9.12	3.31
MW-107R	12/19/2000	12.43	8.30	4.13
MW-107R	3/13/2001	12.43	8.95	3.48
MW-107R	6/26/2001	12.43	7.97	4.46
MW-108R	9/26/2000	8.78	5.10	3.68
MW-108R	12/19/2000	8.78	5.87	2.91
MW-108R	3/13/2001	8.78	4.28	4.50
MW-108R	6/26/2001	8.78	4.79	3.99

**TABLE 2-3  
SUMMARY OF GROUNDWATER ANALYTICAL DATA  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	B-4	B-4	B-4	B-4	B-4	B-4	B-4	B-4
					AK50J #####	BD02I #####	BK98J #####	BT43J #####	CF72G #####	CP44A #####	CV96H #####	DH51I #####
<b>TPH (µg/L)</b>												
Diesel-Range Petroleum Hydrocarbons	WTPH-Dx		6586	400 (b)	2300	2900	3600	7700	4700	5900	4200	6400 J
Motor Oil-Range Petroleum Hydrocarbons	WTPH-Dx			1100 (b)	500 U	500 U	500 U	1300	1300	1100	500 U	1200
Gasoline-Range Petroleum Hydrocarbons	WTPH-G		7591	600 (b)	4500	3100 J	6200	9000	4800	6000	6000	5200
<b>CPAH (µg/L)</b>												
Benzo(a)anthracene	8270-SIM	1.0		1.0	0.44	0.53	9.8	6.0	4.0	0.39	17	1.0
Chrysene	8270-SIM	1.0		1.0	0.37	0.43	9.0	4.5	3.3	0.34 M	16	0.83
Benzo(b)fluoranthene	8270-SIM	1.0		1.0	0.06 J	0.08 J	6.8	2.8	1.3	0.04 MJ	9.6	0.22
Benzo(k)fluoranthene	8270-SIM	1.0		1.0	0.12	0.10	6.2	2.3	2.5	0.05 MJ	13	0.33
Benzo(a)pyrene	8270-SIM	1.0		1.0	0.13	0.16	9.8	4.2	3.1	0.07 J	17	0.34
Indeno(1,2,3-cd)pyrene	8270-SIM	1.0		1.0	0.11 U	0.10 U	5.4	2.6	1.6	0.10 U	6.8	0.15
Dibenzo(a,h)anthracene	8270-SIM	1.0		1.0	0.11 U	0.10 U	1.3	0.28	0.45	0.10 U	2.1	0.10 U
<b>SEMIVOLATILES (µg/L)</b>												
Phenol	8270	1100000		10	9.7	2.0 U	1.5 J	3.1	2.2 J	60 U	3.3	2.0 U
Bis-(2-Chloroethyl) Ether	8270	10		10	2.1 U	2.0 U	2.0 U	2.0 U	2.0 U	60 U	2.0 U	2.0 U
2-Chlorophenol	8270	96.7		10	1.1 U	1.0 U	1.0 U	1.0 U	1.0 U	30 U	1.0 U	1.0 U
1,3-Dichlorobenzene	8270	2600		10	1.1 U	1.0 U	1.0 U	1.0 U	1.0 U	30 U	1.0 U	1.0 U
1,4-Dichlorobenzene	8270	10		10	1.1 U	1.0 U	1.0 U	1.0 U	1.0 U	30 U	1.0 U	1.0 U
Benzyl Alcohol	8270	20		10	5.3 U	5.0 U	5.0 U	5.0 U	5.0 U	150 U	5.0 U	5.0 U
1,2-Dichlorobenzene	8270	4200		10	1.1 U	1.0 U	1.0 U	1.0 U	1.0 U	30 U	1.0 U	1.0 U
2-Methylphenol	8270			10 (c)	2.1 U	2.0 U	2.0 U	2.0 U	2.0 U	60 U	2.0 U	1.0 U
2,2'-Oxybis(1-Chloropropane)	8270			10 (c)	1.1 U	1.0 U	1.0 U	1.0 U	1.0 U	30 U	1.0 U	1.0 U
4-Methylphenol	8270			10 (c)	1.1 U	1.0 U	3.3 J	1.0 U	1.0 U	30 U	1.0 U	2.2
N-Nitroso-Di-N-Propylamine	8270	10		10	2.1 U	2.0 U	2.0 U	2.0 U	2.0 U	60 U	2.0 U	2.0 U
Hexachloroethane	8270	10		10	2.1 U	2.0 U	2.0 U	2.0 U	2.0 U	60 U	2.0 U	2.0 U
Nitrobenzene	8270	449		10	1.1 U	1.0 U	1.0 U	1.0 U	1.0 U	30 U	1.0 U	1.0 U
Isophorone	8270	600		10	1.1 U	1.0 U	1.0 U	1.0 U	1.0 U	30 U	1.0 U	1.0 U
2-Nitrophenol	8270			10	5.3 U	5.0 U	5.0 U	5.0 U	5.0 U	150 U	5.0 U	5.0 U
2,4-Dimethylphenol	8270	553		10	3.2 U	3.0 U	3.0 U	3.0 U	3.0 U	90 U	3.0 U	3.0 U
Benzoic Acid	8270			10	11 U	10 U	10 U	10 U	10 U	300 U	10 U	10 U
bis(2-Chloroethoxy) Methane	8270			10	1.1 U	1.0 U	1.0 U	1.0 U	1.0 U	30 U	1.0 U	1.0 U
2,4-Dichlorophenol	8270	191		10	3.2 U	3.0 U	3.0 U	3.0 U	3.0 U	90 U	3.0 U	3.0 U
1,2,4-Trichlorobenzene	8270	227		10	1.1 U	1.0 U	1.0 U	1.0 U	1.0 U	30 U	1.0 U	1.0 U
Naphthalene	8270	9880		10	33	5200	4100 J	4200 J	3800 J	3800	3100	3200
4-Chloroaniline	8270			20	3.2 U	3.0 U	3.0 U	3.0 U	3.0 U	90 U	3.0 U	3.0 U
Hexachlorobutadiene	8270	50		10	2.1 U	2.0 U	2.0 U	2.0 U	2.0 U	60 U	2.0 U	2.0 U
4-Chloro-3-methylphenol	8270			20	2.1 U	2.0 U	2.0 U	2.0 U	2.0 U	60 U	2.0 U	2.0 U
2-Methylnaphthalene	8270			10	190	860	580	650	660 J	540	670	510
Hexachlorocyclopentadiene	8270	4180		20	5.3 U	5.0 U	5.0 U	5.0 U	5.0 U	150 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	8270	10		10	5.3 U	5.0 U	5.0 U	5.0 U	5.0 U	150 U	5.0 U	5.0 U

**TABLE 2-3  
SUMMARY OF GROUNDWATER ANALYTICAL DATA  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	B-4	B-4	B-4	B-4	B-4	B-4	B-4	B-4
					AK50J #####	BD02I #####	BK98J #####	BT43J #####	CF72G #####	CP44A #####	CV96H #####	DH51I #####
2,4,5-Trichlorophenol	8270			10	5.3 U	5.0 U	5.0 U	5.0 U	5.0 U	150 U	5.0 U	5.0 U
2-Chloronaphthalene	8270			10	1.1 U	1.0 U	1.0 U	1.0 U	1.0 U	30 U	1.0 U	1.0 U
2-Nitroaniline	8270			50	5.3 U	5.0 U	5.0 U	5.0 U	5.0 U	150 U	5.0 U	5.0 U
Dimethylphthalate	8270	72000		10	1.1 U	1.0 U	1.0 U	1.0 U	1.0 U	30 U	1.0 U	1.0 U
Acenaphthylene	8270			10	3.7	1.9	4.3 J	2.6	2.7	30 U	8.8	2.0
3-Nitroaniline	8270			50	6.4 U	6.0 U	6.0 U	6.0 U	6.0 U	180 U	6.0 U	6.0 U
Acenaphthene	8270	225	456	10	280	450	350	420	370 J	390	430	350
2,4-Dinitrophenol	8270	3460		50	11 U	10 U	10 U	10 U	10 U	300 U	10 U	10 U
4-Nitrophenol	8270			50	5.3 U	5.0 U	5.0 U	5.0 U	5.0 U	150 U	5.0 U	5.0 U
Dibenzofuran	8270			10	13	21	25 J	22	20	26 J	23	18
2,6-Dinitrotoluene	8270			10	5.3 U	5.0 U	5.0 U	5.0 U	5.0 U	150 U	5.0 U	5.0 U
2,4-Dinitrotoluene	8270	10		10	5.3 U	5.0 U	5.0 U	5.0 U	5.0 U	150 U	5.0 U	5.0 U
Diethylphthalate	8270	28400		10	1.1 U	1.0 U	1.0 U	1.0 U	1.0	30 U	1.0 U	1.0 U
4-Chlorophenyl-phenylether	8270			10	1.1 U	1.0 U	1.0 U	1.0 U	1.0 U	30 U	1.0 U	1.0 U
Fluorene	8270	2422		10	82	55	100	150	110	120	150	69
4-Nitroaniline	8270			20	5.3 U	5.0 U	5.0 U	5.0 U	5.0 U	150 U	5.0 U	5.0 U
4,6-Dinitro-2-Methylphenol	8270			50 (c)	11 U	10 U	10 U	10 U	10 U	300 U	10 U	10 U
N-Nitrosodiphenylamine	8270	16		10	1.1 U	1.0 U	1.0 U	1.0 U	1.0 U	30 U	1.0 U	1.0 U
4-Bromophenyl-phenylether	8270			10	1.1 U	1.0 U	1.0 U	1.0 U	1.0 U	30 U	1.0 U	1.0 U
Hexachlorobenzene	8270	10		10	1.1 U	1.0 U	1.0 U	1.0 U	1.0 U	30 U	1.0 U	1.0 U
Pentachlorophenol	8270	50		50	5.3 U	5.0 U	5.0 U	5.0 U	5.0 U	150 U	5.0 U	5.0 U
Phenanthrene	8270			10	51	59	120	160	130	120	230	79
Carbazole	8270			10	19	22	19 J	27	23	30 U	24	20
Anthracene	8270	25900		10	7.3	12	18 J	22	16	30 U	28	13
Di-n-Butylphthalate	8270	2910		10 (c)	1.1 U	1.0 U	1.0 U	1.0 U	1.0 U	30 U	1.0 U	1.0 U
Fluoranthene	8270	27.1		10	6.2	6.1	20 J	17	13	30 U	42	9.3
Pyrene	8270	777		10	6.8	9.2	19 J	20	14 J	30 U	46	9.8
Butylbenzylphthalate	8270	1250		10	1.1 U	1.0 U	1.0 U	1.0 U	1.0 U	30 U	1.0 U	1.0 U
3,3'-Dichlorobenzidine	8270	20		20	5.3 U	5.0 U	5.0 U	5.0 U	5.0 U	150 U	5.0 U	5.0 U
bis(2-Ethylhexyl)phthalate	8270	10		10	1.1 U	1.0 U	1.1 J	3.2	1.0 U	30 U	1.2	1.0 U
Di-n-Octyl phthalate	8270			10	1.1 U	1.0 U	1.0 U	1.0 U	1.0 U	30 U	1.0 U	1.0 U
Benzo(g,h,i)perylene	8270			10	1.1 U	1.0 U	2.4 J	1.4	1.0 U	30 U	7.5	1.0 U



**TABLE 2-3  
SUMMARY OF GROUNDWATER ANALYTICAL DATA  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	B-4	B-4	B-4	B-4	B-4	B-4	B-4	B-4
					AK50J	BD02I	BK98J	BT43J	CF72G	CP44A	CV96H	DH51I
					#####	#####	#####	#####	#####	#####	#####	#####
<b>VOLATILES (µg/L)</b>												
Chloromethane	8260	133		10	1.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U
Bromomethane	8260	968		10 (c)	1.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U
Vinyl Chloride	8260	10		10	1.0 U	2.5 U	10 U	2.5 U	NA	5.0 U	5.0 U	5.0 U
Chloroethane	8260			10	1.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U
Methylene Chloride	8260	960		5	2.0 U	20 U	20 U	20 U	20 U	10 U	10 U	10 U
Acetone	8260			10	5.0 U	150	50 U	50 U	50 U	25 U	200	72
Carbon Disulfide	8260			10	1.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethene	8260	5		5	1.0 U	2.5 U	10 U	2.5 U	NA	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	8260			5	1.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U
trans-1,2-Dichloroethene	8260	32800		5	1.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	8260			5	1.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U
Chloroform	8260	470		5	1.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethane	8260	99		5	1.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U
2-Butanone	8260			50 (c)	5.0 U	50 U	50 U	50 U	50 U	25 U	25 U	25 U
1,1,1-Trichloroethane	8260	41700		5	1.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U
Carbon Tetrachloride	8260	5		5	1.0 U	2.5 U	10 U	2.5 U	NA	5.0 U	5.0 U	5.0 U
Vinyl Acetate	8260			50	5.0 U	50 U	50 U	50 U	50 U	25 U	25 U	25 U
Bromodichloromethane	8260	28		5	1.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U
1,2-Dichloropropane	8260	23		5	1.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U
cis-1,3-Dichloropropene	8260	19		5	1.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U
Trichloroethene	8260	81		5	1.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U
Dibromochloromethane	8260	21		10 (c)	1.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	8260	42		5	1.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U
Benzene	8260	71	219	5	260 J	140	150	94	130	140	120	130
trans-1,3-Dichloropropene	8260	19		5	1.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U
2-Chloroethylvinylether	8260			10	5.0 U	50 U	R	50 U	50 U	25 U	25 U	25 U
Bromoform	8260	360		5	1.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-Pentanone (MIBK)	8260			50 (c)	5.0 U	50 U	50 U	50 U	50 U	25 U	25 U	25 U
2-Hexanone	8260			50	5.0 U	50 U	50 U	50 U	50 U	25 U	25 U	25 U
Tetrachloroethene	8260	8.9		5	1.0 U	2.5 U	10 U	2.5 U	NA	5.0 U	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	8260	6.5		5	1.0 U	2.5 U	10 U	2.5 U	NA	5.0 U	5.0 U	5.0 U
Toluene	8260	485		5	3.8	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U
Chlorobenzene	8260	5030		5	1.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	8260	276		5	310 M	200	220	160	200 J	220	200	220
Styrene	8260			5	1.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U
Trichlorofluoromethane	8260			10 (c)	1.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloro-1,2,2-trifluoroethane	8260			10 (c)	2.0 U	20 U	20 U	20 U	20 U	10 U	10 U	10 U
m,p-Xylene	8260			5 (d)	8.2	160	10 U	130	10 U	5.0 U	5.3	5.0 U
o-Xylene	8260			5 (d)	11	10 U	10 U	10 U	10 U	6.7	6.0	5.4
1,2-Dichlorobenzene	8260	4200		10	1.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U
1,3-Dichlorobenzene	8260	2600		10	1.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U

**TABLE 2-3  
SUMMARY OF GROUNDWATER ANALYTICAL DATA  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	B-4	B-4	B-4	B-4	B-4	B-4	B-4	B-4
					AK50J #####	BD02I #####	BK98J #####	BT43J #####	CF72G #####	CP44A #####	CV96H #####	DH51I #####
1,4-Dichlorobenzene	8260	10		10	1.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U
Acrolein	8260	780		500 (c)	50 U	500 U	500 U	500 U	500 U	250 U	250 U	250 U
Methyl iodide	8260			10 (c)	1.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U
Bromoethane	8260			10 (c)	2.0 U	20 U	20 U	20 U	20 U	10 U	10 U	10 U
Acrylonitrile	8260	5		5	5.0 U	2.5 U	50 U	2.5 U	NA	5.0 U	5.0 U	5.0 U
1,1-Dichloropropene	8260			10 (c)	1.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U
Dibromomethane	8260			10 (c)	1.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U
1,1,1,2-Tetrachloroethane	8260			10 (c)	1.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane	8260			50 (c)	5.0 U	50 U	50 U	50 U	50 U	25 U	25 U	25 U
1,2,3-Trichloropropane	8260			10 (c)	3.0 U	30 U	30 U	30 U	30 U	15 U	15 U	15 U
trans-1,4-Dichloro-2-butene	8260			50 (c)	5.0 U	50 U	50 U	50 U	50 U	25 U	25 U	25 U
1,3,5-Trimethylbenzene	8260			10 (c)	19	10 U	10 U	10 U	10 U	8.0	7.6	6.0
1,2,4-Trimethylbenzene	8260			10 (c)	21	11	10	10 U	10 U	12	12	9.6
Hexachlorobutadiene	8260	50		10	5.0 U	50 U	50 U	50 U	50 U	25 U	25 U	25 U
Ethylene Dibromide	8260			10 (c)	1.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U
Bromochloromethane	8260			10 (c)	1.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U
2,2-Dichloropropane	8260			10 (c)	1.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U
1,3-Dichloropropane	8260			10 (c)	1.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U
Isopropylbenzene	8260			10 (c)	14	10 U	10 U	10 U	10 U	8.5	7.9	6.8
n-Propylbenzene	8260			10 (c)	2.7	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U
Bromobenzene	8260			10 (c)	1.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U
2-Chlorotoluene	8260			10 (c)	1.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U
4-Chlorotoluene	8260			10 (c)	1.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U
tert-Butylbenzene	8260			10 (c)	1.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U
sec-Butylbenzene	8260			10 (c)	1.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U
4-Isopropyltoluene	8260			10 (c)	5.5	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U
n-Butylbenzene	8260			10 (c)	1.0 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U
1,2,4-Trichlorobenzene	8260	227		10	5.0 U	50 U	50 U	50 U	50 U	25 U	25 U	25 U
Naphthalene	8260	9880		10	7100	7000	6600	5200	6400	5900	5400	5600
1,2,3-Trichlorobenzene	8260			10 (c)	5.0 U	50 U	50 U	50 U	50 U	25 U	25 U	25 U

**TABLE 2-3**  
**SUMMARY OF GROUNDWATER ANALYTICAL DATA**  
**06/99 TO 06/01**  
**UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	B-4	B-4	B-4	B-4	B-4	B-4	B-4	B-4
					AK50J	BD02I	BK98J	BT43J	CF72G	CP44A	CV96H	DH51I
					#####	#####	#####	#####	#####	#####	#####	#####
<b>VOLATILES-SIM (µg/L)</b>												
Vinyl Chloride	SW8260-SIM	10		10	NA	NA	NA	NA	0.50 U	NA	NA	NA
1,1-Dichloroethene	SW8260-SIM	5		5	NA	NA	NA	NA	0.50 U	NA	NA	NA
Carbon Tetrachloride	SW8260-SIM	5		5	NA	NA	NA	NA	0.50 U	NA	NA	NA
Tetrachloroethene	SW8260-SIM	8.9		5	NA	NA	NA	NA	0.50 U	NA	NA	NA
1,1,2,2-Tetrachloroethane	SW8260-SIM	6.5		5	NA	NA	NA	NA	0.50 U	NA	NA	NA
Acrylonitrile	SW8260-SIM	5		5	NA	NA	NA	NA	0.50 U	NA	NA	NA
<b>DISSOLVED METALS (µg/L)</b>												
Antimony	200.8	4300		10	1 U	5 U	2 U	1 U	1 U	1 U	1 U	1 U
Arsenic	200.8	4	32	4	2	5 U	3	3	3	3	2	3
Beryllium	200.8	2		2	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
Cadmium	200.8	8		2	1 U	16 J	2 U	1 U	1 U	1 U	1 U	1 U
Chromium	200.8	50		50	2 U	3 J	5 U	5	2 U	2 U	2 U	2 U
Copper	200.8	10		10	2 U	7 J	5 U	2 U	2 U	2 U	3	3
Lead	200.8	10		10	5 U	6 J	10 U	5 U	5 U	5 U	5 U	5 U
Mercury	7470	1		1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Nickel	200.8	10		10	4	6 J	7	4	6	6	5	5
Selenium	200.8	71		20	5 U	5 U	10 U	5 U	2 U	2 U	2 U	2 U
Silver	200.8	2		2	2 U	2 U	5 U	2 U	2 U	2 U	2 U	2 U
Zinc	200.8	77		20	20 U	70 J	40 U	20 U	20	30	20 U	20 U
<b>Cyanide (µg/L)</b>												
Total Cyanide	335.2	50		50	31 J	35	29 U	60	31	38	44	44
Weak Acid Dissoc. Cyanide	SM4500CN-I			50	NA	NA	NA	NA	NA	5 U	5 U	5 U
<b>CONVENTIONALS</b>												
Total Dissolved Solids (µg/L)	160.1				730000	820000	720000	NA	670000	750000	820000 J	810000 J
Total Suspended Solids (µg/L)	160.2				63000	680000	930000	NA	620000	440000	1800000	1000000 J
Ortho-Phosphorous (µg-P/L)	365.2				NA	NA	16	NA	NA	NA	NA	6
pH	Field				NM	NM	NM	6.78	7.04	6.68	NM	NM
Specific Conductance (µmhos)	Field				NM	NM	NM	1288	1340	1500	NM	NM
Temperature (°C)	Field				NM	NM	NM	16.6	17.1	14.6	NM	NM

**TABLE 2-3  
SUMMARY OF GROUNDWATER ANALYTICAL DATA  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	B-4	B-4	B-4	B-4	B-4	B-4	B-4	B-4
					AK50J	BD02I	BK98J	BT43J	CF72G	CP44A	CV96H	DH51I
					#####	#####	#####	#####	#####	#####	#####	#####
<b>MAJOR IONS</b>												
Calcium	6010				NA	NA	112000	NA	NA	NA	NA	111000
Magnesium	6010				NA	NA	51200	NA	NA	NA	NA	50500
Potassium	6010				NA	NA	16200	NA	NA	NA	NA	15000
Sodium	6010				NA	NA	121000	NA	NA	NA	NA	122000
Alkalinity (µg/L CaCO3)	2320				NA	NA	NA	NA	NA	NA	NA	NA
Carbonate (Alkalinity) (µg/L CaCO3)	2320				NA	NA	NA	NA	NA	NA	NA	NA
Bicarbonate (Alkalinity) (µg/L CaCO3)	2320				NA	NA	NA	NA	NA	NA	NA	NA
Bromide (µg/L)	4500Br-B				NA	NA	1600	NA	NA	NA	NA	10000 U
Fluoride (µg/L)	340.2				NA	NA	250	NA	NA	NA	NA	300
Chloride (µg/L)	325.2				NA	NA	51000 J	NA	NA	NA	NA	46000
N-Nitrate (µg-N/L)	Calculated				NA	NA	10 U	NA	NA	NA	NA	10 U
N-Nitrite (µg-N/L)	354.1				NA	NA	10 U	NA	NA	NA	NA	10 U
Nitrate+Nitrite (NO2+NO3) (µg-N/L)	353.2				NA	NA	10 U	NA	NA	NA	NA	10 U
Sulfate (µg/L)	375.2				NA	NA	7800 J	NA	NA	NA	NA	4800

**TABLE 2-3  
SUMMARY OF GROUNDWATER ANALYTICAL DATA  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	B-6	B-6R	B-6R	B-12	B-6R	B-6R	B-6R
					AK50H #####	BD02H #####	BK98H #####	Dup of B-6R BK98I 3/22/2000	BT43I #####	CF72F #####	CP44H #####
<b>TPH (µg/L)</b>											
Diesel-Range Petroleum Hydrocarbons	WTPH-Dx		6586	400 (b)	250 U	250 U	250 U	250 U	250 U	250 U	250 U
Motor Oil-Range Petroleum Hydrocarbons	WTPH-Dx			1100 (b)	500 U	500 U	500 U	500 U	500 U	500 U	500 U
Gasoline-Range Petroleum Hydrocarbons	WTPH-G		7591	600 (b)	250 U	250 U	250 U	250 U	250 U	250 U	250 U
<b>CPAH (µg/L)</b>											
Benzo(a)anthracene	8270-SIM	1.0		1.0	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.03 MJ
Chrysene	8270-SIM	1.0		1.0	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Benzo(b)fluoranthene	8270-SIM	1.0		1.0	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Benzo(k)fluoranthene	8270-SIM	1.0		1.0	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Benzo(a)pyrene	8270-SIM	1.0		1.0	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Indeno(1,2,3-cd)pyrene	8270-SIM	1.0		1.0	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Dibenzo(a,h)anthracene	8270-SIM	1.0		1.0	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
<b>SEMIVOLATILES (µg/L)</b>											
Phenol	8270	1100000		10	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Bis-(2-Chloroethyl) Ether	8270	10		10	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2-Chlorophenol	8270	96.7		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	8270	2600		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	8270	10		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzyl Alcohol	8270			20	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichlorobenzene	8270	4200		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Methylphenol	8270			10 (c)	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2,2'-Oxybis(1-Chloropropane)	8270			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Methylphenol	8270			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
N-Nitroso-Di-N-Propylamine	8270	10		10	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Hexachloroethane	8270	10		10	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Nitrobenzene	8270	449		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isophorone	8270	600		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Nitrophenol	8270			10	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dimethylphenol	8270	553		10	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Benzoic Acid	8270			10	10 U	10 U	10 U	10 U	10 U	10 U	10 U
bis(2-Chloroethoxy) Methane	8270			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,4-Dichlorophenol	8270	191		10	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
1,2,4-Trichlorobenzene	8270	227		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Naphthalene	8270	9880		10	1.0 U	1.0 U	4.0 J	1.0 UJ	1.0 U	1.0 U	1.0 U
4-Chloroaniline	8270			20	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Hexachlorobutadiene	8270	50		10	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Chloro-3-methylphenol	8270			20	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2-Methylnaphthalene	8270			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Hexachlorocyclopentadiene	8270	4180		20	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	8270	10		10	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

**TABLE 2-3**  
**SUMMARY OF GROUNDWATER ANALYTICAL DATA**  
**06/99 TO 06/01**  
**UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	B-6	B-6R	B-6R	B-12	B-6R	B-6R	B-6R
					AK50H #####	BD02H #####	BK98H #####	Dup of B-6R BK98I 3/22/2000	BT43I #####	CF72F #####	CP44H #####
2,4,5-Trichlorophenol	8270			10	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Chloronaphthalene	8270			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Nitroaniline	8270			50	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dimethylphthalate	8270	72000		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Acenaphthylene	8270			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
3-Nitroaniline	8270			50	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U
Acenaphthene	8270	225	456	10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U
2,4-Dinitrophenol	8270	3460		50	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Nitrophenol	8270			50	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dibenzofuran	8270			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,6-Dinitrotoluene	8270			10	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dinitrotoluene	8270	10		10	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Diethylphthalate	8270	28400		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorophenyl-phenylether	8270			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Fluorene	8270	2422		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Nitroaniline	8270			20	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4,6-Dinitro-2-Methylphenol	8270			50 (c)	10 U	10 U	10 U	10 U	10 U	10 U	10 U
N-Nitrosodiphenylamine	8270	16		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Bromophenyl-phenylether	8270			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Hexachlorobenzene	8270	10		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	8270	50		50	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Phenanthrene	8270			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbazole	8270			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Anthracene	8270	25900		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Di-n-Butylphthalate	8270	2910		10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Fluoranthene	8270	27.1		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pyrene	8270	777		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U
Butylbenzylphthalate	8270	1250		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
3,3'-Dichlorobenzidine	8270	20		20	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
bis(2-Ethylhexyl)phthalate	8270	10		10	30 J	2.0	1.0 U	1.4	2.6	1.0 U	1.0 U
Di-n-Octyl phthalate	8270			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzo(g,h,i)perylene	8270			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

**TABLE 2-3  
SUMMARY OF GROUNDWATER ANALYTICAL DATA  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	B-6	B-6R	B-6R	B-12	B-6R	B-6R	B-6R
					AK50H #####	BD02H #####	BK98H #####	Dup of B-6R BK98I 3/22/2000	BT43I #####	CF72F #####	CP44H #####
<b>VOLATILES (µg/L)</b>											
Chloromethane	8260	133		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	8260	968		10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl Chloride	8260	10		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	8260			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	8260	960		5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Acetone	8260			10	5.9	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	6.9
Carbon Disulfide	8260			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	8260	5		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	8260			5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	8260	32800		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	8260			5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	8260	470		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	8260	99		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone	8260			50 (c)	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,1-Trichloroethane	8260	41700		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon Tetrachloride	8260	5		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl Acetate	8260			50	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	8260	28		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	8260	23		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	8260	19		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	8260	81		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	8260	21		10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	8260	42		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzene	8260	71	219	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	8260	19		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chloroethylvinylether	8260			10	5.0 U	5.0 U	R	R	5.0 U	5.0 U	5.0 U
Bromoform	8260	360		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Methyl-2-Pentanone (MIBK)	8260			50 (c)	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Hexanone	8260			50	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	8260	8.9		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	8260	6.5		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	8260	485		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	8260	5030		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	8260	276		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	8260			5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichlorotrifluoroethane	8260			10 (c)	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
m,p-Xylene	8260			5 (d)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
o-Xylene	8260			5 (d)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	8260	4200		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	8260	2600		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

**TABLE 2-3  
SUMMARY OF GROUNDWATER ANALYTICAL DATA  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	B-6	B-6R	B-6R	B-12	B-6R	B-6R	B-6R
					AK50H #####	BD02H #####	BK98H #####	Dup of B-6R BK98I 3/22/2000	BT43I #####	CF72F #####	CP44H #####
1,4-Dichlorobenzene	8260	10		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Acrolein	8260	780		500 (c)	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Methyl Iodide	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoethane	8260			10 (c)	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Acrylonitrile	8260	5		5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U
1,1-Dichloropropene	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromomethane	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1,2-Tetrachloroethane	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	8260			50 (c)	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2,3-Trichloropropane	8260			10 (c)	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
trans-1,4-Dichloro-2-butene	8260			50 (c)	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,3,5-Trimethylbenzene	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trimethylbenzene	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Hexachlorobutadiene	8260	50		10	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethylene Dibromide	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromochloromethane	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,2-Dichloropropane	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichloropropane	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzene	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
n-Propylbenzene	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromobenzene	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chlorotoluene	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorotoluene	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
tert-Butylbenzene	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
sec-Butylbenzene	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Isopropyltoluene	8260			10 (c)	1.0 U	1.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
n-Butylbenzene	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	8260	227		10	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Naphthalene	8260	9880		10	8.0	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2,3-Trichlorobenzene	8260			10 (c)	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U



**TABLE 2-3  
SUMMARY OF GROUNDWATER ANALYTICAL DATA  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	B-6	B-6R	B-6R	B-12	B-6R	B-6R	B-6R
					AK50H #####	BD02H #####	BK98H #####	Dup of B-6R BK98I 3/22/2000	BT43I #####	CF72F #####	CP44H #####
<b>VOLATILES-SIM (µg/L)</b>											
Vinyl Chloride	SW8260-SIM	10		10	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethene	SW8260-SIM	5		5	NA	NA	NA	NA	NA	NA	NA
Carbon Tetrachloride	SW8260-SIM	5		5	NA	NA	NA	NA	NA	NA	NA
Tetrachloroethene	SW8260-SIM	8.9		5	NA	NA	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	SW8260-SIM	6.5		5	NA	NA	NA	NA	NA	NA	NA
Acrylonitrile	SW8260-SIM	5		5	NA	NA	NA	NA	NA	NA	NA
<b>DISSOLVED METALS (µg/L)</b>											
Antimony	200.8	4300		10	1 U	5 U	1 U	2 U	1 U	1 U	1 U
Arsenic	200.8	4	32	4	13	6	20	20	17	35	21
Beryllium	200.8	2		2	1 U	1 U	1 U	2 U	1 U	1 U	1 U
Cadmium	200.8	8		2	1 U	1 U	1 U	2 U	1 U	1 U	1 U
Chromium	200.8	50		50	9	2 U	2 U	5 U	4	3	2 U
Copper	200.8	10		10	2 U	2 U	2 U	5 U	3	3	2 U
Lead	200.8	10		10	5 U	5 U	5 U	10 U	5 U	5 U	5 U
Mercury	7470	1		1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Nickel	200.8	10		10	2	2 U	2 U	5 U	3	4	3
Selenium	200.8	71		20	5 U	5 U	5 U	10 U	5 U	2 U	2 U
Silver	200.8	2		2	2 U	2 U	2 U	5 U	2 U	2 U	2 U
Zinc	200.8	77		20	20 U	20 U	20 U	40 U	20 U	20 U	20 U
<b>Cyanide (µg/L)</b>											
Total Cyanide	335.2	50		50	5 UJ	5 U	5 U	5 U	12 U	5 U	5 U
Weak Acid Dissoc. Cyanide	SM4500CN-I			50	NA	NA	NA	NA	NA	NA	5 U
<b>CONVENTIONALS</b>											
Total Dissolved Solids (µg/L)	160.1				890000	830000	900000	900000	820000 J	1000000	800000
Total Suspended Solids (µg/L)	160.2				14000	680000	460000	460000	890000	1600000	1500000
Ortho-Phosphorous (µg-P/L)	365.2				NA	NA	4 U	4 U	NA	NA	NA
pH	Field				7.27	6.76	6.99	6.99	7.18	6.59	6.19
Specific Conductance (µmhos)	Field				1770	1440	1700	1660	1301	1685	2693
Temperature (°C)	Field				17.3	16.9	15.9	15.9	16.9	17.7	14.5

**TABLE 2-3  
SUMMARY OF GROUNDWATER ANALYTICAL DATA  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	B-6	B-6R	B-6R	B-12	B-6R	B-6R	B-6R
					AK50H #####	BD02H #####	BK98H #####	Dup of B-6R BK98I 3/22/2000	BT43I #####	CF72F #####	CP44H #####
<b>MAJOR IONS</b>											
Calcium	6010				NA	NA	82300	82200	NA	NA	NA
Magnesium	6010				NA	NA	61400	61600	NA	NA	NA
Potassium	6010				NA	NA	17800	17900	NA	NA	NA
Sodium	6010				NA	NA	208000	212000	NA	NA	NA
Alkalinity (µg/L CaCO3)	2320				NA	NA	810000	810000	NA	NA	NA
Carbonate (Alkalinity) (µg/L CaCO3)	2320				NA	NA	1000 U	1000 U	NA	NA	NA
Bicarbonate (Alkalinity) (µg/L CaCO3)	2320				NA	NA	810000	810000	NA	NA	NA
Bromide (µg/L)	4500Br-B				NA	NA	500 U	500 U	NA	NA	NA
Fluoride (µg/L)	340.2				NA	NA	180	180	NA	NA	NA
Chloride (µg/L)	325.2				NA	NA	38000 J	39000 J	NA	NA	NA
N-Nitrate (µg-N/L)	Calculated				NA	NA	10 U	11	NA	NA	NA
N-Nitrite (µg-N/L)	354.1				NA	NA	10 U	10 U	NA	NA	NA
Nitrate+Nitrite (NO2+NO3) (µg-N/L)	353.2				NA	NA	10 U	11	NA	NA	NA
Sulfate (µg/L)	375.2				NA	NA	10000 J	11000 J	NA	NA	NA

**TABLE 2-3  
SUMMARY OF GROUNDWATER ANALYTICAL DATA  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	B-6R CV96I #####	B-6R DH51D #####
<b>TPH (µg/L)</b>						
Diesel-Range Petroleum Hydrocarbons	WTPH-Dx		6586	400 (b)	250 UJ	250 U
Motor Oil-Range Petroleum Hydrocarbons	WTPH-Dx			1100 (b)	500 UJ	500 U
Gasoline-Range Petroleum Hydrocarbons	WTPH-G		7591	600 (b)	250 U	250 U
<b>CPAH (µg/L)</b>						
Benzo(a)anthracene	8270-SIM	1.0		1.0	0.13 MJ	0.10 U
Chrysene	8270-SIM	1.0		1.0	0.13 J	0.10 U
Benzo(b)fluoranthene	8270-SIM	1.0		1.0	0.05 J	0.10 U
Benzo(k)fluoranthene	8270-SIM	1.0		1.0	0.08 J	0.10 U
Benzo(a)pyrene	8270-SIM	1.0		1.0	0.09 J	0.10 U
Indeno(1,2,3-cd)pyrene	8270-SIM	1.0		1.0	0.04 J	0.10 U
Dibenzo(a,h)anthracene	8270-SIM	1.0		1.0	0.10 UJ	0.10 U
<b>SEMIVOLATILES (µg/L)</b>						
Phenol	8270	1100000		10	2.0 U	2.0 U
Bis-(2-Chloroethyl) Ether	8270	10		10	2.0 U	2.0 U
2-Chlorophenol	8270	96.7		10	1.0 U	1.0 UJ
1,3-Dichlorobenzene	8270	2600		10	1.0 U	1.0 U
1,4-Dichlorobenzene	8270	10		10	1.0 U	1.0 U
Benzyl Alcohol	8270			20	5.0 U	5.0 U
1,2-Dichlorobenzene	8270	4200		10	1.0 U	1.0 U
2-Methylphenol	8270			10 (c)	2.0 U	1.0 U
2,2'-Oxybis(1-Chloropropane)	8270			10 (c)	1.0 U	1.0 U
4-Methylphenol	8270			10 (c)	1.0 U	1.0 U
N-Nitroso-Di-N-Propylamine	8270	10		10	2.0 U	2.0 U
Hexachloroethane	8270	10		10	2.0 U	2.0 U
Nitrobenzene	8270	449		10	1.0 U	1.0 U
Isophorone	8270	600		10	1.0 U	1.0 U
2-Nitrophenol	8270			10	5.0 U	5.0 U
2,4-Dimethylphenol	8270	553		10	3.0 U	3.0 U
Benzoic Acid	8270			10	10 U	10 U
bis(2-Chloroethoxy) Methane	8270			10	1.0 U	1.0 U
2,4-Dichlorophenol	8270	191		10	3.0 U	3.0 U
1,2,4-Trichlorobenzene	8270	227		10	1.0 U	1.0 U
Naphthalene	8270	9880		10	3.6	1.0 U
4-Chloroaniline	8270			20	3.0 U	3.0 U
Hexachlorobutadiene	8270	50		10	2.0 U	2.0 U
4-Chloro-3-methylphenol	8270			20	2.0 U	2.0 U
2-Methylnaphthalene	8270			10	1.0 U	1.0 U
Hexachlorocyclopentadiene	8270	4180		20	5.0 U	5.0 U
2,4,6-Trichlorophenol	8270	10		10	5.0 U	5.0 U

**TABLE 2-3**  
**SUMMARY OF GROUNDWATER ANALYTICAL DATA**  
**06/99 TO 06/01**  
**UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	B-6R CV96I #####	B-6R DH51D #####
2,4,5-Trichlorophenol	8270			10	5.0 U	5.0 U
2-Chloronaphthalene	8270			10	1.0 U	1.0 U
2-Nitroaniline	8270			50	5.0 U	5.0 U
Dimethylphthalate	8270	72000		10	1.0 U	1.0 U
Acenaphthylene	8270			10	1.0 U	1.0 U
3-Nitroaniline	8270			50	6.0 U	6.0 U
Acenaphthene	8270	225	456	10	1.0 U	1.0 UJ
2,4-Dinitrophenol	8270	3460		50	10 U	10 U
4-Nitrophenol	8270			50	5.0 U	5.0 UJ
Dibenzofuran	8270			10	1.0 U	1.0 U
2,6-Dinitrotoluene	8270			10	5.0 U	5.0 U
2,4-Dinitrotoluene	8270	10		10	5.0 U	5.0 U
Diethylphthalate	8270	28400		10	1.0 U	1.0 U
4-Chlorophenyl-phenylether	8270			10	1.0 U	1.0 U
Fluorene	8270	2422		10	1.0 U	1.0 U
4-Nitroaniline	8270			20	5.0 U	5.0 U
4,6-Dinitro-2-Methylphenol	8270			50 (c)	10 U	10 U
N-Nitrosodiphenylamine	8270	16		10	1.0 U	1.0 U
4-Bromophenyl-phenylether	8270			10	1.0 U	1.0 U
Hexachlorobenzene	8270	10		10	1.0 U	1.0 U
Pentachlorophenol	8270	50		50	5.0 U	5.0 U
Phenanthrene	8270			10	1.8	1.0 U
Carbazole	8270			10	1.0 U	1.0 U
Anthracene	8270	25900		10	1.0 U	1.0 U
Di-n-Butylphthalate	8270	2910		10 (c)	1.0 U	1.0 U
Fluoranthene	8270	27.1		10	1.0 U	1.0 U
Pyrene	8270	777		10	1.0 U	1.0 U
Butylbenzylphthalate	8270	1250		10	1.0 U	1.0 U
3,3'-Dichlorobenzidine	8270	20		20	5.0 U	5.0 U
bis(2-Ethylhexyl)phthalate	8270	10		10	1.0 U	1.0 U
Di-n-Octyl phthalate	8270			10	1.0 U	1.0 U
Benzo(g,h,i)perylene	8270			10	1.0 U	1.0 U

**TABLE 2-3**  
**SUMMARY OF GROUNDWATER ANALYTICAL DATA**  
**06/99 TO 06/01**  
**UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	B-6R CV96I #####	B-6R DH51D #####
<b>VOLATILES (µg/L)</b>						
Chloromethane	8260	133		10	1.0 U	1.0 U
Bromomethane	8260	968		10 (c)	1.0 U	1.0 U
Vinyl Chloride	8260	10		10	1.0 U	1.0 U
Chloroethane	8260			10	1.0 U	1.0 U
Methylene Chloride	8260	960		5	2.0 U	2.0 U
Acetone	8260			10	5.0 U	5.0 U
Carbon Disulfide	8260			10	1.0 U	1.0 U
1,1-Dichloroethene	8260	5		5	1.0 U	1.0 U
1,1-Dichloroethane	8260			5	1.0 U	1.0 U
trans-1,2-Dichloroethene	8260	32800		5	1.0 U	1.0 U
cis-1,2-Dichloroethene	8260			5	1.0 U	1.0 U
Chloroform	8260	470		5	1.0 U	1.0 U
1,2-Dichloroethane	8260	99		5	1.0 U	1.0 U
2-Butanone	8260			50 (c)	5.0 U	5.0 U
1,1,1-Trichloroethane	8260	41700		5	1.0 U	1.0 U
Carbon Tetrachloride	8260	5		5	1.0 U	1.0 U
Vinyl Acetate	8260			50	5.0 U	5.0 U
Bromodichloromethane	8260	28		5	1.0 U	1.0 U
1,2-Dichloropropane	8260	23		5	1.0 U	1.0 U
cis-1,3-Dichloropropene	8260	19		5	1.0 U	1.0 U
Trichloroethene	8260	81		5	1.0 U	1.0 U
Dibromochloromethane	8260	21		10 (c)	1.0 U	1.0 U
1,1,2-Trichloroethane	8260	42		5	1.0 U	1.0 U
Benzene	8260	71	219	5	1.0 U	1.0 U
trans-1,3-Dichloropropene	8260	19		5	1.0 U	1.0 U
2-Chloroethylvinylether	8260			10	5.0 U	5.0 U
Bromoform	8260	360		5	1.0 U	1.0 U
4-Methyl-2-Pentanone (MIBK)	8260			50 (c)	5.0 U	5.0 U
2-Hexanone	8260			50	5.0 U	5.0 U
Tetrachloroethene	8260	8.9		5	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	8260	6.5		5	1.0 U	1.0 U
Toluene	8260	485		5	1.0 U	1.0 U
Chlorobenzene	8260	5030		5	1.0 U	1.0 U
Ethylbenzene	8260	276		5	1.0 U	1.0 U
Styrene	8260			5	1.0 U	1.0 U
Trichlorofluoromethane	8260			10 (c)	1.0 U	1.0 U
1,1,2-Trichlorotrifluoroethane	8260			10 (c)	2.0 U	2.0 U
m,p-Xylene	8260			5 (d)	1.0 U	1.0 U
o-Xylene	8260			5 (d)	1.0 U	1.0 U
1,2-Dichlorobenzene	8260	4200		10	1.0 U	1.0 U
1,3-Dichlorobenzene	8260	2600		10	1.0 U	1.0 U

**TABLE 2-3**  
**SUMMARY OF GROUNDWATER ANALYTICAL DATA**  
**06/99 TO 06/01**  
**UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	B-6R CV96I #####	B-6R DH51D #####
1,4-Dichlorobenzene	8260	10		10	1.0 U	1.0 U
Acrolein	8260	780		500 (c)	50 U	50 U
Methyl iodide	8260			10 (c)	1.0 U	1.0 U
Bromoethane	8260			10 (c)	2.0 U	2.0 U
Acrylonitrile	8260	5		5	1.0 U	1.0 U
1,1-Dichloropropene	8260			10 (c)	1.0 U	1.0 U
Dibromomethane	8260			10 (c)	1.0 U	1.0 U
1,1,1,2-Tetrachloroethane	8260			10 (c)	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	8260			50 (c)	5.0 U	5.0 U
1,2,3-Trichloropropane	8260			10 (c)	3.0 U	3.0 U
trans-1,4-Dichloro-2-butene	8260			50 (c)	5.0 U	5.0 U
1,3,5-Trimethylbenzene	8260			10 (c)	1.0 U	1.0 U
1,2,4-Trimethylbenzene	8260			10 (c)	1.0 U	1.0 U
Hexachlorobutadiene	8260	50		10	5.0 U	5.0 U
Ethylene Dibromide	8260			10 (c)	1.0 U	1.0 U
Bromochloromethane	8260			10 (c)	1.0 U	1.0 U
2,2-Dichloropropane	8260			10 (c)	1.0 U	1.0 U
1,3-Dichloropropane	8260			10 (c)	1.0 U	1.0 U
Isopropylbenzene	8260			10 (c)	1.0 U	1.0 U
n-Propylbenzene	8260			10 (c)	1.0 U	1.0 U
Bromobenzene	8260			10 (c)	1.0 U	1.0 U
2-Chlorotoluene	8260			10 (c)	1.0 U	1.0 U
4-Chlorotoluene	8260			10 (c)	1.0 U	1.0 U
tert-Butylbenzene	8260			10 (c)	1.0 U	1.0 U
sec-Butylbenzene	8260			10 (c)	1.0 U	1.0 U
4-Isopropyltoluene	8260			10 (c)	1.0 U	1.0 U
n-Butylbenzene	8260			10 (c)	1.0 U	1.0 U
1,2,4-Trichlorobenzene	8260	227		10	5.0 U	5.0 U
Naphthalene	8260	9880		10	5.0 U	5.0 U
1,2,3-Trichlorobenzene	8260			10 (c)	5.0 U	5.0 U

**TABLE 2-3  
SUMMARY OF GROUNDWATER ANALYTICAL DATA  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	B-6R CV96I #####	B-6R DH51D #####
<b>VOLATILES-SIM (µg/L)</b>						
Vinyl Chloride	SW8260-SIM	10		10	NA	NA
1,1-Dichloroethene	SW8260-SIM	5		5	NA	NA
Carbon Tetrachloride	SW8260-SIM	5		5	NA	NA
Tetrachloroethene	SW8260-SIM	8.9		5	NA	NA
1,1,2,2-Tetrachloroethane	SW8260-SIM	6.5		5	NA	NA
Acrylonitrile	SW8260-SIM	5		5	NA	NA
<b>DISSOLVED METALS (µg/L)</b>						
Antimony	200.8	4300		10	1 U	1 U
Arsenic	200.8	4	32	4	27	33
Beryllium	200.8	2		2	1 U	1 U
Cadmium	200.8	8		2	1 U	1 U
Chromium	200.8	50		50	2 U	4
Copper	200.8	10		10	2 U	3
Lead	200.8	10		10	5 U	5 U
Mercury	7470	1		1	0.1 U	0.1 U
Nickel	200.8	10		10	3	2
Selenium	200.8	71		20	2 U	2 U
Silver	200.8	2		2	2 U	2 U
Zinc	200.8	77		20	20 U	20 U
<b>Cyanide (µg/L)</b>						
Total Cyanide	335.2	50		50	5 U	5 U
Weak Acid Dissoc. Cyanide	SM4500CN-I			50	5 U	5 U
<b>CONVENTIONALS</b>						
Total Dissolved Solids (µg/L)	160.1				1100000 J	1200000 J
Total Suspended Solids (µg/L)	160.2				2400000	370000 J
Ortho-Phosphorous (µg-P/L)	365.2				NA	16
pH	Field				7.90	6.66
Specific Conductance (µmhos)	Field				2720	1698
Temperature (°C)	Field				15.1	16.8

**TABLE 2-3  
SUMMARY OF GROUNDWATER ANALYTICAL DATA  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	B-6R CV96I #####	B-6R DH51D #####
<b>MAJOR IONS</b>						
Calcium	6010				NA	57100
Magnesium	6010				NA	43700
Potassium	6010				NA	14600
Sodium	6010				NA	338000
Alkalinity (µg/L CaCO <sub>3</sub> )	2320				NA	1000000
Carbonate (Alkalinity) (µg/L CaCO <sub>3</sub> )	2320				NA	1000 U
Bicarbonate (Alkalinity) (µg/L CaCO <sub>3</sub> )	2320				NA	1000000
Bromide (µg/L)	4500Br-B				NA	500 U
Fluoride (µg/L)	340.2				NA	100
Chloride (µg/L)	325.2				NA	46000
N-Nitrate (µg-N/L)	Calculated				NA	10 U
N-Nitrite (µg-N/L)	354.1				NA	10 U
Nitrate+Nitrite (NO <sub>2</sub> +NO <sub>3</sub> ) (µg-N/L)	353.2				NA	10 U
Sulfate (µg/L)	375.2				NA	9000



**TABLE 2-3  
SUMMARY OF GROUNDWATER ANALYTICAL DATA  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-101R	MW110	MW-101R	MW-101R	MW-101R	MW-101R
					AK50A 6/16/1999	Dup of MW-101R AK50B 6/16/1999	BD02A 12/16/1999	BK98G 3/22/2000	BT43A #####	CF72H 9/27/2000
<b>TPH (µg/L)</b>										
Diesel-Range Petroleum Hydrocarbons	WTPH-Dx		6586	400 (b)	2200	2600	2400	3500	4000	3000
Motor Oil-Range Petroleum Hydrocarbons	WTPH-Dx			1100 (b)	500 U	500 U	500 U	500 U	500 U	1000 U
Gasoline-Range Petroleum Hydrocarbons	WTPH-G		7591	600 (b)	5200	4500	4700	6200	9500	5700
<b>CPAH (µg/L)</b>										
Benzo(a)anthracene	8270-SIM	1.0		1.0	0.19	0.19	0.27	0.29	0.39	0.41
Chrysene	8270-SIM	1.0		1.0	0.18	0.14	0.20	0.22	0.27	0.30
Benzo(b)fluoranthene	8270-SIM	1.0		1.0	0.10 U	0.10 U	0.10 U	0.05 J	0.05 J	0.07 J
Benzo(k)fluoranthene	8270-SIM	1.0		1.0	0.10 U	0.10 U	0.10 U	0.07 J	0.07 J	0.12
Benzo(a)pyrene	8270-SIM	1.0		1.0	0.10 U	0.10 U	0.10 U	0.08 J	0.09 J	0.12
Indeno(1,2,3-cd)pyrene	8270-SIM	1.0		1.0	0.10 U	0.10 U	0.10 U	0.10 U	0.04 J	0.05 J
Dibenzo(a,h)anthracene	8270-SIM	1.0		1.0	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
<b>SEMIVOLATILES (µg/L)</b>										
Phenol	8270	1100000		10	3.1	2.9	2.4	1.6 J	2.0 U	2.0 U
Bis-(2-Chloroethyl) Ether	8270	10		10	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2-Chlorophenol	8270	96.7		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	8270	2600		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	8270	10		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzyl Alcohol	8270			20	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichlorobenzene	8270	4200		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Methylphenol	8270			10 (c)	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2,2'-Oxybis(1-Chloropropane)	8270			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Methylphenol	8270			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
N-Nitroso-Di-N-Propylamine	8270	10		10	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Hexachloroethane	8270	10		10	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Nitrobenzene	8270	449		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isophorone	8270	600		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Nitrophenol	8270			10	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dimethylphenol	8270	553		10	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Benzoic Acid	8270			10	10 U	10 U	10 U	10 U	10 U	10 U
bis(2-Chloroethoxy) Methane	8270			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,4-Dichlorophenol	8270	191		10	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
1,2,4-Trichlorobenzene	8270	227		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Naphthalene	8270	9880		10	4000	3600	2400	2800 J	4500 J	3000 J
4-Chloroaniline	8270			20	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Hexachlorobutadiene	8270	50		10	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Chloro-3-methylphenol	8270			20	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2-Methylnaphthalene	8270			10	450	400	520	440	710	480 J
Hexachlorocyclopentadiene	8270	4180		20	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	8270	10		10	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

**TABLE 2-3**  
**SUMMARY OF GROUNDWATER ANALYTICAL DATA**  
**06/99 TO 06/01**  
**UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-101R	MW110	MW-101R	MW-101R	MW-101R	MW-101R
					AK50A 6/16/1999	Dup of MW-101R AK50B 6/16/1999	BD02A 12/16/1999	BK98G 3/22/2000	BT43A #####	CF72H 9/27/2000
2,4,5-Trichlorophenol	8270			10	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Chloronaphthalene	8270			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Nitroaniline	8270			50	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dimethylphthalate	8270	72000		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Acenaphthylene	8270			10	2.8 J	4.1 J	1.7	1.1 J	1.8	1.5
3-Nitroaniline	8270		456	50	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U
Acenaphthene	8270	225		10	210	200	290	200	340	280 J
2,4-Dinitrophenol	8270	3460		50	10 U	10 U	10 U	10 U	10 U	10 U
4-Nitrophenol	8270			50	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dibenzofuran	8270			10	19	19	18	17 J	20	18
2,6-Dinitrotoluene	8270			10	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dinitrotoluene	8270	10		10	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Diethylphthalate	8270	28400		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorophenyl-phenylether	8270			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Fluorene	8270	2422		10	80	81 J	60	67 J	110	74
4-Nitroaniline	8270			20	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4,6-Dinitro-2-Methylphenol	8270			50 (c)	10 U	10 U	10 U	10 U	10 U	10 U
N-Nitrosodiphenylamine	8270	16		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Bromophenyl-phenylether	8270			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Hexachlorobenzene	8270	10		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	8270	50		50	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Phenanthrene	8270			10	74 J	68 J	60	64 J	130	80 J
Carbazole	8270			10	9.8 J	23 J	19	16 J	24	22
Anthracene	8270	25900		10	4.8	5.7	5.6	4.2 J	8.7	6.5
Di-n-Butylphthalate	8270	2910		10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Fluoranthene	8270	27.1		10	4.8	4.8	5.2	3.2 J	6.9	6.2
Pyrene	8270	777		10	3.7	4.9	5.9	3.0 J	6.6	6.1 J
Butylbenzylphthalate	8270	1250		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
3,3'-Dichlorobenzidine	8270	20		20	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
bis(2-Ethylhexyl)phthalate	8270	10		10	10 J	3.6 J	1.0 U	1.0 U	1.0 U	1.0 U
Di-n-Octyl phthalate	8270			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzo(g,h,i)perylene	8270			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

**TABLE 2-3  
SUMMARY OF GROUNDWATER ANALYTICAL DATA  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-101R	MW110	MW-101R	MW-101R	MW-101R	MW-101R
					AK50A 6/16/1999	Dup of MW-101R AK50B 6/16/1999	BD02A 12/16/1999	BK98G 3/22/2000	BT43A #####	CF72H 9/27/2000
<b>VOLATILES (µg/L)</b>										
Chloromethane	8260	133		10	1.0 UJ	1.0 UJ	10 U	10 U	10 U	10 U
Bromomethane	8260	968		10 (c)	1.0 UJ	1.0 UJ	10 U	10 U	10 U	10 U
Vinyl Chloride	8260	10		10	1.0 UJ	1.0 UJ	2.5 U	0.50 U	2.5 U	NA
Chloroethane	8260			10	1.0 UJ	1.0 UJ	10 U	10 U	10 U	10 U
Methylene Chloride	8260	960		5	2.0 UJ	2.0 UJ	20 U	20 U	20 U	20 U
Acetone	8260			10	5.0 UJ	5.0 UJ	50 U	50 U	50 U	50 U
Carbon Disulfide	8260			10	1.0 UJ	1.0 UJ	10 U	10 U	10 U	10 U
1,1-Dichloroethene	8260	5		5	1.0 UJ	1.0 UJ	2.5 U	0.50 U	2.5 U	NA
1,1-Dichloroethane	8260			5	1.0 UJ	1.0 UJ	10 U	10 U	10 U	10 U
trans-1,2-Dichloroethene	8260	32800		5	1.0 UJ	1.0 UJ	10 U	10 U	10 U	10 U
cis-1,2-Dichloroethene	8260			5	1.0 UJ	1.0 UJ	10 U	10 U	10 U	10 U
Chloroform	8260	470		5	1.0 UJ	1.0 UJ	10 U	10 U	10 U	10 U
1,2-Dichloroethane	8260	99		5	1.0 U	1.0 U	10 U	10 U	10 U	10 U
2-Butanone	8260			50 (c)	5.0 UJ	5.0 UJ	50 U	50 U	50 U	50 U
1,1,1-Trichloroethane	8260	41700		5	1.0 UJ	1.0 UJ	10 U	10 U	10 U	10 U
Carbon Tetrachloride	8260	5		5	1.0 U	1.0 U	2.5 U	0.50 U	2.5 U	NA
Vinyl Acetate	8260			50	5.0 UJ	5.0 UJ	50 U	50 U	50 U	50 U
Bromodichloromethane	8260	28		5	1.0 U	1.0 U	10 U	10 U	10 U	10 U
1,2-Dichloropropane	8260	23		5	1.0 U	1.0 U	10 U	10 U	10 U	10 U
cis-1,3-Dichloropropene	8260	19		5	1.0 U	1.0 U	10 U	10 U	10 U	10 U
Trichloroethene	8260	81		5	1.0 U	1.0 U	10 U	10 U	10 U	10 U
Dibromochloromethane	8260	21		10 (c)	1.0 U	1.0 U	10 U	10 U	10 U	10 U
1,1,2-Trichloroethane	8260	42		5	1.0 UJ	1.0 UJ	10 U	10 U	10 U	10 U
Benzene	8260	71	219	5	75	87	54	64	82	72
trans-1,3-Dichloropropene	8260	19		5	1.0 U	1.0 U	10 U	10 U	10 U	10 U
2-Chloroethylvinylether	8260			10	5.0 U	5.0 U	50 U	R	50 U	50 U
Bromoform	8260	360		5	1.0 U	1.0 U	10 U	10 U	10 U	10 U
4-Methyl-2-Pentanone (MIBK)	8260			50 (c)	5.0 U	5.0 U	50 U	50 U	50 U	50 U
2-Hexanone	8260			50	5.0 U	5.0 U	50 U	50 U	50 U	50 U
Tetrachloroethene	8260	8.9		5	1.0 U	1.0 U	2.5 U	0.50 U	2.5 U	NA
1,1,2,2-Tetrachloroethane	8260	6.5		5	1.0 U	1.0 U	2.5 U	0.50 U	2.5 U	NA
Toluene	8260	485		5	16 J	23 J	10 U	12	12	10 U
Chlorobenzene	8260	5030		5	1.0 U	1.0 U	10 U	10 U	10 U	10 U
Ethylbenzene	8260	276		5	160 J	280 J	120	210	290	240 J
Styrene	8260			5	1.0 U	1.0 U	10 U	10 U	10 U	10 U
Trichlorofluoromethane	8260			10 (c)	1.0 UJ	1.0 UJ	10 U	10 U	10 U	10 U
1,1,2-Trichlorotrifluoroethane	8260			10 (c)	2.0 U	2.0 U	20 U	20 U	20 U	20 U
m,p-Xylene	8260			5 (d)	55 J	93 J	42	61	71	56 J
o-Xylene	8260			5 (d)	33 J	54 J	23	33	41	23 J
1,2-Dichlorobenzene	8260	4200		10	1.0 U	1.0 U	10 U	10 U	10 U	10 U
1,3-Dichlorobenzene	8260	2600		10	1.0 U	1.0 U	10 U	10 U	10 U	10 U

**TABLE 2-3  
SUMMARY OF GROUNDWATER ANALYTICAL DATA  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-101R	MW110		MW-101R	MW-101R	MW-101R	MW-101R
					AK50A 6/16/1999	Dup of MW-101R AK50B 6/16/1999	BD02A 12/16/1999	BK98G 3/22/2000	BT43A #####	CF72H 9/27/2000	
1,4-Dichlorobenzene	8260	10		10	1.0 U	1.0 U	10 U	10 U	10 U	10 U	10 U
Acrolein	8260	780		500 (c)	50 UJ	50 UJ	500 U	500 U	500 U	500 U	500 U
Methyl Iodide	8260			10 (c)	1.0 U	1.0 U	10 U	10 U	10 U	10 U	10 U
Bromoethane	8260			10 (c)	2.0 U	2.0 U	20 U	20 U	20 U	20 U	20 U
Acrylonitrile	8260	5		5	5.0 UJ	5.0 UJ	2.5 U	0.50 U	2.5 U		NA
1,1-Dichloropropene	8260			10 (c)	1.0 U	1.0 U	10 U	10 U	10 U	10 U	10 U
Dibromomethane	8260			10 (c)	1.0 U	1.0 U	10 U	10 U	10 U	10 U	10 U
1,1,1,2-Tetrachloroethane	8260			10 (c)	1.0 U	1.0 U	10 U	10 U	10 U	10 U	10 U
1,2-Dibromo-3-chloropropane	8260			50 (c)	5.0 U	5.0 U	50 U	50 U	50 U	50 U	50 U
1,2,3-Trichloropropane	8260			10 (c)	3.0 U	3.0 U	30 U	30 U	30 U	30 U	30 U
trans-1,4-Dichloro-2-butene	8260			50 (c)	5.0 U	5.0 U	50 U	50 U	50 U	50 U	50 U
1,3,5-Trimethylbenzene	8260			10 (c)	13 J	25 J	10	16	22		16
1,2,4-Trimethylbenzene	8260			10 (c)	29 J	53 J	22	30	40		25 J
Hexachlorobutadiene	8260	50		10	5.0 U	5.0 U	50 U	50 U	50 U	50 U	50 U
Ethylene Dibromide	8260			10 (c)	1.0 U	1.0 U	10 U	10 U	10 U	10 U	10 U
Bromochloromethane	8260			10 (c)	1.0 UJ	1.0 UJ	10 U	10 U	10 U	10 U	10 U
2,2-Dichloropropane	8260			10 (c)	1.0 UJ	1.0 UJ	10 U	10 U	10 U	10 U	10 U
1,3-Dichloropropane	8260			10 (c)	1.0 U	1.0 U	10 U	10 U	10 U	10 U	10 U
Isopropylbenzene	8260			10 (c)	5.5 J	9.6 J	10 U	10 U	10 U	10 U	10 U
n-Propylbenzene	8260			10 (c)	1.0 U	1.4	10 U	10 U	10 U	10 U	10 U
Bromobenzene	8260			10 (c)	1.0 U	1.0 U	10 U	10 U	10 U	10 U	10 U
2-Chlorotoluene	8260			10 (c)	1.0 U	1.0 U	10 U	10 U	10 U	10 U	10 U
4-Chlorotoluene	8260			10 (c)	1.0 U	1.0 U	10 U	10 U	10 U	10 U	10 U
tert-Butylbenzene	8260			10 (c)	1.0 U	1.0 U	10 U	10 U	10 U	10 U	10 U
sec-Butylbenzene	8260			10 (c)	1.0 U	1.0 U	10 U	10 U	10 U	10 U	10 U
4-Isopropyltoluene	8260			10 (c)	3.0 J	5.8 J	10 U	10 U	10 U	10 U	10 U
n-Butylbenzene	8260			10 (c)	1.0 U	1.0 U	10 U	10 U	10 U	10 U	10 U
1,2,4-Trichlorobenzene	8260	227		10	5.0 U	5.0 U	50 U	50 U	50 U	50 U	50 U
Naphthalene	8260	9880		10	7000	6400	3500	5500	7800	6000	6000
1,2,3-Trichlorobenzene	8260			10 (c)	5.0 U	5.0 U	50 U	50 U	50 U	50 U	50 U

**TABLE 2-3  
SUMMARY OF GROUNDWATER ANALYTICAL DATA  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-101R AK50A 6/16/1999	MW110 Dup of MW-101R AK50B 6/16/1999	MW-101R BD02A 12/16/1999	MW-101R BK98G 3/22/2000	MW-101R BT43A #####	MW-101R CF72H 9/27/2000
<b>VOLATILES-SIM (µg/L)</b>										
Vinyl Chloride	SW8260-SIM	10		10	NA	NA	NA	NA	NA	0.50 U
1,1-Dichloroethene	SW8260-SIM	5		5	NA	NA	NA	NA	NA	0.50 U
Carbon Tetrachloride	SW8260-SIM	5		5	NA	NA	NA	NA	NA	0.50 U
Tetrachloroethene	SW8260-SIM	8.9		5	NA	NA	NA	NA	NA	0.50 U
1,1,2,2-Tetrachloroethane	SW8260-SIM	6.5		5	NA	NA	NA	NA	NA	0.50 U
Acrylonitrile	SW8260-SIM	5		5	NA	NA	NA	NA	NA	0.50 U
<b>DISSOLVED METALS (µg/L)</b>										
Antimony	200.8	4300		10	1 U	1 U	1	1 U	1 U	1 U
Arsenic	200.8	4	32	4	13	12	14	12	12	13
Beryllium	200.8	2		2	1 U	1 U	1 U	1 U	1 U	1 U
Cadmium	200.8	8		2	1 U	1 U	1 U	1 U	1 U	1 U
Chromium	200.8	50		50	4	5	7	2 U	7	6
Copper	200.8	10		10	2 U	2 U	2 U	2 U	2 U	3
Lead	200.8	10		10	5 U	5 U	5 U	5 U	5 U	5 U
Mercury	7470	1		1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Nickel	200.8	10		10	3	3	3	3	2 U	4
Selenium	200.8	71		20	5	5 U	5	5 U	5 U	10 U
Silver	200.8	2		2	2 U	2 U	2 U	2 U	2 U	2 U
Zinc	200.8	77		20	20 U	20 U	20 U	20 U	20 U	50
<b>Cyanide (µg/L)</b>										
Total Cyanide	335.2	50		50	20 J	21 J	19	18	13 U	21
Weak Acid Dissoc. Cyanide	SM4500CN-I			50	NA	NA	NA	NA	NA	NA
<b>CONVENTIONALS</b>										
Total Dissolved Solids (µg/L)	160.1				1300000	1300000	1400000	1300000	1100000 J	960000
Total Suspended Solids (µg/L)	160.2				80000	76000	120000	120000	79000	85000
Ortho-Phosphorous (µg-P/L)	365.2				NA	NA	NA	4 U	NA	NA
pH	Field				6.13	6.13	5.75	6.83	6.93	6.65
Specific Conductance (µmhos)	Field				2200	2200	2490	3680	1650	2410
Temperature (°C)	Field				14.3	14.3	14.3	12.9	13.4	16.6

**TABLE 2-3  
SUMMARY OF GROUNDWATER ANALYTICAL DATA  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-101R	MW110	MW-101R	MW-101R	MW-101R	MW-101R
					AK50A 6/16/1999	Dup of MW-101R AK50B 6/16/1999	BD02A 12/16/1999	BK98G 3/22/2000	BT43A #####	CF72H 9/27/2000
<b>MAJOR IONS</b>										
Calcium	6010				NA	NA	NA	71500	NA	NA
Magnesium	6010				NA	NA	NA	54600	NA	NA
Potassium	6010				NA	NA	NA	16700	NA	NA
Sodium	6010				NA	NA	NA	329000	NA	NA
Alkalinity (µg/L CaCO <sub>3</sub> )	2320				NA	NA	NA	780000	NA	NA
Carbonate (Alkalinity) (µg/L CaCO <sub>3</sub> )	2320				NA	NA	NA	1000 U	NA	NA
Bicarbonate (Alkalinity) (µg/L CaCO <sub>3</sub> )	2320				NA	NA	NA	780000	NA	NA
Bromide (µg/L)	4500Br-B				NA	NA	NA	5500	NA	NA
Fluoride (µg/L)	340.2				NA	NA	NA	510	NA	NA
Chloride (µg/L)	325.2				NA	NA	NA	260000 J	NA	NA
N-Nitrate (µg-N/L)	Calculated				NA	NA	NA	10 U	NA	NA
N-Nitrite (µg-N/L)	354.1				NA	NA	NA	18	NA	NA
Nitrate+Nitrite (NO <sub>2</sub> +NO <sub>3</sub> ) (µg-N/L)	353.2				NA	NA	NA	27	NA	NA
Sulfate (µg/L)	375.2				NA	NA	NA	2500 UJ	NA	NA

**TABLE 2-3**  
**SUMMARY OF GROUNDWATER ANALYTICAL DATA**  
**06/99 TO 06/01**  
**UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-101R	MW-101R	MW-101R	MW-109
					CP44B 12/20/2000	CV96A 3/14/2001	DH51F 6/22/2001	Dup of MW-101R DH51E 6/22/2001
<b>TPH (µg/L)</b>								
Diesel-Range Petroleum Hydrocarbons	WTPH-Dx		6586	400 (b)	3100	3500	2900	2900
Motor Oil-Range Petroleum Hydrocarbons	WTPH-Dx			1100 (b)	500 U	500 U	500 U	500 U
Gasoline-Range Petroleum Hydrocarbons	WTPH-G		7591	600 (b)	6700	6000	6100	7400
<b>CPAH (µg/L)</b>								
Benzo(a)anthracene	8270-SIM	1.0		1.0	0.27	0.49	0.27	0.29
Chrysene	8270-SIM	1.0		1.0	0.20 M	0.44	0.18	0.20
Benzo(b)fluoranthene	8270-SIM	1.0		1.0	0.03 MJ	0.20	0.10 U	0.10 U
Benzo(k)fluoranthene	8270-SIM	1.0		1.0	0.04 MJ	0.24	0.10 U	0.10 U
Benzo(a)pyrene	8270-SIM	1.0		1.0	0.03 MJ	0.30	0.10 U	0.10 U
Indeno(1,2,3-cd)pyrene	8270-SIM	1.0		1.0	0.10 U	0.14	0.10 U	0.10 U
Dibenzo(a,h)anthracene	8270-SIM	1.0		1.0	0.10 U	0.10 U	0.10 U	0.10 U
<b>SEMIVOLATILES (µg/L)</b>								
Phenol	8270	1100000		10	2.0 U	2.0 U	2.0 U	2.0 U
Bis-(2-Chloroethyl) Ether	8270	10		10	2.0 U	2.0 U	2.0 U	2.0 U
2-Chlorophenol	8270	96.7		10	1.0 U	1.0 U	1.0 UJ	1.0 UJ
1,3-Dichlorobenzene	8270	2600		10	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	8270	10		10	1.0 U	1.0 U	1.0 U	1.0 U
Benzyl Alcohol	8270			20	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichlorobenzene	8270	4200		10	1.0 U	1.0 U	1.0 U	1.0 U
2-Methylphenol	8270			10 (c)	2.0 U	2.0 U	1.0 U	1.0 U
2,2'-Oxybis(1-Chloropropane)	8270			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U
4-Methylphenol	8270			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U
N-Nitroso-Di-N-Propylamine	8270	10		10	2.0 U	2.0 U	2.0 U	2.0 U
Hexachloroethane	8270	10		10	2.0 U	2.0 U	2.0 U	2.0 U
Nitrobenzene	8270	449		10	1.0 U	1.0 U	1.0 U	1.0 U
Isophorone	8270	600		10	1.0 U	1.0 U	1.0 U	1.0 U
2-Nitrophenol	8270	10		10	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dimethylphenol	8270	553		10	3.0 U	3.0 U	3.0 U	3.0 U
Benzoic Acid	8270			10	10 U	10 U	10 U	10 U
bis(2-Chloroethoxy) Methane	8270			10	1.0 U	1.0 U	1.0 U	1.0 U
2,4-Dichlorophenol	8270	191		10	3.0 U	3.0 U	3.0 U	3.0 U
1,2,4-Trichlorobenzene	8270	227		10	1.0 U	1.0 U	1.0 U	1.0 U
Naphthalene	8270	9880		10	2400	3900	3100	3200
4-Chloroaniline	8270			20	3.0 U	3.0 U	3.0 U	3.0 U
Hexachlorobutadiene	8270	50		10	2.0 U	2.0 U	2.0 U	2.0 U
4-Chloro-3-methylphenol	8270			20	2.0 U	2.0 U	2.0 U	2.0 U
2-Methylnaphthalene	8270			10	460	590	600	570
Hexachlorocyclopentadiene	8270	4180		20	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	8270	10		10	5.0 U	5.0 U	5.0 U	5.0 U

**TABLE 2-3  
SUMMARY OF GROUNDWATER ANALYTICAL DATA  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-101R	MW-101R	MW-101R	MW-109
					CP44B 12/20/2000	CV96A 3/14/2001	DH51F 6/22/2001	Dup of MW-101R DH51E 6/22/2001
2,4,5-Trichlorophenol	8270			10	5.0 U	5.0 U	5.0 U	5.0 U
2-Chloronaphthalene	8270			10	1.0 U	1.0 U	1.0 U	1.0 U
2-Nitroaniline	8270			50	5.0 U	5.0 U	5.0 U	5.0 U
Dimethylphthalate	8270	72000		10	1.0 U	1.0 U	1.0 U	1.0 U
Acenaphthylene	8270			10	1.8	1.4	1.5	1.3
3-Nitroaniline	8270			50	6.0 U	6.0 U	6.0 U	6.0 U
Acenaphthene	8270	225	456	10	330	330	330 J	330 J
2,4-Dinitrophenol	8270	3460		50	10 U	10 U	10 U	10 U
4-Nitrophenol	8270			50	5.0 U	5.0 U	5.0 UJ	5.0 UJ
Dibenzofuran	8270			10	23	17	19	18
2,6-Dinitrotoluene	8270			10	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dinitrotoluene	8270	10		10	5.0 U	5.0 U	5.0 U	5.0 U
Diethylphthalate	8270	28400		10	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorophenyl-phenylether	8270			10	1.0 U	1.0 U	1.0 U	1.0 U
Fluorene	8270	2422		10	95	58	78	64
4-Nitroaniline	8270			20	5.0 U	5.0 U	5.0 U	5.0 U
4,6-Dinitro-2-Methylphenol	8270			50 (c)	10 U	10 U	10 U	10 U
N-Nitrosodiphenylamine	8270	16		10	1.0 U	1.0 U	1.0 U	1.0 U
4-Bromophenyl-phenylether	8270			10	1.0 U	1.0 U	1.0 U	1.0 U
Hexachlorobenzene	8270	10		10	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	8270	50		50	5.0 U	5.0 U	5.0 U	5.0 U
Phenanthrene	8270			10	65	59	74	63
Carbazole	8270			10	26	19	18	18
Anthracene	8270	25900		10	6.4	5.7	7.1	6.8
Di-n-Butylphthalate	8270	2910		10 (c)	1.0 U	1.0 U	1.0 U	1.0 U
Fluoranthene	8270	27.1		10	5.3	5.1	6.1	5.8
Pyrene	8270	777		10	5.4	4.8	6.0	5.5
Butylbenzylphthalate	8270	1250		10	1.0 U	1.0 U	1.0 U	1.0 U
3,3'-Dichlorobenzidine	8270	20		20	5.0 U	5.0 U	5.0 U	5.0 U
bis(2-Ethylhexyl)phthalate	8270	10		10	1.0 U	2.3	1.0 U	1.0 U
Di-n-Octyl phthalate	8270			10	1.0 U	1.0 U	1.0 U	1.0 U
Benzo(g,h,i)perylene	8270			10	1.0 U	1.0 U	1.0 U	1.0 U



**TABLE 2-3  
SUMMARY OF GROUNDWATER ANALYTICAL DATA  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-101R	MW-101R	MW-101R	MW-109
					CP44B 12/20/2000	CV96A 3/14/2001	DH51F 6/22/2001	Dup of MW-101R DH51E 6/22/2001
<b>VOLATILES (µg/L)</b>								
Chloromethane	8260	133		10	5.0 U	5.0 U	5.0 U	1.0 U
Bromomethane	8260	968		10 (c)	5.0 U	5.0 U	5.0 U	1.0 U
Vinyl Chloride	8260	10		10	5.0 U	5.0 U	5.0 U	1.0 U
Chloroethane	8260			10	5.0 U	5.0 U	5.0 U	1.0 U
Methylene Chloride	8260	960		5	10 U	10 U	10 U	2.0 U
Acetone	8260			10	25 U	25 U	25 U	5.0 U
Carbon Disulfide	8260			10	5.0 U	5.0 U	5.0 U	1.0 U
1,1-Dichloroethene	8260	5		5	5.0 U	5.0 U	5.0 U	1.0 U
1,1-Dichloroethane	8260			5	5.0 U	5.0 U	5.0 U	1.0 U
trans-1,2-Dichloroethene	8260	32800		5	5.0 U	5.0 U	5.0 U	1.0 U
cis-1,2-Dichloroethene	8260			5	5.0 U	5.0 U	5.0 U	1.0 U
Chloroform	8260	470		5	5.0 U	5.0 U	5.0 U	1.0 U
1,2-Dichloroethane	8260	99		5	5.0 U	5.0 U	5.0 U	1.0 U
2-Butanone	8260			50 (c)	25 U	25 U	25 U	5.0 U
1,1,1-Trichloroethane	8260	41700		5	5.0 U	5.0 U	5.0 U	1.0 U
Carbon Tetrachloride	8260	5		5	5.0 U	5.0 U	5.0 U	1.0 U
Vinyl Acetate	8260			50	25 U	25 U	25 U	5.0 U
Bromodichloromethane	8260	28		5	5.0 U	5.0 U	5.0 U	1.0 U
1,2-Dichloropropane	8260	23		5	5.0 U	5.0 U	5.0 U	1.0 U
cis-1,3-Dichloropropene	8260	19		5	5.0 U	5.0 U	5.0 U	1.0 U
Trichloroethene	8260	81		5	5.0 U	5.0 U	5.0 U	1.0 U
Dibromochloromethane	8260	21		10 (c)	5.0 U	5.0 U	5.0 U	1.0 U
1,1,2-Trichloroethane	8260	42		5	5.0 U	5.0 U	5.0 U	1.0 U
Benzene	8260	71	219	5	64	82	72	64
trans-1,3-Dichloropropene	8260	19		5	5.0 U	5.0 U	5.0 U	1.0 U
2-Chloroethylvinylether	8260			10	25 U	25 U	25 U	5.0 U
Bromoform	8260	360		5	5.0 U	5.0 U	5.0 U	1.0 U
4-Methyl-2-Pentanone (MIBK)	8260			50 (c)	25 U	25 U	25 U	5.0 U
2-Hexanone	8260			50	25 U	25 U	25 U	5.0 U
Tetrachloroethene	8260	8.9		5	5.0 U	5.0 U	5.0 U	1.0 U
1,1,2,2-Tetrachloroethane	8260	6.5		5	5.0 U	5.0 U	5.0 U	1.0 U
Toluene	8260	485		5	18	11	14	18
Chlorobenzene	8260	5030		5	5.0 U	5.0 U	5.0 U	1.0 U
Ethylbenzene	8260	276		5	200	250	250 J	130 J
Styrene	8260			5	5.0 U	5.0 U	5.0 U	1.0 U
Trichlorofluoromethane	8260			10 (c)	5.0 U	5.0 U	5.0 U	1.0 U
1,1,2-Trichlorotrifluoroethane	8260			10 (c)	10 U	10 U	10 U	2.0 U
m,p-Xylene	8260			5 (d)	90	64	83 J	110 J
o-Xylene	8260			5 (d)	42	36	39 J	52 J
1,2-Dichlorobenzene	8260	4200		10	5.0 U	5.0 U	5.0 U	1.0 U
1,3-Dichlorobenzene	8260	2600		10	5.0 U	5.0 U	5.0 U	1.0 U

**TABLE 2-3  
SUMMARY OF GROUNDWATER ANALYTICAL DATA  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-101R	MW-101R	MW-101R	MW-109
					CP44B 12/20/2000	CV96A 3/14/2001	DH51F 6/22/2001	Dup of MW-101R DH51E 6/22/2001
1,4-Dichlorobenzene	8260	10		10	5.0 U	5.0 U	5.0 U	1.0 U
Acrolein	8260	780		500 (c)	250 U	250 U	250 U	50 U
Methyl Iodide	8260			10 (c)	5.0 U	5.0 U	5.0 U	1.0 U
Bromoethane	8260			10 (c)	10 U	10 U	10 U	2.0 U
Acrylonitrile	8260	5		5	5.0 U	5.0 U	5.0 U	1.0 U
1,1-Dichloropropene	8260			10 (c)	5.0 U	5.0 U	5.0 U	1.0 U
Dibromomethane	8260			10 (c)	5.0 U	5.0 U	5.0 U	1.0 U
1,1,1,2-Tetrachloroethane	8260			10 (c)	5.0 U	5.0 U	5.0 U	1.0 U
1,2-Dibromo-3-chloropropane	8260			50 (c)	25 U	25 U	25 U	5.0 U
1,2,3-Trichloropropane	8260			10 (c)	15 U	15 U	15 U	3.0 U
trans-1,4-Dichloro-2-butene	8260			50 (c)	25 U	25 U	25 U	5.0 U
1,3,5-Trimethylbenzene	8260			10 (c)	19	20	19	23
1,2,4-Trimethylbenzene	8260			10 (c)	40	39	37 J	47 J
Hexachlorobutadiene	8260	50		10	25 U	25 U	25 U	5.0 U
Ethylene Dibromide	8260			10 (c)	5.0 U	5.0 U	5.0 U	1.0 U
Bromochloromethane	8260			10 (c)	5.0 U	5.0 U	5.0 U	1.0 U
2,2-Dichloropropane	8260			10 (c)	5.0 U	5.0 U	5.0 U	1.0 U
1,3-Dichloropropane	8260			10 (c)	5.0 U	5.0 U	5.0 U	1.0 U
Isopropylbenzene	8260			10 (c)	10	11	9.3	9.8
n-Propylbenzene	8260			10 (c)	5.0 U	5.0 U	5.0 U	1.4
Bromobenzene	8260			10 (c)	5.0 U	5.0 U	5.0 U	1.0 U
2-Chlorotoluene	8260			10 (c)	5.0 U	5.0 U	5.0 U	1.0 U
4-Chlorotoluene	8260			10 (c)	5.0 U	5.0 U	5.0 U	1.0 U
tert-Butylbenzene	8260			10 (c)	5.0 U	5.0 U	5.0 U	1.0 U
sec-Butylbenzene	8260			10 (c)	5.0 U	5.0 U	5.0 U	1.0 U
4-Isopropyltoluene	8260			10 (c)	5.0 U	5.0	5.0 U	4.8
n-Butylbenzene	8260			10 (c)	5.0 U	5.0 U	5.0 U	1.0 U
1,2,4-Trichlorobenzene	8260	227		10	25 U	25 U	25 U	5.0 U
Naphthalene	8260	9880		10	5700	6400	7800	7000 J
1,2,3-Trichlorobenzene	8260			10 (c)	25 U	25 U	25 U	5.0 U

**TABLE 2-3  
SUMMARY OF GROUNDWATER ANALYTICAL DATA  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-101R CP44B 12/20/2000	MW-101R CV96A 3/14/2001	MW-101R DH51F 6/22/2001	MW-109 Dup of MW-101R DH51E 6/22/2001
<b>VOLATILES-SIM (µg/L)</b>								
Vinyl Chloride	SW8260-SIM	10		10	NA	NA	NA	NA
1,1-Dichloroethene	SW8260-SIM	5		5	NA	NA	NA	NA
Carbon Tetrachloride	SW8260-SIM	5		5	NA	NA	NA	NA
Tetrachloroethene	SW8260-SIM	8.9		5	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	SW8260-SIM	6.5		5	NA	NA	NA	NA
Acrylonitrile	SW8260-SIM	5		5	NA	NA	NA	NA
<b>DISSOLVED METALS (µg/L)</b>								
Antimony	200.8	4300		10	1 U	1 U	1 U	1 U
Arsenic	200.8	4	32	4	13	12	12	12
Beryllium	200.8	2		2	1 U	1 U	1 U	1 U
Cadmium	200.8	8		2	1 U	1 U	1 U	1 U
Chromium	200.8	50		50	2 U	4	5	4
Copper	200.8	10		10	3	2 U	2 U	2 U
Lead	200.8	10		10	5 U	5 U	5 U	5 U
Mercury	7470	1		1	0.1 U	0.1 U	0.1 U	0.1 U
Nickel	200.8	10		10	2 U	2 U	2 U	2 U
Selenium	200.8	71		20	2 U	2 U	3	2 U
Silver	200.8	2		2	2 U	2 U	2 U	2 U
Zinc	200.8	77		20	20 U	20 U	20 U	20 U
<b>Cyanide (µg/L)</b>								
Total Cyanide	335.2	50		50	16	18	17	19
Weak Acid Dissoc. Cyanide	SM4500CN-I			50	5	5 U	5 U	5 U
<b>CONVENTIONALS</b>								
Total Dissolved Solids (µg/L)	160.1				1100000	1000000 J	1000000 J	1100000 J
Total Suspended Solids (µg/L)	160.2				74000	76000	76000 J	98000 J
Ortho-Phosphorous (µg-P/L)	365.2				NA	NA	11 J	21 J
pH	Field				6.49	7.46	6.83	6.81
Specific Conductance (µmhos)	Field				2580	1918	2535	2908
Temperature (°C)	Field				13.9	12.8	14.8	14.9

**TABLE 2-3  
SUMMARY OF GROUNDWATER ANALYTICAL DATA  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-101R CP44B 12/20/2000	MW-101R CV96A 3/14/2001	MW-101R DH51F 6/22/2001	MW-109 Dup of MW-101R DH51E 6/22/2001
<b>MAJOR IONS</b>								
Calcium	6010				NA	NA	62900	60900
Magnesium	6010				NA	NA	54200	52900
Potassium	6010				NA	NA	15900	15900
Sodium	6010				NA	NA	294000	294000
Alkalinity (µg/L CaCO <sub>3</sub> )	2320				NA	NA	760000	780000
Carbonate (Alkalinity) (µg/L CaCO <sub>3</sub> )	2320				NA	NA	1000 U	1000 U
Bicarbonate (Alkalinity) (µg/L CaCO <sub>3</sub> )	2320				NA	NA	760000	780000
Bromide (µg/L)	4500Br-B				NA	NA	10000 U	10000 U
Fluoride (µg/L)	340.2				NA	NA	500	500
Chloride (µg/L)	325.2				NA	NA	150000	130000
N-Nitrate (µg-N/L)	Calculated				NA	NA	13	10 U
N-Nitrite (µg-N/L)	354.1				NA	NA	10 U	10 U
Nitrate+Nitrite (NO <sub>2</sub> +NO <sub>3</sub> ) (µg-N/L)	353.2				NA	NA	13	10 U
Sulfate (µg/L)	375.2				NA	NA	10000	9100

**TABLE 2-3  
SUMMARY OF GROUNDWATER ANALYTICAL DATA  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-102R	MW-102R	MW-109	MW-102R	MW-102R	MW-109
					AK50C 6/16/1999	BD02C 12/16/1999	Dup of MW-102R BD02B 12/16/1999	BK98D 3/22/2000	BT43B 6/14/2000	Dup of MW-102R BT43E 6/14/2000
<b>TPH (µg/L)</b>										
Diesel-Range Petroleum Hydrocarbons	WTPH-Dx		6586	400 (b)	250 U	250 U	250 U	250 U	250 U	250 U
Motor Oil-Range Petroleum Hydrocarbons	WTPH-Dx			1100 (b)	500 U	500 U	500 U	500 U	500 U	500 U
Gasoline-Range Petroleum Hydrocarbons	WTPH-G		7591	600 (b)	250 U	250 U	250 U	250 U	250 U	250 U
<b>CPAH (µg/L)</b>										
Benzo(a)anthracene	8270-SIM	1.0		1.0	0.10 U	0.10 U	0.10 U	0.10 U	0.06 J	0.05 J
Chrysene	8270-SIM	1.0		1.0	0.10 U	0.10 U	0.10 U	0.10 U	0.04 J	0.03 J
Benzo(b)fluoranthene	8270-SIM	1.0		1.0	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Benzo(k)fluoranthene	8270-SIM	1.0		1.0	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Benzo(a)pyrene	8270-SIM	1.0		1.0	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Indeno(1,2,3-cd)pyrene	8270-SIM	1.0		1.0	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Dibenzo(a,h)anthracene	8270-SIM	1.0		1.0	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
<b>SEMIVOLATILES (µg/L)</b>										
Phenol	8270	1100000		10	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Bis-(2-Chloroethyl) Ether	8270	10		10	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2-Chlorophenol	8270	96.7		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	8270	2600		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	8270	10		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzyl Alcohol	8270			20	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichlorobenzene	8270	4200		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Methylphenol	8270			10 (c)	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2,2'-Oxybis(1-Chloropropane)	8270			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Methylphenol	8270			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
N-Nitroso-Di-N-Propylamine	8270	10		10	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Hexachloroethane	8270	10		10	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Nitrobenzene	8270	449		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isophorone	8270	600		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Nitrophenol	8270			10	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dimethylphenol	8270	553		10	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Benzoic Acid	8270			10	10 U	10 U	10 U	10 U	10 U	10 U
bis(2-Chloroethoxy) Methane	8270			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,4-Dichlorophenol	8270	191		10	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
1,2,4-Trichlorobenzene	8270	227		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Naphthalene	8270	9880		10	1.0	1.0 U	1.0 U	3.7 J	9.3 J	2.8 J
4-Chloroaniline	8270			20	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Hexachlorobutadiene	8270	50		10	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Chloro-3-methylphenol	8270			20	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2-Methylnaphthalene	8270			10	1.0 U	1.0 U	1.0 U	1.0 U	1.8	1.0 U
Hexachlorocyclopentadiene	8270	4180		20	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	8270	10		10	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

**TABLE 2-3**  
**SUMMARY OF GROUNDWATER ANALYTICAL DATA**  
**06/99 TO 06/01**  
**UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-102R	MW-102R	MW-109	MW-102R	MW-102R	MW-109
					AK50C 6/16/1999	BD02C 12/16/1999	Dup of MW-102R BD02B 12/16/1999	BK98D 3/22/2000	BT43B 6/14/2000	Dup of MW-102R BT43E 6/14/2000
2,4,5-Trichlorophenol	8270			10	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Chloronaphthalene	8270			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Nitroaniline	8270			50	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dimethylphthalate	8270	72000		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Acenaphthylene	8270			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
3-Nitroaniline	8270			50	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U
Acenaphthene	8270	225	456	10	7.0	11	11	11	13	11
2,4-Dinitrophenol	8270	3460		50	10 U	10 U	10 U	10 U	10 U	10 U
4-Nitrophenol	8270			50	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dibenzofuran	8270			10	1.0 U	1.2	1.2	1.2	1.3	1.3
2,6-Dinitrotoluene	8270			10	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dinitrotoluene	8270	10		10	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Diethylphthalate	8270	28400		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorophenyl-phenylether	8270			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Fluorene	8270	2422		10	1.0 U	2.4	2.1	1.8	2.7	2.6
4-Nitroaniline	8270			20	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4,6-Dinitro-2-Methylphenol	8270			50 (c)	10 U	10 U	10 U	10 U	10 U	10 U
N-Nitrosodiphenylamine	8270	16		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Bromophenyl-phenylether	8270			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Hexachlorobenzene	8270	10		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	8270	50		50	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Phenanthrene	8270			10	1.0 U	1.0 U	1.0 U	1.0 U	3.2	3.2
Carbazole	8270			10	1.0 U	0.8 J	1.0 J	1.0 U	1.0 U	1.0 U
Anthracene	8270	25900		10	1.0 U	0.8 J	0.7 J	1.0 U	1.0	1.0 U
Di-n-Butylphthalate	8270	2910		10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Fluoranthene	8270	27.1		10	1.0 U	1.0	1.0	1.0 U	1.0	1.0 U
Pyrene	8270	777		10	1.0 U	0.9 J	1.1	1.0 U	1.0 U	1.0 U
Butylbenzylphthalate	8270	1250		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
3,3'-Dichlorobenzidine	8270	20		20	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
bis(2-Ethylhexyl)phthalate	8270	10		10	65 J	3.0 J	1.0 U	1.0 U	1.0 U	1.0 U
Di-n-Octyl phthalate	8270			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzo(g,h,i)perylene	8270			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

**TABLE 2-3  
SUMMARY OF GROUNDWATER ANALYTICAL DATA  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-102R	MW-102R	MW-109	MW-102R	MW-102R	MW-109
					AK50C 6/16/1999	BD02C 12/16/1999	Dup of MW-102R BD02B 12/16/1999	BK98D 3/22/2000	BT43B 6/14/2000	Dup of MW-102R BT43E 6/14/2000
<b>VOLATILES (µg/L)</b>										
Chloromethane	8260	133		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	8260	968		10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl Chloride	8260	10		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	8260			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	8260	960		5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Acetone	8260			10	5.0 U	6.0	5.0 U	7.6	5.0 U	5.0 U
Carbon Disulfide	8260			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	8260	5		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	8260			5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	8260	32800		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	8260			5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	8260	470		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	8260	99		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone	8260			50 (c)	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,1-Trichloroethane	8260	41700		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon Tetrachloride	8260	5		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl Acetate	8260			50	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	8260	28		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	8260	23		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	8260	19		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	8260	81		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	8260	21		10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	8260	42		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzene	8260	71	219	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	8260	19		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chloroethylvinylether	8260			10	5.0 U	5.0 U	5.0 U	R	5.0 U	5.0 U
Bromoform	8260	360		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Methyl-2-Pentanone (MIBK)	8260			50 (c)	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Hexanone	8260			50	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	8260	8.9		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	8260	6.5		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	8260	485		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	8260	5030		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	8260	276		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	8260			5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichlorotrifluoroethane	8260			10 (c)	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
m,p-Xylene	8260			5 (d)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
o-Xylene	8260			5 (d)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	8260	4200		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	8260	2600		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

**TABLE 2-3**  
**SUMMARY OF GROUNDWATER ANALYTICAL DATA**  
**06/99 TO 06/01**  
**UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-102R	MW-102R	MW-109	MW-102R	MW-102R	MW-109
					AK50C 6/16/1999	BD02C 12/16/1999	Dup of MW-102R BD02B 12/16/1999	BK98D 3/22/2000	BT43B 6/14/2000	Dup of MW-102R BT43E 6/14/2000
1,4-Dichlorobenzene	8260	10		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Acrolein	8260	780		500 (c)	50 U	50 U	50 U	50 U	50 U	50 U
Methyl Iodide	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoethane	8260			10 (c)	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Acrylonitrile	8260	5		5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloropropene	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromomethane	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1,2-Tetrachloroethane	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	8260			50 (c)	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2,3-Trichloropropane	8260			10 (c)	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
trans-1,4-Dichloro-2-butene	8260			50 (c)	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,3,5-Trimethylbenzene	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trimethylbenzene	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Hexachlorobutadiene	8260	50		10	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethylene Dibromide	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromochloromethane	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,2-Dichloropropane	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichloropropane	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzene	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
n-Propylbenzene	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromobenzene	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chlorotoluene	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorotoluene	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
tert-Butylbenzene	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
sec-Butylbenzene	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Isopropyltoluene	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
n-Butylbenzene	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	8260	227		10	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Naphthalene	8260	9880		10	20	6.9 J	11 J	10	8.7	8.0
1,2,3-Trichlorobenzene	8260			10 (c)	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U



**TABLE 2-3  
SUMMARY OF GROUNDWATER ANALYTICAL DATA  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-102R AK50C 6/16/1999	MW-102R BD02C 12/16/1999	MW-109 Dup of MW-102R BD02B 12/16/1999	MW-102R BK98D 3/22/2000	MW-102R BT43B 6/14/2000	MW-109 Dup of MW-102R BT43E 6/14/2000
<b>VOLATILES-SIM (µg/L)</b>										
Vinyl Chloride	SW8260-SIM	10		10	NA	NA	NA	NA	NA	NA
1,1-Dichloroethene	SW8260-SIM	5		5	NA	NA	NA	NA	NA	NA
Carbon Tetrachloride	SW8260-SIM	5		5	NA	NA	NA	NA	NA	NA
Tetrachloroethene	SW8260-SIM	8.9		5	NA	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	SW8260-SIM	6.5		5	NA	NA	NA	NA	NA	NA
Acrylonitrile	SW8260-SIM	5		5	NA	NA	NA	NA	NA	NA
<b>DISSOLVED METALS (µg/L)</b>										
Antimony	200.8	4300		10	1 U	1 U	1 U	1 U	1 U	1 U
Arsenic	200.8	4	32	4	4	5	6	7	8	7
Beryllium	200.8	2		2	1 U	1 U	1 U	1 U	1 U	1 U
Cadmium	200.8	8		2	1 U	1 U	1 U	1 U	1 U	1 U
Chromium	200.8	50		50	4	3	4	2 U	9	5
Copper	200.8	10		10	2 U	2 U	2 U	2 U	2 U	2 U
Lead	200.8	10		10	5 U	5 U	5 U	5 U	5 U	5 U
Mercury	7470	1		1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Nickel	200.8	10		10	5	2 U	3	2 U	2 U	2 U
Selenium	200.8	71		20	5 U	7	8	9	9 J	7 J
Silver	200.8	2		2	2 U	2 U	2 U	2 U	2 U	2 U
Zinc	200.8	77		20	20 U	20 U	20 U	20 U	20 U	20 U
<b>Cyanide (µg/L)</b>										
Total Cyanide	335.2	50		50	12 J	14	16	12	9 U	8 U
Weak Acid Dissoc. Cyanide	SM4500CN-I			50	NA	NA	NA	NA	NA	NA
<b>CONVENTIONALS</b>										
Total Dissolved Solids (µg/L)	160.1				1500000	1700000	1600000	1800000	1900000 J	1900000 J
Total Suspended Solids (µg/L)	160.2				43000	57000	58000	65000	60000	62000
Ortho-Phosphorous (µg-P/L)	365.2				NA	NA	NA	4 U	NA	NA
pH	Field				6.41	5.85	5.85	6.89	7.11	7.11
Specific Conductance (µmhos)	Field				3420	2990	2990	3960	14.8	3010
Temperature (°C)	Field				15.1	15.1	15.2	14.1	3010	14.8

**TABLE 2-3**  
**SUMMARY OF GROUNDWATER ANALYTICAL DATA**  
**06/99 TO 06/01**  
**UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-102R	MW-102R	MW-109	MW-102R	MW-102R	MW-109
					AK50C 6/16/1999	BD02C 12/16/1999	Dup of MW-102R BD02B 12/16/1999	BK98D 3/22/2000	BT43B 6/14/2000	Dup of MW-102R BT43E 6/14/2000
<b>MAJOR IONS</b>										
Calcium	6010				NA	NA	NA	197000	NA	NA
Magnesium	6010				NA	NA	NA	61100	NA	NA
Potassium	6010				NA	NA	NA	16900	NA	NA
Sodium	6010				NA	NA	NA	405000	NA	NA
Alkalinity (µg/L CaCO <sub>3</sub> )	2320				NA	NA	NA	710000	NA	NA
Carbonate (Alkalinity) (µg/L CaCO <sub>3</sub> )	2320				NA	NA	NA	1000 U	NA	NA
Bicarbonate (Alkalinity) (µg/L CaCO <sub>3</sub> )	2320				NA	NA	NA	710000	NA	NA
Bromide (µg/L)	4500Br-B				NA	NA	NA	14200	NA	NA
Fluoride (µg/L)	340.2				NA	NA	NA	210	NA	NA
Chloride (µg/L)	325.2				NA	NA	NA	640000 J	NA	NA
N-Nitrate (µg-N/L)	Calculated				NA	NA	NA	10 U	NA	NA
N-Nitrite (µg-N/L)	354.1				NA	NA	NA	10 U	NA	NA
Nitrate+Nitrite (NO <sub>2</sub> +NO <sub>3</sub> ) (µg-N/L)	353.2				NA	NA	NA	10 U	NA	NA
Sulfate (µg/L)	375.2				NA	NA	NA	6100 J	NA	NA

**TABLE 2-3**  
**SUMMARY OF GROUNDWATER ANALYTICAL DATA**  
**06/99 TO 06/01**  
**UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-102R	MW-102R	MW-109	MW102R	MW102R
					CF72A 9/27/2000	CP44E 12/20/2000	Dup of MW-102R CP44I 12/20/2000	CV96B 3/14/2001	DH51B 6/22/2001
<b>TPH (µg/L)</b>									
Diesel-Range Petroleum Hydrocarbons	WTPH-Dx		6586	400 (b)	250 U	280	310	320	320
Motor Oil-Range Petroleum Hydrocarbons	WTPH-Dx			1100 (b)	500 U	500 U	500 U	500 U	500 U
Gasoline-Range Petroleum Hydrocarbons	WTPH-G		7591	600 (b)	250 U	250 U	250 U	250 U	250 U
<b>CPAH (µg/L)</b>									
Benzo(a)anthracene	8270-SIM	1.0		1.0	0.10 U	0.07 J	0.06 MJ	0.10 U	0.10 U
Chrysene	8270-SIM	1.0		1.0	0.10 U	0.04 MJ	0.04 MJ	0.10 U	0.10 U
Benzo(b)fluoranthene	8270-SIM	1.0		1.0	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Benzo(k)fluoranthene	8270-SIM	1.0		1.0	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Benzo(a)pyrene	8270-SIM	1.0		1.0	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Indeno(1,2,3-cd)pyrene	8270-SIM	1.0		1.0	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Dibenzo(a,h)anthracene	8270-SIM	1.0		1.0	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
<b>SEMIVOLATILES (µg/L)</b>									
Phenol	8270	1100000		10	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Bis-(2-Chloroethyl) Ether	8270	10		10	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2-Chlorophenol	8270	96.7		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	8270	2600		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	8270	10		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzyl Alcohol	8270			20	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichlorobenzene	8270	4200		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Methylphenol	8270			10 (c)	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U
2,2'-Oxybis(1-Chloropropane)	8270			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Methylphenol	8270			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
N-Nitroso-Di-N-Propylamine	8270	10		10	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Hexachloroethane	8270	10		10	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Nitrobenzene	8270	449		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isophorone	8270	600		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Nitrophenol	8270			10	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dimethylphenol	8270	553		10	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Benzoic Acid	8270			10	10 U	10 U	10 U	10 U	10 U
bis(2-Chloroethoxy) Methane	8270			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,4-Dichlorophenol	8270	191		10	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
1,2,4-Trichlorobenzene	8270	227		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Naphthalene	8270	9880		10	3.3 J	1.0 U	1.0 U	1.7	1.0 U
4-Chloroaniline	8270			20	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Hexachlorobutadiene	8270	50		10	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Chloro-3-methylphenol	8270			20	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2-Methylnaphthalene	8270			10	1.0 J	3.5	3.2	1.0 U	1.0 U
Hexachlorocyclopentadiene	8270	4180		20	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	8270	10		10	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

**TABLE 2-3  
SUMMARY OF GROUNDWATER ANALYTICAL DATA  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-102R	MW-102R	MW-109	MW102R	MW102R
					CF72A 9/27/2000	CP44E 12/20/2000	Dup of MW-102R CP44I 12/20/2000	CV96B 3/14/2001	DH51B 6/22/2001
2,4,5-Trichlorophenol	8270			10	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Chloronaphthalene	8270			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Nitroaniline	8270			50	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dimethylphthalate	8270	72000		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Acenaphthylene	8270			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
3-Nitroaniline	8270			50	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U
Acenaphthene	8270	225	456	10	11 J	14	12	13	12 J
2,4-Dinitrophenol	8270	3460		50	10 U	10 U	10 U	10 U	10 U
4-Nitrophenol	8270			50	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ
Dibenzofuran	8270			10	1.1	1.5	1.5	1.5	1.3
2,6-Dinitrotoluene	8270			10	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dinitrotoluene	8270	10		10	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Diethylphthalate	8270	28400		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorophenyl-phenylether	8270			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Fluorene	8270	2422		10	2.8	3.2	3.2	2.9	3.2
4-Nitroaniline	8270			20	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4,6-Dinitro-2-Methylphenol	8270			50 (c)	10 U	10 U	10 U	10 U	10 U
N-Nitrosodiphenylamine	8270	16		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Bromophenyl-phenylether	8270			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Hexachlorobenzene	8270	10		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	8270	50		50	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Phenanthrene	8270			10	4.2	0.6 J	1.4	1.0 U	4.3
Carbazole	8270			10	1.0 U	0.8 J	0.8 J	1.0 U	1.0 U
Anthracene	8270	25900		10	1.0 U	1.0 J	0.8 J	1.0 U	1.0 U
Di-n-Butylphthalate	8270	2910		10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Fluoranthene	8270	27.1		10	1.0 U	0.9 J	0.9 J	1.0	1.0 U
Pyrene	8270	777		10	1.0 UJ	1.0 J	0.8 J	1.0 U	1.0 U
Butylbenzylphthalate	8270	1250		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
3,3'-Dichlorobenzidine	8270	20		20	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
bis(2-Ethylhexyl)phthalate	8270	10		10	1.0	1.0 U	1.0 U	7.9	1.0 U
Di-n-Octyl phthalate	8270			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzo(g,h,i)perylene	8270			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

**TABLE 2-3  
SUMMARY OF GROUNDWATER ANALYTICAL DATA  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-102R	MW-102R	MW-109	MW102R	MW102R
					CF72A 9/27/2000	CP44E 12/20/2000	Dup of MW-102R CP44I 12/20/2000	CV96B 3/14/2001	DH51B 6/22/2001
<b>VOLATILES (µg/L)</b>									
Chloromethane	8260	133		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	8260	968		10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl Chloride	8260	10		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	8260			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	8260	960		5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Acetone	8260			10	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon Disulfide	8260			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	8260	5		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	8260			5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	8260	32800		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	8260			5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	8260	470		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	8260	99		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone	8260			50 (c)	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,1-Trichloroethane	8260	41700		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon Tetrachloride	8260	5		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl Acetate	8260			50	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	8260	28		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	8260	23		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	8260	19		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	8260	81		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	8260	21		10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	8260	42		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzene	8260	71	219	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	8260	19		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chloroethylvinylether	8260			10	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromoform	8260	360		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Methyl-2-Pentanone (MIBK)	8260			50 (c)	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Hexanone	8260			50	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	8260	8.9		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	8260	6.5		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	8260	485		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	8260	5030		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	8260	276		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	8260			5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichlorotrifluoroethane	8260			10 (c)	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
m,p-Xylene	8260			5 (d)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
o-Xylene	8260			5 (d)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	8260	4200		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	8260	2600		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

**TABLE 2-3**  
**SUMMARY OF GROUNDWATER ANALYTICAL DATA**  
**06/99 TO 06/01**  
**UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-102R	MW-102R	MW-109	MW102R	MW102R
					CF72A 9/27/2000	CP44E 12/20/2000	Dup of MW-102R CP44I 12/20/2000	CV96B 3/14/2001	DH51B 6/22/2001
1,4-Dichlorobenzene	8260	10		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Acrolein	8260	780		500 (c)	50 U	50 U	50 U	50 U	50 U
Methyl Iodide	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoethane	8260			10 (c)	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Acrylonitrile	8260	5		5	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloropropene	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromomethane	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1,2-Tetrachloroethane	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	8260			50 (c)	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2,3-Trichloropropane	8260			10 (c)	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
trans-1,4-Dichloro-2-butene	8260			50 (c)	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,3,5-Trimethylbenzene	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trimethylbenzene	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Hexachlorobutadiene	8260	50		10	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethylene Dibromide	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromochloromethane	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,2-Dichloropropane	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichloropropane	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzene	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
n-Propylbenzene	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromobenzene	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chlorotoluene	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorotoluene	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
tert-Butylbenzene	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
sec-Butylbenzene	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Isopropyltoluene	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
n-Butylbenzene	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	8260	227		10	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Naphthalene	8260	9880		10	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2,3-Trichlorobenzene	8260			10 (c)	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

**TABLE 2-3  
SUMMARY OF GROUNDWATER ANALYTICAL DATA  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-102R	MW-102R	MW-109	MW102R	MW102R
					CF72A 9/27/2000	CP44E 12/20/2000	Dup of MW-102R CP44I 12/20/2000	CV96B 3/14/2001	DH51B 6/22/2001
<b>VOLATILES-SIM (µg/L)</b>									
Vinyl Chloride	SW8260-SIM	10		10	NA	NA	NA	NA	NA
1,1-Dichloroethene	SW8260-SIM	5		5	NA	NA	NA	NA	NA
Carbon Tetrachloride	SW8260-SIM	5		5	NA	NA	NA	NA	NA
Tetrachloroethene	SW8260-SIM	8.9		5	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	SW8260-SIM	6.5		5	NA	NA	NA	NA	NA
Acrylonitrile	SW8260-SIM	5		5	NA	NA	NA	NA	NA
<b>DISSOLVED METALS (µg/L)</b>									
Antimony	200.8	4300		10	1 U	1 U	1 U	1 U	1 U
Arsenic	200.8	4	32	4	10	9	10	6	7
Beryllium	200.8	2		2	1 U	1 U	1 U	1 U	1 U
Cadmium	200.8	8		2	1 U	1 U	1 U	1 U	1 U
Chromium	200.8	50		50	13	2 U	2 U	6	4
Copper	200.8	10		10	2 U	2 U	2 U	2 U	2 U
Lead	200.8	10		10	5 U	5 U	5 U	5 U	5 U
Mercury	7470	1		1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Nickel	200.8	10		10	4	5	6	4	4
Selenium	200.8	71		20	10 U	7	8	10 U	7
Silver	200.8	2		2	2 U	2 U	2 U	2 U	2 U
Zinc	200.8	77		20	20 U	20 U	20 U	20 U	20 U
<b>Cyanide (µg/L)</b>									
Total Cyanide	335.2	50		50	12	13	13	13	13
Weak Acid Dissoc. Cyanide	SM4500CN-I			50	NA	5 U	5 U	5 U	5 U
<b>CONVENTIONALS</b>									
Total Dissolved Solids (µg/L)	160.1				1900000	1800000	1700000	2100000 J	2100000 J
Total Suspended Solids (µg/L)	160.2				74000	56000	54000	53000	67000 J
Ortho-Phosphorous (µg-P/L)	365.2				NA	NA	NA	NA	4 U
pH	Field				6.76	6.02	6.02	7.23	6.60
Specific Conductance (µmhos)	Field				3470	3750	3740	3920	3875
Temperature (°C)	Field				17.3	15.1	15.1	14.5	16.0

**TABLE 2-3  
SUMMARY OF GROUNDWATER ANALYTICAL DATA  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-102R	MW-102R	MW-109	MW102R	MW102R
					CF72A 9/27/2000	CP44E 12/20/2000	Dup of MW-102R CP44I 12/20/2000	CV96B 3/14/2001	DH51B 6/22/2001
<b>MAJOR IONS</b>									
Calcium	6010				NA	NA	NA	NA	239000
Magnesium	6010				NA	NA	NA	NA	71000
Potassium	6010				NA	NA	NA	NA	17700
Sodium	6010				NA	NA	NA	NA	484000
Alkalinity (µg/L CaCO <sub>3</sub> )	2320				NA	NA	NA	NA	820000
Carbonate (Alkalinity) (µg/L CaCO <sub>3</sub> )	2320				NA	NA	NA	NA	1000 U
Bicarbonate (Alkalinity) (µg/L CaCO <sub>3</sub> )	2320				NA	NA	NA	NA	820000
Bromide (µg/L)	4500Br-B				NA	NA	NA	NA	50000 U
Fluoride (µg/L)	340.2				NA	NA	NA	NA	200
Chloride (µg/L)	325.2				NA	NA	NA	NA	730000
N-Nitrate (µg-N/L)	Calculated				NA	NA	NA	NA	10 U
N-Nitrite (µg-N/L)	354.1				NA	NA	NA	NA	10 U
Nitrate+Nitrite (NO <sub>2</sub> +NO <sub>3</sub> ) (µg-N/L)	353.2				NA	NA	NA	NA	10 U
Sulfate (µg/L)	375.2				NA	NA	NA	NA	8100



**TABLE 2-3  
SUMMARY OF GROUNDWATER ANALYTICAL DATA  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-104	MW-104	MW-104	MW-104	MW-104	MW-104	MW-104	MW-104
					AK50E #####	BD02E #####	BK98B #####	BT43D #####	CF72C #####	CP44F #####	CV96C #####	DH51C 6/22/2001
<b>TPH (µg/L)</b>												
Diesel-Range Petroleum Hydrocarbons	WTPH-Dx		6586	400 (b)	420	420	520	440	500	500	560	380
Motor Oil-Range Petroleum Hydrocarbons	WTPH-Dx			1100 (b)	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U
Gasoline-Range Petroleum Hydrocarbons	WTPH-G		7591	600 (b)	320	290	320	530	290	360	370	310
<b>CPAH (µg/L)</b>												
Benzo(a)anthracene	8270-SIM	1.0		1.0	0.10 U	0.10	0.11	0.12	0.10	0.14 M	0.11	0.13
Chrysene	8270-SIM	1.0		1.0	0.10 U	0.10	0.09 J	0.09 J	0.09 J	0.12 M	0.10	0.10 U
Benzo(b)fluoranthene	8270-SIM	1.0		1.0	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Benzo(k)fluoranthene	8270-SIM	1.0		1.0	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Benzo(a)pyrene	8270-SIM	1.0		1.0	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Indeno(1,2,3-cd)pyrene	8270-SIM	1.0		1.0	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Dibenzo(a,h)anthracene	8270-SIM	1.0		1.0	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
<b>SEMIVOLATILES (µg/L)</b>												
Phenol	8270	1100000		10	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Bis-(2-Chloroethyl) Ether	8270	10		10	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2-Chlorophenol	8270	96.7		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	8270	2600		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	8270	10		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzyl Alcohol	8270	20		10	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichlorobenzene	8270	4200		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Methylphenol	8270			10 (c)	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2,2'-Oxybis(1-Chloropropane)	8270			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Methylphenol	8270			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
N-Nitroso-Di-N-Propylamine	8270	10		10	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Hexachloroethane	8270	10		10	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Nitrobenzene	8270	449		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isophorone	8270	600		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Nitrophenol	8270			10	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dimethylphenol	8270	553		10	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Benzoic Acid	8270			10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
bis(2-Chloroethoxy) Methane	8270			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,4-Dichlorophenol	8270	191		10	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
1,2,4-Trichlorobenzene	8270	227		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Naphthalene	8270	9880		10	1.0 U	1.0 U	1.1 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chloroaniline	8270			20	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Hexachlorobutadiene	8270	50		10	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Chloro-3-methylphenol	8270			20	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2-Methylnaphthalene	8270			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	24	1.0 U	1.0 U
Hexachlorocyclopentadiene	8270	4180		20	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	8270	10		10	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

**TABLE 2-3  
SUMMARY OF GROUNDWATER ANALYTICAL DATA  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-104	MW-104	MW-104	MW-104	MW-104	MW-104	MW-104	MW-104
					AK50E #####	BD02E #####	BK98B #####	BT43D #####	CF72C #####	CP44F #####	CV96C #####	DH51C 6/22/2001
2,4,5-Trichlorophenol	8270			10	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Chloronaphthalene	8270			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Nitroaniline	8270			50	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dimethylphthalate	8270	72000		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Acenaphthylene	8270			10	1.0 U	2.0	1.0 U	1.0 U	1.0 U	1.0 U	1.1	1.0 U
3-Nitroaniline	8270			50	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U
Acenaphthene	8270	225	456	10	58	37	37	43 J	47 J	62	40	43 J
2,4-Dinitrophenol	8270	3460		50	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Nitrophenol	8270			50	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ
Dibenzofuran	8270			10	5.5	5.3	4.0	5.6	6.5	9.6	5.8	6.9
2,6-Dinitrotoluene	8270			10	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dinitrotoluene	8270	10		10	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Diethylphthalate	8270	28400		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorophenyl-phenylether	8270			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Fluorene	8270	2422		10	11	13	10	9.6	12	17	11	11
4-Nitroaniline	8270			20	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4,6-Dinitro-2-Methylphenol	8270			50 (c)	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
N-Nitrosodiphenylamine	8270	16		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Bromophenyl-phenylether	8270			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Hexachlorobenzene	8270	10		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	8270	50		50	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Phenanthrene	8270			10	4.5	7.9	5.7	1.0 U	5.0	8.7	3.1	1.0 U
Carbazole	8270			10	25	16	13	12	6.7	11	6.8	4.0
Anthracene	8270	25900		10	1.2	1.6	1.3	1.3	1.5	1.7	1.2	1.3
Di-n-Butylphthalate	8270	2910		10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Fluoranthene	8270	27.1		10	1.4	1.8	1.4	1.9	1.5	1.9	1.6	1.5
Pyrene	8270	777		10	1.2	1.7	1.2	1.5	1.2 J	1.6	1.2	1.1
Butylbenzylphthalate	8270	1250		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
3,3'-Dichlorobenzidine	8270	20		20	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
bis(2-Ethylhexyl)phthalate	8270	10		10	65 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Di-n-Octyl phthalate	8270			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzo(g,h,i)perylene	8270			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

**TABLE 2-3  
SUMMARY OF GROUNDWATER ANALYTICAL DATA  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-104	MW-104	MW-104	MW-104	MW-104	MW-104	MW-104	MW-104
					AK50E #####	BD02E #####	BK98B #####	BT43D #####	CF72C #####	CP44F #####	CV96C #####	DH51C 6/22/2001
<b>VOLATILES (µg/L)</b>												
Chloromethane	8260	133		10	1.0 UJ	10 U	10 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	8260	968		10 (c)	1.0 UJ	10 U	10 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl Chloride	8260	10		10	1.0 UJ	2.5 U	0.50 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	8260			10	1.0 UJ	10 U	10 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	8260	960		5	2.0 UJ	20 U	20 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Acetone	8260			10	5.0 UJ	50 U	50 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon Disulfide	8260			10	1.0 UJ	10 U	10 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	8260	5		5	1.0 UJ	2.5 U	0.50 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	8260			5	1.0 UJ	10 U	10 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	8260	32800		5	1.0 UJ	10 U	10 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	8260			5	1.0 UJ	10 U	10 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	8260	470		5	1.0 UJ	10 U	10 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	8260	99		5	1.0 U	10 U	10 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone	8260			50 (c)	5.0 UJ	50 U	50 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,1-Trichloroethane	8260	41700		5	1.0 UJ	10 U	10 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon Tetrachloride	8260	5		5	1.0 U	2.5 U	0.50 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl Acetate	8260			50	5.0 UJ	50 U	50 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	8260	28		5	1.0 U	10 U	10 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	8260	23		5	1.0 U	10 U	10 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	8260	19		5	1.0 U	10 U	10 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	8260	81		5	1.0 U	10 U	10 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	8260	21		10 (c)	1.0 U	10 U	10 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	8260	42		5	1.0 UJ	10 U	10 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzene	8260	71	219	5	7.0	10 U	10 U	2.2	1.4	1.4	1.9	1.7
trans-1,3-Dichloropropene	8260	19		5	1.0 U	10 U	10 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chloroethylvinylether	8260			10	5.0 U	50 U	R	10 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromoform	8260	360		5	1.0 U	10 U	10 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Methyl-2-Pentanone (MIBK)	8260			50 (c)	5.0 U	50 U	50 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Hexanone	8260			50	5.0 U	50 U	50 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	8260	8.9		5	1.0 U	2.5 U	0.50 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	8260	6.5		5	1.0 U	2.5 U	0.50 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	8260	485		5	2.1	10 U	10 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	8260	5030		5	1.0 U	10 U	10 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	8260	276		5	5.2	10 U	10 U	2.3	1.2 J	1.0	1.2	1.5
Styrene	8260			5	1.0 U	10 U	10 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane	8260			10 (c)	1.0 U	10 U	10 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichlorotrifluoroethane	8260			10 (c)	2.0 U	20 U	20 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U
m,p-Xylene	8260			5 (d)	6.0	10 U	10 U	4.0	2.4 J	2.8	3.1	2.2
o-Xylene	8260			5 (d)	4.5	10 U	10 U	2.0 U	1.0 U	1.0 J	1.2	1.0 U
1,2-Dichlorobenzene	8260	4200		10	1.0 U	10 U	10 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	8260	2600		10	1.0 U	10 U	10 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U

**TABLE 2-3  
SUMMARY OF GROUNDWATER ANALYTICAL DATA  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-104	MW-104	MW-104	MW-104	MW-104	MW-104	MW-104	MW-104
					AK50E #####	BD02E #####	BK98B #####	BT43D #####	CF72C #####	CP44F #####	CV96C #####	DH51C 6/22/2001
1,4-Dichlorobenzene	8260	10		10	1.0 U	10 U	10 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Acrolein	8260	780		500 (c)	50 UJ	500 U	500 U	100 U	50 U	50 U	50 U	50 U
Methyl Iodide	8260			10 (c)	1.0 U	10 U	10 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoethane	8260			10 (c)	2.0 U	20 U	20 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Acrylonitrile	8260	5		5	5.0 UJ	2.5 U	0.50 U	10 U	5.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloropropene	8260			10 (c)	1.0 U	10 U	10 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromomethane	8260			10 (c)	1.0 U	10 U	10 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1,2-Tetrachloroethane	8260			10 (c)	1.0 U	10 U	10 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	8260			50 (c)	5.0 U	50 U	50 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2,3-Trichloropropane	8260			10 (c)	3.0 U	30 U	30 U	6.0 U	3.0 U	3.0 U	3.0 U	3.0 U
trans-1,4-Dichloro-2-butene	8260			50 (c)	5.0 U	50 U	50 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U
1,3,5-Trimethylbenzene	8260			10 (c)	3.2	10 U	10 U	2.0 U	1.0 U	1.4	1.6	1.4
1,2,4-Trimethylbenzene	8260			10 (c)	11	10 U	10 U	7.0	4.4 J	4.6	5.7	3.3
Hexachlorobutadiene	8260	50		10	5.0 U	50 U	50 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethylene Dibromide	8260			10 (c)	1.0 U	10 U	10 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromochloromethane	8260			10 (c)	1.0 UJ	10 U	10 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,2-Dichloropropane	8260			10 (c)	1.0 UJ	10 U	10 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichloropropane	8260			10 (c)	1.0 U	10 U	10 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzene	8260			10 (c)	1.4	10 U	10 U	2.0 U	1.0 U	1.5	1.5	1.2
n-Propylbenzene	8260			10 (c)	1.0 U	10 U	10 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromobenzene	8260			10 (c)	1.0 U	10 U	10 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chlorotoluene	8260			10 (c)	1.0 U	10 U	10 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorotoluene	8260			10 (c)	1.0 U	10 U	10 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
tert-Butylbenzene	8260			10 (c)	1.0 U	10 U	10 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
sec-Butylbenzene	8260			10 (c)	1.0 U	10 U	10 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Isopropyltoluene	8260			10 (c)	1.0 U	10 U	10 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
n-Butylbenzene	8260			10 (c)	1.0 U	10 U	10 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	8260	227		10	5.0 U	50 U	50 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U
Naphthalene	8260	9880		10	740	300	240	240	160	80	120	100
1,2,3-Trichlorobenzene	8260			10 (c)	5.0 U	50 U	50 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U

**TABLE 2-3  
SUMMARY OF GROUNDWATER ANALYTICAL DATA  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-104	MW-104	MW-104	MW-104	MW-104	MW-104	MW-104	MW-104
					AK50E #####	BD02E #####	BK98B #####	BT43D #####	CF72C #####	CP44F #####	CV96C #####	DH51C 6/22/2001
<b>VOLATILES-SIM (µg/L)</b>												
Vinyl Chloride	SW8260-SIM	10		10	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethene	SW8260-SIM	5		5	NA	NA	NA	NA	NA	NA	NA	NA
Carbon Tetrachloride	SW8260-SIM	5		5	NA	NA	NA	NA	NA	NA	NA	NA
Tetrachloroethene	SW8260-SIM	8.9		5	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	SW8260-SIM	6.5		5	NA	NA	NA	NA	NA	NA	NA	NA
Acrylonitrile	SW8260-SIM	5		5	NA	NA	NA	NA	NA	NA	NA	NA
<b>DISSOLVED METALS (µg/L)</b>												
Antimony	200.8	4300		10	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Arsenic	200.8	4	32	4	1 U	1	1 U	1 U	1	1 U	1	1
Beryllium	200.8	2		2	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cadmium	200.8	8		2	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chromium	200.8	50		50	5	2 U	2 U	2 U	3	2 U	2 U	2 U
Copper	200.8	10		10	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Lead	200.8	10		10	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Mercury	7470	1		1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Nickel	200.8	10		10	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Selenium	200.8	71		20	5 U	5 U	5 U	5 U	2 U	2 U	2 U	2 U
Silver	200.8	2		2	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Zinc	200.8	77		20	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
<b>Cyanide (µg/L)</b>												
Total Cyanide	335.2	50		50	9	25	8	5 U	7	11	11	9
Weak Acid Dissoc. Cyanide	SM4500CN-1			50	NA	NA	NA	NA	NA	5 U	5 U	5 U
<b>CONVENTIONALS</b>												
Total Dissolved Solids (µg/L)	160.1				600000	600000	560000	600000 J	510000	450000	570000 J	550000 J
Total Suspended Solids (µg/L)	160.2				16000	41000	16000	9300	18000	25000	12000	19000 J
Ortho-Phosphorous (µg-P/L)	365.2				NA	NA	50	NA	NA	NA	NA	22
pH	Field				6.98	5.75	7.23	7.17	6.94	6.86	7.59	6.74
Specific Conductance (µmhos)	Field				1070	832	1020	814	8635	990	1170	955
Temperature (°C)	Field				16.7	25.5	14.1	15.1	16.8	15.3	13.1	14.7

**TABLE 2-3  
SUMMARY OF GROUNDWATER ANALYTICAL DATA  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-104	MW-104	MW-104	MW-104	MW-104	MW-104	MW-104	MW-104
					AK50E	BD02E	BK98B	BT43D	CF72C	CP44F	CV96C	DH51C
					#####	#####	#####	#####	#####	#####	#####	6/22/2001
<b>MAJOR IONS</b>												
Calcium	6010				NA	NA	52900	NA	NA	NA	NA	49000
Magnesium	6010				NA	NA	26500	NA	NA	NA	NA	23600
Potassium	6010				NA	NA	22700	NA	NA	NA	NA	19400
Sodium	6010				NA	NA	121000	NA	NA	NA	NA	104000
Alkalinity (µg/L CaCO3)	2320				NA	NA	390000	NA	NA	NA	NA	360000
Carbonate (Alkalinity) (µg/L CaCO3)	2320				NA	NA	1000 U	NA	NA	NA	NA	1000 U
Bicarbonate (Alkalinity) (µg/L CaCO3)	2320				NA	NA	390000	NA	NA	NA	NA	360000
Bromide (µg/L)	4500Br-B				NA	NA	1600	NA	NA	NA	NA	50000 U
Fluoride (µg/L)	340.2				NA	NA	220	NA	NA	NA	NA	200
Chloride (µg/L)	325.2				NA	NA	83000 J	NA	NA	NA	NA	68000
N-Nitrate (µg-N/L)	Calculated				NA	NA	10 U	NA	NA	NA	NA	10 U
N-Nitrite (µg-N/L)	354.1				NA	NA	10 U	NA	NA	NA	NA	10 U
Nitrate+Nitrite (NO2+NO3) (µg-N/L)	353.2				NA	NA	10 U	NA	NA	NA	NA	10 U
Sulfate (µg/L)	375.2				NA	NA	21000 J	NA	NA	NA	NA	13000

**TABLE 2-3  
SUMMARY OF GROUNDWATER ANALYTICAL DATA  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-105	MW-105	MW-105	MW-105	MW-105	MW-109	MW-105
					AK501 #####	BD02F #####	BK98C #####	BT43F #####	CF72I #####	Dup of MW-105 CF72D 9/27/2000	CP44C #####
<b>TPH (µg/L)</b>											
Diesel-Range Petroleum Hydrocarbons	WTPH-Dx		6586	400 (b)	1200	1500	1800	1600	1600	1500	1500
Motor Oil-Range Petroleum Hydrocarbons	WTPH-Dx			1100 (b)	500 U	500 U	500 U	500 U	500 U	500 U	500 U
Gasoline-Range Petroleum Hydrocarbons	WTPH-G		7591	600 (b)	1500	1800	2100	3300	2300	2600	2500
<b>CPAH (µg/L)</b>											
Benzo(a)anthracene	8270-SIM	1.0		1.0	0.28	0.32	0.30	0.49	0.38	0.34	0.33
Chrysene	8270-SIM	1.0		1.0	0.20	0.23	0.20	0.32	0.31	0.21	0.25 M
Benzo(b)fluoranthene	8270-SIM	1.0		1.0	0.10 U	0.10 U	0.10 U	0.04 J	0.08 J	0.03 J	0.03 MJ
Benzo(k)fluoranthene	8270-SIM	1.0		1.0	0.10 U	0.10 U	0.10 U	0.05 J	0.12	0.06 J	0.04 MJ
Benzo(a)pyrene	8270-SIM	1.0		1.0	0.10 U	0.10 U	0.10 U	0.05 J	0.14	0.06 J	0.02 MJ
Indeno(1,2,3-cd)pyrene	8270-SIM	1.0		1.0	0.10 U	0.10 U	0.10 U	0.10 U	0.05 J	0.10 U	0.10 U
Dibenzo(a,h)anthracene	8270-SIM	1.0		1.0	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
<b>SEMIVOLATILES (µg/L)</b>											
Phenol	8270	1100000		10	10	2.0 U	8.0 J	5.0	9.7 J	6.3 J	6.1
Bis-(2-Chloroethyl) Ether	8270	10		10	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2-Chlorophenol	8270	96.7		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	8270	2600		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	8270	10		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzyl Alcohol	8270			20	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichlorobenzene	8270	4200		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Methylphenol	8270			10 (c)	2.0 U	2.0 U	1.2 J	2.0 U	2.0 U	2.0 U	1.0 J
2,2'-Oxybis(1-Chloropropane)	8270			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Methylphenol	8270			10 (c)	2.4	1.0 J	1.4 J	1.3	1.5	1.1	0.9 J
N-Nitroso-Di-N-Propylamine	8270	10		10	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Hexachloroethane	8270	10		10	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Nitrobenzene	8270	449		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isophorone	8270	600		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Nitrophenol	8270			10	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dimethylphenol	8270	553		10	23	17	16 J	38	37	38	22
Benzoic Acid	8270			10	10 U	10 U	10 U	10 U	10 U	10 U	10 U
bis(2-Chloroethoxy) Methane	8270			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,4-Dichlorophenol	8270	191		10	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
1,2,4-Trichlorobenzene	8270	227		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Naphthalene	8270	9880		10	1700	1300	860 J	1500 J	820 J	1200 J	1000
4-Chloroaniline	8270			20	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Hexachlorobutadiene	8270	50		10	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Chloro-3-methylphenol	8270			20	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2-Methylnaphthalene	8270			10	70	190	75 J	120	90 J	120 J	100
Hexachlorocyclopentadiene	8270	4180		20	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	8270	10		10	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

**TABLE 2-3  
SUMMARY OF GROUNDWATER ANALYTICAL DATA  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-105	MW-105	MW-105	MW-105	MW-105	MW-109	MW-105
					AK501 #####	BD02F #####	BK98C #####	BT43F #####	CF72I #####	Dup of MW-105 CF72D 9/27/2000	CP44C #####
2,4,5-Trichlorophenol	8270			10	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Chloronaphthalene	8270			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Nitroaniline	8270			50	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dimethylphthalate	8270	72000		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Acenaphthylene	8270			10	13	7.6	2.8 J	2.7	2.9	3.1	2.3
3-Nitroaniline	8270			50	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U
Acenaphthene	8270	225	456	10	72	80	70 J	75	73 J	100 J	100
2,4-Dinitrophenol	8270	3460		50	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Nitrophenol	8270			50	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dibenzofuran	8270			10	28	28	22 J	23	22	23	29
2,6-Dinitrotoluene	8270			10	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	9.3
2,4-Dinitrotoluene	8270	10		10	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Diethylphthalate	8270	28400		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorophenyl-phenylether	8270			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Fluorene	8270	2422		10	38	39	27 J	31	31	32	42
4-Nitroaniline	8270			20	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4,6-Dinitro-2-Methylphenol	8270			50 (c)	10 U	10 U	10 U	10 U	10 U	10 U	10 U
N-Nitrosodiphenylamine	8270	16		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Bromophenyl-phenylether	8270			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Hexachlorobenzene	8270	10		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	8270	50		50	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Phenanthrene	8270			10	72	67	61 J	72	66	66	57
Carbazole	8270			10	71	45	26 J	39	38	39	37
Anthracene	8270	25900		10	7.1	8.2	5.1 J	9.5	7.6	8.0	7.4
Di-n-Butylphthalate	8270	2910		10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Fluoranthene	8270	27.1		10	7.1	9.1	5.7 J	8.7	6.9	7.7	9.2
Pyrene	8270	777		10	6.1	9.5	4.3 J	7.6	5.8 J	5.8 J	9.6
Butylbenzylphthalate	8270	1250		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
3,3'-Dichlorobenzidine	8270	20		20	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
bis(2-Ethylhexyl)phthalate	8270	10		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0	1.6
Di-n-Octyl phthalate	8270			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzo(g,h,i)perylene	8270			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U



**TABLE 2-3  
SUMMARY OF GROUNDWATER ANALYTICAL DATA  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-105	MW-105	MW-105	MW-105	MW-105	MW-109	MW-105
					AK501 #####	BD02F #####	BK98C #####	BT43F #####	CF72I #####	Dup of MW-105 CF72D 9/27/2000	CP44C #####
<b>VOLATILES (µg/L)</b>											
Chloromethane	8260	133		10	1.0 U	10 U	10 U	10 U	10 U	1.0 U	5.0 U
Bromomethane	8260	968		10 (c)	1.0 U	10 U	10 U	10 U	10 U	1.0 U	5.0 U
Vinyl Chloride	8260	10		10	1.0 U	2.5 U	0.50 U	2.5 U	NA	1.0 U	5.0 U
Chloroethane	8260			10	1.0 U	10 U	10 U	10 U	10 U	1.0 U	5.0 U
Methylene Chloride	8260	960		5	2.0 U	20 U	20 U	20 U	20 U	2.0 U	10 U
Acetone	8260			10	5.0 U	50 U	50 U	50 U	50 U	9.7	25 U
Carbon Disulfide	8260			10	1.0 U	10 U	10 U	10 U	10 U	1.0 U	5.0 U
1,1-Dichloroethene	8260	5		5	1.0 U	2.5 U	0.50 U	2.5 U	NA	1.0 U	5.0 U
1,1-Dichloroethane	8260			5	1.0 U	10 U	10 U	10 U	10 U	1.0 U	5.0 U
trans-1,2-Dichloroethene	8260	32800		5	1.0 U	10 U	10 U	10 U	10 U	1.0 U	5.0 U
cis-1,2-Dichloroethene	8260			5	1.0 U	10 U	10 U	10 U	10 U	1.0 U	5.0 U
Chloroform	8260	470		5	1.0 U	10 U	10 U	10 U	10 U	1.0 U	5.0 U
1,2-Dichloroethane	8260	99		5	1.0 U	10 U	10 U	10 U	10 U	1.0 U	5.0 U
2-Butanone	8260			50 (c)	5.0 U	50 U	50 U	50 U	50 U	5.0 U	25 U
1,1,1-Trichloroethane	8260	41700		5	1.0 U	10 U	10 U	10 U	10 U	1.0 U	5.0 U
Carbon Tetrachloride	8260	5		5	1.0 U	2.5 U	0.50 U	2.5 U	NA	1.0 U	5.0 U
Vinyl Acetate	8260			50	5.0 U	50 U	50 U	50 U	50 U	5.0 U	25 U
Bromodichloromethane	8260	28		5	1.0 U	10 U	10 U	10 U	10 U	1.0 U	5.0 U
1,2-Dichloropropane	8260	23		5	1.0 U	10 U	10 U	10 U	10 U	1.0 U	5.0 U
cis-1,3-Dichloropropene	8260	19		5	1.0 U	10 U	10 U	10 U	10 U	1.0 U	5.0 U
Trichloroethene	8260	81		5	1.0 U	10 U	10 U	10 U	10 U	1.0 U	5.0 U
Dibromochloromethane	8260	21		10 (c)	1.0 U	10 U	10 U	10 U	10 U	1.0 U	5.0 U
1,1,2-Trichloroethane	8260	42		5	1.0 U	10 U	10 U	10 U	10 U	1.0 U	5.0 U
Benzene	8260	71	219	5	360	170	300	430	360	340	200
trans-1,3-Dichloropropene	8260	19		5	1.0 U	10 U	10 U	10 U	10 U	1.0 U	5.0 U
2-Chloroethylvinylether	8260			10	5.0 U	50 U	R	50 U	50 U	5.0 U	25 U
Bromoform	8260	360		5	1.0 U	10 U	10 U	10 U	10 U	1.0 U	5.0 U
4-Methyl-2-Pentanone (MIBK)	8260			50 (c)	5.0 U	50 U	50 U	50 U	50 U	5.0 U	25 U
2-Hexanone	8260			50	5.0 U	50 U	50 U	50 U	50 U	5.0 U	25 U
Tetrachloroethene	8260	8.9		5	1.0 U	2.5 U	0.50 U	2.5 U	NA	1.0 U	5.0 U
1,1,2,2-Tetrachloroethane	8260	6.5		5	1.0 U	2.5 U	0.50 U	2.5 U	NA	1.0 U	5.0 U
Toluene	8260	485		5	52	48	51	38	53 J	70 J	30
Chlorobenzene	8260	5030		5	1.0 U	10 U	10 U	10 U	10 U	1.0 U	5.0 U
Ethylbenzene	8260	276		5	65	38	66	88	81 J	100 J	47
Styrene	8260			5	1.0 U	10 U	10 U	10 U	10 U	1.4	5.0 U
Trichlorofluoromethane	8260			10 (c)	1.0 U	10 U	10 U	10 U	10 U	1.0 U	5.0 U
1,1,2-Trichlorotrifluoroethane	8260			10 (c)	2.0 U	20 U	20 U	20 U	20 U	2.0 U	10 U
m,p-Xylene	8260			5 (d)	82	52	77	82	86 J	110 J	52
o-Xylene	8260			5 (d)	46	22	36	46	37 J	57 J	27
1,2-Dichlorobenzene	8260	4200		10	1.0 U	10 U	10 U	10 U	10 U	1.0 U	5.0 U
1,3-Dichlorobenzene	8260	2600		10	1.0 U	10 U	10 U	10 U	10 U	1.0 U	5.0 U

**TABLE 2-3  
SUMMARY OF GROUNDWATER ANALYTICAL DATA  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-105	MW-105	MW-105	MW-105	MW-105	MW-109	MW-105
					AK501 #####	BD02F #####	BK98C #####	BT43F #####	CF72I #####	Dup of MW-105 CF72D 9/27/2000	CP44C #####
1,4-Dichlorobenzene	8260	10		10	1.0 U	10 U	10 U	10 U	10 U	1.0 U	5.0 U
Acrolein	8260	780		500 (c)	50 U	500 U	500 U	500 U	500 U	50 U	250 U
Methyl Iodide	8260			10 (c)	1.0 U	10 U	10 U	10 U	10 U	1.0 U	5.0 U
Bromoethane	8260			10 (c)	2.0 U	20 U	20 U	20 U	20 U	2.0 U	10 U
Acrylonitrile	8260	5		5	5.0 U	2.5 U	0.50 U	2.5 U	NA	5.0 U	5.0 U
1,1-Dichloropropene	8260			10 (c)	1.0 U	10 U	10 U	10 U	10 U	1.0 U	5.0 U
Dibromomethane	8260			10 (c)	1.0 U	10 U	10 U	10 U	10 U	1.0 U	5.0 U
1,1,1,2-Tetrachloroethane	8260			10 (c)	1.0 U	10 U	10 U	10 U	10 U	1.0 U	5.0 U
1,2-Dibromo-3-chloropropane	8260			50 (c)	5.0 U	50 U	50 U	50 U	50 U	5.0 U	25 U
1,2,3-Trichloropropane	8260			10 (c)	3.0 U	30 U	30 U	30 U	30 U	3.0 U	15 U
trans-1,4-Dichloro-2-butene	8260			50 (c)	5.0 U	50 U	50 U	50 U	50 U	5.0 U	25 U
1,3,5-Trimethylbenzene	8260			10 (c)	28	10 U	10 U	10 U	10 U	12	8.8
1,2,4-Trimethylbenzene	8260			10 (c)	72	19	25	27	19 J	34 J	22
Hexachlorobutadiene	8260	50		10	5.0 U	50 U	50 U	50 U	50 U	5.0 U	25 U
Ethylene Dibromide	8260			10 (c)	1.0 U	10 U	10 U	10 U	10 U	1.0 U	5.0 U
Bromochloromethane	8260			10 (c)	1.0 U	10 U	10 U	10 U	10 U	1.0 U	5.0 U
2,2-Dichloropropane	8260			10 (c)	1.0 U	10 U	10 U	10 U	10 U	1.0 U	5.0 U
1,3-Dichloropropane	8260			10 (c)	1.0 U	10 U	10 U	10 U	10 U	1.0 U	5.0 U
Isopropylbenzene	8260			10 (c)	4.2	10 U	10 U	10 U	10 U	3.7	5.0 U
n-Propylbenzene	8260			10 (c)	1.0 U	10 U	10 U	10 U	10 U	1.0 U	5.0 U
Bromobenzene	8260			10 (c)	1.0 U	10 U	10 U	10 U	10 U	1.0 U	5.0 U
2-Chlorotoluene	8260			10 (c)	1.0 U	10 U	10 U	10 U	10 U	1.0 U	5.0 U
4-Chlorotoluene	8260			10 (c)	1.0 U	10 U	10 U	10 U	10 U	1.0 U	5.0 U
tert-Butylbenzene	8260			10 (c)	1.0 U	10 U	10 U	10 U	10 U	1.0 U	5.0 U
sec-Butylbenzene	8260			10 (c)	1.0 U	10 U	10 U	10 U	10 U	1.0 U	5.0 U
4-Isopropyltoluene	8260			10 (c)	5.2	10 U	10 U	10 U	10 U	2.7	5.0 U
n-Butylbenzene	8260			10 (c)	1.0 U	10 U	10 U	10 U	10 U	1.0 U	5.0 U
1,2,4-Trichlorobenzene	8260	227		10	5.0 U	50 U	50 U	50 U	50 U	5.0 U	25 U
Naphthalene	8260	9880		10	2600	2100	2300	2900	2500	2300	1700
1,2,3-Trichlorobenzene	8260			10 (c)	5.0 U	50 U	50 U	50 U	50 U	5.0 U	25 U

**TABLE 2-3  
SUMMARY OF GROUNDWATER ANALYTICAL DATA  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-105	MW-105	MW-105	MW-105	MW-105	MW-109	MW-105
					AK501 #####	BD02F #####	BK98C #####	BT43F #####	CF72I #####	Dup of MW-105 CF72D 9/27/2000	CP44C #####
<b>VOLATILES-SIM (µg/L)</b>											
Vinyl Chloride	SW8260-SIM	10		10	NA	NA	NA	NA	0.50 U	NA	NA
1,1-Dichloroethene	SW8260-SIM	5		5	NA	NA	NA	NA	0.50 U	NA	NA
Carbon Tetrachloride	SW8260-SIM	5		5	NA	NA	NA	NA	0.50 U	NA	NA
Tetrachloroethene	SW8260-SIM	8.9		5	NA	NA	NA	NA	0.50 U	NA	NA
1,1,2,2-Tetrachloroethane	SW8260-SIM	6.5		5	NA	NA	NA	NA	0.50 U	NA	NA
Acrylonitrile	SW8260-SIM	5		5	NA	NA	NA	NA	0.50 U	NA	NA
<b>DISSOLVED METALS (µg/L)</b>											
Antimony	200.8	4300		10	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Arsenic	200.8	4	32	4	6	14	10	14	7	6	18
Beryllium	200.8	2		2	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cadmium	200.8	8		2	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chromium	200.8	50		50	10	8	2 U	12	25	29	2 U
Copper	200.8	10		10	2 U	2 U	2 U	2 U	2 U	2 U	9
Lead	200.8	10		10	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Mercury	7470	1		1	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Nickel	200.8	10		10	3	3	4	3	3	4	4
Selenium	200.8	71		20	6	5 U	5 U	10 J	10 U	10 U	10
Silver	200.8	2		2	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Zinc	200.8	77		20	20 U	20 U	20 U	20 U	20 U	20 U	20 U
<b>Cyanide (µg/L)</b>											
Total Cyanide	335.2	50		50	6 J	11	8	7 U	7	7	11
Weak Acid Dissoc. Cyanide	SM4500CN-I			50	NA	NA	NA	NA	NA	NA	5 U
<b>CONVENTIONALS</b>											
Total Dissolved Solids (µg/L)	160.1				2400000	2100000	2800000	3900000 J	3400000	3400000	2200000
Total Suspended Solids (µg/L)	160.2				65000	140000	73000	87000	80000	78000	66000
Ortho-Phosphorous (µg-P/L)	365.2				NA	NA	49	NA	NA	NA	NA
pH	Field				5.95	5.47	6.97	6.84	6.62	6.62	6.74
Specific Conductance (µmhos)	Field				4850	3740	6480	4660	6043	6043	5205
Temperature (°C)	Field				17.7	16.2	16.0	17.0	18.4	18.4	17.0

**TABLE 2-3  
SUMMARY OF GROUNDWATER ANALYTICAL DATA  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-105	MW-105	MW-105	MW-105	MW-105	MW-109	MW-105
					AK501 #####	BD02F #####	BK98C #####	BT43F #####	CF72I #####	Dup of MW-105 CF72D 9/27/2000	CP44C #####
<b>MAJOR IONS</b>											
Calcium	6010				NA	NA	107000	NA	NA	NA	NA
Magnesium	6010				NA	NA	80100	NA	NA	NA	NA
Potassium	6010				NA	NA	50600	NA	NA	NA	NA
Sodium	6010				NA	NA	887000	NA	NA	NA	NA
Alkalinity (µg/L CaCO3)	2320				NA	NA	1000000	NA	NA	NA	NA
Carbonate (Alkalinity) (µg/L CaCO3)	2320				NA	NA	1000 U	NA	NA	NA	NA
Bicarbonate (Alkalinity) (µg/L CaCO3)	2320				NA	NA	1000000	NA	NA	NA	NA
Bromide (µg/L)	4500Br-B				NA	NA	23100	NA	NA	NA	NA
Fluoride (µg/L)	340.2				NA	NA	450	NA	NA	NA	NA
Chloride (µg/L)	325.2				NA	NA	1000000 J	NA	NA	NA	NA
N-Nitrate (µg-N/L)	Calculated				NA	NA	14	NA	NA	NA	NA
N-Nitrite (µg-N/L)	354.1				NA	NA	10 U	NA	NA	NA	NA
Nitrate+Nitrite (NO2+NO3) (µg-N/L)	353.2				NA	NA	14	NA	NA	NA	NA
Sulfate (µg/L)	375.2				NA	NA	12000 J	NA	NA	NA	NA

**TABLE 2-3**  
**SUMMARY OF GROUNDWATER ANALYTICAL DATA**  
**06/99 TO 06/01**  
**UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-105 CV96D #####	MW-105 DH51G #####
<b>TPH (µg/L)</b>						
Diesel-Range Petroleum Hydrocarbons	WTPH-Dx		6586	400 (b)	1200	1200
Motor Oil-Range Petroleum Hydrocarbons	WTPH-Dx			1100 (b)	500 U	500 U
Gasoline-Range Petroleum Hydrocarbons	WTPH-G		7591	600 (b)	2700	2400 J
<b>CPAH (µg/L)</b>						
Benzo(a)anthracene	8270-SIM	1.0		1.0	0.76	0.52
Chrysene	8270-SIM	1.0		1.0	0.69	0.35
Benzo(b)fluoranthene	8270-SIM	1.0		1.0	0.23	0.12
Benzo(k)fluoranthene	8270-SIM	1.0		1.0	0.35	0.13
Benzo(a)pyrene	8270-SIM	1.0		1.0	0.36	0.15
Indeno(1,2,3-cd)pyrene	8270-SIM	1.0		1.0	0.15	0.10 U
Dibenzo(a,h)anthracene	8270-SIM	1.0		1.0	0.10 U	0.10 U
<b>SEMIVOLATILES (µg/L)</b>						
Phenol	8270	1100000		10	4.8	2.0 U
Bis-(2-Chloroethyl) Ether	8270	10		10	2.0 U	2.0 U
2-Chlorophenol	8270	96.7		10	1.0 U	1.0 UJ
1,3-Dichlorobenzene	8270	2600		10	1.0 U	1.0 U
1,4-Dichlorobenzene	8270	10		10	1.0 U	1.0 U
Benzyl Alcohol	8270			20	5.0 U	5.0 U
1,2-Dichlorobenzene	8270	4200		10	1.0 U	1.0 U
2-Methylphenol	8270			10 (c)	2.0 U	1.0 U
2,2'-Oxybis(1-Chloropropane)	8270			10 (c)	1.0 U	1.0 U
4-Methylphenol	8270			10 (c)	1.0 U	1.0 U
N-Nitroso-Di-N-Propylamine	8270	10		10	2.0 U	2.0 U
Hexachloroethane	8270	10		10	2.0 U	2.0 U
Nitrobenzene	8270	449		10	1.0 U	1.0 U
Isophorone	8270	600		10	1.0 U	1.0 U
2-Nitrophenol	8270			10	5.0 U	5.0 U
2,4-Dimethylphenol	8270	553		10	32	30
Benzoic Acid	8270			10	10 U	10 U
bis(2-Chloroethoxy) Methane	8270			10	1.0 U	1.0 U
2,4-Dichlorophenol	8270	191		10	3.0 U	3.0 U
1,2,4-Trichlorobenzene	8270	227		10	1.0 U	1.0 U
Naphthalene	8270	9880		10	1000	770
4-Chloroaniline	8270			20	3.0 U	3.0 U
Hexachlorobutadiene	8270	50		10	2.0 U	2.0 U
4-Chloro-3-methylphenol	8270			20	2.0 U	2.0 U
2-Methylnaphthalene	8270			10	130	110
Hexachlorocyclopentadiene	8270	4180		20	5.0 U	5.0 U
2,4,6-Trichlorophenol	8270	10		10	5.0 U	5.0 U

**TABLE 2-3**  
**SUMMARY OF GROUNDWATER ANALYTICAL DATA**  
**06/99 TO 06/01**  
**UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-105 CV96D #####	MW-105 DH51G #####
2,4,5-Trichlorophenol	8270			10	5.0 U	5.0 U
2-Chloronaphthalene	8270			10	1.0 U	1.0 U
2-Nitroaniline	8270			50	5.0 U	5.0 U
Dimethylphthalate	8270	72000		10	1.0 U	1.0 U
Acenaphthylene	8270			10	1.6	1.2
3-Nitroaniline	8270			50	6.0 U	6.0 U
Acenaphthene	8270	225	456	10	67	70
2,4-Dinitrophenol	8270	3460		50	10 U	10 U
4-Nitrophenol	8270			50	5.0 U	5.0 UJ
Dibenzofuran	8270			10	23	21
2,6-Dinitrotoluene	8270			10	5.0 U	5.0 U
2,4-Dinitrotoluene	8270	10		10	5.0 U	5.0 U
Diethylphthalate	8270	28400		10	1.0 U	1.0 U
4-Chlorophenyl-phenylether	8270			10	1.0 U	1.0 U
Fluorene	8270	2422		10	32	32
4-Nitroaniline	8270			20	5.0 U	5.0 U
4,6-Dinitro-2-Methylphenol	8270			50 (c)	10 U	10 U
N-Nitrosodiphenylamine	8270	16		10	1.0 U	1.0 U
4-Bromophenyl-phenylether	8270			10	1.0 U	1.0 U
Hexachlorobenzene	8270	10		10	1.0 U	1.0 U
Pentachlorophenol	8270	50		50	5.0 U	5.0 U
Phenanthrene	8270			10	58	59
Carbazole	8270			10	31	24
Anthracene	8270	25900		10	8.1	7.0
Di-n-Butylphthalate	8270	2910		10 (c)	1.0 U	1.0 U
Fluoranthene	8270	27.1		10	11	9.5
Pyrene	8270	777		10	9.6	8.1
Butylbenzylphthalate	8270	1250		10	1.0 U	1.0 U
3,3'-Dichlorobenzidine	8270	20		20	5.0 U	5.0 U
bis(2-Ethylhexyl)phthalate	8270	10		10	1.0 U	1.0 U
Di-n-Octyl phthalate	8270			10	1.0 U	1.0 U
Benzo(g,h,i)perylene	8270			10	1.0 U	1.0 U

**TABLE 2-3  
SUMMARY OF GROUNDWATER ANALYTICAL DATA  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-105 CV96D #####	MW-105 DH51G #####
<b>VOLATILES (µg/L)</b>						
Chloromethane	8260	133		10	5.0 U	5.0 U
Bromomethane	8260	968		10 (c)	5.0 U	5.0 U
Vinyl Chloride	8260	10		10	5.0 U	5.0 U
Chloroethane	8260			10	5.0 U	5.0 U
Methylene Chloride	8260	960		5	10 U	10 U
Acetone	8260			10	25 U	25 U
Carbon Disulfide	8260			10	5.0 U	5.0 U
1,1-Dichloroethene	8260	5		5	5.0 U	5.0 U
1,1-Dichloroethane	8260			5	5.0 U	5.0 U
trans-1,2-Dichloroethene	8260	32800		5	5.0 U	5.0 U
cis-1,2-Dichloroethene	8260			5	5.0 U	5.0 U
Chloroform	8260	470		5	5.0 U	5.0 U
1,2-Dichloroethane	8260	99		5	5.0 U	5.0 U
2-Butanone	8260			50 (c)	25 U	25 U
1,1,1-Trichloroethane	8260	41700		5	5.0 U	5.0 U
Carbon Tetrachloride	8260	5		5	5.0 U	5.0 U
Vinyl Acetate	8260			50	25 U	25 U
Bromodichloromethane	8260	28		5	5.0 U	5.0 U
1,2-Dichloropropane	8260	23		5	5.0 U	5.0 U
cis-1,3-Dichloropropene	8260	19		5	5.0 U	5.0 U
Trichloroethene	8260	81		5	5.0 U	5.0 U
Dibromochloromethane	8260	21		10 (c)	5.0 U	5.0 U
1,1,2-Trichloroethane	8260	42		5	5.0 U	5.0 U
Benzene	8260	71	219	5	310	390
trans-1,3-Dichloropropene	8260	19		5	5.0 U	5.0 U
2-Chloroethylvinylether	8260			10	25 U	25 U
Bromoform	8260	360		5	5.0 U	5.0 U
4-Methyl-2-Pentanone (MIBK)	8260			50 (c)	25 U	25 U
2-Hexanone	8260			50	25 U	25 U
Tetrachloroethene	8260	8.9		5	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	8260	6.5		5	5.0 U	5.0 U
Toluene	8260	485		5	30	23
Chlorobenzene	8260	5030		5	5.0 U	5.0 U
Ethylbenzene	8260	276		5	76	82
Styrene	8260			5	5.0 U	5.0 U
Trichlorofluoromethane	8260			10 (c)	5.0 U	5.0 U
1,1,2-Trichlorotrifluoroethane	8260			10 (c)	10 U	10 U
m,p-Xylene	8260			5 (d)	69	60
o-Xylene	8260			5 (d)	42	42
1,2-Dichlorobenzene	8260	4200		10	5.0 U	5.0 U
1,3-Dichlorobenzene	8260	2600		10	5.0 U	5.0 U

**TABLE 2-3**  
**SUMMARY OF GROUNDWATER ANALYTICAL DATA**  
**06/99 TO 06/01**  
**UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-105 CV96D #####	MW-105 DH51G #####
1,4-Dichlorobenzene	8260	10		10	5.0 U	5.0 U
Acrolein	8260	780		500 (c)	250 U	250 U
Methyl Iodide	8260			10 (c)	5.0 U	5.0 U
Bromoethane	8260			10 (c)	10 U	10 U
Acrylonitrile	8260	5		5	5.0 U	5.0 U
1,1-Dichloropropene	8260			10 (c)	5.0 U	5.0 U
Dibromomethane	8260			10 (c)	5.0 U	5.0 U
1,1,1,2-Tetrachloroethane	8260			10 (c)	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane	8260			50 (c)	25 U	25 U
1,2,3-Trichloropropane	8260			10 (c)	15 U	15 U
trans-1,4-Dichloro-2-butene	8260			50 (c)	25 U	25 U
1,3,5-Trimethylbenzene	8260			10 (c)	11	7.6
1,2,4-Trimethylbenzene	8260			10 (c)	30	24
Hexachlorobutadiene	8260	50		10	25 U	25 U
Ethylene Dibromide	8260			10 (c)	5.0 U	5.0 U
Bromochloromethane	8260			10 (c)	5.0 U	5.0 U
2,2-Dichloropropane	8260			10 (c)	5.0 U	5.0 U
1,3-Dichloropropane	8260			10 (c)	5.0 U	5.0 U
Isopropylbenzene	8260			10 (c)	5.0 U	5.0 U
n-Propylbenzene	8260			10 (c)	5.0 U	5.0 U
Bromobenzene	8260			10 (c)	5.0 U	5.0 U
2-Chlorotoluene	8260			10 (c)	5.0 U	5.0 U
4-Chlorotoluene	8260			10 (c)	5.0 U	5.0 U
tert-Butylbenzene	8260			10 (c)	5.0 U	5.0 U
sec-Butylbenzene	8260			10 (c)	5.0 U	5.0 U
4-Isopropyltoluene	8260			10 (c)	5.0 U	5.0 U
n-Butylbenzene	8260			10 (c)	5.0 U	5.0 U
1,2,4-Trichlorobenzene	8260	227		10	25 U	25 U
Naphthalene	8260	9880		10	1900	2300
1,2,3-Trichlorobenzene	8260			10 (c)	25 U	25 U



**TABLE 2-3  
SUMMARY OF GROUNDWATER ANALYTICAL DATA  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-105 CV96D #####	MW-105 DH51G #####
<b>VOLATILES-SIM (µg/L)</b>						
Vinyl Chloride	SW8260-SIM	10		10	NA	NA
1,1-Dichloroethene	SW8260-SIM	5		5	NA	NA
Carbon Tetrachloride	SW8260-SIM	5		5	NA	NA
Tetrachloroethene	SW8260-SIM	8.9		5	NA	NA
1,1,2,2-Tetrachloroethane	SW8260-SIM	6.5		5	NA	NA
Acrylonitrile	SW8260-SIM	5		5	NA	NA
<b>DISSOLVED METALS (µg/L)</b>						
Antimony	200.8	4300		10	1 U	1 U
Arsenic	200.8	4	32	4	14	14
Beryllium	200.8	2		2	1 U	1 U
Cadmium	200.8	8		2	1 U	1 U
Chromium	200.8	50		50	7	9
Copper	200.8	10		10	2 U	2 U
Lead	200.8	10		10	5 U	5 U
Mercury	7470	1		1	0.1 U	0.1 U
Nickel	200.8	10		10	2 U	3
Selenium	200.8	71		20	10 U	11
Silver	200.8	2		2	2 U	2 U
Zinc	200.8	77		20	20 U	20 U
<b>Cyanide (µg/L)</b>						
Total Cyanide	335.2	50		50	7	5
Weak Acid Dissoc. Cyanide	SM4500CN-I			50	5 U	5 U
<b>CONVENTIONALS</b>						
Total Dissolved Solids (µg/L)	160.1				3400000 J	3200000 J
Total Suspended Solids (µg/L)	160.2				83000	85000 J
Ortho-Phosphorous (µg-P/L)	365.2				NA	5
pH	Field				7.26	7.01
Specific Conductance (µmhos)	Field				7310	7525
Temperature (°C)	Field				15.8	17.6

**TABLE 2-3  
SUMMARY OF GROUNDWATER ANALYTICAL DATA  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-105 CV96D #####	MW-105 DH51G #####
<b>MAJOR IONS</b>						
Calcium	6010				NA	119000
Magnesium	6010				NA	84900
Potassium	6010				NA	47300
Sodium	6010				NA	891000
Alkalinity (µg/L CaCO <sub>3</sub> )	2320				NA	1400000
Carbonate (Alkalinity) (µg/L CaCO <sub>3</sub> )	2320				NA	1000 U
Bicarbonate (Alkalinity) (µg/L CaCO <sub>3</sub> )	2320				NA	140000
Bromide (µg/L)	4500Br-B				NA	50000 U
Fluoride (µg/L)	340.2				NA	400
Chloride (µg/L)	325.2				NA	1100000
N-Nitrate (µg-N/L)	Calculated				NA	10 U
N-Nitrite (µg-N/L)	354.1				NA	10 U
Nitrate+Nitrite (NO <sub>2</sub> +NO <sub>3</sub> ) (µg-N/L)	353.2				NA	10 U
Sulfate (µg/L)	375.2				NA	11000

**TABLE 2-3**  
**SUMMARY OF GROUNDWATER ANALYTICAL DATA**  
**06/99 TO 06/01**  
**UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-107R AK50F 6/16/1999	MW-107R BD02G 12/16/1999	MW-107R BK98A 3/22/2000	MW-107R BT43G 6/14/2000	MW-107R CF72J 9/27/2000	MW-107R CP44D 12/20/2000
<b>TPH (µg/L)</b>										
Diesel-Range Petroleum Hydrocarbons	WTPH-Dx		6586	400 (b)	250 U	580	360	740	600	540
Motor Oil-Range Petroleum Hydrocarbons	WTPH-Dx			1100 (b)	500 U	500 U	500 U	500 U	500 U	500 U
Gasoline-Range Petroleum Hydrocarbons	WTPH-G		7591	600 (b)	550	990	840	3400	780	1400
<b>CPAH (µg/L)</b>										
Benzo(a)anthracene	8270-SIM	1.0		1.0	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.04 J
Chrysene	8270-SIM	1.0		1.0	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.03 MJ
Benzo(b)fluoranthene	8270-SIM	1.0		1.0	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Benzo(k)fluoranthene	8270-SIM	1.0		1.0	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Benzo(a)pyrene	8270-SIM	1.0		1.0	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Indeno(1,2,3-cd)pyrene	8270-SIM	1.0		1.0	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Dibenzo(a,h)anthracene	8270-SIM	1.0		1.0	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
<b>SEMIVOLATILES (µg/L)</b>										
Phenol	8270	1100000		10	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Bis-(2-Chloroethyl) Ether	8270	10		10	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2-Chlorophenol	8270	96.7		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	8270	2600		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	8270	10		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzyl Alcohol	8270			20	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichlorobenzene	8270	4200		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Methylphenol	8270			10 (c)	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2,2'-Oxybis(1-Chloropropane)	8270			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Methylphenol	8270			10 (c)	1.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
N-Nitroso-Di-N-Propylamine	8270	10		10	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Hexachloroethane	8270	10		10	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Nitrobenzene	8270	449		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isophorone	8270	600		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Nitrophenol	8270			10	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dimethylphenol	8270	553		10	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Benzoic Acid	8270			10	10 U	10 U	10 U	10 U	10 U	10 U
bis(2-Chloroethoxy) Methane	8270			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,4-Dichlorophenol	8270	191		10	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
1,2,4-Trichlorobenzene	8270	227		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Naphthalene	8270	9880		10	2.1	390	600 J	2000 J	900 J	740
4-Chloroaniline	8270			20	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Hexachlorobutadiene	8270	50		10	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Chloro-3-methylphenol	8270			20	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2-Methylnaphthalene	8270			10	6.8	44	39	130	78 J	63
Hexachlorocyclopentadiene	8270	4180		20	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	8270	10		10	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

**TABLE 2-3  
SUMMARY OF GROUNDWATER ANALYTICAL DATA  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-107R	MW-107R	MW-107R	MW-107R	MW-107R	MW-107R
					AK50F 6/16/1999	BD02G 12/16/1999	BK98A 3/22/2000	BT43G 6/14/2000	CF72J 9/27/2000	CP44D 12/20/2000
2,4,5-Trichlorophenol	8270			10	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Chloronaphthalene	8270			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Nitroaniline	8270			50	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dimethylphthalate	8270	72000		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Acenaphthylene	8270			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
3-Nitroaniline	8270			50	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U
Acenaphthene	8270	225	456	10	5.9	18	14 J	47	36 J	33
2,4-Dinitrophenol	8270	3460		50	10 U	10 U	10 U	10 U	10 U	10 U
4-Nitrophenol	8270			50	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dibenzofuran	8270			10	1.0 U	1.0	1.0 U	2.6	1.9	1.8
2,6-Dinitrotoluene	8270			10	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dinitrotoluene	8270	10		10	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Diethylphthalate	8270	28400		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorophenyl-phenylether	8270			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Fluorene	8270	2422		10	1.5	4.8	3.2	12	9.2	8.9
4-Nitroaniline	8270			20	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4,6-Dinitro-2-Methylphenol	8270			50 (c)	10 U	10 U	10 U	10 U	10 U	10 U
N-Nitrosodiphenylamine	8270	16		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Bromophenyl-phenylether	8270			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Hexachlorobenzene	8270	10		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	8270	50		50	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Phenanthrene	8270			10	1.4	3.2	2.3	9.1	6.7	5.9
Carbazole	8270			10	2.2	3.7	2.3	9.2	4.9	4.4
Anthracene	8270	25900		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Di-n-Butylphthalate	8270	2910		10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Fluoranthene	8270	27.1		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pyrene	8270	777		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U
Butylbenzylphthalate	8270	1250		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
3,3'-Dichlorobenzidine	8270	20		20	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
bis(2-Ethylhexyl)phthalate	8270	10		10	5.1 J	1.0 U	1.0 U	1.3	1.6	1.0 U
Di-n-Octyl phthalate	8270			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzo(g,h,i)perylene	8270			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

**TABLE 2-3  
SUMMARY OF GROUNDWATER ANALYTICAL DATA  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-107R	MW-107R	MW-107R	MW-107R	MW-107R	MW-107R
					AK50F 6/16/1999	BD02G 12/16/1999	BK98A 3/22/2000	BT43G 6/14/2000	CF72J 9/27/2000	CP44D 12/20/2000
<b>VOLATILES (µg/L)</b>										
Chloromethane	8260	133		10	1.0 U	10 U	10 U	10 U	10 U	5.0 U
Bromomethane	8260	968		10 (c)	1.0 U	10 U	10 U	10 U	10 U	5.0 U
Vinyl Chloride	8260	10		10	1.0 U	2.5 U	0.50 U	2.5 U	NA	5.0 U
Chloroethane	8260			10	1.0 U	10 U	10 U	10 U	10 U	5.0 U
Methylene Chloride	8260	960		5	2.0 U	20 U	20 U	20 U	20 U	10 U
Acetone	8260			10	5.0 U	50 U	50 U	50 U	50 U	25 U
Carbon Disulfide	8260			10	1.0 U	10 U	10 U	10 U	10 U	5.0 U
1,1-Dichloroethene	8260	5		5	1.0 U	2.5 U	0.50 U	2.5 U	NA	5.0 U
1,1-Dichloroethane	8260			5	1.0 U	10 U	10 U	10 U	10 U	5.0 U
trans-1,2-Dichloroethene	8260	32800		5	1.0 U	10 U	10 U	10 U	10 U	5.0 U
cis-1,2-Dichloroethene	8260			5	1.0 U	10 U	10 U	10 U	10 U	5.0 U
Chloroform	8260	470		5	1.0 U	10 U	10 U	10 U	10 U	5.0 U
1,2-Dichloroethane	8260	99		5	1.0 U	10 U	10 U	10 U	10 U	5.0 U
2-Butanone	8260			50 (c)	5.0 U	50 U	50 U	50 U	50 U	25 U
1,1,1-Trichloroethane	8260	41700		5	1.0 U	10 U	10 U	10 U	10 U	5.0 U
Carbon Tetrachloride	8260	5		5	1.0 U	2.5 U	0.50 U	2.5 U	NA	5.0 U
Vinyl Acetate	8260			50	5.0 U	50 U	50 U	50 U	50 U	25 U
Bromodichloromethane	8260	28		5	1.0 U	10 U	10 U	10 U	10 U	5.0 U
1,2-Dichloropropane	8260	23		5	1.0 U	10 U	10 U	10 U	10 U	5.0 U
cis-1,3-Dichloropropene	8260	19		5	1.0 U	10 U	10 U	10 U	10 U	5.0 U
Trichloroethene	8260	81		5	1.0 U	10 U	10 U	10 U	10 U	5.0 U
Dibromochloromethane	8260	21		10 (c)	1.0 U	10 U	10 U	10 U	10 U	5.0 U
1,1,2-Trichloroethane	8260	42		5	1.0 U	10 U	10 U	10 U	10 U	5.0 U
Benzene	8260	71	219	5	1.0 U	10 U	10 U	10 U	10 U	5.0 U
trans-1,3-Dichloropropene	8260	19		5	1.0 U	10 U	10 U	10 U	10 U	5.0 U
2-Chloroethylvinylether	8260			10	5.0 U	50 U	R	50 U	50 U	25 U
Bromoform	8260	360		5	1.0 U	10 U	10 U	10 U	10 U	5.0 U
4-Methyl-2-Pentanone (MIBK)	8260			50 (c)	5.0 U	50 U	50 U	50 U	50 U	25 U
2-Hexanone	8260			50	5.0 U	50 U	50 U	50 U	50 U	25 U
Tetrachloroethene	8260	8.9		5	1.0 U	2.5 U	0.50 U	2.5 U	NA	5.0 U
1,1,2,2-Tetrachloroethane	8260	6.5		5	1.0 U	2.5 U	0.50 U	2.5 U	NA	5.0 U
Toluene	8260	485		5	3.7	10 U	10 U	14	10 U	4.9 J
Chlorobenzene	8260	5030		5	1.0 U	10 U	10 U	10 U	10 U	5.0 U
Ethylbenzene	8260	276		5	22	27	23	73	14 J	33
Styrene	8260			5	1.0 U	10 U	10 U	10 U	10 U	5.0 U
Trichlorofluoromethane	8260			10 (c)	1.0 U	10 U	10 U	10 U	10 U	5.0 U
1,1,2-Trichlorotrifluoroethane	8260			10 (c)	2.0 U	20 U	20 U	20 U	20 U	10 U
m,p-Xylene	8260			5 (d)	17	19	21	59	13 J	24
o-Xylene	8260			5 (d)	8.6	10	12	33	10 U	19
1,2-Dichlorobenzene	8260	4200		10	1.0 U	10 U	10 U	10 U	10 U	5.0 U
1,3-Dichlorobenzene	8260	2600		10	1.0 U	10 U	10 U	10 U	10 U	5.0 U

**TABLE 2-3**  
**SUMMARY OF GROUNDWATER ANALYTICAL DATA**  
**06/99 TO 06/01**  
**UNION STATION**

Analyte	Method	CAP Cleanup	Background-based	Practical	MW-107R	MW-107R	MW-107R	MW-107R	MW-107R	MW-107R
		Level (µg/L)	Screening Level (a) (µg/L)	Quantitation Limits (µg/L)	AK50F 6/16/1999	BD02G 12/16/1999	BK98A 3/22/2000	BT43G 6/14/2000	CF72J 9/27/2000	CP44D 12/20/2000
1,4-Dichlorobenzene	8260	10		10	1.0 U	10 U	10 U	10 U	10 U	5.0 U
Acrolein	8260	780		500 (c)	50 U	500 U	500 U	500 U	500 U	250 U
Methyl Iodide	8260			10 (c)	1.0 U	10 U	10 U	10 U	10 U	5.0 U
Bromoethane	8260			10 (c)	2.0 U	20 U	20 U	20 U	20 U	10 U
Acrylonitrile	8260	5		5	5.0 U	2.5 U	0.50 U	2.5 U	NA	5.0 U
1,1-Dichloropropene	8260			10 (c)	1.0 U	10 U	10 U	10 U	10 U	5.0 U
Dibromomethane	8260			10 (c)	1.0 U	10 U	10 U	10 U	10 U	5.0 U
1,1,1,2-Tetrachloroethane	8260			10 (c)	1.0 U	10 U	10 U	10 U	10 U	5.0 U
1,2-Dibromo-3-chloropropane	8260			50 (c)	5.0 U	50 U	50 U	50 U	50 U	25 U
1,2,3-Trichloropropane	8260			10 (c)	3.0 U	30 U	30 U	30 U	30 U	15 U
trans-1,4-Dichloro-2-butene	8260			50 (c)	5.0 U	50 U	50 U	50 U	50 U	25 U
1,3,5-Trimethylbenzene	8260			10 (c)	6.2	10 U	10 U	10 U	10 U	5.7
1,2,4-Trimethylbenzene	8260			10 (c)	4.1	10 U	10 U	24	10 U	18
Hexachlorobutadiene	8260	50		10	5.0 U	50 U	50 U	50 U	50 U	25 U
Ethylene Dibromide	8260			10 (c)	1.0 U	10 U	10 U	10 U	10 U	5.0 U
Bromochloromethane	8260			10 (c)	1.0 U	10 U	10 U	10 U	10 U	5.0 U
2,2-Dichloropropane	8260			10 (c)	1.0 U	10 U	10 U	10 U	10 U	5.0 U
1,3-Dichloropropane	8260			10 (c)	1.0 U	10 U	10 U	10 U	10 U	5.0 U
Isopropylbenzene	8260			10 (c)	1.0 U	10 U	10 U	10 U	10 U	5.0 U
n-Propylbenzene	8260			10 (c)	1.0 U	10 U	10 U	10 U	10 U	5.0 U
Bromobenzene	8260			10 (c)	1.0 U	10 U	10 U	10 U	10 U	5.0 U
2-Chlorotoluene	8260			10 (c)	1.0 U	10 U	10 U	10 U	10 U	5.0 U
4-Chlorotoluene	8260			10 (c)	1.0 U	10 U	10 U	10 U	10 U	5.0 U
tert-Butylbenzene	8260			10 (c)	1.0 U	10 U	10 U	10 U	10 U	5.0 U
sec-Butylbenzene	8260			10 (c)	1.0 U	10 U	10 U	10 U	10 U	5.0 U
4-Isopropyltoluene	8260			10 (c)	12	10 U	10 U	10 U	10 U	5.0 U
n-Butylbenzene	8260			10 (c)	1.0 U	10 U	10 U	10 U	10 U	5.0 U
1,2,4-Trichlorobenzene	8260	227		10	5.0 U	50 U	50 U	50 U	50 U	25 U
Naphthalene	8260	9880		10	850	1400	1400 J	4800	1500	2200
1,2,3-Trichlorobenzene	8260			10 (c)	5.0 U	50 U	50 U	50 U	50 U	25 U

**TABLE 2-3  
SUMMARY OF GROUNDWATER ANALYTICAL DATA  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-107R AK50F 6/16/1999	MW-107R BD02G 12/16/1999	MW-107R BK98A 3/22/2000	MW-107R BT43G 6/14/2000	MW-107R CF72J 9/27/2000	MW-107R CP44D 12/20/2000
<b>VOLATILES-SIM (µg/L)</b>										
Vinyl Chloride	SW8260-SIM	10		10	NA	NA	NA	NA	0.50 U	NA
1,1-Dichloroethene	SW8260-SIM	5		5	NA	NA	NA	NA	0.50 U	NA
Carbon Tetrachloride	SW8260-SIM	5		5	NA	NA	NA	NA	0.50 U	NA
Tetrachloroethene	SW8260-SIM	8.9		5	NA	NA	NA	NA	0.50 U	NA
1,1,2,2-Tetrachloroethane	SW8260-SIM	6.5		5	NA	NA	NA	NA	0.50 U	NA
Acrylonitrile	SW8260-SIM	5		5	NA	NA	NA	NA	0.50 U	NA
<b>DISSOLVED METALS (µg/L)</b>										
Antimony	200.8	4300		10	4 U	1 U	4 U	4 U	1 U	1 U
Arsenic	200.8	4	32	4	8	6	6	6	5	6
Beryllium	200.8	2		2	4 U	1 U	4 U	4 U	1 U	1 U
Cadmium	200.8	8		2	4 U	1 U	4 U	4 U	1 U	1 U
Chromium	200.8	50		50	10	9	10 U	10 U	15	2 U
Copper	200.8	10		10	10 U	2 U	10 U	10	2 U	2 U
Lead	200.8	10		10	20 U	5 U	20 U	20 U	5 U	5 U
Mercury	7470	1		1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Nickel	200.8	10		10	10 U	2 U	10 U	10 U	2 U	2 U
Selenium	200.8	71		20	20 U	5 U	20 U	20 U	10 U	5
Silver	200.8	2		2	10 U	2 U	10 U	10 U	2 U	2 U
Zinc	200.8	77		20	80 U	20 U	80 U	80 U	20 U	20 U
<b>Cyanide (µg/L)</b>										
Total Cyanide	335.2	50		50	5 UJ	5	5 U	5 U	5 U	5 U
Weak Acid Dissoc. Cyanide	SM4500CN-I			50	NA	NA	NA	NA	NA	5 U
<b>CONVENTIONALS</b>										
Total Dissolved Solids (µg/L)	160.1				2400000	2000000	1800000	2000000 J	1800000	1700000
Total Suspended Solids (µg/L)	160.2				62000	84000	62000	54000	49000	59000
Ortho-Phosphorous (µg-P/L)	365.2				NA	NA	1000	NA	NA	NA
pH	Field				6.42	6.02	6.94	7.22	6.74	6.29
Specific Conductance (µmhos)	Field				4190	5070	3520	1840	3778	3423
Temperature (°C)	Field				13.4	13.5	12.3	13.1	14.4	13.2

**TABLE 2-3**  
**SUMMARY OF GROUNDWATER ANALYTICAL DATA**  
**06/99 TO 06/01**  
**UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-107R AK50F 6/16/1999	MW-107R BD02G 12/16/1999	MW-107R BK98A 3/22/2000	MW-107R BT43G 6/14/2000	MW-107R CF72J 9/27/2000	MW-107R CP44D 12/20/2000
<b>MAJOR IONS</b>										
Calcium	6010				NA	NA	34600	NA	NA	NA
Magnesium	6010				NA	NA	46100	NA	NA	NA
Potassium	6010				NA	NA	22700	NA	NA	NA
Sodium	6010				NA	NA	641000	NA	NA	NA
Alkalinity (µg/L CaCO <sub>3</sub> )	2320				NA	NA	960000	NA	NA	NA
Carbonate (Alkalinity) (µg/L CaCO <sub>3</sub> )	2320				NA	NA	1000 U	NA	NA	NA
Bicarbonate (Alkalinity) (µg/L CaCO <sub>3</sub> )	2320				NA	NA	960000	NA	NA	NA
Bromide (µg/L)	4500Br-B				NA	NA	6100	NA	NA	NA
Fluoride (µg/L)	340.2				NA	NA	280	NA	NA	NA
Chloride (µg/L)	325.2				NA	NA	510000 J	NA	NA	NA
N-Nitrate (µg-N/L)	Calculated				NA	NA	10	NA	NA	NA
N-Nitrite (µg-N/L)	354.1				NA	NA	10 U	NA	NA	NA
Nitrate+Nitrite (NO <sub>2</sub> +NO <sub>3</sub> ) (µg-N/L)	353.2				NA	NA	10	NA	NA	NA
Sulfate (µg/L)	375.2				NA	NA	15000 J	NA	NA	NA



**TABLE 2-3**  
**SUMMARY OF GROUNDWATER ANALYTICAL DATA**  
**06/99 TO 06/01**  
**UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-107R	MW-109	MW-107R
					CV96E 3/14/2001	Dup of MW-107R CV96G 3/14/2001	DH51H 6/22/2001
<b>TPH (µg/L)</b>							
Diesel-Range Petroleum Hydrocarbons	WTPH-Dx		6586	400 (b)	1200	1100	890
Motor Oil-Range Petroleum Hydrocarbons	WTPH-Dx			1100 (b)	500 U	500 U	500 U
Gasoline-Range Petroleum Hydrocarbons	WTPH-G		7591	600 (b)	1800 J	1400 J	1500
<b>CPAH (µg/L)</b>							
Benzo(a)anthracene	8270-SIM	1.0		1.0	0.10 U	0.10 U	0.10 U
Chrysene	8270-SIM	1.0		1.0	0.10 U	0.10 U	0.10 U
Benzo(b)fluoranthene	8270-SIM	1.0		1.0	0.10 U	0.10 U	0.10 U
Benzo(k)fluoranthene	8270-SIM	1.0		1.0	0.10 U	0.10 U	0.10 U
Benzo(a)pyrene	8270-SIM	1.0		1.0	0.10 U	0.10 U	0.10 U
Indeno(1,2,3-cd)pyrene	8270-SIM	1.0		1.0	0.10 U	0.10 U	0.10 U
Dibenzo(a,h)anthracene	8270-SIM	1.0		1.0	0.10 U	0.10 U	0.10 U
<b>SEMIVOLATILES (µg/L)</b>							
Phenol	8270	1100000		10	2.0 U	2.0 U	2.0 U
Bis-(2-Chloroethyl) Ether	8270	10		10	2.0 U	2.0 U	2.0 U
2-Chlorophenol	8270	96.7		10	1.0 U	1.0 U	1.0 UJ
1,3-Dichlorobenzene	8270	2600		10	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	8270	10		10	1.0 U	1.0 U	1.0 U
Benzyl Alcohol	8270			20	5.0 U	5.0 U	5.0 U
1,2-Dichlorobenzene	8270	4200		10	1.0 U	1.0 U	1.0 U
2-Methylphenol	8270			10 (c)	2.0 U	2.0 U	1.0 U
2,2'-Oxybis(1-Chloropropane)	8270			10 (c)	1.0 U	1.0 U	1.0 U
4-Methylphenol	8270			10 (c)	1.0 U	1.0 U	1.0 U
N-Nitroso-Di-N-Propylamine	8270	10		10	2.0 U	2.0 U	2.0 U
Hexachloroethane	8270	10		10	2.0 U	2.0 U	2.0 U
Nitrobenzene	8270	449		10	1.0 U	1.0 U	1.0 U
Isophorone	8270	600		10	1.0 U	1.0 U	1.0 U
2-Nitrophenol	8270			10	5.0 U	5.0 U	5.0 U
2,4-Dimethylphenol	8270	553		10	3.0 U	3.0 U	3.0 U
Benzoic Acid	8270			10	10 U	10 U	10 U
bis(2-Chloroethoxy) Methane	8270			10	1.0 U	1.0 U	1.0 U
2,4-Dichlorophenol	8270	191		10	3.0 U	3.0 U	3.0 U
1,2,4-Trichlorobenzene	8270	227		10	1.0 U	1.0 U	1.0 U
Naphthalene	8270	9880		10	2200	1900	1300
4-Chloroaniline	8270			20	3.0 U	3.0 U	3.0 U
Hexachlorobutadiene	8270	50		10	2.0 U	2.0 U	2.0 U
4-Chloro-3-methylphenol	8270			20	2.0 U	2.0 U	2.0 U
2-Methylnaphthalene	8270			10	170	150	130
Hexachlorocyclopentadiene	8270	4180		20	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	8270	10		10	5.0 U	5.0 U	5.0 U

**TABLE 2-3**  
**SUMMARY OF GROUNDWATER ANALYTICAL DATA**  
**06/99 TO 06/01**  
**UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-107R	MW-109	MW-107R
					CV96E 3/14/2001	Dup of MW-107R CV96G 3/14/2001	DH51H 6/22/2001
2,4,5-Trichlorophenol	8270			10	5.0 U	5.0 U	5.0 U
2-Chloronaphthalene	8270			10	1.0 U	1.0 U	1.0 U
2-Nitroaniline	8270			50	5.0 U	5.0 U	5.0 U
Dimethylphthalate	8270	72000		10	1.0 U	1.0 U	1.0 U
Acenaphthylene	8270			10	1.0 U	1.0 U	1.0 U
3-Nitroaniline	8270			50	6.0 U	6.0 U	6.0 U
Acenaphthene	8270	225	456	10	53	53	47
2,4-Dinitrophenol	8270	3460		50	10 U	10 U	10 U
4-Nitrophenol	8270			50	5.0 U	5.0 U	5.0 U
Dibenzofuran	8270			10	3.9	4.0	3.0
2,6-Dinitrotoluene	8270			10	5.0 U	5.0 U	5.0 U
2,4-Dinitrotoluene	8270	10		10	5.0 U	5.0 U	5.0 U
Diethylphthalate	8270	28400		10	1.0 U	1.0 U	1.0 U
4-Chlorophenyl-phenylether	8270			10	1.0 U	1.0 U	1.0 U
Fluorene	8270	2422		10	16	17	14
4-Nitroaniline	8270			20	5.0 U	5.0 U	5.0 U
4,6-Dinitro-2-Methylphenol	8270			50 (c)	10 U	10 U	10 U
N-Nitrosodiphenylamine	8270	16		10	1.0 U	1.0 U	1.0 U
4-Bromophenyl-phenylether	8270			10	1.0 U	1.0 U	1.0 U
Hexachlorobenzene	8270	10		10	1.0 U	1.0 U	1.0 U
Pentachlorophenol	8270	50		50	5.0 U	5.0 U	5.0 U
Phenanthrene	8270			10	12	12	9.8
Carbazole	8270			10	10	11	7.1
Anthracene	8270	25900		10	1.0	1.0	1.0 U
Di-n-Butylphthalate	8270	2910		10 (c)	1.0 U	1.0 U	1.0 U
Fluoranthene	8270	27.1		10	1.0 U	1.0 U	1.0 U
Pyrene	8270	777		10	1.0 U	1.0 U	1.0 U
Butylbenzylphthalate	8270	1250		10	1.0 U	1.0 U	1.0 U
3,3'-Dichlorobenzidine	8270	20		20	5.0 U	5.0 U	5.0 U
bis(2-Ethylhexyl)phthalate	8270	10		10	1.0 U	1.0 U	1.0 U
Di-n-Octyl phthalate	8270			10	1.0 U	1.0 U	1.0 U
Benzo(g,h,i)perylene	8270			10	1.0 U	1.0 U	1.0 U

**TABLE 2-3  
SUMMARY OF GROUNDWATER ANALYTICAL DATA  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-107R	MW-109	MW-107R
					CV96E 3/14/2001	Dup of MW-107R CV96G 3/14/2001	DH51H 6/22/2001
<b>VOLATILES (µg/L)</b>							
Chloromethane	8260	133		10	5.0 U	1.0 U	5.0 U
Bromomethane	8260	968		10 (c)	5.0 U	1.0 U	5.0 U
Vinyl Chloride	8260	10		10	5.0 U	1.0 U	5.0 U
Chloroethane	8260			10	5.0 U	1.0 U	5.0 U
Methylene Chloride	8260	960		5	10 U	2.0 U	10 U
Acetone	8260			10	25 U	5.0 U	25 U
Carbon Disulfide	8260			10	5.0 U	1.0 U	5.0 U
1,1-Dichloroethene	8260	5		5	5.0 U	1.0 U	5.0 U
1,1-Dichloroethane	8260			5	5.0 U	1.0 U	5.0 U
trans-1,2-Dichloroethene	8260	32800		5	5.0 U	1.0 U	5.0 U
cis-1,2-Dichloroethene	8260			5	5.0 U	1.0 U	5.0 U
Chloroform	8260	470		5	5.0 U	1.0 U	5.0 U
1,2-Dichloroethane	8260	99		5	5.0 U	1.0 U	5.0 U
2-Butanone	8260			50 (c)	25 U	5.0 U	25 U
1,1,1-Trichloroethane	8260	41700		5	5.0 U	1.0 U	5.0 U
Carbon Tetrachloride	8260	5		5	5.0 U	1.0 U	5.0 U
Vinyl Acetate	8260			50	25 U	5.0 U	25 U
Bromodichloromethane	8260	28		5	5.0 U	1.0 U	5.0 U
1,2-Dichloropropane	8260	23		5	5.0 U	1.0 U	5.0 U
cis-1,3-Dichloropropene	8260	19		5	5.0 U	1.0 U	5.0 U
Trichloroethene	8260	81		5	5.0 U	1.0 U	5.0 U
Dibromochloromethane	8260	21		10 (c)	5.0 U	1.0 U	5.0 U
1,1,2-Trichloroethane	8260	42		5	5.0 U	1.0 U	5.0 U
Benzene	8260	71	219	5	5.0 U	1.2	5.0 U
trans-1,3-Dichloropropene	8260	19		5	5.0 U	1.0 U	5.0 U
2-Chloroethylvinylether	8260			10	25 U	5.0 U	25 U
Bromoform	8260	360		5	5.0 U	1.0 U	5.0 U
4-Methyl-2-Pentanone (MIBK)	8260			50 (c)	25 U	5.0 U	25 U
2-Hexanone	8260			50	25 U	5.0 U	25 U
Tetrachloroethene	8260	8.9		5	5.0 U	1.0 U	5.0 U
1,1,2,2-Tetrachloroethane	8260	6.5		5	5.0 U	1.0 U	5.0 U
Toluene	8260	485		5	8.6	7.6	7.3
Chlorobenzene	8260	5030		5	5.0 U	1.0 U	5.0 U
Ethylbenzene	8260	276		5	46	44	47
Styrene	8260			5	5.0 U	1.0 U	5.0 U
Trichlorofluoromethane	8260			10 (c)	5.0 U	1.0 U	5.0 U
1,1,2-Trichlorotrifluoroethane	8260			10 (c)	10 U	2.0 U	10 U
m,p-Xylene	8260			5 (d)	33	33	32
o-Xylene	8260			5 (d)	23	23	20
1,2-Dichlorobenzene	8260	4200		10	5.0 U	1.0 U	5.0 U
1,3-Dichlorobenzene	8260	2600		10	5.0 U	1.0 U	5.0 U

**TABLE 2-3**  
**SUMMARY OF GROUNDWATER ANALYTICAL DATA**  
**06/99 TO 06/01**  
**UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-107R	MW-109	MW-107R
					CV96E 3/14/2001	Dup of MW-107R CV96G 3/14/2001	DH51H 6/22/2001
1,4-Dichlorobenzene	8260	10		10	5.0 U		5.0 U
Acrolein	8260	780		500 (c)	250 U	50 U	250 U
Methyl Iodide	8260			10 (c)	5.0 U	1.0 U	5.0 U
Bromoethane	8260			10 (c)	10 U	2.0 U	10 U
Acrylonitrile	8260	5		5	5.0 U	1.0 U	5.0 U
1,1-Dichloropropene	8260			10 (c)	5.0 U	1.0 U	5.0 U
Dibromomethane	8260			10 (c)	5.0 U	1.0 U	5.0 U
1,1,1,2-Tetrachloroethane	8260			10 (c)	5.0 U	1.0 U	5.0 U
1,2-Dibromo-3-chloropropane	8260			50 (c)	25 U	5.0 U	25 U
1,2,3-Trichloropropane	8260			10 (c)	15 U	3.0 U	15 U
trans-1,4-Dichloro-2-butene	8260			50 (c)	25 U	5.0 U	25 U
1,3,5-Trimethylbenzene	8260			10 (c)	7.0	7.0	6.2
1,2,4-Trimethylbenzene	8260			10 (c)	20	20	17
Hexachlorobutadiene	8260	50		10	25 U	5.0 U	25 U
Ethylene Dibromide	8260			10 (c)	5.0 U	1.0 U	5.0 U
Bromochloromethane	8260			10 (c)	5.0 U	1.0 U	5.0 U
2,2-Dichloropropane	8260			10 (c)	5.0 U	1.0 U	5.0 U
1,3-Dichloropropane	8260			10 (c)	5.0 U	1.0 U	5.0 U
Isopropylbenzene	8260			10 (c)	5.0 U	1.9	5.0 U
n-Propylbenzene	8260			10 (c)	5.0 U	1.0 U	5.0 U
Bromobenzene	8260			10 (c)	5.0 U	1.0 U	5.0 U
2-Chlorotoluene	8260			10 (c)	5.0 U	1.0 U	5.0 U
4-Chlorotoluene	8260			10 (c)	5.0 U	1.0 U	5.0 U
tert-Butylbenzene	8260			10 (c)	5.0 U	1.0 U	5.0 U
sec-Butylbenzene	8260			10 (c)	5.0 U	1.0 U	5.0 U
4-Isopropyltoluene	8260			10 (c)	5.0 U	3.2	5.0 U
n-Butylbenzene	8260			10 (c)	5.0 U	1.0 U	5.0 U
1,2,4-Trichlorobenzene	8260	227		10	25 U	5.0 U	25 U
Naphthalene	8260	9880		10	2700 J	2100 J	2900
1,2,3-Trichlorobenzene	8260			10 (c)	25 U	5.0 U	25 U

**TABLE 2-3**  
**SUMMARY OF GROUNDWATER ANALYTICAL DATA**  
**06/99 TO 06/01**  
**UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-107R CV96E 3/14/2001	MW-109 Dup of MW-107R CV96G 3/14/2001	MW-107R DH51H 6/22/2001
<b>VOLATILES-SIM (µg/L)</b>							
Vinyl Chloride	SW8260-SIM	10		10	NA	NA	NA
1,1-Dichloroethene	SW8260-SIM	5		5	NA	NA	NA
Carbon Tetrachloride	SW8260-SIM	5		5	NA	NA	NA
Tetrachloroethene	SW8260-SIM	8.9		5	NA	NA	NA
1,1,2,2-Tetrachloroethane	SW8260-SIM	6.5		5	NA	NA	NA
Acrylonitrile	SW8260-SIM	5		5	NA	NA	NA
<b>DISSOLVED METALS (µg/L)</b>							
Antimony	200.8	4300		10	1 U	1 U	1 U
Arsenic	200.8	4	32	4	7	8	8
Beryllium	200.8	2		2	1 U	1 U	1 U
Cadmium	200.8	8		2	1 U	1 U	1 U
Chromium	200.8	50		50	6	5	10
Copper	200.8	10		10	3	2 U	2 U
Lead	200.8	10		10	5 U	5 U	5 U
Mercury	7470	1		1	0.1 U	0.1 U	0.1 U
Nickel	200.8	10		10	2 U	2 U	2 U
Selenium	200.8	71		20	4	4	4
Silver	200.8	2		2	2 U	2 U	2 U
Zinc	200.8	77		20	20 U	20 U	20 U
<b>Cyanide (µg/L)</b>							
Total Cyanide	335.2	50		50	5 U	5 U	5 U
Weak Acid Dissoc. Cyanide	SM4500CN-I			50	5 U	5 U	5 U
<b>CONVENTIONALS</b>							
Total Dissolved Solids (µg/L)	160.1				1900000 J	1800000 J	1900000 J
Total Suspended Solids (µg/L)	160.2				56000	53000	65000 J
Ortho-Phosphorous (µg-P/L)	365.2				NA	NA	350
pH	Field				8.22	8.24	6.84
Specific Conductance (µmhos)	Field				4350	4350	3550
Temperature (°C)	Field				12.3	12.3	13.6

**TABLE 2-3  
SUMMARY OF GROUNDWATER ANALYTICAL DATA  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-107R	MW-109	MW-107R
					CV96E 3/14/2001	Dup of MW-107R CV96G 3/14/2001	DH51H 6/22/2001
<b>MAJOR IONS</b>							
Calcium	6010				NA	NA	39600
Magnesium	6010				NA	NA	51800
Potassium	6010				NA	NA	22000
Sodium	6010				NA	NA	629000
Alkalinity (µg/L CaCO <sub>3</sub> )	2320				NA	NA	1000000
Carbonate (Alkalinity) (µg/L CaCO <sub>3</sub> )	2320				NA	NA	1000 U
Bicarbonate (Alkalinity) (µg/L CaCO <sub>3</sub> )	2320				NA	NA	1000000
Bromide (µg/L)	4500Br-B				NA	NA	50000 U
Fluoride (µg/L)	340.2				NA	NA	200
Chloride (µg/L)	325.2				NA	NA	520000
N-Nitrate (µg-N/L)	Calculated				NA	NA	10 U
N-Nitrite (µg-N/L)	354.1				NA	NA	10 U
Nitrate+Nitrite (NO <sub>2</sub> +NO <sub>3</sub> ) (µg-N/L)	353.2				NA	NA	10 U
Sulfate (µg/L)	375.2				NA	NA	10000

**TABLE 2-3  
SUMMARY OF GROUNDWATER ANALYTICAL DATA  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-108R	MW-108R	MW-108R	MW-108R	MW-108R	MW-108R
					AK50G 6/16/1999	BD02K 12/16/1999	BK98F 3/22/2000	BT43H 6/14/2000	CF72E 9/27/2000	CP44G 12/20/2000
<b>TPH (µg/L)</b>										
Diesel-Range Petroleum Hydrocarbons	WTPH-Dx		6586	400 (b)	250 U	250 U	250 U	250 U	250 U	250 U
Motor Oil-Range Petroleum Hydrocarbons	WTPH-Dx			1100 (b)	500 U	500 U	500 U	500 U	500 U	500 U
Gasoline-Range Petroleum Hydrocarbons	WTPH-G		7591	600 (b)	250 U	250 U	250 U	250 U	250 U	250 U
<b>CPAH (µg/L)</b>										
Benzo(a)anthracene	8270-SIM	1.0		1.0	0.10 U	0.10 U	0.05 J	0.05 J	0.08 J	0.06 J
Chrysene	8270-SIM	1.0		1.0	0.10 U	0.10 U	0.04 J	0.04 J	0.06 J	0.04 J
Benzo(b)fluoranthene	8270-SIM	1.0		1.0	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Benzo(k)fluoranthene	8270-SIM	1.0		1.0	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Benzo(a)pyrene	8270-SIM	1.0		1.0	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Indeno(1,2,3-cd)pyrene	8270-SIM	1.0		1.0	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Dibenzo(a,h)anthracene	8270-SIM	1.0		1.0	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
<b>SEMIVOLATILES (µg/L)</b>										
Phenol	8270	1100000		10	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Bis-(2-Chloroethyl) Ether	8270	10		10	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2-Chlorophenol	8270	96.7		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	8270	2600		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	8270	10		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzyl Alcohol	8270			20	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichlorobenzene	8270	4200		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Methylphenol	8270			10 (c)	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2,2'-Oxybis(1-Chloropropane)	8270			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Methylphenol	8270			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
N-Nitroso-Di-N-Propylamine	8270	10		10	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Hexachloroethane	8270	10		10	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Nitrobenzene	8270	449		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isophorone	8270	600		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Nitrophenol	8270			10	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dimethylphenol	8270	553		10	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Benzoic Acid	8270			10	10 U	10 U	10 U	10 U	10 U	10 U
bis(2-Chloroethoxy) Methane	8270			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,4-Dichlorophenol	8270	191		10	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
1,2,4-Trichlorobenzene	8270	227		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Naphthalene	8270	9880		10	67	50	20 J	50 J	100 J	53
4-Chloroaniline	8270			20	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Hexachlorobutadiene	8270	50		10	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4-Chloro-3-methylphenol	8270			20	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2-Methylnaphthalene	8270			10	11	10	4.5	7.7	14 J	9.4
Hexachlorocyclopentadiene	8270	4180		20	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	8270	10		10	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

**TABLE 2-3  
SUMMARY OF GROUNDWATER ANALYTICAL DATA  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-108R	MW-108R	MW-108R	MW-108R	MW-108R	MW-108R
					AK50G 6/16/1999	BD02K 12/16/1999	BK98F 3/22/2000	BT43H 6/14/2000	CF72E 9/27/2000	CP44G 12/20/2000
2,4,5-Trichlorophenol	8270			10	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Chloronaphthalene	8270			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Nitroaniline	8270			50	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dimethylphthalate	8270	72000		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Acenaphthylene	8270			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
3-Nitroaniline	8270			50	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U
Acenaphthene	8270	225	456	10	5.8	5.7	2.3	4.1	7.7 J	6.8
2,4-Dinitrophenol	8270	3460		50	10 U	10 U	10 U	10 U	10 U	10 U
4-Nitrophenol	8270			50	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dibenzofuran	8270			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,6-Dinitrotoluene	8270			10	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dinitrotoluene	8270	10		10	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Diethylphthalate	8270	28400		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorophenyl-phenylether	8270			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Fluorene	8270	2422		10	1.6	1.9	1.0 U	1.3	1.8	2.1
4-Nitroaniline	8270			20	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4,6-Dinitro-2-Methylphenol	8270			50 (c)	10 U	10 U	10 U	10 U	10 U	10 U
N-Nitrosodiphenylamine	8270	16		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Bromophenyl-phenylether	8270			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Hexachlorobenzene	8270	10		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	8270	50		50	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Phenanthrene	8270			10	1.8	2.5	2.0	2.0	2.6	2.3
Carbazole	8270			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Anthracene	8270	25900		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Di-n-Butylphthalate	8270	2910		10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Fluoranthene	8270	27.1		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pyrene	8270	777		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U
Butylbenzylphthalate	8270	1250		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
3,3'-Dichlorobenzidine	8270	20		20	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
bis(2-Ethylhexyl)phthalate	8270	10		10	2.9 J	1.0 U	1.0 U	1.0 U	1.0 U	1.5
Di-n-Octyl phthalate	8270			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzo(g,h,i)perylene	8270			10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U



**TABLE 2-3**  
**SUMMARY OF GROUNDWATER ANALYTICAL DATA**  
**06/99 TO 06/01**  
**UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-108R	MW-108R	MW-108R	MW-108R	MW-108R	MW-108R
					AK50G 6/16/1999	BD02K 12/16/1999	BK98F 3/22/2000	BT43H 6/14/2000	CF72E 9/27/2000	CP44G 12/20/2000
<b>VOLATILES (µg/L)</b>										
Chloromethane	8260	133		10	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	8260	968		10 (c)	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl Chloride	8260	10		10	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	8260			10	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	8260	960		5	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Acetone	8260			10	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon Disulfide	8260			10	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	8260	5		5	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	8260			5	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	8260	32800		5	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	8260			5	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	8260	470		5	1.0 UJ	1.4	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	8260	99		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone	8260			50 (c)	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,1-Trichloroethane	8260	41700		5	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon Tetrachloride	8260	5		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl Acetate	8260			50	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	8260	28		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	8260	23		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	8260	19		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	8260	81		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	8260	21		10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	8260	42		5	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzene	8260	71	219	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0	1.0 U
trans-1,3-Dichloropropene	8260	19		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chloroethylvinylether	8260			10	5.0 U	5.0 U	R	5.0 U	5.0 U	5.0 U
Bromoform	8260	360		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Methyl-2-Pentanone (MIBK)	8260			50 (c)	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Hexanone	8260			50	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	8260	8.9		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	8260	6.5		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	8260	485		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	8260	5030		5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	8260	276		5	1.9	1.3	1.0 U	1.0	2.7 J	1.4
Styrene	8260			5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane	8260			10 (c)	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichlorotrifluoroethane	8260			10 (c)	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
m,p-Xylene	8260			5 (d)	1.0 U	1.0 U	1.0 U	1.0 U	1.1 J	0.6 J
o-Xylene	8260			5 (d)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.5 J
1,2-Dichlorobenzene	8260	4200		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	8260	2600		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

**TABLE 2-3  
SUMMARY OF GROUNDWATER ANALYTICAL DATA  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-108R	MW-108R	MW-108R	MW-108R	MW-108R	MW-108R
					AK50G 6/16/1999	BD02K 12/16/1999	BK98F 3/22/2000	BT43H 6/14/2000	CF72E 9/27/2000	CP44G 12/20/2000
1,4-Dichlorobenzene	8260	10		10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Acrolein	8260	780		500 (c)	50 UJ	50 U	50 U	50 U	50 U	50 U
Methyl Iodide	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoethane	8260			10 (c)	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Acrylonitrile	8260	5		5	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U
1,1-Dichloropropene	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromomethane	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1,2-Tetrachloroethane	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	8260			50 (c)	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2,3-Trichloropropane	8260			10 (c)	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
trans-1,4-Dichloro-2-butene	8260			50 (c)	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,3,5-Trimethylbenzene	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trimethylbenzene	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Hexachlorobutadiene	8260	50		10	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethylene Dibromide	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromochloromethane	8260			10 (c)	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,2-Dichloropropane	8260			10 (c)	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichloropropane	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzene	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
n-Propylbenzene	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromobenzene	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chlorotoluene	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorotoluene	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
tert-Butylbenzene	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
sec-Butylbenzene	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Isopropyltoluene	8260			10 (c)	1.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
n-Butylbenzene	8260			10 (c)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	8260	227		10	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Naphthalene	8260	9880		10	120	58	39	51	160	46
1,2,3-Trichlorobenzene	8260			10 (c)	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

**TABLE 2-3  
SUMMARY OF GROUNDWATER ANALYTICAL DATA  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-108R AK50G 6/16/1999	MW-108R BD02K 12/16/1999	MW-108R BK98F 3/22/2000	MW-108R BT43H 6/14/2000	MW-108R CF72E 9/27/2000	MW-108R CP44G 12/20/2000
<b>VOLATILES-SIM (µg/L)</b>										
Vinyl Chloride	SW8260-SIM	10		10	NA	NA	NA	NA	NA	NA
1,1-Dichloroethene	SW8260-SIM	5		5	NA	NA	NA	NA	NA	NA
Carbon Tetrachloride	SW8260-SIM	5		5	NA	NA	NA	NA	NA	NA
Tetrachloroethene	SW8260-SIM	8.9		5	NA	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	SW8260-SIM	6.5		5	NA	NA	NA	NA	NA	NA
Acrylonitrile	SW8260-SIM	5		5	NA	NA	NA	NA	NA	NA
<b>DISSOLVED METALS (µg/L)</b>										
Antimony	200.8	4300		10	4 U	1 U	8 U	4 U	1 U	4 U
Arsenic	200.8	4	32	4	10	4	8 U	5	2 U	15
Beryllium	200.8	2		2	4 U	1 U	8 U	4 U	1 U	4 U
Cadmium	200.8	8		2	4 U	1 U	8 U	4 U	1 U	4 U
Chromium	200.8	50		50	20	16	20 U	10 U	68	30
Copper	200.8	10		10	10 U	2 U	20 U	10 U	2 U	10 U
Lead	200.8	10		10	20 U	5 U	40 U	20 U	5 U	20 U
Mercury	7470	1		1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Nickel	200.8	10		10	10 U	6	20 U	10 U	6	10 U
Selenium	200.8	71		20	40	11	40 U	20 U	10 U	60
Silver	200.8	2		2	10 U	2 U	20 U	10 U	2 U	10 U
Zinc	200.8	77		20	80 U	20 U	160 U	80 U	20 U	80 U
<b>Cyanide (µg/L)</b>										
Total Cyanide	335.2	50		50	5 UJ	6	5 U	10 U	5 U	5 U
Weak Acid Dissoc. Cyanide	SM4500CN-I			50	NA	NA	NA	NA	NA	5 U
<b>CONVENTIONALS</b>										
Total Dissolved Solids (µg/L)	160.1				10000000	10000000	12000000	10000000 J	9300000	9800000
Total Suspended Solids (µg/L)	160.2				86000	110000	99000	89000	97000	84000
Ortho-Phosphorous (µg-P/L)	365.2				NA	NA	1000	NA	NA	NA
pH	Field				6.06	5.19	6.70	6.59	6.35	6.67
Specific Conductance (µmhos)	Field				1933	1830	1970	1710	15125	19350
Temperature (°C)	Field				14.0	14.1	13.1	14.0	15.0	14.5

**TABLE 2-3**  
**SUMMARY OF GROUNDWATER ANALYTICAL DATA**  
**06/99 TO 06/01**  
**UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-108R AK50G 6/16/1999	MW-108R BD02K 12/16/1999	MW-108R BK98F 3/22/2000	MW-108R BT43H 6/14/2000	MW-108R CF72E 9/27/2000	MW-108R CP44G 12/20/2000
<b>MAJOR IONS</b>										
Calcium	6010				NA	NA	159000	NA	NA	NA
Magnesium	6010				NA	NA	420000	NA	NA	NA
Potassium	6010				NA	NA	226000	NA	NA	NA
Sodium	6010				NA	NA	3620000	NA	NA	NA
Alkalinity (µg/L CaCO <sub>3</sub> )	2320				NA	NA	2800000	NA	NA	NA
Carbonate (Alkalinity) (µg/L CaCO <sub>3</sub> )	2320				NA	NA	1000 U	NA	NA	NA
Bicarbonate (Alkalinity) (µg/L CaCO <sub>3</sub> )	2320				NA	NA	2800000	NA	NA	NA
Bromide (µg/L)	4500Br-B				NA	NA	121000	NA	NA	NA
Fluoride (µg/L)	340.2				NA	NA	640	NA	NA	NA
Chloride (µg/L)	325.2				NA	NA	6500000 J	NA	NA	NA
N-Nitrate (µg-N/L)	Calculated				NA	NA	10 U	NA	NA	NA
N-Nitrite (µg-N/L)	354.1				NA	NA	10 U	NA	NA	NA
Nitrate+Nitrite (NO <sub>2</sub> +NO <sub>3</sub> ) (µg-N/L)	353.2				NA	NA	10 U	NA	NA	NA
Sulfate (µg/L)	375.2				NA	NA	46000 J	NA	NA	NA

**TABLE 2-3**  
**SUMMARY OF GROUNDWATER ANALYTICAL DATA**  
**06/99 TO 06/01**  
**UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-108R CV96F 3/14/2001	MW-108R DH51A 6/22/2001
<b>TPH (µg/L)</b>						
Diesel-Range Petroleum Hydrocarbons	WTPH-Dx		6586	400 (b)	250 U	250 U
Motor Oil-Range Petroleum Hydrocarbons	WTPH-Dx			1100 (b)	500 U	500 U
Gasoline-Range Petroleum Hydrocarbons	WTPH-G		7591	600 (b)	250 U	250 UJ
<b>CPAH (µg/L)</b>						
Benzo(a)anthracene	8270-SIM	1.0		1.0	0.10 U	0.10 U
Chrysene	8270-SIM	1.0		1.0	0.10 U	0.10 U
Benzo(b)fluoranthene	8270-SIM	1.0		1.0	0.10 U	0.10 U
Benzo(k)fluoranthene	8270-SIM	1.0		1.0	0.10 U	0.10 U
Benzo(a)pyrene	8270-SIM	1.0		1.0	0.10 U	0.10 U
Indeno(1,2,3-cd)pyrene	8270-SIM	1.0		1.0	0.10 U	0.10 U
Dibenzo(a,h)anthracene	8270-SIM	1.0		1.0	0.10 U	0.10 U
<b>SEMIVOLATILES (µg/L)</b>						
Phenol	8270	1100000		10	2.0 U	2.0 U
Bis-(2-Chloroethyl) Ether	8270	10		10	2.0 U	2.0 U
2-Chlorophenol	8270	96.7		10	1.0 U	1.0 UJ
1,3-Dichlorobenzene	8270	2600		10	1.0 U	1.0 U
1,4-Dichlorobenzene	8270	10		10	1.0 U	1.0 U
Benzyl Alcohol	8270			20	5.0 U	5.0 U
1,2-Dichlorobenzene	8270	4200		10	1.0 U	1.0 U
2-Methylphenol	8270			10 (c)	2.0 U	1.0 U
2,2'-Oxybis(1-Chloropropane)	8270			10 (c)	1.0 U	1.0 U
4-Methylphenol	8270			10 (c)	1.0 U	1.0 U
N-Nitroso-Di-N-Propylamine	8270	10		10	2.0 U	2.0 U
Hexachloroethane	8270	10		10	2.0 U	2.0 U
Nitrobenzene	8270	449		10	1.0 U	1.0 U
Isophorone	8270	600		10	1.0 U	1.0 U
2-Nitrophenol	8270			10	5.0 U	5.0 U
2,4-Dimethylphenol	8270	553		10	3.0 U	3.0 U
Benzoic Acid	8270			10	10 U	10 U
bis(2-Chloroethoxy) Methane	8270			10	1.0 U	1.0 U
2,4-Dichlorophenol	8270	191		10	3.0 U	3.0 U
1,2,4-Trichlorobenzene	8270	227		10	1.0 U	1.0 U
Naphthalene	8270	9880		10	19	30
4-Chloroaniline	8270			20	3.0 U	3.0 U
Hexachlorobutadiene	8270	50		10	2.0 U	2.0 U
4-Chloro-3-methylphenol	8270			20	2.0 U	2.0 U
2-Methylnaphthalene	8270			10	4.0	5.4
Hexachlorocyclopentadiene	8270	4180		20	5.0 U	5.0 U
2,4,6-Trichlorophenol	8270	10		10	5.0 U	5.0 U

**TABLE 2-3**  
**SUMMARY OF GROUNDWATER ANALYTICAL DATA**  
**06/99 TO 06/01**  
**UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-108R CV96F 3/14/2001	MW-108R DH51A 6/22/2001
2,4,5-Trichlorophenol	8270			10	5.0 U	5.0 U
2-Chloronaphthalene	8270			10	1.0 U	1.0 U
2-Nitroaniline	8270			50	5.0 U	5.0 U
Dimethylphthalate	8270	72000		10	1.0 U	1.0 U
Acenaphthylene	8270			10	1.0 U	1.0 U
3-Nitroaniline	8270			50	6.0 U	6.0 U
Acenaphthene	8270	225	456	10	2.5	3.8 J
2,4-Dinitrophenol	8270	3460		50	10 U	10 U
4-Nitrophenol	8270			50	5.0 U	5.0 UJ
Dibenzofuran	8270			10	1.0 U	1.0 U
2,6-Dinitrotoluene	8270			10	5.0 U	5.0 U
2,4-Dinitrotoluene	8270	10		10	5.0 U	5.0 U
Diethylphthalate	8270	28400		10	1.0 U	1.0 U
4-Chlorophenyl-phenylether	8270			10	1.0 U	1.0 U
Fluorene	8270	2422		10	1.1	1.1
4-Nitroaniline	8270			20	5.0 U	5.0 U
4,6-Dinitro-2-Methylphenol	8270			50 (c)	10 U	10 U
N-Nitrosodiphenylamine	8270	16		10	1.0 U	1.0 U
4-Bromophenyl-phenylether	8270			10	1.0 U	1.0 U
Hexachlorobenzene	8270	10		10	1.0 U	1.0 U
Pentachlorophenol	8270	50		50	5.0 U	5.0 U
Phenanthrene	8270			10	2.1	1.7
Carbazole	8270			10	1.0 U	1.0 U
Anthracene	8270	25900		10	1.0 U	1.0 U
Di-n-Butylphthalate	8270	2910		10 (c)	1.0 U	1.0 U
Fluoranthene	8270	27.1		10	1.0 U	1.0 U
Pyrene	8270	777		10	1.0 U	1.0 U
Butylbenzylphthalate	8270	1250		10	1.0 U	1.0 U
3,3'-Dichlorobenzidine	8270	20		20	5.0 U	5.0 U
bis(2-Ethylhexyl)phthalate	8270	10		10	1.0 U	1.0 U
Di-n-Octyl phthalate	8270			10	1.0 U	1.0 U
Benzo(g,h,i)perylene	8270			10	1.0 U	1.0 U

**TABLE 2-3  
SUMMARY OF GROUNDWATER ANALYTICAL DATA  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-108R CV96F 3/14/2001	MW-108R DH51A 6/22/2001
<b>VOLATILES (µg/L)</b>						
Chloromethane	8260	133		10	1.0 U	1.0 U
Bromomethane	8260	968		10 (c)	1.0 U	1.0 U
Vinyl Chloride	8260	10		10	1.0 U	1.0 U
Chloroethane	8260			10	1.0 U	1.0 U
Methylene Chloride	8260	960		5	2.0 U	2.0 U
Acetone	8260			10	5.0 U	5.0 U
Carbon Disulfide	8260			10	1.0 U	1.0 U
1,1-Dichloroethene	8260	5		5	1.0 U	1.0 U
1,1-Dichloroethane	8260			5	1.0 U	1.0 U
trans-1,2-Dichloroethene	8260	32800		5	1.0 U	1.0 U
cis-1,2-Dichloroethene	8260			5	1.0 U	1.0 U
Chloroform	8260	470		5	1.0 U	1.0 U
1,2-Dichloroethane	8260	99		5	1.0 U	1.0 U
2-Butanone	8260			50 (c)	5.0 U	5.0 U
1,1,1-Trichloroethane	8260	41700		5	1.0 U	1.0 U
Carbon Tetrachloride	8260	5		5	1.0 U	1.0 U
Vinyl Acetate	8260			50	5.0 U	5.0 U
Bromodichloromethane	8260	28		5	1.0 U	1.0 U
1,2-Dichloropropane	8260	23		5	1.0 U	1.0 U
cis-1,3-Dichloropropene	8260	19		5	1.0 U	1.0 U
Trichloroethene	8260	81		5	1.0 U	1.0 U
Dibromochloromethane	8260	21		10 (c)	1.0 U	1.0 U
1,1,2-Trichloroethane	8260	42		5	1.0 U	1.0 U
Benzene	8260	71	219	5	1.0 U	1.0 U
trans-1,3-Dichloropropene	8260	19		5	1.0 U	1.0 U
2-Chloroethylvinylether	8260			10	5.0 U	5.0 U
Bromoform	8260	360		5	1.0 U	1.0 U
4-Methyl-2-Pentanone (MIBK)	8260			50 (c)	5.0 U	5.0 U
2-Hexanone	8260			50	5.0 U	5.0 U
Tetrachloroethene	8260	8.9		5	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	8260	6.5		5	1.0 U	1.0 U
Toluene	8260	485		5	1.0 U	1.0 U
Chlorobenzene	8260	5030		5	1.0 U	1.0 U
Ethylbenzene	8260	276		5	1.0 U	1.0 U
Styrene	8260			5	1.0 U	1.0 U
Trichlorofluoromethane	8260			10 (c)	1.0 U	1.0 U
1,1,2-Trichlorotrifluoroethane	8260			10 (c)	2.0 U	2.0 U
m,p-Xylene	8260			5 (d)	1.0 U	1.0 U
o-Xylene	8260			5 (d)	1.0 U	1.0 U
1,2-Dichlorobenzene	8260	4200		10	1.0 U	1.0 U
1,3-Dichlorobenzene	8260	2600		10	1.0 U	1.0 U

**TABLE 2-3**  
**SUMMARY OF GROUNDWATER ANALYTICAL DATA**  
**06/99 TO 06/01**  
**UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-108R CV96F 3/14/2001	MW-108R DH51A 6/22/2001
1,4-Dichlorobenzene	8260	10		10	1.0 U	1.0 U
Acrolein	8260	780		500 (c)	50 U	50 U
Methyl Iodide	8260			10 (c)	1.0 U	1.0 U
Bromoethane	8260			10 (c)	2.0 U	2.0 U
Acrylonitrile	8260	5		5	1.0 U	1.0 U
1,1-Dichloropropene	8260			10 (c)	1.0 U	1.0 U
Dibromomethane	8260			10 (c)	1.0 U	1.0 U
1,1,1,2-Tetrachloroethane	8260			10 (c)	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	8260			50 (c)	5.0 U	5.0 U
1,2,3-Trichloropropane	8260			10 (c)	3.0 U	3.0 U
trans-1,4-Dichloro-2-butene	8260			50 (c)	5.0 U	5.0 U
1,3,5-Trimethylbenzene	8260			10 (c)	1.0 U	1.0 U
1,2,4-Trimethylbenzene	8260			10 (c)	1.0 U	1.0 U
Hexachlorobutadiene	8260	50		10	5.0 U	5.0 U
Ethylene Dibromide	8260			10 (c)	1.0 U	1.0 U
Bromochloromethane	8260			10 (c)	1.0 U	1.0 U
2,2-Dichloropropane	8260			10 (c)	1.0 U	1.0 U
1,3-Dichloropropane	8260			10 (c)	1.0 U	1.0 U
Isopropylbenzene	8260			10 (c)	1.0 U	1.0 U
n-Propylbenzene	8260			10 (c)	1.0 U	1.0 U
Bromobenzene	8260			10 (c)	1.0 U	1.0 U
2-Chlorotoluene	8260			10 (c)	1.0 U	1.0 U
4-Chlorotoluene	8260			10 (c)	1.0 U	1.0 U
tert-Butylbenzene	8260			10 (c)	1.0 U	1.0 U
sec-Butylbenzene	8260			10 (c)	1.0 U	1.0 U
4-Isopropyltoluene	8260			10 (c)	1.0 U	1.0 U
n-Butylbenzene	8260			10 (c)	1.0 U	1.0 U
1,2,4-Trichlorobenzene	8260	227		10	5.0 U	5.0 U
Naphthalene	8260	9880		10	28 J	21
1,2,3-Trichlorobenzene	8260			10 (c)	5.0 U	5.0 U



**TABLE 2-3**  
**SUMMARY OF GROUNDWATER ANALYTICAL DATA**  
**06/99 TO 06/01**  
**UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-108R CV96F 3/14/2001	MW-108R DH51A 6/22/2001
<b>VOLATILES-SIM (µg/L)</b>						
Vinyl Chloride	SW8260-SIM	10		10	NA	NA
1,1-Dichloroethene	SW8260-SIM	5		5	NA	NA
Carbon Tetrachloride	SW8260-SIM	5		5	NA	NA
Tetrachloroethene	SW8260-SIM	8.9		5	NA	NA
1,1,2,2-Tetrachloroethane	SW8260-SIM	6.5		5	NA	NA
Acrylonitrile	SW8260-SIM	5		5	NA	NA
<b>DISSOLVED METALS (µg/L)</b>						
Antimony	200.8	4300		10	1 U	1 U
Arsenic	200.8	4	32	4	4	6
Beryllium	200.8	2		2	1 U	1 U
Cadmium	200.8	8		2	1 U	1 U
Chromium	200.8	50		50	9	16
Copper	200.8	10		10	2 U	2 U
Lead	200.8	10		10	5 U	5 U
Mercury	7470	1		1	0.1 U	0.1 U
Nickel	200.8	10		10	4	4
Selenium	200.8	71		20	10	20
Silver	200.8	2		2	2 U	2 U
Zinc	200.8	77		20	20 U	20 U
<b>Cyanide (µg/L)</b>						
Total Cyanide	335.2	50		50	5 U	5 U
Weak Acid Dissoc. Cyanide	SM4500CN-I			50	5 U	5 U
<b>CONVENTIONALS</b>						
Total Dissolved Solids (µg/L)	160.1				11000000 J	11000000 J
Total Suspended Solids (µg/L)	160.2				88000	130000 J
Ortho-Phosphorous (µg-P/L)	365.2				NA	240
pH	Field				7.12	6.72
Specific Conductance (µmhos)	Field				19675	18925
Temperature (°C)	Field				13.2	15.0

**TABLE 2-3**  
**SUMMARY OF GROUNDWATER ANALYTICAL DATA**  
**06/99 TO 06/01**  
**UNION STATION**

Analyte	Method	CAP Cleanup Level (µg/L)	Background-based Screening Level (a) (µg/L)	Practical Quantitation Limits (µg/L)	MW-108R CV96F 3/14/2001	MW-108R DH51A 6/22/2001
<b>MAJOR IONS</b>						
Calcium	6010				NA	147000
Magnesium	6010				NA	348000
Potassium	6010				NA	160000
Sodium	6010				NA	2990000
Alkalinity (µg/L CaCO <sub>3</sub> )	2320				NA	2900000
Carbonate (Alkalinity) (µg/L CaCO <sub>3</sub> )	2320				NA	1000 U
Bicarbonate (Alkalinity) (µg/L CaCO <sub>3</sub> )	2320				NA	2900000
Bromide (µg/L)	4500Br-B				NA	50000 U
Fluoride (µg/L)	340.2				NA	500
Chloride (µg/L)	325.2				NA	5400000
N-Nitrate (µg-N/L)	Calculated				NA	10 U
N-Nitrite (µg-N/L)	354.1				NA	10 U
Nitrate+Nitrite (NO <sub>2</sub> +NO <sub>3</sub> ) (µg-N/L)	353.2				NA	10 U
Sulfate (µg/L)	375.2				NA	38000

**TABLE 2-3**  
**SUMMARY OF GROUNDWATER ANALYTICAL DATA**  
**06/99 TO 06/01**  
**UNION STATION**

NA = Not analyzed for this constituent.

NM = Not measured.

U = Indicates the compound was undetected at the listed concentration

J = The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

UJ = The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

M = Indicates an estimated value of analyte detected and confirmed by analyst with low spectral match parameters.

R = The sample results were rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

(a) Screening level is based on the 90th percentile of the background data obtained from wells B4 and/or B6/B6R.

The 90th percentile was calculated using MTCA stat Background Module V2.0.

(b) PQL calculated from method detection limit.

(c) PQL based on method reporting limit and PQLs of similar compounds.

(d) PQL identified for total xylenes in CAP.

**TABLE 4-1**  
**STATISTICAL SUMMARY OF GROUNDWATER DATA - WELL HC101/MW101R**  
**06/99 TO 06/01**  
**UNION STATION**

Analyte	Method	CAP Cleanup Level (a) (µg/L)	Background-based Screening Level (µg/L)	Practical Quantitation Limit (b) (µg/L)	Number of Samples (c)	Number of Detects (>= PQL)	Number of Censored Data (d)	Percent Censored Data	Statistical Case No. (e)	UCL	Minimum Uncensored Data (f)	Maximum Uncensored Data (f)	Mean of Uncensored Data (f)	Std. Dev. of Uncensored Data (f)	Median of Uncensored Data (f)
<b>TPH (µg/L)</b>															
Diesel-Range Hydrocarbons	WTPH-Dx		6586 (g)	400 (h)	8	8	0	0	1	3570 (i)	2200	4000	3075	595	3050
Motor-oil Range Hydrocarbons	WTPH-Dx		7591 (g)	1100 (h)	8	0	8	100	0	NC	--	--	--	--	--
Gasoline-Range Hydrocarbons	WTPH-G			600 (h)	8	8	0	0	1	9500 (j)	4700	9500	6263	1447	6050
<b>CPAH (µg/L)</b>															
Benzo(a)anthracene	8270-SIM	1.0		1.0	8	0	8	100	0	NC	--	--	--	--	--
Chrysene	8270-SIM	1.0		1.0	8	0	8	100	0	NC	--	--	--	--	--
Benzo(b)fluoranthene	8270-SIM	1.0		1.0	8	0	8	100	0	NC	--	--	--	--	--
Benzo(k)fluoranthene	8270-SIM	1.0		1.0	8	0	8	100	0	NC	--	--	--	--	--
Benzo(a)pyrene	8270-SIM	1.0		1.0	8	0	8	100	0	NC	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	8270-SIM	1.0		1.0	8	0	8	100	0	NC	--	--	--	--	--
Dibenzo(a,h)anthracene	8270-SIM	1.0		1.0	8	0	8	100	0	NC	--	--	--	--	--
<b>SEMI-VOLATILES (µg/L)</b>															
Phenol	8270	1100000		10	8	0	8	100	0	NC	--	--	--	--	--
Bis-(2-Chloroethyl) Ether	8270	10		10	8	0	8	100	0	NC	--	--	--	--	--
2-Chlorophenol	8270	96.7		10	8	0	8	100	0	NC	--	--	--	--	--
1,3-Dichlorobenzene	8270	2600		10	8	0	8	100	0	NC	--	--	--	--	--
1,4-Dichlorobenzene	8270	10		10	8	0	8	100	0	NC	--	--	--	--	--
Benzyl Alcohol	8270			20	8	0	8	100	0	NC	--	--	--	--	--
1,2-Dichlorobenzene	8270	4200		10	8	0	8	100	0	NC	--	--	--	--	--
2-Methylphenol	8270			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
2,2'-Oxybis(1-Chloropropane)	8270			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
4-Methylphenol	8270			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
N-Nitroso-Di-N-Propylamine	8270	10		10	8	0	8	100	0	NC	--	--	--	--	--
Hexachloroethane	8270	10		10	8	0	8	100	0	NC	--	--	--	--	--
Nitrobenzene	8270	449		10	8	0	8	100	0	NC	--	--	--	--	--
Isophorone	8270	600		10	8	0	8	100	0	NC	--	--	--	--	--
2-Nitrophenol	8270			10	8	0	8	100	0	NC	--	--	--	--	--
2,4-Dimethylphenol	8270	553		10	8	0	8	100	0	NC	--	--	--	--	--
Benzoic Acid	8270			10	8	0	8	100	0	NC	--	--	--	--	--
bis(2-Chloroethoxy) Methane	8270			10	8	0	8	100	0	NC	--	--	--	--	--
2,4-Dichlorophenol	8270	191		10	8	0	8	100	0	NC	--	--	--	--	--
1,2,4-Trichlorobenzene	8270	227		10	8	0	8	100	0	NC	--	--	--	--	--
Naphthalene	8270	9880		10	8	8	0	0	1	3911 (i)	2400	4500	3262	782	3050
4-Chloroaniline	8270			20	8	0	8	100	0	NC	--	--	--	--	--
Hexachlorobutadiene	8270	50		10	8	0	8	100	0	NC	--	--	--	--	--
4-Chloro-3-methylphenol	8270			20	8	0	8	100	0	NC	--	--	--	--	--
2-Methylnaphthalene	8270			10	8	8	0	0	1	602 (i)	440	710	531	95	500
Hexachlorocyclopentadiene	8270	4180		20	8	0	8	100	0	NC	--	--	--	--	--
2,4,6-Trichlorophenol	8270	10		10	8	0	8	100	0	NC	--	--	--	--	--
2,4,5-Trichlorophenol	8270			10	8	0	8	100	0	NC	--	--	--	--	--
2-Chloronaphthalene	8270			10	8	0	8	100	0	NC	--	--	--	--	--
2-Nitroaniline	8270			50	8	0	8	100	0	NC	--	--	--	--	--
Dimethylphthalate	8270	72000		10	8	0	8	100	0	NC	--	--	--	--	--
Acenaphthylene	8270			10	8	0	8	100	0	NC	--	--	--	--	--
3-Nitroaniline	8270			50	8	0	8	100	0	NC	--	--	--	--	--
Acenaphthene	8270	225	456 (g)	10	8	8	0	0	1	340 (j)	200	340	289	56	310
2,4-Dinitrophenol	8270	3460		50	8	0	8	100	0	NC	--	--	--	--	--
4-Nitrophenol	8270			50	8	0	8	100	0	NC	--	--	--	--	--
Dibenzofuran	8270			10	8	8	0	0	1	23 (j)	17	23	19	2.0	19
2,6-Dinitrotoluene	8270			10	8	0	8	100	0	NC	--	--	--	--	--
2,4-Dinitrotoluene	8270	10		10	8	0	8	100	0	NC	--	--	--	--	--
Diethylphthalate	8270	28400		10	8	0	8	100	0	NC	--	--	--	--	--
4-Chlorophenyl-phenylether	8270			10	8	0	8	100	0	NC	--	--	--	--	--
Fluorene	8270	2422		10	8	8	0	0	1	92 (i)	58	110	78	18	76
4-Nitroaniline	8270			20	8	0	8	100	0	NC	--	--	--	--	--

**TABLE 4-1  
STATISTICAL SUMMARY OF GROUNDWATER DATA - WELL HC101/MW101R  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (a) (µg/L)	Background-based Screening Level (µg/L)	Practical Quantitation Limit (b) (µg/L)	Number of Samples (c)	Number of Detects (>= PQL)	Number of Censored Data (d)	Percent Censored Data	Statistical Case No. (e)	UCL	Minimum Uncensored Data (f)	Maximum Uncensored Data (f)	Mean of Uncensored Data (f)	Std. Dev. of Uncensored Data (f)	Median of Uncensored Data (f)
4,6-Dinitro-2-Methylphenol	8270			50 (k)	8	0	8	100	0	NC	--	--	--	--	--
N-Nitrosodiphenylamine	8270	16		10	8	0	8	100	0	NC	--	--	--	--	--
4-Bromophenyl-phenylether	8270			10	8	0	8	100	0	NC	--	--	--	--	--
Hexachlorobenzene	8270	10		10	8	0	8	100	0	NC	--	--	--	--	--
Pentachlorophenol	8270	50		50	8	0	8	100	0	NC	--	--	--	--	--
Phenanthrene	8270			10	8	8	0	0	1	130 (j)	59	130	76	23	70
Carbazole	8270			10	8	7	1	12.5	1	26 (j, l)	16	26	18	7.7	19
Anthracene	8270	25900		10	8	0	8	100	0	NC	--	--	--	--	--
Di-n-Butylphthalate	8270	2910		10 (k)	8	0	8	100	0	NC	--	--	--	--	--
Fluoranthene	8270	27.1		10	8	0	8	100	0	NC	--	--	--	--	--
Pyrene	8270	777		10	8	0	8	100	0	NC	--	--	--	--	--
Butylbenzylphthalate	8270	1250		10	8	0	8	100	0	NC	--	--	--	--	--
3,3'-Dichlorobenzidine	8270	20		20	8	0	8	100	0	NC	--	--	--	--	--
bis(2-Ethylhexyl)phthalate	8270	10		10	8	1	7	87.5	3	10 (m)	10	10	--	--	--
Di-n-Octyl phthalate	8270			10	8	0	8	100	0	NC	--	--	--	--	--
Benzo(g,h,i)perylene	8270			10	8	0	8	100	0	NC	--	--	--	--	--

**TABLE 4-1**  
**STATISTICAL SUMMARY OF GROUNDWATER DATA - WELL HC101/MW101R**  
**06/99 TO 06/01**  
**UNION STATION**

Analyte	Method	CAP Cleanup Level (a) (µg/L)	Background-based Screening Level (µg/L)	Practical Quantitation Limit (b) (µg/L)	Number of Samples (c)	Number of Detects (>= PQL)	Number of Censored Data (d)	Percent Censored Data	Statistical Case No. (e)	UCL	Minimum Uncensored Data (f)	Maximum Uncensored Data (f)	Mean of Uncensored Data (f)	Std. Dev. of Uncensored Data (f)	Median of Uncensored Data (f)	
<b>VOLATILES (µg/L)</b>																
Chloromethane	8260	133		10	8	0	8	100	0	NC	--	--	--	--	--	
Bromomethane	8260	968		10 (k)	8	0	8	100	0	NC	--	--	--	--	--	
Vinyl Chloride	8260	10		10	8	0	8	100	0	NC	--	--	--	--	--	
Chloroethane	8260			10	8	0	8	100	0	NC	--	--	--	--	--	
Methylene Chloride	8260	960		5	8	0	8	100	0	NC	--	--	--	--	--	
Acetone	8260			10	8	0	8	100	0	NC	--	--	--	--	--	
Carbon Disulfide	8260			10	8	0	8	100	0	NC	--	--	--	--	--	
1,1-Dichloroethene	8260	5		5	8	0	8	100	0	NC	--	--	--	--	--	
1,1-Dichloroethane	8260			5	8	0	8	100	0	NC	--	--	--	--	--	
trans-1,2-Dichloroethene	8260	32800		5	8	0	8	100	0	NC	--	--	--	--	--	
cis-1,2-Dichloroethene	8260			5	8	0	8	100	0	NC	--	--	--	--	--	
Chloroform	8260	470		5	8	0	8	100	0	NC	--	--	--	--	--	
1,2-Dichloroethane	8260	99		5	8	0	8	100	0	NC	--	--	--	--	--	
2-Butanone	8260			50 (k)	8	0	8	100	0	NC	--	--	--	--	--	
1,1,1-Trichloroethane	8260	41700		5	8	0	8	100	0	NC	--	--	--	--	--	
Carbon Tetrachloride	8260	5		5	8	0	8	100	0	NC	--	--	--	--	--	
Vinyl Acetate	8260			50	8	0	8	100	0	NC	--	--	--	--	--	
Bromodichloromethane	8260	28		5	8	0	8	100	0	NC	--	--	--	--	--	
1,2-Dichloropropane	8260	23		5	8	0	8	100	0	NC	--	--	--	--	--	
cis-1,3-Dichloropropene	8260	19		5	8	0	8	100	0	NC	--	--	--	--	--	
Trichloroethene	8260	81		5	8	0	8	100	0	NC	--	--	--	--	--	
Dibromochloromethane	8260	21		10 (k)	8	0	8	100	0	NC	--	--	--	--	--	
1,1,2-Trichloroethane	8260	42		5	8	0	8	100	0	NC	--	--	--	--	--	
Benzene	8260	71	219 (g)	5	8	8	0	1	78	(i)	54	82	71	9.6	72	
trans-1,3-Dichloropropene	8260	19		5	8	0	8	100	0	NC	--	--	--	--	--	
2-Chloroethylvinylether	8260			10	8	0	8	100	0	NC	--	--	--	--	--	
Bromoform	8260	360		5	8	0	8	100	0	NC	--	--	--	--	--	
4-Methyl-2-Pentanone (MIBK)	8260			50 (k)	8	0	8	100	0	NC	--	--	--	--	--	
2-Hexanone	8260			50	8	0	8	100	0	NC	--	--	--	--	--	
Tetrachloroethene	8260	8.9		5	8	0	8	100	0	NC	--	--	--	--	--	
1,1,2,2-Tetrachloroethane	8260	6.5		5	8	0	8	100	0	NC	--	--	--	--	--	
Toluene	8260	485		5	8	6	2	25	2	21	(i)	11	18	14	2.7	13
Chlorobenzene	8260	5030		5	8	0	8	100	0	NC	--	--	--	--	--	
Ethylbenzene	8260	276		5	8	8	0	1	270	(i)	120	290	215	55	225	
Styrene	8260			5	8	0	8	100	0	NC	--	--	--	--	--	
Trichlorofluoromethane	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--	
1,1,2-Trichlorotrifluoroethane	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--	
m,p-Xylene	8260			5 (n)	8	8	0	1	79	(i)	42	90	65	16	63	
o-Xylene	8260			5 (n)	8	8	0	1	39	(i)	23	42	34	7.4	35	
1,2-Dichlorobenzene	8260	4200		10	8	0	8	100	0	NC	--	--	--	--	--	
1,3-Dichlorobenzene	8260	2600		10	8	0	8	100	0	NC	--	--	--	--	--	
1,4-Dichlorobenzene	8260	10		10	8	0	8	100	0	NC	--	--	--	--	--	
Acrolein	8260	780		500 (k)	8	0	8	100	0	NC	--	--	--	--	--	
Methyl Iodide	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--	
Bromoethane	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--	
Acrylonitrile	8260	5		5	8	0	8	100	0	NC	--	--	--	--	--	
1,1-Dichloropropene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--	
Dibromomethane	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--	
1,1,1,2-Tetrachloroethane	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--	
1,2-Dibromo-3-chloropropane	8260			50 (k)	8	0	8	100	0	NC	--	--	--	--	--	
1,2,3-Trichloropropane	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--	
trans-1,4-Dichloro-2-butene	8260			50 (k)	8	0	8	100	0	NC	--	--	--	--	--	
1,3,5-Trimethylbenzene	8260			10 (k)	8	8	0	1	21	(i)	10	22	17	3.9	18	
1,2,4-Trimethylbenzene	8260			10 (k)	8	8	0	1	39	(i)	22	40	33	7.2	34	
Hexachlorobutadiene	8260	50		10	8	0	8	100	0	NC	--	--	--	--	--	
Ethylene Dibromide	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--	
Bromochloromethane	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--	

**TABLE 4-1  
STATISTICAL SUMMARY OF GROUNDWATER DATA - WELL HC101/MW101R  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (a) (µg/L)	Background-based Screening Level (µg/L)	Practical Quantitation Limit (b) (µg/L)	Number of Samples (c)	Number of Detects (>= PQL)	Number of Censored Data (d)	Percent Censored Data	Statistical Case No. (e)	UCL	Minimum Uncensored Data (f)	Maximum Uncensored Data (f)	Mean of Uncensored Data (f)	Std. Dev. of Uncensored Data (f)	Median of Uncensored Data (f)
2,2-Dichloropropane	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
1,3-Dichloropropane	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
Isopropylbenzene	8260			10 (k)	8	2	6	75	3	11 (m)	10	11	--	--	--
n-Propylbenzene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
Bromobenzene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
2-Chlorotoluene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
4-Chlorotoluene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
tert-Butylbenzene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
sec-Butylbenzene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
4-Isopropyltoluene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
n-Butylbenzene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
1,2,4-Trichlorobenzene	8260	227		10	8	0	8	100	0	NC	--	--	--	--	--
Naphthalene	8260	9880		10	8	8	0	0	1	7156 (i)	3500	7800	6213	1408	6200
1,2,3-Trichlorobenzene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
<b>DISSOLVED METALS (µg/L)</b>															
Antimony	200.8	4300		10	8	0	8	100	0	NC	--	--	--	--	--
Arsenic	200.8	4	32 (g)	4	8	8	0	0	1	14 (j)	12	14	13	0.7	13
Beryllium	200.8	2		2	8	0	8	100	0	NC	--	--	--	--	--
Cadmium	200.8	8		2	8	0	8	100	0	NC	--	--	--	--	--
Chromium	200.8	50		50	8	0	8	100	0	NC	--	--	--	--	--
Copper	200.8	10		10	8	0	8	100	0	NC	--	--	--	--	--
Lead	200.8	10		10	8	0	8	100	0	NC	--	--	--	--	--
Mercury	7470	1		1	8	0	8	100	0	NC	--	--	--	--	--
Nickel	200.8	10		10	8	0	8	100	0	NC	--	--	--	--	--
Selenium	200.8	71		20	8	0	8	100	0	NC	--	--	--	--	--
Silver	200.8	2		2	8	0	8	100	0	NC	--	--	--	--	--
Zinc	200.8	76.6		20	8	1	7	87.5	3	50 (m)	50	50	--	--	--
<b>Cyanide (µg/L)</b>															
Total Cyanide	335.2	50		50	8	0	8	100	0	NC	--	--	--	--	--
Weak Acid Dissoc. Cyanide	SM4500CN-I	50		50	3	0	3	100	0	NC	--	--	--	--	--

**TABLE 4-1**  
**STATISTICAL SUMMARY OF GROUNDWATER DATA - WELL HC102/MW102R**  
**06/99 TO 06/01**  
**UNION STATION**

Analyte	Method	CAP Cleanup Level (a) (µg/L)	Background-based Screening Level (µg/L)	Practical Quantitation Limit (b) (µg/L)	Number of Samples (c)	Number of Detects (>= PQL)	Number of Censored Data (d)	Percent Censored Data	Statistical Case No. (e)	UCL	Minimum Uncensored Data (f)	Maximum Uncensored Data (f)	Mean of Uncensored Data (f)	Std. Dev. of Uncensored Data (f)	Median of Uncensored Data (f)
<b>TPH (µg/L)</b>															
Diesel-Range Hydrocarbons	WTPH-Dx		6586 (g)	400 (h)	8	0	8	100	0	NC	--	--	--	--	--
Motor-oil Range Hydrocarbons	WTPH-Dx		7591 (g)	1100 (h)	8	0	8	100	0	NC	--	--	--	--	--
Gasoline-Range Hydrocarbons	WTPH-G			600 (h)	8	0	8	100	0	NC	--	--	--	--	--
<b>CPAH (µg/L)</b>															
Benzo(a)anthracene	8270-SIM	1.0		1.0	8	0	8	100	0	NC	--	--	--	--	--
Chrysene	8270-SIM	1.0		1.0	8	0	8	100	0	NC	--	--	--	--	--
Benzo(b)fluoranthene	8270-SIM	1.0		1.0	8	0	8	100	0	NC	--	--	--	--	--
Benzo(k)fluoranthene	8270-SIM	1.0		1.0	8	0	8	100	0	NC	--	--	--	--	--
Benzo(a)pyrene	8270-SIM	1.0		1.0	8	0	8	100	0	NC	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	8270-SIM	1.0		1.0	8	0	8	100	0	NC	--	--	--	--	--
Dibenzo(a,h)anthracene	8270-SIM	1.0		1.0	8	0	8	100	0	NC	--	--	--	--	--
<b>SEMIVOLATILES (µg/L)</b>															
Phenol	8270	1100000		10	8	0	8	100	0	NC	--	--	--	--	--
Bis-(2-Chloroethyl) Ethane	8270	10		10	8	0	8	100	0	NC	--	--	--	--	--
2-Chloropheno	8270	96.7		10	8	0	8	100	0	NC	--	--	--	--	--
1,3-Dichlorobenzene	8270	2600		10	8	0	8	100	0	NC	--	--	--	--	--
1,4-Dichlorobenzene	8270	10		10	8	0	8	100	0	NC	--	--	--	--	--
Benzyl Alcohol	8270			20	8	0	8	100	0	NC	--	--	--	--	--
1,2-Dichlorobenzene	8270	4200		10	8	0	8	100	0	NC	--	--	--	--	--
2-Methylpheno	8270			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
2,2'-Oxybis(1-Chloropropane	8270			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
4-Methylpheno	8270			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
N-Nitroso-Di-N-Propylamine	8270	10		10	8	0	8	100	0	NC	--	--	--	--	--
Hexachloroethane	8270	10		10	8	0	8	100	0	NC	--	--	--	--	--
Nitrobenzene	8270	449		10	8	0	8	100	0	NC	--	--	--	--	--
Isophorone	8270	600		10	8	0	8	100	0	NC	--	--	--	--	--
2-Nitrophenol	8270			10	8	0	8	100	0	NC	--	--	--	--	--
2,4-Dimethylpheno	8270	553		10	8	0	8	100	0	NC	--	--	--	--	--
Benzoic Acid	8270			10	8	0	8	100	0	NC	--	--	--	--	--
bis(2-Chloroethoxy) Methane	8270			10	8	0	8	100	0	NC	--	--	--	--	--
2,4-Dichloropheno	8270	191		10	8	0	8	100	0	NC	--	--	--	--	--
1,2,4-Trichlorobenzene	8270	227		10	8	0	8	100	0	NC	--	--	--	--	--
Naphthalene	8270	9880		10	8	0	8	100	0	NC	--	--	--	--	--
4-Chloroaniline	8270			20	8	0	8	100	0	NC	--	--	--	--	--
Hexachlorobutadiene	8270	50		10	8	0	8	100	0	NC	--	--	--	--	--
4-Chloro-3-methylphenc	8270			20	8	0	8	100	0	NC	--	--	--	--	--
2-Methylnaphthalen	8270			10	8	0	8	100	0	NC	--	--	--	--	--
Hexachlorocyclopentadiene	8270	4180		20	8	0	8	100	0	NC	--	--	--	--	--
2,4,6-Trichloropheno	8270	10		10	8	0	8	100	0	NC	--	--	--	--	--
2,4,5-Trichloropheno	8270			10	8	0	8	100	0	NC	--	--	--	--	--
2-Chloronaphthalen	8270			10	8	0	8	100	0	NC	--	--	--	--	--
2-Nitroaniline	8270			50	8	0	8	100	0	NC	--	--	--	--	--
Dimethylphthalate	8270	72000		10	8	0	8	100	0	NC	--	--	--	--	--
Acenaphthylen	8270			10	8	0	8	100	0	NC	--	--	--	--	--
3-Nitroaniline	8270			50	8	0	8	100	0	NC	--	--	--	--	--
Acenaphthene	8270	225	456 (g)	10	8	7	1	12.5	1	14 (j, l)	11	14	11	4.1	12
2,4-Dinitrophenol	8270	3460		50	8	0	8	100	0	NC	--	--	--	--	--
4-Nitrophenol	8270			50	8	0	8	100	0	NC	--	--	--	--	--
Dibenzofuran	8270			10	8	0	8	100	0	NC	--	--	--	--	--
2,6-Dinitrotoluene	8270			10	8	0	8	100	0	NC	--	--	--	--	--
2,4-Dinitrotoluene	8270	10		10	8	0	8	100	0	NC	--	--	--	--	--
Diethylphthalate	8270	28400		10	8	0	8	100	0	NC	--	--	--	--	--
4-Chlorophenyl-phenylethe	8270			10	8	0	8	100	0	NC	--	--	--	--	--
Fluorene	8270	2422		10	8	0	8	100	0	NC	--	--	--	--	--
4-Nitroaniline	8270			20	8	0	8	100	0	NC	--	--	--	--	--



**TABLE 4-1  
 STATISTICAL SUMMARY OF GROUNDWATER DATA - WELL HC102/MW102R  
 06/99 TO 06/01  
 UNION STATION**

Analyte	Method	CAP Cleanup Level (a) (µg/L)	Background-based Screening Level (µg/L)	Practical Quantitation Limit (b) (µg/L)	Number of Samples (c)	Number of Detects (>= PQL)	Number of Censored Data (d)	Percent Censored Data	Statistical Case No. (e)	UCL	Minimum Uncensored Data (f)	Maximum Uncensored Data (f)	Mean of Uncensored Data (f)	Std. Dev. of Uncensored Data (f)	Median of Uncensored Data (f)
4,6-Dinitro-2-Methylpheno	8270			50 (k)	8	0	8	100	0	NC	--	--	--	--	--
N-Nitrosodiphenylamine	8270	16		10	8	0	8	100	0	NC	--	--	--	--	--
4-Bromophenyl-phenylethe	8270			10	8	0	8	100	0	NC	--	--	--	--	--
Hexachlorobenzene	8270	10		10	8	0	8	100	0	NC	--	--	--	--	--
Pentachloropheno	8270	50		50	8	0	8	100	0	NC	--	--	--	--	--
Phenanthrene	8270			10	8	0	8	100	0	NC	--	--	--	--	--
Carbazole	8270			10	8	0	8	100	0	NC	--	--	--	--	--
Anthracene	8270	25900		10	8	0	8	100	0	NC	--	--	--	--	--
Di-n-Butylphthalat	8270	2910		10 (k)	8	0	8	100	0	NC	--	--	--	--	--
Fluoranthene	8270	27.1		10	8	0	8	100	0	NC	--	--	--	--	--
Pyrene	8270	777		10	8	0	8	100	0	NC	--	--	--	--	--
Butylbenzylphthalat	8270	1250		10	8	0	8	100	0	NC	--	--	--	--	--
3,3'-Dichlorobenzidine	8270	20		20	8	0	8	100	0	NC	--	--	--	--	--
bis(2-Ethylhexyl)phthalat	8270	10		10	8	1	7	87.5	3	65 (m)	65	65	--	--	--
Di-n-Octyl phthalat	8270			10	8	0	8	100	0	NC	--	--	--	--	--
Benzo(g,h,i)perylene	8270			10	8	0	8	100	0	NC	--	--	--	--	--

**TABLE 4-1**  
**STATISTICAL SUMMARY OF GROUNDWATER DATA - WELL HC102/MW102R**  
**06/99 TO 06/01**  
**UNION STATION**

Analyte	Method	CAP Cleanup Level (a) (µg/L)	Background-based Screening Level (µg/L)	Practical Quantitation Limit (b) (µg/L)	Number of Samples (c)	Number of Detects (>= PQL)	Number of Censored Data (d)	Percent Censored Data	Statistical Case No. (e)	UCL	Minimum Uncensored Data (f)	Maximum Uncensored Data (f)	Mean of Uncensored Data (f)	Std. Dev. of Uncensored Data (f)	Median of Uncensored Data (f)
<b>VOLATILES (µg/L)</b>															
Chloromethane	8260	133		10	8	0	8	100	0	NC	--	--	--	--	--
Bromomethane	8260	968		10 (k)	8	0	8	100	0	NC	--	--	--	--	--
Vinyl Chloride	8260	10		10	8	0	8	100	0	NC	--	--	--	--	--
Chloroethane	8260			10	8	0	8	100	0	NC	--	--	--	--	--
Methylene Chloride	8260	960		5	8	0	8	100	0	NC	--	--	--	--	--
Acetone	8260			10	8	0	8	100	0	NC	--	--	--	--	--
Carbon Disulfide	8260			10	8	0	8	100	0	NC	--	--	--	--	--
1,1-Dichloroethene	8260	5		5	8	0	8	100	0	NC	--	--	--	--	--
1,1-Dichloroethane	8260			5	8	0	8	100	0	NC	--	--	--	--	--
trans-1,2-Dichloroethene	8260	32800		5	8	0	8	100	0	NC	--	--	--	--	--
cis-1,2-Dichloroethene	8260			5	8	0	8	100	0	NC	--	--	--	--	--
Chloroform	8260	470		5	8	0	8	100	0	NC	--	--	--	--	--
1,2-Dichloroethane	8260	99		5	8	0	8	100	0	NC	--	--	--	--	--
2-Butanone	8260			50 (k)	8	0	8	100	0	NC	--	--	--	--	--
1,1,1-Trichloroethane	8260	41700		5	8	0	8	100	0	NC	--	--	--	--	--
Carbon Tetrachloride	8260	5		5	8	0	8	100	0	NC	--	--	--	--	--
Vinyl Acetate	8260			50	8	0	8	100	0	NC	--	--	--	--	--
Bromodichloromethane	8260	28		5	8	0	8	100	0	NC	--	--	--	--	--
1,2-Dichloropropane	8260	23		5	8	0	8	100	0	NC	--	--	--	--	--
cis-1,3-Dichloropropene	8260	19		5	8	0	8	100	0	NC	--	--	--	--	--
Trichloroethene	8260	81		5	8	0	8	100	0	NC	--	--	--	--	--
Dibromochloromethane	8260	21		10 (k)	8	0	8	100	0	NC	--	--	--	--	--
1,1,2-Trichloroethane	8260	42		5	8	0	8	100	0	NC	--	--	--	--	--
Benzene	8260	71	219 (g)	5	8	0	8	100	0	NC	--	--	--	--	--
trans-1,3-Dichloropropene	8260	19		5	8	0	8	100	0	NC	--	--	--	--	--
2-Chloroethylvinylethe	8260			10	8	0	8	100	0	NC	--	--	--	--	--
Bromoform	8260	360		5	8	0	8	100	0	NC	--	--	--	--	--
4-Methyl-2-Pentanone (MIBK)	8260			50 (k)	8	0	8	100	0	NC	--	--	--	--	--
2-Hexanone	8260			50	8	0	8	100	0	NC	--	--	--	--	--
Tetrachloroethene	8260	8.9		5	8	0	8	100	0	NC	--	--	--	--	--
1,1,2,2-Tetrachloroethane	8260	6.5		5	8	0	8	100	0	NC	--	--	--	--	--
Toluene	8260	485		5	8	0	8	100	0	NC	--	--	--	--	--
Chlorobenzene	8260	5030		5	8	0	8	100	0	NC	--	--	--	--	--
Ethylbenzene	8260	276		5	8	0	8	100	0	NC	--	--	--	--	--
Styrene	8260			5	8	0	8	100	0	NC	--	--	--	--	--
Trichlorofluoromethane	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
1,1,2-Trichlorotrifluoroethane	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
m,p-Xylene	8260			5 (n)	8	0	8	100	0	NC	--	--	--	--	--
o-Xylene	8260			5 (n)	8	0	8	100	0	NC	--	--	--	--	--
1,2-Dichlorobenzene	8260	4200		10	8	0	8	100	0	NC	--	--	--	--	--
1,3-Dichlorobenzene	8260	2600		10	8	0	8	100	0	NC	--	--	--	--	--
1,4-Dichlorobenzene	8260	10		10	8	0	8	100	0	NC	--	--	--	--	--
Acrolein	8260	780		500 (k)	8	0	8	100	0	NC	--	--	--	--	--
Methyl Iodide	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
Bromoethane	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
Acrylonitrile	8260	5		5	8	0	8	100	0	NC	--	--	--	--	--
1,1-Dichloropropene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
Dibromomethane	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
1,1,1,2-Tetrachloroethane	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
1,2-Dibromo-3-chloropropane	8260			50 (k)	8	0	8	100	0	NC	--	--	--	--	--
1,2,3-Trichloropropane	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
trans-1,4-Dichloro-2-butene	8260			50 (k)	8	0	8	100	0	NC	--	--	--	--	--
1,3,5-Trimethylbenzene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
1,2,4-Trimethylbenzene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
Hexachlorobutadiene	8260	50		10	8	0	8	100	0	NC	--	--	--	--	--
Ethylene Dibromide	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
Bromochloromethane	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--

**TABLE 4-1**  
**STATISTICAL SUMMARY OF GROUNDWATER DATA - WELL HC102/MW102R**  
**06/99 TO 06/01**  
**UNION STATION**

Analyte	Method	CAP Cleanup Level (a) (µg/L)	Background-based Screening Level (µg/L)	Practical Quantitation Limit (b) (µg/L)	Number of Samples (c)	Number of Detects (>= PQL)	Number of Censored Data (d)	Percent Censored Data	Statistical Case No. (e)	UCL	Minimum Uncensored Data (f)	Maximum Uncensored Data (f)	Mean of Uncensored Data (f)	Std. Dev. of Uncensored Data (f)	Median of Uncensored Data (f)
2,2-Dichloropropane	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
1,3-Dichloropropane	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
Isopropylbenzene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
n-Propylbenzene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
Bromobenzene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
2-Chlorotoluene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
4-Chlorotoluene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
tert-Butylbenzene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
sec-Butylbenzene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
4-Isopropyltoluene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
n-Butylbenzene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
1,2,4-Trichlorobenzene	8260	227		10	8	0	8	100	0	NC	--	--	--	--	--
Naphthalene	8260	9880		10	8	2	6	75	3	20 (m)	10	20	--	--	--
1,2,3-Trichlorobenzene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
<b>DISSOLVED METALS (µg/L)</b>															
Antimony	200.8	4300		10	8	0	8	100	0	NC	--	--	--	--	--
Arsenic	200.8	4	32 (g)	4	8	8	0	1	8.9 (i)	4	10	7	2	7	
Beryllium	200.8	2		2	8	0	8	100	0	NC	--	--	--	--	--
Cadmium	200.8	8		2	8	0	8	100	0	NC	--	--	--	--	--
Chromium	200.8	50		50	8	0	8	100	0	NC	--	--	--	--	--
Copper	200.8	10		10	8	0	8	100	0	NC	--	--	--	--	--
Lead	200.8	10		10	8	0	8	100	0	NC	--	--	--	--	--
Mercury	7470	1		1	8	0	8	100	0	NC	--	--	--	--	--
Nickel	200.8	10		10	8	0	8	100	0	NC	--	--	--	--	--
Selenium	200.8	71		20	8	0	8	100	0	NC	--	--	--	--	--
Silver	200.8	2		2	8	0	8	100	0	NC	--	--	--	--	--
Zinc	200.8	76.6		20	8	0	8	100	0	NC	--	--	--	--	--
<b>Cyanide (µg/L)</b>															
Total Cyanide	335.2	50		50	8	0	8	100	0	NC	--	--	--	--	--
Weak Acid Dissoc. Cyanide	SM4500CN-I	50		50	3	0	3	100	0	NC	--	--	--	--	--

**TABLE 4-1**  
**STATISTICAL SUMMARY OF GROUNDWATER DATA - WELL MW104**  
**06/99 TO 06/01**  
**UNION STATION**

Analyte	Method	CAP Cleanup Level (a) (µg/L)	Background-based Screening Level (µg/L)	Practical Quantitation Limit (b) (µg/L)	Number of Samples (c)	Number of Detects (>= PQL)	Number of Censored Data (d)	Percent Censored Data	Statistical Case No. (e)	UCL	Minimum Uncensored Data (f)	Maximum Uncensored Data (f)	Mean of Uncensored Data (f)	Std. Dev. of Uncensored Data (f)	Median of Uncensored Data (f)
<b>TPH (µg/L)</b>															
Diesel-Range Hydrocarbons	WTPH-Dx		6586 (g)	400 (h)	8	7	1	12.5	1	560 (j, l)	420	560	451	96	470
Motor-oil Range Hydrocarbons	WTPH-Dx		7591 (g)	1100 (h)	8	0	8	100	0	NC	--	--	--	--	--
Gasoline-Range Hydrocarbons	WTPH-G			600 (h)	8	0	8	100	0	NC	--	--	--	--	--
<b>CPAH (µg/L)</b>															
Benzo(a)anthracene	8270-SIM	1.0		1.0	8	0	8	100	0	NC	--	--	--	--	--
Chrysene	8270-SIM	1.0		1.0	8	0	8	100	0	NC	--	--	--	--	--
Benzo(b)fluoranthene	8270-SIM	1.0		1.0	8	0	8	100	0	NC	--	--	--	--	--
Benzo(k)fluoranthene	8270-SIM	1.0		1.0	8	0	8	100	0	NC	--	--	--	--	--
Benzo(a)pyrene	8270-SIM	1.0		1.0	8	0	8	100	0	NC	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	8270-SIM	1.0		1.0	8	0	8	100	0	NC	--	--	--	--	--
Dibenzo(a,h)anthracene	8270-SIM	1.0		1.0	8	0	8	100	0	NC	--	--	--	--	--
<b>SEMIVOLATILES (µg/L)</b>															
Phenol	8270	1100000		10	8	0	8	100	0	NC	--	--	--	--	--
Bis-(2-Chloroethyl) Ethane	8270	10		10	8	0	8	100	0	NC	--	--	--	--	--
2-Chloropheno	8270	96.7		10	8	0	8	100	0	NC	--	--	--	--	--
1,3-Dichlorobenzene	8270	2600		10	8	0	8	100	0	NC	--	--	--	--	--
1,4-Dichlorobenzene	8270	10		10	8	0	8	100	0	NC	--	--	--	--	--
Benzyl Alcohol	8270			20	8	0	8	100	0	NC	--	--	--	--	--
1,2-Dichlorobenzene	8270	4200		10	8	0	8	100	0	NC	--	--	--	--	--
2-Methylpheno	8270			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
2,2'-Oxybis(1-Chloropropane	8270			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
4-Methylpheno	8270			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
N-Nitroso-Di-N-Propylamine	8270	10		10	8	0	8	100	0	NC	--	--	--	--	--
Hexachloroethane	8270	10		10	8	0	8	100	0	NC	--	--	--	--	--
Nitrobenzene	8270	449		10	8	0	8	100	0	NC	--	--	--	--	--
Isophorone	8270	600		10	8	0	8	100	0	NC	--	--	--	--	--
2-Nitrophenol	8270			10	8	0	8	100	0	NC	--	--	--	--	--
2,4-Dimethylpheno	8270	553		10	8	0	8	100	0	NC	--	--	--	--	--
Benzoic Acid	8270			10	8	0	8	100	0	NC	--	--	--	--	--
bis(2-Chloroethoxy) Methane	8270			10	8	0	8	100	0	NC	--	--	--	--	--
2,4-Dichloropheno	8270	191		10	8	0	8	100	0	NC	--	--	--	--	--
1,2,4-Trichlorobenzene	8270	227		10	8	0	8	100	0	NC	--	--	--	--	--
Naphthalene	8270	9880		10	8	0	8	100	0	NC	--	--	--	--	--
4-Chloroaniline	8270			20	8	0	8	100	0	NC	--	--	--	--	--
Hexachlorobutadiene	8270	50		10	8	0	8	100	0	NC	--	--	--	--	--
4-Chloro-3-methylphenc	8270			20	8	0	8	100	0	NC	--	--	--	--	--
2-Methylnaphthalen	8270			10	8	1	7	87.5	3	24 (m)	24	24	--	--	--
Hexachlorocyclopentadiene	8270	4180		20	8	0	8	100	0	NC	--	--	--	--	--
2,4,6-Trichloropheno	8270	10		10	8	0	8	100	0	NC	--	--	--	--	--
2,4,5-Trichloropheno	8270			10	8	0	8	100	0	NC	--	--	--	--	--
2-Chloronaphthalen	8270			10	8	0	8	100	0	NC	--	--	--	--	--
2-Nitroaniline	8270			50	8	0	8	100	0	NC	--	--	--	--	--
Dimethylphthalate	8270	72000		10	8	0	8	100	0	NC	--	--	--	--	--
Acenaphthylen	8270			10	8	0	8	100	0	NC	--	--	--	--	--
3-Nitroaniline	8270			50	8	0	8	100	0	NC	--	--	--	--	--
Acenaphthene	8270	225	456 (g)	10	8	8	0	0	1	53 (i)	37	62	46	9.4	43
2,4-Dinitropheno	8270	3460		50	8	0	8	100	0	NC	--	--	--	--	--
4-Nitrophenol	8270			50	8	0	8	100	0	NC	--	--	--	--	--
Dibenzofuran	8270			10	8	0	8	100	0	NC	--	--	--	--	--
2,6-Dinitrotoluene	8270			10	8	0	8	100	0	NC	--	--	--	--	--
2,4-Dinitrotoluene	8270	10		10	8	0	8	100	0	NC	--	--	--	--	--
Diethylphthalate	8270	28400		10	8	0	8	100	0	NC	--	--	--	--	--
4-Chlorophenyl-phenylethe	8270			10	8	0	8	100	0	NC	--	--	--	--	--
Fluorene	8270	2422		10	8	7	1	12.5	1	17 (j, l)	10	17	11	4.5	11
4-Nitroaniline	8270			20	8	0	8	100	0	NC	--	--	--	--	--

**TABLE 4-1  
STATISTICAL SUMMARY OF GROUNDWATER DATA - WELL MW104  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (a) (µg/L)	Background-based Screening Level (µg/L)	Practical Quantitation Limit (b) (µg/L)	Number of Samples (c)	Number of Detects (>= PQL)	Number of Censored Data (d)	Percent Censored Data	Statistical Case No. (e)	UCL	Minimum Uncensored Data (f)	Maximum Uncensored Data (f)	Mean of Uncensored Data (f)	Std. Dev. of Uncensored Data (f)	Median of Uncensored Data (f)
4,6-Dinitro-2-Methylpheno	8270			50 (k)	8	0	8	100	0	NC	--	--	--	--	--
N-Nitrosodiphenylamine	8270	16		10	8	0	8	100	0	NC	--	--	--	--	--
4-Bromophenyl-phenylethe	8270			10	8	0	8	100	0	NC	--	--	--	--	--
Hexachlorobenzene	8270	10		10	8	0	8	100	0	NC	--	--	--	--	--
Pentachloropheno	8270	50		50	8	0	8	100	0	NC	--	--	--	--	--
Phenanthrene	8270			10	8	0	8	100	0	NC	--	--	--	--	--
Carbazole	8270			10	8	5	3	37.5	2	19 (l)	11	25	15	5.7	13
Anthracene	8270	25900		10	8	0	8	100	0	NC	--	--	--	--	--
Di-n-Butylphthalat	8270	2910		10 (k)	8	0	8	100	0	NC	--	--	--	--	--
Fluoranthene	8270	27.1		10	8	0	8	100	0	NC	--	--	--	--	--
Pyrene	8270	777		10	8	0	8	100	0	NC	--	--	--	--	--
Butylbenzylphthalat	8270	1250		10	8	0	8	100	0	NC	--	--	--	--	--
3,3'-Dichlorobenzidine	8270	20		20	8	0	8	100	0	NC	--	--	--	--	--
bis(2-Ethylhexyl)phthalat	8270	10		10	8	1	7	88	3	65 (m)	65	65	--	--	--
Di-n-Octyl phthalat	8270			10	8	0	8	100	0	NC	--	--	--	--	--
Benzo(g,h,i)perylene	8270			10	8	0	8	100	0	NC	--	--	--	--	--

**TABLE 4-1**  
**STATISTICAL SUMMARY OF GROUNDWATER DATA - WELL MW104**  
**06/99 TO 06/01**  
**UNION STATION**

Analyte	Method	CAP Cleanup Level (a) (µg/L)	Background-based Screening Level (µg/L)	Practical Quantitation Limit (b) (µg/L)	Number of Samples (c)	Number of Detects (>= PQL)	Number of Censored Data (d)	Percent Censored Data	Statistical Case No. (e)	UCL	Minimum Uncensored Data (f)	Maximum Uncensored Data (f)	Mean of Uncensored Data (f)	Std. Dev. of Uncensored Data (f)	Median of Uncensored Data (f)
<b>VOLATILES (µg/L)</b>															
Chloromethane	8260	133		10	8	0	8	100	0	NC	--	--	--	--	--
Bromomethane	8260	968		10 (k)	8	0	8	100	0	NC	--	--	--	--	--
Vinyl Chloride	8260	10		10	8	0	8	100	0	NC	--	--	--	--	--
Chloroethane	8260			10	8	0	8	100	0	NC	--	--	--	--	--
Methylene Chloride	8260	960		5	8	0	8	100	0	NC	--	--	--	--	--
Acetone	8260			10	8	0	8	100	0	NC	--	--	--	--	--
Carbon Disulfide	8260			10	8	0	8	100	0	NC	--	--	--	--	--
1,1-Dichloroethene	8260	5		5	8	0	8	100	0	NC	--	--	--	--	--
1,1-Dichloroethane	8260			5	8	0	8	100	0	NC	--	--	--	--	--
trans-1,2-Dichloroethene	8260	32800		5	8	0	8	100	0	NC	--	--	--	--	--
cis-1,2-Dichloroethene	8260			5	8	0	8	100	0	NC	--	--	--	--	--
Chloroform	8260	470		5	8	0	8	100	0	NC	--	--	--	--	--
1,2-Dichloroethane	8260	99		5	8	0	8	100	0	NC	--	--	--	--	--
2-Butanone	8260			50 (k)	8	0	8	100	0	NC	--	--	--	--	--
1,1,1-Trichloroethane	8260	41700		5	8	0	8	100	0	NC	--	--	--	--	--
Carbon Tetrachloride	8260	5		5	8	0	8	100	0	NC	--	--	--	--	--
Vinyl Acetate	8260			50	8	0	8	100	0	NC	--	--	--	--	--
Bromodichloromethane	8260	28		5	8	0	8	100	0	NC	--	--	--	--	--
1,2-Dichloropropane	8260	23		5	8	0	8	100	0	NC	--	--	--	--	--
cis-1,3-Dichloropropene	8260	19		5	8	0	8	100	0	NC	--	--	--	--	--
Trichloroethene	8260	81		5	8	0	8	100	0	NC	--	--	--	--	--
Dibromochloromethane	8260	21		10 (k)	8	0	8	100	0	NC	--	--	--	--	--
1,1,2-Trichloroethane	8260	42		5	8	0	8	100	0	NC	--	--	--	--	--
Benzene	8260	71	219 (g)	5	8	1	7	87.5	3	7 (m)	7.0	7.0	--	--	--
trans-1,3-Dichloropropene	8260	19		5	8	0	8	100	0	NC	--	--	--	--	--
2-Chloroethylvinylethe	8260			10	8	0	8	100	0	NC	--	--	--	--	--
Bromoform	8260	360		5	8	0	8	100	0	NC	--	--	--	--	--
4-Methyl-2-Pentanone (MIBK)	8260			50 (k)	8	0	8	100	0	NC	--	--	--	--	--
2-Hexanone	8260			50	8	0	8	100	0	NC	--	--	--	--	--
Tetrachloroethene	8260	8.9		5	8	0	8	100	0	NC	--	--	--	--	--
1,1,2,2-Tetrachloroethane	8260	6.5		5	8	0	8	100	0	NC	--	--	--	--	--
Toluene	8260	485		5	8	0	8	100	0	NC	--	--	--	--	--
Chlorobenzene	8260	5030		5	8	0	8	100	0	NC	--	--	--	--	--
Ethylbenzene	8260	276		5	8	1	7	87.5	3	5 (m)	5.2	5.2	--	--	--
Styrene	8260			5	8	0	8	100	0	NC	--	--	--	--	--
Trichlorofluoromethane	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
1,1,2-Trichlorotrifluoroethane	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
m,p-Xylene	8260			5 (n)	8	1	7	87.5	3	6 (m)	6.0	6.0	--	--	--
o-Xylene	8260			5 (n)	8	0	8	100	0	NC	--	--	--	--	--
1,2-Dichlorobenzene	8260	4200		10	8	0	8	100	0	NC	--	--	--	--	--
1,3-Dichlorobenzene	8260	2600		10	8	0	8	100	0	NC	--	--	--	--	--
1,4-Dichlorobenzene	8260	10		10	8	0	8	100	0	NC	--	--	--	--	--
Acrolein	8260	780		500 (k)	8	0	8	100	0	NC	--	--	--	--	--
Methyl Iodide	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
Bromoethane	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
Acrylonitrile	8260	5		5	8	0	8	100	0	NC	--	--	--	--	--
1,1-Dichloropropene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
Dibromomethane	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
1,1,1,2-Tetrachloroethane	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
1,2-Dibromo-3-chloropropane	8260			50 (k)	8	0	8	100	0	NC	--	--	--	--	--
1,2,3-Trichloropropane	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
trans-1,4-Dichloro-2-butene	8260			50 (k)	8	0	8	100	0	NC	--	--	--	--	--
1,3,5-Trimethylbenzene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
1,2,4-Trimethylbenzene	8260			10 (k)	8	1	7	87.5	3	11 (m)	11	11	--	--	--
Hexachlorobutadiene	8260	50		10	8	0	8	100	0	NC	--	--	--	--	--
Ethylene Dibromide	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
Bromochloromethane	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--

**TABLE 4-1  
STATISTICAL SUMMARY OF GROUNDWATER DATA - WELL MW104  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (a) (µg/L)	Background-based Screening Level (µg/L)	Practical Quantitation Limit (b) (µg/L)	Number of Samples (c)	Number of Detects (>= PQL)	Number of Censored Data (d)	Percent Censored Data	Statistical Case No. (e)	UCL	Minimum Uncensored Data (f)	Maximum Uncensored Data (f)	Mean of Uncensored Data (f)	Std. Dev. of Uncensored Data (f)	Median of Uncensored Data (f)
2,2-Dichloropropane	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
1,3-Dichloropropane	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
Isopropylbenzene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
n-Propylbenzene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
Bromobenzene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
2-Chlorotoluene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
4-Chlorotoluene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
tert-Butylbenzene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
sec-Butylbenzene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
4-Isopropyltoluene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
n-Butylbenzene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
1,2,4-Trichlorobenzene	8260	227		10	8	0	8	100	0	NC	--	--	--	--	--
Naphthalene	8260	9880		10	8	8	0	0	1	526 (i)	80	740	248	214	200
1,2,3-Trichlorobenzene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
<b>DISSOLVED METALS (µg/L)</b>															
Antimony	200.8	4300		10	8	0	8	100	0	NC	--	--	--	--	--
Arsenic	200.8	4	32 (g)	4	8	0	8	100	0	NC	--	--	--	--	--
Beryllium	200.8	2		2	8	0	8	100	0	NC	--	--	--	--	--
Cadmium	200.8	8		2	8	0	8	100	0	NC	--	--	--	--	--
Chromium	200.8	50		50	8	0	8	100	0	NC	--	--	--	--	--
Copper	200.8	10		10	8	0	8	100	0	NC	--	--	--	--	--
Lead	200.8	10		10	8	0	8	100	0	NC	--	--	--	--	--
Mercury	7470	1		1	8	0	8	100	0	NC	--	--	--	--	--
Nickel	200.8	10		10	8	0	8	100	0	NC	--	--	--	--	--
Selenium	200.8	71		20	8	0	8	100	0	NC	--	--	--	--	--
Silver	200.8	2		2	8	0	8	100	0	NC	--	--	--	--	--
Zinc	200.8	76.6		20	8	0	8	100	0	NC	--	--	--	--	--
<b>Cyanide (µg/L)</b>															
Total Cyanide	335.2	50		50	8	0	8	100	0	NC	--	--	--	--	--
Weak Acid Dissoc. Cyanide	SM4500CN-I	50		50	3	0	3	100	0	NC	--	--	--	--	--

**TABLE 4-1  
STATISTICAL SUMMARY OF GROUNDWATER DATA - WELL MW105  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (a) (µg/L)	Background-based Screening Level (µg/L)	Practical Quantitation Limit (b) (µg/L)	Number of Samples (c)	Number of Detects (>= PQL)	Number of Censored Data (d)	Percent Censored Data	Statistical Case No. (e)	UCL	Minimum Uncensored Data (f)	Maximum Uncensored Data (f)	Mean of Uncensored Data (f)	Std. Dev. of Uncensored Data (f)	Median of Uncensored Data (f)
<b>TPH (µg/L)</b>															
Diesel-Range Hydrocarbons	WTPH-Dx		6586 (g)	400 (h)	8	8	0	0	1	1800 (j)	1200	1800	1450	227	1500
Motor-oil Range Hydrocarbons	WTPH-Dx		7591 (g)	1100 (h)	8	0	8	100	0	NC	--	--	--	--	--
Gasoline-Range Hydrocarbons	WTPH-G			600 (h)	8	8	0	0	1	2804 (i)	1500	3300	2325	552	2350
<b>CPAH (µg/L)</b>															
Benzo(a)anthracene	8270-SIM	1.0		1.0	8	0	8	100	0	NC	--	--	--	--	--
Chrysene	8270-SIM	1.0		1.0	8	0	8	100	0	NC	--	--	--	--	--
Benzo(b)fluoranthene	8270-SIM	1.0		1.0	8	0	8	100	0	NC	--	--	--	--	--
Benzo(k)fluoranthene	8270-SIM	1.0		1.0	8	0	8	100	0	NC	--	--	--	--	--
Benzo(a)pyrene	8270-SIM	1.0		1.0	8	0	8	100	0	NC	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	8270-SIM	1.0		1.0	8	0	8	100	0	NC	--	--	--	--	--
Dibenzo(a,h)anthracene	8270-SIM	1.0		1.0	8	0	8	100	0	NC	--	--	--	--	--
<b>SEMIVOLATILES (µg/L)</b>															
Phenol	8270	1100000		10	8	1	7	87.5	3	10 (m)	10	10	--	--	--
Bis-(2-Chloroethyl) Ethane	8270	10		10	8	0	8	100	0	NC	--	--	--	--	--
2-Chloropheno	8270	96.7		10	8	0	8	100	0	NC	--	--	--	--	--
1,3-Dichlorobenzene	8270	2600		10	8	0	8	100	0	NC	--	--	--	--	--
1,4-Dichlorobenzene	8270	10		10	8	0	8	100	0	NC	--	--	--	--	--
Benzyl Alcohol	8270			20	8	0	8	100	0	NC	--	--	--	--	--
1,2-Dichlorobenzene	8270	4200		10	8	0	8	100	0	NC	--	--	--	--	--
2-Methylpheno	8270			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
2,2'-Oxybis(1-Chloropropane	8270			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
4-Methylpheno	8270			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
N-Nitroso-Di-N-Propylamine	8270	10		10	8	0	8	100	0	NC	--	--	--	--	--
Hexachloroethane	8270	10		10	8	0	8	100	0	NC	--	--	--	--	--
Nitrobenzene	8270	449		10	8	0	8	100	0	NC	--	--	--	--	--
Isophorone	8270	600		10	8	0	8	100	0	NC	--	--	--	--	--
2-Nitrophenol	8270			10	8	0	8	100	0	NC	--	--	--	--	--
2,4-Dimethylpheno	8270	553		10	8	8	0	0	1	35 (i)	16	38	27	8.6	27
Benzoic Acid	8270			10	8	0	8	100	0	NC	--	--	--	--	--
bis(2-Chloroethoxy) Methane	8270			10	8	0	8	100	0	NC	--	--	--	--	--
2,4-Dichloropheno	8270	191		10	8	0	8	100	0	NC	--	--	--	--	--
1,2,4-Trichlorobenzene	8270	227		10	8	0	8	100	0	NC	--	--	--	--	--
Naphthalene	8270	9880		10	8	8	0	0	1	1410 (i)	770	1700	1119	343	1000
4-Chloroaniline	8270			20	8	0	8	100	0	NC	--	--	--	--	--
Hexachlorobutadiene	8270	50		10	8	0	8	100	0	NC	--	--	--	--	--
4-Chloro-3-methylphenc	8270			20	8	0	8	100	0	NC	--	--	--	--	--
2-Methylnaphthalen	8270			10	8	8	0	0	1	143 (i)	70	190	111	38	105
Hexachlorocyclopentadiene	8270	4180		20	8	0	8	100	0	NC	--	--	--	--	--
2,4,6-Trichloropheno	8270	10		10	8	0	8	100	0	NC	--	--	--	--	--
2,4,5-Trichloropheno	8270			10	8	0	8	100	0	NC	--	--	--	--	--
2-Chloronaphthalen	8270			10	8	0	8	100	0	NC	--	--	--	--	--
2-Nitroaniline	8270			50	8	0	8	100	0	NC	--	--	--	--	--
Dimethylphthalate	8270	72000		10	8	0	8	100	0	NC	--	--	--	--	--
Acenaphthylen	8270			10	8	1	7	88	3	13 (m)	13	13	--	--	--
3-Nitroaniline	8270			50	8	0	8	100	0	NC	--	--	--	--	--
Acenaphthene	8270	225	456 (g)	10	8	8	0	0	1	100 (j)	67	100	76	10	73
2,4-Dinitropheno	8270	3460		50	8	0	8	100	0	NC	--	--	--	--	--
4-Nitrophenol	8270			50	8	0	8	100	0	NC	--	--	--	--	--
Dibenzofuran	8270			10	8	8	0	0	1	29 (j)	21	29	25	3.3	23
2,6-Dinitrotoluene	8270			10	8	0	8	100	0	NC	--	--	--	--	--
2,4-Dinitrotoluene	8270	10		10	8	0	8	100	0	NC	--	--	--	--	--
Diethylphthalate	8270	28400		10	8	0	8	100	0	NC	--	--	--	--	--
4-Chlorophenyl-phenylethe	8270			10	8	0	8	100	0	NC	--	--	--	--	--
Fluorene	8270	2422		10	8	8	0	0	1	38 (i)	27	42	34	5.1	32
4-Nitroaniline	8270			20	8	0	8	100	0	NC	--	--	--	--	--



**TABLE 4-1  
STATISTICAL SUMMARY OF GROUNDWATER DATA - WELL MW105  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (a) (µg/L)	Background-based Screening Level (µg/L)	Practical Quantitation Limit (b) (µg/L)	Number of Samples (c)	Number of Detects (>= PQL)	Number of Censored Data (d)	Percent Censored Data	Statistical Case No. (e)	UCL	Minimum Uncensored Data (f)	Maximum Uncensored Data (f)	Mean of Uncensored Data (f)	Std. Dev. of Uncensored Data (f)	Median of Uncensored Data (f)
4,6-Dinitro-2-Methylpheno	8270			50 (k)	8	0	8	100	0	NC	--	--	--	--	--
N-Nitrosodiphenylamine	8270	16		10	8	0	8	100	0	NC	--	--	--	--	--
4-Bromophenyl-phenylethe	8270			10	8	0	8	100	0	NC	--	--	--	--	--
Hexachlorobenzene	8270	10		10	8	0	8	100	0	NC	--	--	--	--	--
Pentachloropheno	8270	50		50	8	0	8	100	0	NC	--	--	--	--	--
Phenanthrene	8270			10	8	8	0	0	1	68 (i)	57	72	64	6.1	64
Carbazole	8270			10	8	8	0	0	1	51 (i)	24	71	39	15	38
Anthracene	8270	25900		10	8	0	8	100	0	NC	--	--	--	--	--
Di-n-Butylphthalat	8270	2910		10 (k)	8	0	8	100	0	NC	--	--	--	--	--
Fluoranthene	8270	27.1		10	8	1	7	87.5	3	11 (m)	11	11	--	--	--
Pyrene	8270	777		10	8	0	8	100	0	NC	--	--	--	--	--
Butylbenzylphthalat	8270	1250		10	8	0	8	100	0	NC	--	--	--	--	--
3,3'-Dichlorobenzidine	8270	20		20	8	0	8	100	0	NC	--	--	--	--	--
bis(2-Ethylhexyl)phthalat	8270	10		10	8	0	8	100	0	NC	--	--	--	--	--
Di-n-Octyl phthalat	8270			10	8	0	8	100	0	NC	--	--	--	--	--
Benzo(g,h,i)perylene	8270			10	8	0	8	100	0	NC	--	--	--	--	--

**TABLE 4-1  
STATISTICAL SUMMARY OF GROUNDWATER DATA - WELL MW105  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (a) (µg/L)	Background-based Screening Level (µg/L)	Practical Quantitation Limit (b) (µg/L)	Number of Samples (c)	Number of Detects (>= PQL)	Number of Censored Data (d)	Percent Censored Data	Statistical Case No. (e)	UCL	Minimum Uncensored Data (f)	Maximum Uncensored Data (f)	Mean of Uncensored Data (f)	Std. Dev. of Uncensored Data (f)	Median of Uncensored Data (f)
<b>VOLATILES (µg/L)</b>															
Chloromethane	8260	133		10	8	0	8	100	0	NC	--	--	--	--	--
Bromomethane	8260	968		10 (k)	8	0	8	100	0	NC	--	--	--	--	--
Vinyl Chloride	8260	10		10	8	0	8	100	0	NC	--	--	--	--	--
Chloroethane	8260			10	8	0	8	100	0	NC	--	--	--	--	--
Methylene Chloride	8260	960		5	8	0	8	100	0	NC	--	--	--	--	--
Acetone	8260			10	8	0	8	100	0	NC	--	--	--	--	--
Carbon Disulfide	8260			10	8	0	8	100	0	NC	--	--	--	--	--
1,1-Dichloroethene	8260	5		5	8	0	8	100	0	NC	--	--	--	--	--
1,1-Dichloroethane	8260			5	8	0	8	100	0	NC	--	--	--	--	--
trans-1,2-Dichloroethene	8260	32800		5	8	0	8	100	0	NC	--	--	--	--	--
cis-1,2-Dichloroethene	8260			5	8	0	8	100	0	NC	--	--	--	--	--
Chloroform	8260	470		5	8	0	8	100	0	NC	--	--	--	--	--
1,2-Dichloroethane	8260	99		5	8	0	8	100	0	NC	--	--	--	--	--
2-Butanone	8260			50 (k)	8	0	8	100	0	NC	--	--	--	--	--
1,1,1-Trichloroethane	8260	41700		5	8	0	8	100	0	NC	--	--	--	--	--
Carbon Tetrachloride	8260	5		5	8	0	8	100	0	NC	--	--	--	--	--
Vinyl Acetate	8260			50	8	0	8	100	0	NC	--	--	--	--	--
Bromodichloromethane	8260	28		5	8	0	8	100	0	NC	--	--	--	--	--
1,2-Dichloropropane	8260	23		5	8	0	8	100	0	NC	--	--	--	--	--
cis-1,3-Dichloropropene	8260	19		5	8	0	8	100	0	NC	--	--	--	--	--
Trichloroethene	8260	81		5	8	0	8	100	0	NC	--	--	--	--	--
Dibromochloromethane	8260	21		10 (k)	8	0	8	100	0	NC	--	--	--	--	--
1,1,2-Trichloroethane	8260	42		5	8	0	8	100	0	NC	--	--	--	--	--
Benzene	8260	71	219 (g)	5	8	8	0	0	1	378 (i)	170	430	315	91	335
trans-1,3-Dichloropropene	8260	19		5	8	0	8	100	0	NC	--	--	--	--	--
2-Chloroethylvinylethe	8260			10	8	0	8	100	0	NC	--	--	--	--	--
Bromoform	8260	360		5	8	0	8	100	0	NC	--	--	--	--	--
4-Methyl-2-Pentanone (MIBK)	8260			50 (k)	8	0	8	100	0	NC	--	--	--	--	--
2-Hexanone	8260			50	8	0	8	100	0	NC	--	--	--	--	--
Tetrachloroethene	8260	8.9		5	8	0	8	100	0	NC	--	--	--	--	--
1,1,2,2-Tetrachloroethane	8260	6.5		5	8	0	8	100	0	NC	--	--	--	--	--
Toluene	8260	485		5	8	8	0	0	1	53 (j)	23	53	41	12	43
Chlorobenzene	8260	5030		5	8	0	8	100	0	NC	--	--	--	--	--
Ethylbenzene	8260	276		5	8	8	0	0	1	80 (i)	38	88	68	18	71
Styrene	8260			5	8	0	8	100	0	NC	--	--	--	--	--
Trichlorofluoromethane	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
1,1,2-Trichlorotrifluoroethane	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
m,p-Xylene	8260			5 (n)	8	8	0	0	1	79 (i)	52	86	70	14	73
o-Xylene	8260			5 (n)	8	8	0	0	1	43 (i)	22	46	37	8.8	40
1,2-Dichlorobenzene	8260	4200		10	8	0	8	100	0	NC	--	--	--	--	--
1,3-Dichlorobenzene	8260	2600		10	8	0	8	100	0	NC	--	--	--	--	--
1,4-Dichlorobenzene	8260	10		10	8	0	8	100	0	NC	--	--	--	--	--
Acrolein	8260	780		500 (k)	8	0	8	100	0	NC	--	--	--	--	--
Methyl Iodide	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
Bromoethane	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
Acrylonitrile	8260	5		5	8	0	8	100	0	NC	--	--	--	--	--
1,1-Dichloropropene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
Dibromomethane	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
1,1,1,2-Tetrachloroethane	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
1,2-Dibromo-3-chloropropane	8260			50 (k)	8	0	8	100	0	NC	--	--	--	--	--
1,2,3-Trichloropropane	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
trans-1,4-Dichloro-2-butene	8260			50 (k)	8	0	8	100	0	NC	--	--	--	--	--
1,3,5-Trimethylbenzene	8260			10 (k)	8	2	6	75	3	28 (m)	11	28	--	--	--
1,2,4-Trimethylbenzene	8260			10 (k)	8	8	0	0	1	72 (j)	19	72	30	17	25
Hexachlorobutadiene	8260	50		10	8	0	8	100	0	NC	--	--	--	--	--
Ethylene Dibromide	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
Bromochloromethane	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--

**TABLE 4-1**  
**STATISTICAL SUMMARY OF GROUNDWATER DATA - WELL MW105**  
**06/99 TO 06/01**  
**UNION STATION**

Analyte	Method	CAP Cleanup Level (a) (µg/L)	Background-based Screening Level (µg/L)	Practical Quantitation Limit (b) (µg/L)	Number of Samples (c)	Number of Detects (>= PQL)	Number of Censored Data (d)	Percent Censored Data	Statistical Case No. (e)	UCL	Minimum Uncensored Data (f)	Maximum Uncensored Data (f)	Mean of Uncensored Data (f)	Std. Dev. of Uncensored Data (f)	Median of Uncensored Data (f)
2,2-Dichloropropane	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
1,3-Dichloropropane	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
Isopropylbenzene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
n-Propylbenzene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
Bromobenzene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
2-Chlorotoluene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
4-Chlorotoluene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
tert-Butylbenzene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
sec-Butylbenzene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
4-Isopropyltoluene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
n-Butylbenzene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
1,2,4-Trichlorobenzene	8260	227		10	8	0	8	100	0	NC	--	--	--	--	--
Naphthalene	8260	9880		10	8	8	0	0	1	2598 (i)	1700	2900	2288	387	2300
1,2,3-Trichlorobenzene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
<b>DISSOLVED METALS (µg/L)</b>															
Antimony	200.8	4300		10	8	0	8	100	0	NC	--	--	--	--	--
Arsenic	200.8	4	32 (g)	4	8	8	0	0	1	18 (j)	6	18	12	4.1	14
Beryllium	200.8	2		2	8	0	8	100	0	NC	--	--	--	--	--
Cadmium	200.8	8		2	8	0	8	100	0	NC	--	--	--	--	--
Chromium	200.8	50		50	8	0	8	100	0	NC	--	--	--	--	--
Copper	200.8	10		10	8	0	8	100	0	NC	--	--	--	--	--
Lead	200.8	10		10	8	0	8	100	0	NC	--	--	--	--	--
Mercury	7470	1		1	8	0	8	100	0	NC	--	--	--	--	--
Nickel	200.8	10		10	8	0	8	100	0	NC	--	--	--	--	--
Selenium	200.8	71		20	8	0	8	100	0	NC	--	--	--	--	--
Silver	200.8	2		2	8	0	8	100	0	NC	--	--	--	--	--
Zinc	200.8	76.6		20	8	0	8	100	0	NC	--	--	--	--	--
<b>Cyanide (µg/L)</b>															
Total Cyanide	335.2	50		50	8	0	8	100	0	NC	--	--	--	--	--
Weak Acid Dissoc. Cyanide	SM4500CN-I	50		50	8	0	8	100	0	NC	--	--	--	--	--

**TABLE 4-1  
STATISTICAL SUMMARY OF GROUNDWATER DATA - WELL MW-107/MW107R  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (a) (µg/L)	Background-based Screening Level (µg/L)	Practical Quantitation Limit (b) (µg/L)	Number of Samples (c)	Number of Detects (>= PQL)	Number of Censored Data (d)	Percent Censored Data	Statistical Case No. (e)	UCL	Minimum Uncensored Data (f)	Maximum Uncensored Data (f)	Mean of Uncensored Data (f)	Std. Dev. of Uncensored Data (f)	Median of Uncensored Data (f)
<b>TPH (µg/L)</b>															
Diesel-Range Hydrocarbons	WTPH-Dx		6586 (g)	400 (h)	8	6	2	25	2	990 (i)	540	1200	758	252	670
Motor-oil Range Hydrocarbons	WTPH-Dx		7591 (g)	1100 (h)	8	0	8	100	0	NC	--	--	--	--	--
Gasoline-Range Hydrocarbons	WTPH-G			600 (h)	8	7	1	12.5	1	3351 (i, l)	780	3400	1370	953	1195
<b>CPAH (µg/L)</b>															
Benzo(a)anthracene	8270-SIM	1.0		1.0	8	0	8	100	0	NC	--	--	--	--	--
Chrysene	8270-SIM	1.0		1.0	8	0	8	100	0	NC	--	--	--	--	--
Benzo(b)fluoranthene	8270-SIM	1.0		1.0	8	0	8	100	0	NC	--	--	--	--	--
Benzo(k)fluoranthene	8270-SIM	1.0		1.0	8	0	8	100	0	NC	--	--	--	--	--
Benzo(a)pyrene	8270-SIM	1.0		1.0	8	0	8	100	0	NC	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	8270-SIM	1.0		1.0	8	0	8	100	0	NC	--	--	--	--	--
Dibenzo(a,h)anthracene	8270-SIM	1.0		1.0	8	0	8	100	0	NC	--	--	--	--	--
<b>SEMIVOLATILES (µg/L)</b>															
Phenol	8270	1100000		10	8	0	8	100	0	NC	--	--	--	--	--
Bis-(2-Chloroethyl) Ethane	8270	10		10	8	0	8	100	0	NC	--	--	--	--	--
2-Chloropheno	8270	96.7		10	8	0	8	100	0	NC	--	--	--	--	--
1,3-Dichlorobenzene	8270	2600		10	8	0	8	100	0	NC	--	--	--	--	--
1,4-Dichlorobenzene	8270	10		10	8	0	8	100	0	NC	--	--	--	--	--
Benzyl Alcohol	8270			20	8	0	8	100	0	NC	--	--	--	--	--
1,2-Dichlorobenzene	8270	4200		10	8	0	8	100	0	NC	--	--	--	--	--
2-Methylpheno	8270			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
2,2'-Oxybis(1-Chloropropane	8270			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
4-Methylpheno	8270			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
N-Nitroso-Di-N-Propylamine	8270	10		10	8	0	8	100	0	NC	--	--	--	--	--
Hexachloroethane	8270	10		10	8	0	8	100	0	NC	--	--	--	--	--
Nitrobenzene	8270	449		10	8	0	8	100	0	NC	--	--	--	--	--
Isophorone	8270	600		10	8	0	8	100	0	NC	--	--	--	--	--
2-Nitrophenol	8270			10	8	0	8	100	0	NC	--	--	--	--	--
2,4-Dimethylpheno	8270	553		10	8	0	8	100	0	NC	--	--	--	--	--
Benzoic Acid	8270			10	8	0	8	100	0	NC	--	--	--	--	--
bis(2-Chloroethoxy) Methane	8270			10	8	0	8	100	0	NC	--	--	--	--	--
2,4-Dichloropheno	8270	191		10	8	0	8	100	0	NC	--	--	--	--	--
1,2,4-Trichlorobenzene	8270	227		10	8	0	8	100	0	NC	--	--	--	--	--
Naphthalene	8270	9880		10	8	7	1	12.5	1	1183 (i, l)	390	2200	1161	702	900
4-Chloroaniline	8270			20	8	0	8	100	0	NC	--	--	--	--	--
Hexachlorobutadiene	8270	50		10	8	0	8	100	0	NC	--	--	--	--	--
4-Chloro-3-methylphenc	8270			20	8	0	8	100	0	NC	--	--	--	--	--
2-Methylnaphthalen	8270			10	8	7	1	12.5	1	120 (i, l)	39	170	82	57	71
Hexachlorocyclopentadiene	8270	4180		20	8	0	8	100	0	NC	--	--	--	--	--
2,4,6-Trichloropheno	8270	10		10	8	0	8	100	0	NC	--	--	--	--	--
2,4,5-Trichloropheno	8270			10	8	0	8	100	0	NC	--	--	--	--	--
2-Chloronaphthalen	8270			10	8	0	8	100	0	NC	--	--	--	--	--
2-Nitroaniline	8270			50	8	0	8	100	0	NC	--	--	--	--	--
Dimethylphthalate	8270	72000		10	8	0	8	100	0	NC	--	--	--	--	--
Acenaphthylen	8270			10	8	0	8	100	0	NC	--	--	--	--	--
3-Nitroaniline	8270			50	8	0	8	100	0	NC	--	--	--	--	--
Acenaphthene	8270	225	456 (g)	10	8	7	1	12.5	1	43 (i, l)	14	53	31	18	35
2,4-Dinitropheno	8270	3460		50	8	0	8	100	0	NC	--	--	--	--	--
4-Nitrophenol	8270			50	8	0	8	100	0	NC	--	--	--	--	--
Dibenzofuran	8270			10	8	0	8	100	0	NC	--	--	--	--	--
2,6-Dinitrotoluene	8270			10	8	0	8	100	0	NC	--	--	--	--	--
2,4-Dinitrotoluene	8270	10		10	8	0	8	100	0	NC	--	--	--	--	--
Diethylphthalate	8270	28400		10	8	0	8	100	0	NC	--	--	--	--	--
4-Chlorophenyl-phenylethe	8270			10	8	0	8	100	0	NC	--	--	--	--	--
Fluorene	8270	2422		10	8	3	5	63	3	16 (m)	12	16	--	--	--
4-Nitroaniline	8270			20	8	0	8	100	0	NC	--	--	--	--	--

**TABLE 4-1**  
**STATISTICAL SUMMARY OF GROUNDWATER DATA - WELL MW-107/MW107R**  
**06/99 TO 06/01**  
**UNION STATION**

Analyte	Method	CAP Cleanup Level (a) (µg/L)	Background-based Screening Level (µg/L)	Practical Quantitation Limit (b) (µg/L)	Number of Samples (c)	Number of Detects (>= PQL)	Number of Censored Data (d)	Percent Censored Data	Statistical Case No. (e)	UCL	Minimum Uncensored Data (f)	Maximum Uncensored Data (f)	Mean of Uncensored Data (f)	Std. Dev. of Uncensored Data (f)	Median of Uncensored Data (f)
4,6-Dinitro-2-Methylpheno	8270			50 (k)	8	0	8	100	0	NC	--	--	--	--	--
N-Nitrosodiphenylamine	8270	16		10	8	0	8	100	0	NC	--	--	--	--	--
4-Bromophenyl-phenylethe	8270			10	8	0	8	100	0	NC	--	--	--	--	--
Hexachlorobenzene	8270	10		10	8	0	8	100	0	NC	--	--	--	--	--
Pentachloropheno	8270	50		50	8	0	8	100	0	NC	--	--	--	--	--
Phenanthrene	8270			10	8	1	7	87.5	3	12 (m)	12	12	--	--	--
Carbazole	8270			10	8	1	7	87.5	3	10 (m)	10	10	--	--	--
Anthracene	8270	25900		10	8	0	8	100	0	NC	--	--	--	--	--
Di-n-Butylphthalat	8270	2910		10 (k)	8	0	8	100	0	NC	--	--	--	--	--
Fluoranthene	8270	27.1		10	8	0	8	100	0	NC	--	--	--	--	--
Pyrene	8270	777		10	8	0	8	100	0	NC	--	--	--	--	--
Butylbenzylphthalat	8270	1250		10	8	0	8	100	0	NC	--	--	--	--	--
3,3'-Dichlorobenzidine	8270	20		20	8	0	8	100	0	NC	--	--	--	--	--
bis(2-Ethylhexyl)phthalat	8270	10		10	8	0	8	100	0	NC	--	--	--	--	--
Di-n-Octyl phthalat	8270			10	8	0	8	100	0	NC	--	--	--	--	--
Benzo(g,h,i)perylene	8270			10	8	0	8	100	0	NC	--	--	--	--	--

**TABLE 4-1  
STATISTICAL SUMMARY OF GROUNDWATER DATA - WELL MW-107/MW107R  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (a) (µg/L)	Background-based Screening Level (µg/L)	Practical Quantitation Limit (b) (µg/L)	Number of Samples (c)	Number of Detects (>= PQL)	Number of Censored Data (d)	Percent Censored Data	Statistical Case No. (e)	UCL	Minimum Uncensored Data (f)	Maximum Uncensored Data (f)	Mean of Uncensored Data (f)	Std. Dev. of Uncensored Data (f)	Median of Uncensored Data (f)
<b>VOLATILES (µg/L)</b>															
Chloromethane	8260	133		10	8	0	8	100	0	NC	--	--	--	--	--
Bromomethane	8260	968		10 (k)	8	0	8	100	0	NC	--	--	--	--	--
Vinyl Chloride	8260	10		10	8	0	8	100	0	NC	--	--	--	--	--
Chloroethane	8260			10	8	0	8	100	0	NC	--	--	--	--	--
Methylene Chloride	8260	960		5	8	0	8	100	0	NC	--	--	--	--	--
Acetone	8260			10	8	0	8	100	0	NC	--	--	--	--	--
Carbon Disulfide	8260			10	8	0	8	100	0	NC	--	--	--	--	--
1,1-Dichloroethene	8260	5		5	8	0	8	100	0	NC	--	--	--	--	--
1,1-Dichloroethane	8260			5	8	0	8	100	0	NC	--	--	--	--	--
trans-1,2-Dichloroethene	8260	32800		5	8	0	8	100	0	NC	--	--	--	--	--
cis-1,2-Dichloroethene	8260			5	8	0	8	100	0	NC	--	--	--	--	--
Chloroform	8260	470		5	8	0	8	100	0	NC	--	--	--	--	--
1,2-Dichloroethane	8260	99		5	8	0	8	100	0	NC	--	--	--	--	--
2-Butanone	8260			50 (k)	8	0	8	100	0	NC	--	--	--	--	--
1,1,1-Trichloroethane	8260	41700		5	8	0	8	100	0	NC	--	--	--	--	--
Carbon Tetrachloride	8260	5		5	8	0	8	100	0	NC	--	--	--	--	--
Vinyl Acetate	8260			50	8	0	8	100	0	NC	--	--	--	--	--
Bromodichloromethane	8260	28		5	8	0	8	100	0	NC	--	--	--	--	--
1,2-Dichloropropane	8260	23		5	8	0	8	100	0	NC	--	--	--	--	--
cis-1,3-Dichloropropene	8260	19		5	8	0	8	100	0	NC	--	--	--	--	--
Trichloroethene	8260	81		5	8	0	8	100	0	NC	--	--	--	--	--
Dibromochloromethane	8260	21		10 (k)	8	0	8	100	0	NC	--	--	--	--	--
1,1,2-Trichloroethane	8260	42		5	8	0	8	100	0	NC	--	--	--	--	--
Benzene	8260	71	219 (g)	5	8	0	8	100	0	NC	--	--	--	--	--
trans-1,3-Dichloropropene	8260	19		5	8	0	8	100	0	NC	--	--	--	--	--
2-Chloroethylvinylethe	8260			10	8	0	8	100	0	NC	--	--	--	--	--
Bromoform	8260	360		5	8	0	8	100	0	NC	--	--	--	--	--
4-Methyl-2-Pentanone (MIBK)	8260			50 (k)	8	0	8	100	0	NC	--	--	--	--	--
2-Hexanone	8260			50	8	0	8	100	0	NC	--	--	--	--	--
Tetrachloroethene	8260	8.9		5	8	0	8	100	0	NC	--	--	--	--	--
1,1,2,2-Tetrachloroethane	8260	6.5		5	8	0	8	100	0	NC	--	--	--	--	--
Toluene	8260	485		5	8	3	5	63	3	14 (m)	7.3	14	--	--	--
Chlorobenzene	8260	5030		5	8	0	8	100	0	NC	--	--	--	--	--
Ethylbenzene	8260	276		5	8	8	0	0	1	58 (i)	14	73	36	19	30
Styrene	8260			5	8	0	8	100	0	NC	--	--	--	--	--
Trichlorofluoromethane	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
1,1,2-Trichlorotrifluoroethane	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
m,p-Xylene	8260			5 (n)	8	8	0	0	1	41 (i)	13	59	27	15	23
o-Xylene	8260			5 (n)	8	7	1	12.5	1	31 (i, l)	8.6	33	16	9.2	16
1,2-Dichlorobenzene	8260	4200		10	8	0	8	100	0	NC	--	--	--	--	--
1,3-Dichlorobenzene	8260	2600		10	8	0	8	100	0	NC	--	--	--	--	--
1,4-Dichlorobenzene	8260	10		10	8	0	8	100	0	NC	--	--	--	--	--
Acrolein	8260	780		500 (k)	8	0	8	100	0	NC	--	--	--	--	--
Methyl Iodide	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
Bromoethane	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
Acrylonitrile	8260	5		5	8	0	8	100	0	NC	--	--	--	--	--
1,1-Dichloropropene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
Dibromomethane	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
1,1,1,2-Tetrachloroethane	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
1,2-Dibromo-3-chloropropane	8260			50 (k)	8	0	8	100	0	NC	--	--	--	--	--
1,2,3-Trichloropropane	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
trans-1,4-Dichloro-2-butene	8260			50 (k)	8	0	8	100	0	NC	--	--	--	--	--
1,3,5-Trimethylbenzene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
1,2,4-Trimethylbenzene	8260			10 (k)	8	4	4	50	2	25 (i)	17	24	20	3.1	19
Hexachlorobutadiene	8260	50		10	8	0	8	100	0	NC	--	--	--	--	--
Ethylene Dibromide	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
Bromochloromethane	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--

**TABLE 4-1**  
**STATISTICAL SUMMARY OF GROUNDWATER DATA - WELL MW-107/MW107R**  
**06/99 TO 06/01**  
**UNION STATION**

Analyte	Method	CAP Cleanup Level (a) (µg/L)	Background-based Screening Level (µg/L)	Practical Quantitation Limit (b) (µg/L)	Number of Samples (c)	Number of Detects (>= PQL)	Number of Censored Data (d)	Percent Censored Data	Statistical Case No. (e)	UCL	Minimum Uncensored Data (f)	Maximum Uncensored Data (f)	Mean of Uncensored Data (f)	Std. Dev. of Uncensored Data (f)	Median of Uncensored Data (f)
2,2-Dichloropropane	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
1,3-Dichloropropane	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
Isopropylbenzene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
n-Propylbenzene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
Bromobenzene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
2-Chlorotoluene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
4-Chlorotoluene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
tert-Butylbenzene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
sec-Butylbenzene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
4-Isopropyltoluene	8260			10 (k)	8	1	7	87.5	3	12 (m)	12	12	--	--	--
n-Butylbenzene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
1,2,4-Trichlorobenzene	8260	227		10	8	0	8	100	0	NC	--	--	--	--	--
Naphthalene	8260	9880		10	8	8	0	0	1	3720 (i)	850	4800	2219	1259	1850
1,2,3-Trichlorobenzene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
<b>DISSOLVED METALS (µg/L)</b>															
Antimony	200.8	4300		10	8	0	8	100	0	NC	--	--	--	--	--
Arsenic	200.8	4	32 (g)	4	8	8	0	0	1	8 (j)	5	8	6.5	1.1	6
Beryllium	200.8	2		2	8	0	8	100	0	NC	--	--	--	--	--
Cadmium	200.8	8		2	8	0	8	100	0	NC	--	--	--	--	--
Chromium	200.8	50		50	8	0	8	100	0	NC	--	--	--	--	--
Copper	200.8	10		10	8	1	7	87.5	3	10 (m)	10	10	--	--	--
Lead	200.8	10		10	8	0	8	100	0	NC	--	--	--	--	--
Mercury	7470	1		1	8	0	8	100	0	NC	--	--	--	--	--
Nickel	200.8	10		10	8	0	8	100	0	NC	--	--	--	--	--
Selenium	200.8	71		20	8	0	8	100	0	NC	--	--	--	--	--
Silver	200.8	2		2	8	0	8	100	0	NC	--	--	--	--	--
Zinc	200.8	76.6		20	8	0	8	100	0	NC	--	--	--	--	--
<b>Cyanide (µg/L)</b>															
Total Cyanide	335.2	50		50	8	0	8	100	0	NC	--	--	--	--	--
Weak Acid Dissoc. Cyanide	SM4500CN-I	50		50	3	0	3	100	0	NC	--	--	--	--	--

**TABLE 4-1  
STATISTICAL SUMMARY OF GROUNDWATER DATA - WELL MW108/MW108R  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (a) (µg/L)	Background-based Screening Level (µg/L)	Practical Quantitation Limit (b) (µg/L)	Number of Samples (c)	Number of Detects (>= PQL)	Number of Censored Data (d)	Percent Censored Data	Statistical Case No. (e)	UCL	Minimum Uncensored Data (f)	Maximum Uncensored Data (f)	Mean of Uncensored Data (f)	Std. Dev. of Uncensored Data (f)	Median of Uncensored Data (f)
<b>TPH (µg/L)</b>															
Diesel-Range Hydrocarbons	WTPH-Dx		6586 (g)	400 (h)	8	0	8	100	0	NC	--	--	--	--	--
Motor-oil Range Hydrocarbons	WTPH-Dx		7591 (g)	1100 (h)	8	0	8	100	0	NC	--	--	--	--	--
Gasoline-Range Hydrocarbons	WTPH-G			600 (h)	8	0	8	100	0	NC	--	--	--	--	--
<b>CPAH (µg/L)</b>															
Benzo(a)anthracene	8270-SIM	1.0		1.0	8	0	8	100	0	NC	--	--	--	--	--
Chrysene	8270-SIM	1.0		1.0	8	0	8	100	0	NC	--	--	--	--	--
Benzo(b)fluoranthene	8270-SIM	1.0		1.0	8	0	8	100	0	NC	--	--	--	--	--
Benzo(k)fluoranthene	8270-SIM	1.0		1.0	8	0	8	100	0	NC	--	--	--	--	--
Benzo(a)pyrene	8270-SIM	1.0		1.0	8	0	8	100	0	NC	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	8270-SIM	1.0		1.0	8	0	8	100	0	NC	--	--	--	--	--
Dibenzo(a,h)anthracene	8270-SIM	1.0		1.0	8	0	8	100	0	NC	--	--	--	--	--
<b>SEMIVOLATILES (µg/L)</b>															
Phenol	8270	1100000		10	8	0	8	100	0	NC	--	--	--	--	--
Bis-(2-Chloroethyl) Ethane	8270	10		10	8	0	8	100	0	NC	--	--	--	--	--
2-Chloropheno	8270	96.7		10	8	0	8	100	0	NC	--	--	--	--	--
1,3-Dichlorobenzene	8270	2600		10	8	0	8	100	0	NC	--	--	--	--	--
1,4-Dichlorobenzene	8270	10		10	8	0	8	100	0	NC	--	--	--	--	--
Benzyl Alcohol	8270			20	8	0	8	100	0	NC	--	--	--	--	--
1,2-Dichlorobenzene	8270	4200		10	8	0	8	100	0	NC	--	--	--	--	--
2-Methylpheno	8270			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
2,2'-Oxybis(1-Chloropropane	8270			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
4-Methylpheno	8270			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
N-Nitroso-Di-N-Propylamine	8270	10		10	8	0	8	100	0	NC	--	--	--	--	--
Hexachloroethane	8270	10		10	8	0	8	100	0	NC	--	--	--	--	--
Nitrobenzene	8270	449		10	8	0	8	100	0	NC	--	--	--	--	--
Isophorone	8270	600		10	8	0	8	100	0	NC	--	--	--	--	--
2-Nitrophenol	8270			10	8	0	8	100	0	NC	--	--	--	--	--
2,4-Dimethylpheno	8270	553		10	8	0	8	100	0	NC	--	--	--	--	--
Benzoic Acid	8270			10	8	0	8	100	0	NC	--	--	--	--	--
bis(2-Chloroethoxy) Methane	8270			10	8	0	8	100	0	NC	--	--	--	--	--
2,4-Dichloropheno	8270	191		10	8	0	8	100	0	NC	--	--	--	--	--
1,2,4-Trichlorobenzene	8270	227		10	8	0	8	100	0	NC	--	--	--	--	--
Naphthalene	8270	9880		10	8	8	0	1	87 (i)	19	100	49	27	50	
4-Chloroaniline	8270			20	8	0	8	100	0	NC	--	--	--	--	--
Hexachlorobutadiene	8270	50		10	8	0	8	100	0	NC	--	--	--	--	--
4-Chloro-3-methylphenc	8270			20	8	0	8	100	0	NC	--	--	--	--	--
2-Methylnaphthalen	8270			10	8	3	5	62.5	3	14 (m)	10	14	--	--	--
Hexachlorocyclopentadiene	8270	4180		20	8	0	8	100	0	NC	--	--	--	--	--
2,4,6-Trichloropheno	8270	10		10	8	0	8	100	0	NC	--	--	--	--	--
2,4,5-Trichloropheno	8270			10	8	0	8	100	0	NC	--	--	--	--	--
2-Chloronaphthalen	8270			10	8	0	8	100	0	NC	--	--	--	--	--
2-Nitroaniline	8270			50	8	0	8	100	0	NC	--	--	--	--	--
Dimethylphthalate	8270	72000		10	8	0	8	100	0	NC	--	--	--	--	--
Acenaphthylen	8270			10	8	0	8	100	0	NC	--	--	--	--	--
3-Nitroaniline	8270			50	8	0	8	100	0	NC	--	--	--	--	--
Acenaphthene	8270	225	456 (g)	10	8	0	8	100	0	NC	--	--	--	--	--
2,4-Dinitropheno	8270	3460		50	8	0	8	100	0	NC	--	--	--	--	--
4-Nitrophenol	8270			50	8	0	8	100	0	NC	--	--	--	--	--
Dibenzofuran	8270			10	8	0	8	100	0	NC	--	--	--	--	--
2,6-Dinitrotoluene	8270			10	8	0	8	100	0	NC	--	--	--	--	--
2,4-Dinitrotoluene	8270	10		10	8	0	8	100	0	NC	--	--	--	--	--
Diethylphthalate	8270	28400		10	8	0	8	100	0	NC	--	--	--	--	--
4-Chlorophenyl-phenylethe	8270			10	8	0	8	100	0	NC	--	--	--	--	--
Fluorene	8270	2422		10	8	0	8	100	0	NC	--	--	--	--	--
4-Nitroaniline	8270			20	8	0	8	100	0	NC	--	--	--	--	--



**TABLE 4-1  
STATISTICAL SUMMARY OF GROUNDWATER DATA - WELL MW108/MW108R  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (a) (µg/L)	Background-based Screening Level (µg/L)	Practical Quantitation Limit (b) (µg/L)	Number of Samples (c)	Number of Detects (>= PQL)	Number of Censored Data (d)	Percent Censored Data	Statistical Case No. (e)	UCL	Minimum Uncensored Data (f)	Maximum Uncensored Data (f)	Mean of Uncensored Data (f)	Std. Dev. of Uncensored Data (f)	Median of Uncensored Data (f)
4,6-Dinitro-2-Methylpheno	8270			50 (k)	8	0	8	100	0	NC	--	--	--	--	--
N-Nitrosodiphenylamine	8270	16		10	8	0	8	100	0	NC	--	--	--	--	--
4-Bromophenyl-phenylethe	8270			10	8	0	8	100	0	NC	--	--	--	--	--
Hexachlorobenzene	8270	10		10	8	0	8	100	0	NC	--	--	--	--	--
Pentachloropheno	8270	50		50	8	0	8	100	0	NC	--	--	--	--	--
Phenanthrene	8270			10	8	0	8	100	0	NC	--	--	--	--	--
Carbazole	8270			10	8	0	8	100	0	NC	--	--	--	--	--
Anthracene	8270	25900		10	8	0	8	100	0	NC	--	--	--	--	--
Di-n-Butylphthalat	8270	2910		10 (k)	8	0	8	100	0	NC	--	--	--	--	--
Fluoranthene	8270	27.1		10	8	0	8	100	0	NC	--	--	--	--	--
Pyrene	8270	777		10	8	0	8	100	0	NC	--	--	--	--	--
Butylbenzylphthalat	8270	1250		10	8	0	8	100	0	NC	--	--	--	--	--
3,3'-Dichlorobenzidine	8270	20		20	8	0	8	100	0	NC	--	--	--	--	--
bis(2-Ethylhexyl)phthalat	8270	10		10	8	0	8	100	0	NC	--	--	--	--	--
Di-n-Octyl phthalat	8270			10	8	0	8	100	0	NC	--	--	--	--	--
Benzo(g,h,i)perylene	8270			10	8	0	8	100	0	NC	--	--	--	--	--

**TABLE 4-1  
STATISTICAL SUMMARY OF GROUNDWATER DATA - WELL MW108/MW108R  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (a) (µg/L)	Background-based Screening Level (µg/L)	Practical Quantitation Limit (b) (µg/L)	Number of Samples (c)	Number of Detects (>= PQL)	Number of Censored Data (d)	Percent Censored Data	Statistical Case No. (e)	UCL	Minimum Uncensored Data (f)	Maximum Uncensored Data (f)	Mean of Uncensored Data (f)	Std. Dev. of Uncensored Data (f)	Median of Uncensored Data (f)
<b>VOLATILES (µg/L)</b>															
Chloromethane	8260	133		10	8	0	8	100	0	NC	--	--	--	--	--
Bromomethane	8260	968		10 (k)	8	0	8	100	0	NC	--	--	--	--	--
Vinyl Chloride	8260	10		10	8	0	8	100	0	NC	--	--	--	--	--
Chloroethane	8260			10	8	0	8	100	0	NC	--	--	--	--	--
Methylene Chloride	8260	960		5	8	0	8	100	0	NC	--	--	--	--	--
Acetone	8260			10	8	0	8	100	0	NC	--	--	--	--	--
Carbon Disulfide	8260			10	8	0	8	100	0	NC	--	--	--	--	--
1,1-Dichloroethene	8260	5		5	8	0	8	100	0	NC	--	--	--	--	--
1,1-Dichloroethane	8260			5	8	0	8	100	0	NC	--	--	--	--	--
trans-1,2-Dichloroethene	8260	32800		5	8	0	8	100	0	NC	--	--	--	--	--
cis-1,2-Dichloroethene	8260			5	8	0	8	100	0	NC	--	--	--	--	--
Chloroform	8260	470		5	8	0	8	100	0	NC	--	--	--	--	--
1,2-Dichloroethane	8260	99		5	8	0	8	100	0	NC	--	--	--	--	--
2-Butanone	8260			50 (k)	8	0	8	100	0	NC	--	--	--	--	--
1,1,1-Trichloroethane	8260	41700		5	8	0	8	100	0	NC	--	--	--	--	--
Carbon Tetrachloride	8260	5		5	8	0	8	100	0	NC	--	--	--	--	--
Vinyl Acetate	8260			50	8	0	8	100	0	NC	--	--	--	--	--
Bromodichloromethane	8260	28		5	8	0	8	100	0	NC	--	--	--	--	--
1,2-Dichloropropane	8260	23		5	8	0	8	100	0	NC	--	--	--	--	--
cis-1,3-Dichloropropene	8260	19		5	8	0	8	100	0	NC	--	--	--	--	--
Trichloroethene	8260	81		5	8	0	8	100	0	NC	--	--	--	--	--
Dibromochloromethane	8260	21		10 (k)	8	0	8	100	0	NC	--	--	--	--	--
1,1,2-Trichloroethane	8260	42		5	8	0	8	100	0	NC	--	--	--	--	--
Benzene	8260	71	219 (g)	5	8	0	8	100	0	NC	--	--	--	--	--
trans-1,3-Dichloropropene	8260	19		5	8	0	8	100	0	NC	--	--	--	--	--
2-Chloroethylvinylethe	8260			10	8	0	8	100	0	NC	--	--	--	--	--
Bromoform	8260	360		5	8	0	8	100	0	NC	--	--	--	--	--
4-Methyl-2-Pentanone (MIBK)	8260			50 (k)	8	0	8	100	0	NC	--	--	--	--	--
2-Hexanone	8260			50	8	0	8	100	0	NC	--	--	--	--	--
Tetrachloroethene	8260	8.9		5	8	0	8	100	0	NC	--	--	--	--	--
1,1,2,2-Tetrachloroethane	8260	6.5		5	8	0	8	100	0	NC	--	--	--	--	--
Toluene	8260	485		5	8	0	8	100	0	NC	--	--	--	--	--
Chlorobenzene	8260	5030		5	8	0	8	100	0	NC	--	--	--	--	--
Ethylbenzene	8260	276		5	8	0	8	100	0	NC	--	--	--	--	--
Styrene	8260			5	8	0	8	100	0	NC	--	--	--	--	--
Trichlorofluoromethane	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
1,1,2-Trichlorotrifluoroethane	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
m,p-Xylene	8260			5 (n)	8	0	8	100	0	NC	--	--	--	--	--
o-Xylene	8260			5 (n)	8	0	8	100	0	NC	--	--	--	--	--
1,2-Dichlorobenzene	8260	4200		10	8	0	8	100	0	NC	--	--	--	--	--
1,3-Dichlorobenzene	8260	2600		10	8	0	8	100	0	NC	--	--	--	--	--
1,4-Dichlorobenzene	8260	10		10	8	0	8	100	0	NC	--	--	--	--	--
Acrolein	8260	780		500 (k)	8	0	8	100	0	NC	--	--	--	--	--
Methyl Iodide	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
Bromoethane	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
Acrylonitrile	8260	5		5	8	0	8	100	0	NC	--	--	--	--	--
1,1-Dichloropropene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
Dibromomethane	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
1,1,1,2-Tetrachloroethane	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
1,2-Dibromo-3-chloropropane	8260			50 (k)	8	0	8	100	0	NC	--	--	--	--	--
1,2,3-Trichloropropane	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
trans-1,4-Dichloro-2-butene	8260			50 (k)	8	0	8	100	0	NC	--	--	--	--	--
1,3,5-Trimethylbenzene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
1,2,4-Trimethylbenzene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
Hexachlorobutadiene	8260	50		10	8	0	8	100	0	NC	--	--	--	--	--
Ethylene Dibromide	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
Bromochloromethane	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--

**TABLE 4-1  
STATISTICAL SUMMARY OF GROUNDWATER DATA - WELL MW108/MW108R  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (a) (µg/L)	Background-based Screening Level (µg/L)	Practical Quantitation Limit (b) (µg/L)	Number of Samples (c)	Number of Detects (>= PQL)	Number of Censored Data (d)	Percent Censored Data	Statistical Case No. (e)	UCL	Minimum Uncensored Data (f)	Maximum Uncensored Data (f)	Mean of Uncensored Data (f)	Std. Dev. of Uncensored Data (f)	Median of Uncensored Data (f)
2,2-Dichloropropane	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
1,3-Dichloropropane	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
Isopropylbenzene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
n-Propylbenzene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
Bromobenzene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
2-Chlorotoluene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
4-Chlorotoluene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
tert-Butylbenzene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
sec-Butylbenzene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
4-Isopropyltoluene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
n-Butylbenzene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
1,2,4-Trichlorobenzene	8260	227		10	8	0	8	100	0	NC	--	--	--	--	--
Naphthalene	8260	9880		10	8	8	0	0	1	134 (i)	21	160	65	49	49
1,2,3-Trichlorobenzene	8260			10 (k)	8	0	8	100	0	NC	--	--	--	--	--
<b>DISSOLVED METALS (µg/L)</b>															
Antimony	200.8	4300		10	8	0	8	100	0	NC	--	--	--	--	--
Arsenic	200.8	4	32 (g)	4	8	6	2	25	2	12 (i)	4	15	7.3	4.4	5.5
Beryllium	200.8	2		2	8	0	8	100	0	NC	--	--	--	--	--
Cadmium	200.8	8		2	8	0	8	100	0	NC	--	--	--	--	--
Chromium	200.8	50		50	8	1	7	87.5	3	68 (m)	68	68	--	--	--
Copper	200.8	10		10	8	0	8	100	0	NC	--	--	--	--	--
Lead	200.8	10		10	8	0	8	100	0	NC	--	--	--	--	--
Mercury	7470	1		1	8	0	8	100	0	NC	--	--	--	--	--
Nickel	200.8	10		10	8	0	8	100	0	NC	--	--	--	--	--
Selenium	200.8	71		20	8	3	5	62.5	3	60 (m)	20	60	--	--	--
Silver	200.8	2		2	8	0	8	100	0	NC	--	--	--	--	--
Zinc	200.8	76.6		20	8	0	8	100	0	NC	--	--	--	--	--
<b>Cyanide (µg/L)</b>															
Total Cyanide	335.2	50		50	8	0	8	100	0	NC	--	--	--	--	--
Weak Acid Dissoc. Cyanide	SM4500CN-I	50		50	3	0	3	100	0	NC	--	--	--	--	--

**TABLE 4-1  
STATISTICAL SUMMARY OF GROUNDWATER DATA - BACKGROUND WELL B4  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (a) (µg/L)	Background-based Screening Level (µg/L)	Practical Quantitation Limit (b) (µg/L)	Number of Samples (c)	Number of Detects (>= PQL)	Number of Censored Data (d)	Percent Censored Data	Statistical Case No. (e)	UCL	Minimum Uncensored Data (f)	Maximum Uncensored Data (f)	Mean of Uncensored Data (f)	Std. Dev. of Uncensored Data (f)	Median of Uncensored Data (f)
<b>TPH (µg/L)</b>															
Diesel-Range Hydrocarbons	WTPH-Dx		6586 (g)	400 (h)	8	8	0	0	---	---	2300	7700	4713	1843	4450
Motor-oil Range Hydrocarbons	WTPH-Dx		7591 (g)	1100 (h)	8	4	4	50	---	---	1100	1300	1225	96	1250
Gasoline-Range Hydrocarbons	WTPH-G			600 (h)	8	8	0	0	---	---	3100	9000	5600	1711	5600
<b>CPAH (µg/L)</b>															
Benzo(a)anthracene	8270-SIM	1.0		1.0	8	5	3	37.5	---	---	1.0	17	7.6	6.2	6.0
Chrysene	8270-SIM	1.0		1.0	8	4	4	50	---	---	3.3	16	8.2	5.7	6.8
Benzo(b)fluoranthene	8270-SIM	1.0		1.0	8	4	4	50	---	---	1.3	9.6	5.1	3.8	4.8
Benzo(k)fluoranthene	8270-SIM	1.0		1.0	8	4	4	50	---	---	2.3	13	6.0	5.0	4.4
Benzo(a)pyrene	8270-SIM	1.0		1.0	8	4	4	50	---	---	3.1	17	8.5	6.4	7.0
Indeno(1,2,3-cd)pyrene	8270-SIM	1.0		1.0	8	4	4	50	---	---	1.6	6.8	4.1	2.4	4.0
Dibenzo(a,h)anthracene	8270-SIM	1.0		1.0	8	2	6	75	---	---	1.3	2.1	1.7	0.6	1.7
<b>SEMIVOLATILES (µg/L)</b>															
Phenol	8270	1100000		10	8	0	8	100	---	---	--	--	--	--	--
Bis-(2-Chloroethyl) Ethane	8270	10		10	8	0	8	100	---	---	--	--	--	--	--
2-Chloropheno	8270	96.7		10	8	0	8	100	---	---	--	--	--	--	--
1,3-Dichlorobenzene	8270	2600		10	8	0	8	100	---	---	--	--	--	--	--
1,4-Dichlorobenzene	8270	10		10	8	0	8	100	---	---	--	--	--	--	--
Benzyl Alcohol	8270			20	8	0	8	100	---	---	--	--	--	--	--
1,2-Dichlorobenzene	8270	4200		10	8	0	8	100	---	---	--	--	--	--	--
2-Methylpheno	8270			10 (k)	8	0	8	100	---	---	--	--	--	--	--
2,2'-Oxybis(1-Chloropropane	8270			10 (k)	8	0	8	100	---	---	--	--	--	--	--
4-Methylpheno	8270			10 (k)	8	0	8	100	---	---	--	--	--	--	--
N-Nitroso-Di-N-Propylamine	8270	10		10	8	0	8	100	---	---	--	--	--	--	--
Hexachloroethane	8270	10		10	8	0	8	100	---	---	--	--	--	--	--
Nitrobenzene	8270	449		10	8	0	8	100	---	---	--	--	--	--	--
Isophorone	8270	600		10	8	0	8	100	---	---	--	--	--	--	--
2-Nitrophenol	8270			10	8	0	8	100	---	---	--	--	--	--	--
2,4-Dimethylpheno	8270	553		10	8	0	8	100	---	---	--	--	--	--	--
Benzoic Acid	8270			10	8	0	8	100	---	---	--	--	--	--	--
bis(2-Chloroethoxy) Methane	8270			10	8	0	8	100	---	---	--	--	--	--	--
2,4-Dichloropheno	8270	191		10	8	0	8	100	---	---	--	--	--	--	--
1,2,4-Trichlorobenzene	8270	227		10	8	0	8	100	---	---	--	--	--	--	--
Naphthalene	8270	9880		10	8	8	0	0	---	---	33	5200	3429	1519	3800
4-Chloroaniline	8270			20	8	0	8	100	---	---	--	--	--	--	--
Hexachlorobutadiene	8270	50		10	8	0	8	100	---	---	--	--	--	--	--
4-Chloro-3-methylphenc	8270			20	8	0	8	100	---	---	--	--	--	--	--
2-Methylnaphthalen	8270			10	8	8	0	0	---	---	190	860	583	191	615
Hexachlorocyclopentadiene	8270	4180		20	8	0	8	100	---	---	--	--	--	--	--
2,4,6-Trichloropheno	8270	10		10	8	0	8	100	---	---	--	--	--	--	--
2,4,5-Trichloropheno	8270			10	8	0	8	100	---	---	--	--	--	--	--
2-Chloronaphthalen	8270			10	8	0	8	100	---	---	--	--	--	--	--
2-Nitroaniline	8270			50	8	0	8	100	---	---	--	--	--	--	--
Dimethylphthalate	8270	72000		10	8	0	8	100	---	---	--	--	--	--	--
Acenaphthylen	8270			10	8	0	8	100	---	---	--	--	--	--	--
3-Nitroaniline	8270			50	8	0	8	100	---	---	--	--	--	--	--
Acenaphthene	8270	225	456 (g)	10	8	8	0	0	---	---	280	450	380	55	380
2,4-Dinitropheno	8270	3460		50	8	0	8	100	---	---	--	--	--	--	--
4-Nitrophenol	8270			50	8	0	8	100	---	---	--	--	--	--	--
Dibenzofuran	8270			10	8	8	0	0	---	---	13	26	21	4	22
2,6-Dinitrotoluene	8270			10	8	0	8	100	---	---	--	--	--	--	--
2,4-Dinitrotoluene	8270	10		10	8	0	8	100	---	---	--	--	--	--	--
Diethylphthalate	8270	28400		10	8	0	8	100	---	---	--	--	--	--	--
4-Chlorophenyl-phenylethe	8270			10	8	0	8	100	---	---	--	--	--	--	--
Fluorene	8270	2422		10	8	8	0	0	---	---	55	150	105	35	105
4-Nitroaniline	8270			20	8	0	8	100	---	---	--	--	--	--	--

**TABLE 4-1**  
**STATISTICAL SUMMARY OF GROUNDWATER DATA - BACKGROUND WELL B4**  
**06/99 TO 06/01**  
**UNION STATION**

Analyte	Method	CAP Cleanup Level (a) (µg/L)	Background-based Screening Level (µg/L)	Practical Quantitation Limit (b) (µg/L)	Number of Samples (c)	Number of Detects (>= PQL)	Number of Censored Data (d)	Percent Censored Data	Statistical Case No. (e)	UCL	Minimum Uncensored Data (f)	Maximum Uncensored Data (f)	Mean of Uncensored Data (f)	Std. Dev. of Uncensored Data (f)	Median of Uncensored Data (f)
4,6-Dinitro-2-Methylpheno	8270			50 (k)	8	0	8	100	---	---	--	--	--	--	--
N-Nitrosodiphenylamine	8270	16		10	8	0	8	100	---	---	--	--	--	--	--
4-Bromophenyl-phenylethe	8270			10	8	0	8	100	---	---	--	--	--	--	--
Hexachlorobenzene	8270	10		10	8	0	8	100	---	---	--	--	--	--	--
Pentachloropheno	8270	50		50	8	0	8	100	---	---	--	--	--	--	--
Phenanthrene	8270			10	8	8	0	0	---	---	51	230	119	58	120
Carbazole	8270			10	8	7	1	12.5	---	---	19	J 27	22	3	22
Anthracene	8270	25900		10	8	6	2	25	---	---	12	28	18	6	17
Di-n-Butylphthalat	8270	2910		10 (k)	8	0	8	100	---	---	--	--	--	--	--
Fluoranthene	8270	27.1		10	8	4	4	50	---	---	13	42	23	13	19
Pyrene	8270	777		10	8	4	4	50	---	---	14	J 46	25	14	20
Butylbenzylphthalat	8270	1250		10	8	0	8	100	---	---	--	--	--	--	--
3,3'-Dichlorobenzidine	8270	20		20	8	0	8	100	---	---	--	--	--	--	--
bis(2-Ethylhexyl)phthalat	8270	10		10	8	0	8	100	---	---	--	--	--	--	--
Di-n-Octyl phthalat	8270			10	8	0	8	100	---	---	--	--	--	--	--
Benzo(g,h,i)perylene	8270			10	8	0	8	100	---	---	--	--	--	--	--

**TABLE 4-1  
STATISTICAL SUMMARY OF GROUNDWATER DATA - BACKGROUND WELL B4  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (a) (µg/L)	Background-based Screening Level (µg/L)	Practical Quantitation Limit (b) (µg/L)	Number of Samples (c)	Number of Detects (>= PQL)	Number of Censored Data (d)	Percent Censored Data	Statistical Case No. (e)	UCL	Minimum Uncensored Data (f)	Maximum Uncensored Data (f)	Mean of Uncensored Data (f)	Std. Dev. of Uncensored Data (f)	Median of Uncensored Data (f)
<b>VOLATILES (µg/L)</b>															
Chloromethane	8260	133		10	8	0	8	100	---	---	--	--	--	--	--
Bromomethane	8260	968		10 (k)	8	0	8	100	---	---	--	--	--	--	--
Vinyl Chloride	8260	10		10	8	0	8	100	---	---	--	--	--	--	--
Chloroethane	8260			10	8	0	8	100	---	---	--	--	--	--	--
Methylene Chloride	8260	960		5	8	0	8	100	---	---	--	--	--	--	--
Acetone	8260			10	8	3	5	62.5	---	---	72	200	141	65	150
Carbon Disulfide	8260			10	8	0	8	100	---	---	--	--	--	--	--
1,1-Dichloroethene	8260	5		5	8	0	8	100	---	---	--	--	--	--	--
1,1-Dichloroethane	8260			5	8	0	8	100	---	---	--	--	--	--	--
trans-1,2-Dichloroethene	8260	32800		5	8	0	8	100	---	---	--	--	--	--	--
cis-1,2-Dichloroethene	8260			5	8	0	8	100	---	---	--	--	--	--	--
Chloroform	8260	470		5	8	0	8	100	---	---	--	--	--	--	--
1,2-Dichloroethane	8260	99		5	8	0	8	100	---	---	--	--	--	--	--
2-Butanone	8260			50 (k)	8	0	8	100	---	---	--	--	--	--	--
1,1,1-Trichloroethane	8260	41700		5	8	0	8	100	---	---	--	--	--	--	--
Carbon Tetrachloride	8260	5		5	8	0	8	100	---	---	--	--	--	--	--
Vinyl Acetate	8260			50	8	0	8	100	---	---	--	--	--	--	--
Bromodichloromethane	8260	28		5	8	0	8	100	---	---	--	--	--	--	--
1,2-Dichloropropane	8260	23		5	8	0	8	100	---	---	--	--	--	--	--
cis-1,3-Dichloropropene	8260	19		5	8	0	8	100	---	---	--	--	--	--	--
Trichloroethene	8260	81		5	8	0	8	100	---	---	--	--	--	--	--
Dibromochloromethane	8260	21		10 (k)	8	0	8	100	---	---	--	--	--	--	--
1,1,2-Trichloroethane	8260	42		5	8	0	8	100	---	---	--	--	--	--	--
Benzene	8260	71	219 (g)	5	8	8	0	0	---	---	94	260	J 146	49	135
trans-1,3-Dichloropropene	8260	19		5	8	0	8	100	---	---	--	--	--	--	--
2-Chloroethylvinylethe	8260			10	8	0	8	100	---	---	--	--	--	--	--
Bromoform	8260	360		5	8	0	8	100	---	---	--	--	--	--	--
4-Methyl-2-Pentanone (MIBK)	8260			50 (k)	8	0	8	100	---	---	--	--	--	--	--
2-Hexanone	8260			50	8	0	8	100	---	---	--	--	--	--	--
Tetrachloroethene	8260	8.9		5	8	0	8	100	---	---	--	--	--	--	--
1,1,2,2-Tetrachloroethane	8260	6.5		5	8	0	8	100	---	---	--	--	--	--	--
Toluene	8260	485		5	8	0	8	100	---	---	--	--	--	--	--
Chlorobenzene	8260	5030		5	8	0	8	100	---	---	--	--	--	--	--
Ethylbenzene	8260	276		5	8	8	0	0	---	---	160	310	216	43	210
Styrene	8260			5	8	0	8	100	---	---	--	--	--	--	--
Trichlorofluoromethane	8260			10 (k)	8	0	8	100	---	---	--	--	--	--	--
1,1,2-Trichlorotrifluoroethane	8260			10 (k)	8	0	8	100	---	---	--	--	--	--	--
m,p-Xylene	8260			5 (n)	8	4	4	50	---	---	5	160	76	81	69
o-Xylene	8260			5(n)	8	4	4	50	---	---	5	11	7	3	6
1,2-Dichlorobenzene	8260	4200		10	8	0	8	100	---	---	--	--	--	--	--
1,3-Dichlorobenzene	8260	2600		10	8	0	8	100	---	---	--	--	--	--	--
1,4-Dichlorobenzene	8260	10		10	8	0	8	100	---	---	--	--	--	--	--
Acrolein	8260	780		500 (k)	8	0	8	100	---	---	--	--	--	--	--
Methyl Iodide	8260			10 (k)	8	0	8	100	---	---	--	--	--	--	--
Bromoethane	8260			10 (k)	8	0	8	100	---	---	--	--	--	--	--
Acrylonitrile	8260	5		5	8	0	8	100	---	---	--	--	--	--	--
1,1-Dichloropropene	8260			10 (k)	8	0	8	100	---	---	--	--	--	--	--
Dibromomethane	8260			10 (k)	8	0	8	100	---	---	--	--	--	--	--
1,1,1,2-Tetrachloroethane	8260			10 (k)	8	0	8	100	---	---	--	--	--	--	--
1,2-Dibromo-3-chloropropane	8260			50 (k)	8	0	8	100	---	---	--	--	--	--	--
1,2,3-Trichloropropane	8260			10 (k)	8	0	8	100	---	---	--	--	--	--	--
trans-1,4-Dichloro-2-butene	8260			50 (k)	8	0	8	100	---	---	--	--	--	--	--
1,3,5-Trimethylbenzene	8260			10 (k)	8	1	7	87.5	---	---	19	19	---	---	---
1,2,4-Trimethylbenzene	8260			10 (k)	8	5	3	37.5	---	---	10	21	13	4	12
Hexachlorobutadiene	8260	50		10	8	0	8	100	---	---	--	--	--	--	--
Ethylene Dibromide	8260			10 (k)	8	0	8	100	---	---	--	--	--	--	--
Bromochloromethane	8260			10 (k)	8	0	8	100	---	---	--	--	--	--	--

**TABLE 4-1**  
**STATISTICAL SUMMARY OF GROUNDWATER DATA - BACKGROUND WELL B4**  
**06/99 TO 06/01**  
**UNION STATION**

Analyte	Method	CAP Cleanup Level (a) (µg/L)	Background-based Screening Level (µg/L)	Practical Quantitation Limit (b) (µg/L)	Number of Samples (c)	Number of Detects (>= PQL)	Number of Censored Data (d)	Percent Censored Data	Statistical Case No. (e)	UCL	Minimum Uncensored Data (f)	Maximum Uncensored Data (f)	Mean of Uncensored Data (f)	Std. Dev. of Uncensored Data (f)	Median of Uncensored Data (f)
2,2-Dichloropropane	8260			10 (k)	8	0	8	100	---	---	--	--	--	--	--
1,3-Dichloropropane	8260			10 (k)	8	0	8	100	---	---	--	--	--	--	--
Isopropylbenzene	8260			10 (k)	8	1	7	87.5	---	---	14	14	---	---	---
n-Propylbenzene	8260			10 (k)	8	0	8	100	---	---	--	--	--	--	--
Bromobenzene	8260			10 (k)	8	0	8	100	---	---	--	--	--	--	--
2-Chlorotoluene	8260			10 (k)	8	0	8	100	---	---	--	--	--	--	--
4-Chlorotoluene	8260			10 (k)	8	0	8	100	---	---	--	--	--	--	--
tert-Butylbenzene	8260			10 (k)	8	0	8	100	---	---	--	--	--	--	--
sec-Butylbenzene	8260			10 (k)	8	0	8	100	---	---	--	--	--	--	--
4-Isopropyltoluene	8260			10 (k)	8	0	8	100	---	---	--	--	--	--	--
n-Butylbenzene	8260			10 (k)	8	0	8	100	---	---	--	--	--	--	--
1,2,4-Trichlorobenzene	8260	227		10	8	0	8	100	---	---	--	--	--	--	--
Naphthalene	8260	9880		10	8	8	0	0	---	---	5200	7100	6150	729	6150
1,2,3-Trichlorobenzene	8260			10 (k)	8	0	8	100	---	---	--	--	--	--	--
<b>DISSOLVED METALS (µg/L)</b>															
Antimony	200.8	4300		10	8	0	8	100	---	---	--	--	--	--	--
Arsenic	200.8	4		4	8	0	8	100	---	---	--	--	--	--	--
Beryllium	200.8	2		2	8	0	8	100	---	---	--	--	--	--	--
Cadmium	200.8	8		2	8	1	7	87.5	---	---	16	J	16	J	---
Chromium	200.8	50		50	8	0	8	100	---	---	--	--	--	--	--
Copper	200.8	10		10	8	0	8	100	---	---	--	--	--	--	--
Lead	200.8	10		10	8	0	8	100	---	---	--	--	--	--	--
Mercury	7470	1		1	8	0	8	100	---	---	--	--	--	--	--
Nickel	200.8	10		10	8	0	8	100	---	---	--	--	--	--	--
Selenium	200.8	71		20	8	0	8	100	---	---	--	--	--	--	--
Silver	200.8	2		2	8	0	8	100	---	---	--	--	--	--	--
Zinc	200.8	76.6		20	8	3	5	62.5	---	---	20	70	J	40	26
<b>Cyanide (µg/L)</b>															
Total Cyanide	335.2	50		50	8	1	7	87.5	---	---	60	60	---	---	---
Weak Acid Dissoc. Cyanide	SM4500CN-I	50		50	3	0	3	100	---	---	--	--	--	--	--

**TABLE 4-1  
STATISTICAL SUMMARY OF GROUNDWATER DATA - BACKGROUND WELL B6/B6R  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (a) (µg/L)	Background-based Screening Level (µg/L)	Practical Quantitation Limit (b) (µg/L)	Number of Samples (c)	Number of Detects (>= PQL)	Number of Censored Data (d)	Percent Censored Data	Statistical Case No. (e)	UCL	Minimum Uncensored Data (f)	Maximum Uncensored Data (f)	Mean of Uncensored Data (f)	Std. Dev. of Uncensored Data (f)	Median of Uncensored Data (f)
<b>TPH (µg/L)</b>															
Diesel-Range Hydrocarbons	WTPH-Dx		6586 (g)	400 (h)	8	0	8	100	---	---	--	--	--	--	--
Motor-oil Range Hydrocarbons	WTPH-Dx		7591 (g)	1100 (h)	8	0	8	100	---	---	--	--	--	--	--
Gasoline-Range Hydrocarbons	WTPH-G			600 (h)	8	0	8	100	---	---	--	--	--	--	--
<b>CPAH (µg/L)</b>															
Benzo(a)anthracene	8270-SIM	1.0		1.0	8	0	8	100	---	---	--	--	--	--	--
Chrysene	8270-SIM	1.0		1.0	8	0	8	100	---	---	--	--	--	--	--
Benzo(b)fluoranthene	8270-SIM	1.0		1.0	8	0	8	100	---	---	--	--	--	--	--
Benzo(k)fluoranthene	8270-SIM	1.0		1.0	8	0	8	100	---	---	--	--	--	--	--
Benzo(a)pyrene	8270-SIM	1.0		1.0	8	0	8	100	---	---	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	8270-SIM	1.0		1.0	8	0	8	100	---	---	--	--	--	--	--
Dibenzo(a,h)anthracene	8270-SIM	1.0		1.0	8	0	8	100	---	---	--	--	--	--	--
<b>SEMIVOLATILES (µg/L)</b>															
Phenol	8270	1100000		10	8	0	8	100	---	---	--	--	--	--	--
Bis-(2-Chloroethyl) Ethane	8270	10		10	8	0	8	100	---	---	--	--	--	--	--
2-Chloropheno	8270	96.7		10	8	0	8	100	---	---	--	--	--	--	--
1,3-Dichlorobenzene	8270	2600		10	8	0	8	100	---	---	--	--	--	--	--
1,4-Dichlorobenzene	8270	10		10	8	0	8	100	---	---	--	--	--	--	--
Benzyl Alcohol	8270			20	8	0	8	100	---	---	--	--	--	--	--
1,2-Dichlorobenzene	8270	4200		10	8	0	8	100	---	---	--	--	--	--	--
2-Methylpheno	8270			10 (k)	8	0	8	100	---	---	--	--	--	--	--
2,2'-Oxybis(1-Chloropropane	8270			10 (k)	8	0	8	100	---	---	--	--	--	--	--
4-Methylpheno	8270			10 (k)	8	0	8	100	---	---	--	--	--	--	--
N-Nitroso-Di-N-Propylamine	8270	10		10	8	0	8	100	---	---	--	--	--	--	--
Hexachloroethane	8270	10		10	8	0	8	100	---	---	--	--	--	--	--
Nitrobenzene	8270	449		10	8	0	8	100	---	---	--	--	--	--	--
Isophorone	8270	600		10	8	0	8	100	---	---	--	--	--	--	--
2-Nitrophenol	8270			10	8	0	8	100	---	---	--	--	--	--	--
2,4-Dimethylpheno	8270	553		10	8	0	8	100	---	---	--	--	--	--	--
Benzoic Acid	8270			10	8	0	8	100	---	---	--	--	--	--	--
bis(2-Chloroethoxy) Methane	8270			10	8	0	8	100	---	---	--	--	--	--	--
2,4-Dichloropheno	8270	191		10	8	0	8	100	---	---	--	--	--	--	--
1,2,4-Trichlorobenzene	8270	227		10	8	0	8	100	---	---	--	--	--	--	--
Naphthalene	8270	9880		10	8	0	8	100	---	---	--	--	--	--	--
4-Chloroaniline	8270			20	8	0	8	100	---	---	--	--	--	--	--
Hexachlorobutadiene	8270	50		10	8	0	8	100	---	---	--	--	--	--	--
4-Chloro-3-methylphenc	8270			20	8	0	8	100	---	---	--	--	--	--	--
2-Methylnaphthalen	8270			10	8	0	8	100	---	---	--	--	--	--	--
Hexachlorocyclopentadiene	8270	4180		20	8	0	8	100	---	---	--	--	--	--	--
2,4,6-Trichloropheno	8270	10		10	8	0	8	100	---	---	--	--	--	--	--
2,4,5-Trichloropheno	8270			10	8	0	8	100	---	---	--	--	--	--	--
2-Chloronaphthalen	8270			10	8	0	8	100	---	---	--	--	--	--	--
2-Nitroaniline	8270			50	8	0	8	100	---	---	--	--	--	--	--
Dimethylphthalate	8270	72000		10	8	0	8	100	---	---	--	--	--	--	--
Acenaphthylen	8270			10	8	0	8	100	---	---	--	--	--	--	--
3-Nitroaniline	8270			50	8	0	8	100	---	---	--	--	--	--	--
Acenaphthene	8270	225	456 (g)	10	8	0	8	100	---	---	--	--	--	--	--
2,4-Dinitropheno	8270	3460		50	8	0	8	100	---	---	--	--	--	--	--
4-Nitrophenol	8270			50	8	0	8	100	---	---	--	--	--	--	--
Dibenzofuran	8270			10	8	0	8	100	---	---	--	--	--	--	--
2,6-Dinitrotoluene	8270			10	8	0	8	100	---	---	--	--	--	--	--
2,4-Dinitrotoluene	8270	10		10	8	0	8	100	---	---	--	--	--	--	--
Diethylphthalate	8270	28400		10	8	0	8	100	---	---	--	--	--	--	--
4-Chlorophenyl-phenylethe	8270			10	8	0	8	100	---	---	--	--	--	--	--
Fluorene	8270	2422		10	8	0	8	100	---	---	--	--	--	--	--
4-Nitroaniline	8270			20	8	0	8	100	---	---	--	--	--	--	--



**TABLE 4-1  
STATISTICAL SUMMARY OF GROUNDWATER DATA - BACKGROUND WELL B6/B6R  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (a) (µg/L)	Background-based Screening Level (µg/L)	Practical Quantitation Limit (b) (µg/L)	Number of Samples (c)	Number of Detects (>= PQL)	Number of Censored Data (d)	Percent Censored Data	Statistical Case No. (e)	UCL	Minimum Uncensored Data (f)	Maximum Uncensored Data (f)	Mean of Uncensored Data (f)	Std. Dev. of Uncensored Data (f)	Median of Uncensored Data (f)
4,6-Dinitro-2-Methylpheno	8270			50 (k)	8	0	8	100	---	---	--	--	--	--	--
N-Nitrosodiphenylamine	8270	16		10	8	0	8	100	---	---	--	--	--	--	--
4-Bromophenyl-phenylethe	8270			10	8	0	8	100	---	---	--	--	--	--	--
Hexachlorobenzene	8270	10		10	8	0	8	100	---	---	--	--	--	--	--
Pentachloropheno	8270	50		50	8	0	8	100	---	---	--	--	--	--	--
Phenanthrene	8270			10	8	0	8	100	---	---	--	--	--	--	--
Carbazole	8270			10	8	0	8	100	---	---	--	--	--	--	--
Anthracene	8270	25900		10	8	0	8	100	---	---	--	--	--	--	--
Di-n-Butylphthalat	8270	2910		10 (k)	8	0	8	100	---	---	--	--	--	--	--
Fluoranthene	8270	27.1		10	8	0	8	100	---	---	--	--	--	--	--
Pyrene	8270	777		10	8	0	8	100	---	---	--	--	--	--	--
Butylbenzylphthalat	8270	1250		10	8	0	8	100	---	---	--	--	--	--	--
3,3'-Dichlorobenzidine	8270	20		20	8	0	8	100	---	---	--	--	--	--	--
bis(2-Ethylhexyl)phthalat	8270	10		10	8	1	7	87.5	---	---	30	30	--	--	--
Di-n-Octyl phthalat	8270			10	8	0	8	100	---	---	--	--	--	--	--
Benzo(g,h,i)perylene	8270			10	8	0	8	100	---	---	--	--	--	--	--

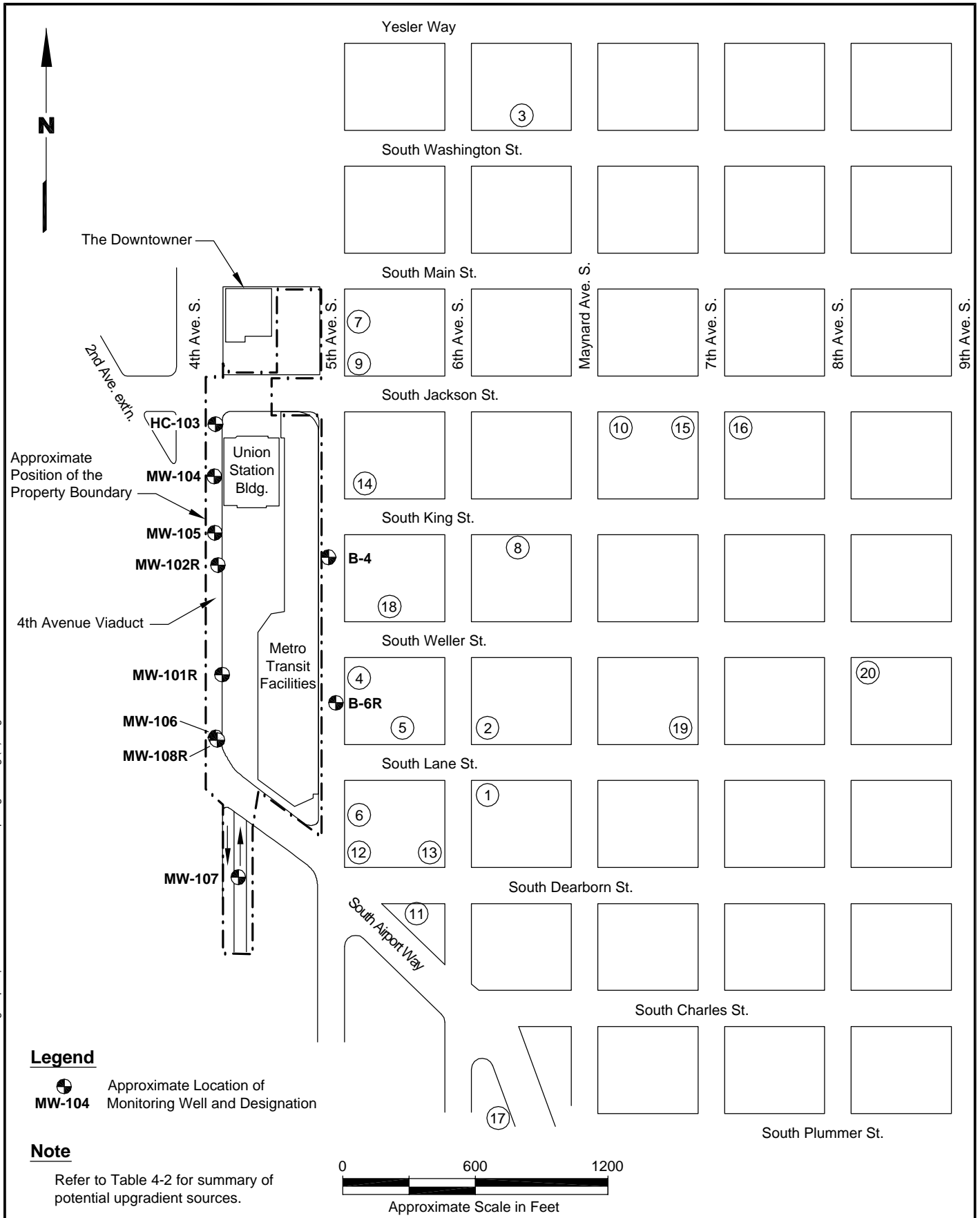
**TABLE 4-1  
STATISTICAL SUMMARY OF GROUNDWATER DATA - BACKGROUND WELL B6/B6R  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (a) (µg/L)	Background-based Screening Level (µg/L)	Practical Quantitation Limit (b) (µg/L)	Number of Samples (c)	Number of Detects (>= PQL)	Number of Censored Data (d)	Percent Censored Data	Statistical Case No. (e)	UCL	Minimum Uncensored Data (f)	Maximum Uncensored Data (f)	Mean of Uncensored Data (f)	Std. Dev. of Uncensored Data (f)	Median of Uncensored Data (f)
<b>VOLATILES (µg/L)</b>															
Chloromethane	8260	133		10	8	0	8	100	---	---	--	--	--	--	--
Bromomethane	8260	968		10 (k)	8	0	8	100	---	---	--	--	--	--	--
Vinyl Chloride	8260	10		10	8	0	8	100	---	---	--	--	--	--	--
Chloroethane	8260			10	8	0	8	100	---	---	--	--	--	--	--
Methylene Chloride	8260	960		5	8	0	8	100	---	---	--	--	--	--	--
Acetone	8260			10	8	0	8	100	---	---	--	--	--	--	--
Carbon Disulfide	8260			10	8	0	8	100	---	---	--	--	--	--	--
1,1-Dichloroethene	8260	5		5	8	0	8	100	---	---	--	--	--	--	--
1,1-Dichloroethane	8260			5	8	0	8	100	---	---	--	--	--	--	--
trans-1,2-Dichloroethene	8260	32800		5	8	0	8	100	---	---	--	--	--	--	--
cis-1,2-Dichloroethene	8260			5	8	0	8	100	---	---	--	--	--	--	--
Chloroform	8260	470		5	8	0	8	100	---	---	--	--	--	--	--
1,2-Dichloroethane	8260	99		5	8	0	8	100	---	---	--	--	--	--	--
2-Butanone	8260			50 (k)	8	0	8	100	---	---	--	--	--	--	--
1,1,1-Trichloroethane	8260	41700		5	8	0	8	100	---	---	--	--	--	--	--
Carbon Tetrachloride	8260	5		5	8	0	8	100	---	---	--	--	--	--	--
Vinyl Acetate	8260			50	8	0	8	100	---	---	--	--	--	--	--
Bromodichloromethane	8260	28		5	8	0	8	100	---	---	--	--	--	--	--
1,2-Dichloropropane	8260	23		5	8	0	8	100	---	---	--	--	--	--	--
cis-1,3-Dichloropropene	8260	19		5	8	0	8	100	---	---	--	--	--	--	--
Trichloroethene	8260	81		5	8	0	8	100	---	---	--	--	--	--	--
Dibromochloromethane	8260	21		10 (k)	8	0	8	100	---	---	--	--	--	--	--
1,1,2-Trichloroethane	8260	42		5	8	0	8	100	---	---	--	--	--	--	--
Benzene	8260	71	219 (g)	5	8	0	8	100	---	---	--	--	--	--	--
trans-1,3-Dichloropropene	8260	19		5	8	0	8	100	---	---	--	--	--	--	--
2-Chloroethylvinylethe	8260			10	8	0	8	100	---	---	--	--	--	--	--
Bromoform	8260	360		5	8	0	8	100	---	---	--	--	--	--	--
4-Methyl-2-Pentanone (MIBK)	8260			50 (k)	8	0	8	100	---	---	--	--	--	--	--
2-Hexanone	8260			50	8	0	8	100	---	---	--	--	--	--	--
Tetrachloroethene	8260	8.9		5	8	0	8	100	---	---	--	--	--	--	--
1,1,2,2-Tetrachloroethane	8260	6.5		5	8	0	8	100	---	---	--	--	--	--	--
Toluene	8260	485		5	8	0	8	100	---	---	--	--	--	--	--
Chlorobenzene	8260	5030		5	8	0	8	100	---	---	--	--	--	--	--
Ethylbenzene	8260	276		5	8	0	8	100	---	---	--	--	--	--	--
Styrene	8260			5	8	0	8	100	---	---	--	--	--	--	--
Trichlorofluoromethane	8260			10 (k)	8	0	8	100	---	---	--	--	--	--	--
1,1,2-Trichlorotrifluoroethane	8260			10 (k)	8	0	8	100	---	---	--	--	--	--	--
m,p-Xylene	8260			5 (n)	8	0	8	100	---	---	--	--	--	--	--
o-Xylene	8260			5(n)	8	0	8	100	---	---	--	--	--	--	--
1,2-Dichlorobenzene	8260	4200		10	8	0	8	100	---	---	--	--	--	--	--
1,3-Dichlorobenzene	8260	2600		10	8	0	8	100	---	---	--	--	--	--	--
1,4-Dichlorobenzene	8260	10		10	8	0	8	100	---	---	--	--	--	--	--
Acrolein	8260	780		500 (k)	8	0	8	100	---	---	--	--	--	--	--
Methyl Iodide	8260			10 (k)	8	0	8	100	---	---	--	--	--	--	--
Bromoethane	8260			10 (k)	8	0	8	100	---	---	--	--	--	--	--
Acrylonitrile	8260	5		5	8	0	8	100	---	---	--	--	--	--	--
1,1-Dichloropropene	8260			10 (k)	8	0	8	100	---	---	--	--	--	--	--
Dibromomethane	8260			10 (k)	8	0	8	100	---	---	--	--	--	--	--
1,1,1,2-Tetrachloroethane	8260			10 (k)	8	0	8	100	---	---	--	--	--	--	--
1,2-Dibromo-3-chloropropane	8260			50 (k)	8	0	8	100	---	---	--	--	--	--	--
1,2,3-Trichloropropane	8260			10 (k)	8	0	8	100	---	---	--	--	--	--	--
trans-1,4-Dichloro-2-butene	8260			50 (k)	8	0	8	100	---	---	--	--	--	--	--
1,3,5-Trimethylbenzene	8260			10 (k)	8	0	8	100	---	---	--	--	--	--	--
1,2,4-Trimethylbenzene	8260			10 (k)	8	0	8	100	---	---	--	--	--	--	--
Hexachlorobutadiene	8260	50		10	8	0	8	100	---	---	--	--	--	--	--
Ethylene Dibromide	8260			10 (k)	8	0	8	100	---	---	--	--	--	--	--
Bromochloromethane	8260			10 (k)	8	0	8	100	---	---	--	--	--	--	--

**TABLE 4-1  
STATISTICAL SUMMARY OF GROUNDWATER DATA - BACKGROUND WELL B6/B6R  
06/99 TO 06/01  
UNION STATION**

Analyte	Method	CAP Cleanup Level (a) (µg/L)	Background-based Screening Level (µg/L)	Practical Quantitation Limit (b) (µg/L)	Number of Samples (c)	Number of Detects (>= PQL)	Number of Censored Data (d)	Percent Censored Data	Statistical Case No. (e)	UCL	Minimum Uncensored Data (f)	Maximum Uncensored Data (f)	Mean of Uncensored Data (f)	Std. Dev. of Uncensored Data (f)	Median of Uncensored Data (f)
2,2-Dichloropropane	8260			10 (k)	8	0	8	100	---	---	--	--	--	--	--
1,3-Dichloropropane	8260			10 (k)	8	0	8	100	---	---	--	--	--	--	--
Isopropylbenzene	8260			10 (k)	8	0	8	100	---	---	--	--	--	--	--
n-Propylbenzene	8260			10 (k)	8	0	8	100	---	---	--	--	--	--	--
Bromobenzene	8260			10 (k)	8	0	8	100	---	---	--	--	--	--	--
2-Chlorotoluene	8260			10 (k)	8	0	8	100	---	---	--	--	--	--	--
4-Chlorotoluene	8260			10 (k)	8	0	8	100	---	---	--	--	--	--	--
tert-Butylbenzene	8260			10 (k)	8	0	8	100	---	---	--	--	--	--	--
sec-Butylbenzene	8260			10 (k)	8	0	8	100	---	---	--	--	--	--	--
4-Isopropyltoluene	8260			10 (k)	8	0	8	100	---	---	--	--	--	--	--
n-Butylbenzene	8260			10 (k)	8	0	8	100	---	---	--	--	--	--	--
1,2,4-Trichlorobenzene	8260	227		10	8	0	8	100	---	---	--	--	--	--	--
Naphthalene	8260	9880		10 (j)	8	0	8	100	---	---	--	--	--	--	--
1,2,3-Trichlorobenzene	8260			10 (k)	8	0	8	100	---	---	--	--	--	--	--
<b>DISSOLVED METALS (µg/L)</b>															
Antimony	200.8	4300		10	8	0	8	100	---	---	--	--	--	--	--
Arsenic	200.8	4	32 (g)	4	8	8	0	0	---	---	6	35	22	10	21
Beryllium	200.8	2		2	8	0	8	100	---	---	--	--	--	--	--
Cadmium	200.8	8		2	8	0	8	100	---	---	--	--	--	--	--
Chromium	200.8	50		50	8	0	8	100	---	---	--	--	--	--	--
Copper	200.8	10		10	8	0	8	100	---	---	--	--	--	--	--
Lead	200.8	10		10	8	0	8	100	---	---	--	--	--	--	--
Mercury	7470	1		1	8	0	8	100	---	---	--	--	--	--	--
Nickel	200.8	10		10	8	0	8	100	---	---	--	--	--	--	--
Selenium	200.8	71		20	8	0	8	100	---	---	--	--	--	--	--
Silver	200.8	2		2	8	0	8	100	---	---	--	--	--	--	--
Zinc	200.8	76.6		20	8	0	8	100	---	---	--	--	--	--	--
<b>Cyanide (µg/L)</b>															
Total Cyanide	335.2	50		50	8	0	8	100	---	---	--	--	--	--	--
Weak Acid Dissoc. Cyanide	SM4500CN-I	50		50	3	0	3	100	---	---	--	--	--	--	--

Union Station Associates/2001 GW Monitoring Report | T:\429002\030\GWMon\01Rpt\Fig4-1.dwg (A) "Figure 4-1" 3/1/2002



Union Station  
Seattle, Washington

**Locations of Potential Upgradient  
Sources of Petroleum Contamination**

Figure  
**4-1**

**TABLE 4-1  
STATISTICAL SUMMARY OF GROUNDWATER DATA - WELL HC101/MW101R  
06/99 TO 06/01  
UNION STATION**

J = Data qualifier indicating that the analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

UCL = Upper confidence limit.

NC = Not calculated.

= UCL exceeds the cleanup level.

- (a) Cleanup levels are from Table 1 of the Cleanup Action Plan, unless otherwise indicated.
- (b) Practical quantitation limits are from Table 1 of the Cleanup Action Plan, unless otherwise indicated.
- (c) The number of samples is equal to the number of samples analyzed.  
not included in the statistical evaluation due to sample collection and extraction procedures (see text).
- (d) Censored data consists of nondetected results and detected values less than the PQL.
- (e) Statistical Case Nos:
  - 0 = Data set consists of 100% censored data
  - 1 = Data set consists of not more than 15 % censored data.
  - 2 = Data set consists of more than 15 % censored data but less than or equal to 50% censored data.
  - 3 = Data set consists of more than 50 % censored data but less than 100 % censored data.
- (f) No UCL, mean, standard deviation, or median were calculated for data sets with 100% censored data. Also, no UCL was calculated for background wells B-4 and B-6/B-6R.
- (g) Screening level is based on the 90th percentile of the background data obtained from wells B4 or B6/B6R. The 90th percentile was calculated using MTCStat 97 Background Module.
- (h) Practical quantitation limit is equal to approximately 10 times the laboratory method detection limit.
- (i) Upper confidence limit calculated using MTCStat 97 Site Module.
- (j) The data set was determined to be neither lognormally nor normally distributed by MTCStat; therefore, in accordance with the Supplement to Statistical Guidance for Ecology Site Managers (Ecology 1993), the upper confidence level was set equal to the maximum concentration in the data set.
- (k) Practical quantitation limit based on method reporting limit and PQLs of similar compounds
- (l) The data set consists of less than or equal to 15 % censored data (Case No. 1); therefore, in accordance with the Supplement to Statistical Guidance for Ecology Site Managers (Ecology 1993), all nondetected values were replaced with 1/2 the detection limit and all detected values less than the PQL were replaced with the detection limit. Statistics were then performed on the adjusted data.
- (m) Greater than 50% of the data are censored; therefore, in accordance with the Supplement to Statistical Guidance for Ecology Site Managers (Ecology 1993), the upper 95% confidence limit was set equal to the maximum concentration in the data set.
- (n) Practical quantitation limit identified for total xylenes in Cleanup Action Plan.

**TABLE 4-2  
SUMMARY OF EXCEEDANCES**

	CAP CUL	Background-based Screening Level	9/1999 - 6/2001 UCL	6/1998 - 6/2000 UCL	Comments
Gasoline	None	7591			Apparent offsite sources
Well MW-101R			9500	7228	
Well MW-105			2804	2491	
Well MW-107R			3351	6256	
Diesel	None	6586			Apparent offsite sources
Well MW-101R			3570	3589	
Well MW-104			560	780	
Well MW-105			1800	1753	
Well MW-107R			990	1901	
Benzene	71	219			Typical gasoline constituent, apparent offsite sources
Well MW-101R			78	104	
Well MW-105			376	373	
Acenaphthene MW-101R	225	456	340	276	Typical diesel constituent, apparent offsite sources
Bis(2-ethylhexyl)phthalate MW-102R	10		65	65	1 detection in 8 samples
MW-104			65	65	1 detection in 8 samples
Arsenic	4	32			Apparent offsite sources
MW-101R			14	14	
MW-102R			9	7	
MW-105			18	21	
MW-107R			8	10	
MW-108R			12	8	
Chromium MW-108	50		68	59	1 detection in 8 samples

CAP CUL = Cleanup level listed in the Cleanup Action Plan.

UCL = Upper Confidence Limit.

**TABLE 4-3**  
**SUMMARY OF POTENTIAL UPGRADIENT SOURCES**  
**OF PETROLEUM CONTAMINATION**

Figure 2 ID	Name of Business	Street Address	Potential to Impact Union Station Site	Known Contamination
1	Assisted Living Facility (former site of New Eagle Garage)	700 block of 6th Ave S.	High	X
2	East-West Investments	6th Ave S. & S. Lane St.	High	X
3	Fort Lawton ARSR	654 S. Washington St.	Moderate	
4	General Motors Truck Center	600 5th Ave S.	Moderate	
5	GMC Truck Center	508 S. Lane St.	Moderate	
6	KS Serv Gas Station	720 5th Ave S.	Moderate	
7	McKales Corp Gas Station	320 5th Ave S.	Moderate	
8	Rex Hotel	657 S. King St.	Moderate	X
9	Rhodes Domes Stadium Service Station (former site of Jay's Union Service Station)	500 S. Jackson St.	Moderate	
10	Seventh Avenue Service	701 S. Jackson St.	Moderate	
11	Texaco Station (former Shell Station)	511 S. Dearborn St.	Moderate	X
12	Gasoline and Oil Station	NE corner of 5th Ave S. and S. Dearborn St.	Moderate	
13	Gasoline and Oil Station	NW corner of 6th Ave S. and S. Dearborn St.	Moderate	
14	Automobile service and repair station	NE corner of 5th Ave S. and S. King St.	Moderate	
15	Automobile service and repair station	SW corner of 7th Ave S. and S. Jackson St.	Moderate	
16	Automobile service and repair station	SE corner of 7th Ave S. and S. Jackson St.	Moderate	
17	Automobile service and repair station	NW corner of Airport Way S. and S. Plummer St.	Moderate	
18	Machine Shop	N. side of S. Weller St. between 5th Ave S. and 6th Ave S.	Moderate	
19	Machine Shop	NW corner of 7th Ave S. and S. Lane St.	Moderate	
20	Machine Shop	SE corner of 8th Ave S. and S. Weller St.	Moderate	

APPENDIX A

---

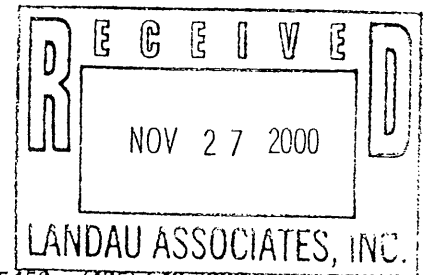
# Approval Letters





STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

Northwest Regional Office, 3190 - 160th Ave S.E. • Bellevue, Washington 98008-5452 • (425) 649-7000



November 22, 2000

~~PROJECT~~

Ms. Kristy J. Hendrickson  
Landau Associates  
130 2<sup>nd</sup> Avenue South  
Edmonds, WA 98020

Dear Kris:

RE: Union Station – Report, *Groundwater Monitoring, Union Station, Seattle, Washington*, dated August 31, 2000.

We have reviewed the subject report (the Report) and your requests to add the weak and dissociable method for cyanide to the list of analyses to be performed; that ground water monitoring frequency be reduced to annual; and that three wells be eliminated from the monitoring well network. With respect to these requests:

- We approve adding the analysis for weak and dissociable cyanide to the list of analytes.
- Monitoring is to continue on a quarterly basis in all wells except HC-103 for another year. At the end of that year Ecology will again evaluate the data.
- Water quality monitoring may be suspended in Well HC-103 for the present. Ecology may require that water quality monitoring be resumed at any time. Water level monitoring in HC-103 is to be continued and the well is to be maintained in a serviceable state.

Attachment 1 provides discussion of these items.

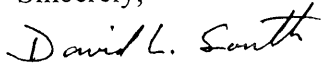
Finally, Ecology believes you should investigate potential upgradient sources in the area and provide discussion of them when reporting the additional four quarters of monitoring data. If you will provide facility names and addresses, we will check as to whether we have any record of cleanup activities.



Ms. Kristy Henderson  
November 22, 2000  
Page 2

Please call me at 424-649-7200 if you have any questions. My E-mail address is dsou461@ecy.wa.gov.

Sincerely,



David L. South  
Senior Engineer, Toxics  
Cleanup Program

Attachment

Cc: Kevin Daniels  
Brad Marten  
Mary Sue Wilson  
Union Station/SIT1.2

Comments on Report,  
*Ground Water Monitoring, Union Station, Seattle, Washington*  
dated August 31, 2000

1. As you point out in the Report, WAC 173-201A-040 specifies that the cyanide criteria be based upon the weak and dissociable method in *Standard Methods for the Examination of Water and Wastewater*. Ecology agrees that adding this analysis to the list of analyses will provide data as specified in regulation. Please also perform the total cyanide analyses in order to evaluate whether there any correlation may be made.
2. With respect to reducing the monitoring frequency to annual, the *Cleanup Action Plan*, Exhibit B to Consent Decree 97-2-18936-5 SEA, states, "If sampling results indicate no statistical exceedances of cleanup levels, monitoring frequency will be decreased to annual ...." [(p. 3-2 of the Cleanup Action Plan, ¶ beginning "Ground water ...")]

Further, Table 3 of the Cleanup Action Plan states, "If UCL<sup>1</sup> exceeds cleanup levels, implement groundwater treatment if directed by Ecology to prevent contamination from leaving the site."

As the Report states, UCLs (or equivalent statistical measures of cleanup levels) were exceeded at a number of wells for a number of compounds. Ecology does not believe these exceedances are sufficiently consistent over the two years of monitoring performed to date to trigger ground water treatment at present. Ecology does believe continued quarterly monitoring is appropriate.

With respect to cyanide, the measurements were of total cyanide. It may be that analysis for weak and dissociable cyanide may show that cyanide is not present above cleanup levels; however, this remains to be done.

With respect to calculations asserted to be natural background concentrations, Ecology has several comments. First, Ecology rejects these calculations as natural background calculations. Natural background is defined in regulation as, "... the concentration of hazardous substance consistently present in the environment which has not been influenced by localized human activities." [WAC 713-340-200] Ecology does not believe natural background concentrations can be established in an urban environment such as the one near Union Station. Establishment of an area background would require discussion with Ecology. Moreover, use of only one background well, and choosing the well with the highest concentrations of the compound of concern (B-4 for gasoline and diesel; B-6R for arsenic) cannot be defended as appropriate for calculating an area background. All that can be said is that these are computations of the cleanup level concentration from data from a background well.

---

<sup>1</sup> Upper Confidence Limit

Ms. Kristy Henderson  
November 22, 2000  
Page 2

Please call me at 424-649-7200 if you have any questions. My E-mail address is dsou461@ecy.wa.gov.

Sincerely,

*David L. South*

David L. South  
Senior Engineer, Toxics  
Cleanup Program

Attachment

Cc: Kevin Daniels  
Brad Marten  
Mary Sue Wilson  
Union Station/SIT1.2

Comments on Report,  
*Ground Water Monitoring, Union Station, Seattle, Washington*  
dated August 31, 2000

1. As you point out in the Report, WAC 173-201A-040 specifies that the cyanide criteria be based upon the weak and dissociable method in *Standard Methods for the Examination of Water and Wastewater*. Ecology agrees that adding this analysis to the list of analyses will provide data as specified in regulation. Please also perform the total cyanide analyses in order to evaluate whether there any correlation may be made.
2. With respect to reducing the monitoring frequency to annual, the *Cleanup Action Plan*, Exhibit B to Consent Decree 97-2-18936-5 SEA, states, "If sampling results indicate no statistical exceedances of cleanup levels, monitoring frequency will be decreased to annual ...." [(p. 3-2 of the Cleanup Action Plan, ¶ beginning "Ground water ..."]

Further, Table 3 of the Cleanup Action Plan states, "If UCL<sup>1</sup> exceeds cleanup levels, implement groundwater treatment if directed by Ecology to prevent contamination from leaving the site."

As the Report states, UCLs (or equivalent statistical measures of cleanup levels) were exceeded at a number of wells for a number of compounds. Ecology does not believe these exceedances are sufficiently consistent over the two years of monitoring performed to date to trigger ground water treatment at present. Ecology does believe continued quarterly monitoring is appropriate.

With respect to cyanide, the measurements were of total cyanide. It may be that analysis for weak and dissociable cyanide may show that cyanide is not present above cleanup levels; however, this remains to be done.

With respect to calculations asserted to be natural background concentrations, Ecology has several comments. First, Ecology rejects these calculations as natural background calculations. Natural background is defined in regulation as, "... the concentration of hazardous substance consistently present in the environment which has not been influenced by localized human activities." [WAC 713-340-200] Ecology does not believe natural background concentrations can be established in an urban environment such as the one near Union Station. Establishment of an area background would require discussion with Ecology. Moreover, use of only one background well, and choosing the well with the highest concentrations of the compound of concern (B-4 for gasoline and diesel; B-6R for arsenic) cannot be defended as appropriate for calculating an area background. All that can be said is that these are computations of the cleanup level concentration from data from a background well.

---

<sup>1</sup> Upper Confidence Limit

Reference to Report Figure 3-11 shows that, for example, MW-101R has high diesel and gasoline concentrations and the concentrations were increasing at the end of the monitoring period. Reference to Report Figure 3-9 (or any of the other ground water elevation contour figures) shows that Well B-6R is the appropriate upgradient well for MW-101R, not B-4. Diesel and gasoline concentrations in Well B-6R have been consistently lower than in Well MW-101R. Had the gasoline and diesel concentrations in Well MW-101R been compared to a cleanup level based on the correct upgradient well, Well B-6R, it would have been apparent that gasoline and diesel in this, and possibly other wells (See MW-107R and MW-105 for gasoline), would exceed the cleanup level.

Similarly, use of background well B-4, rather than B-6R, is more appropriate for calculating an arsenic concentration based upon an upgradient well for compliance wells on the northern portion of the site. Were this done, MW-105 would likely be out of compliance.

Ecology wishes to monitor these trends for at least another year. Monitoring in all wells, except HC-103 (see below) is required to provide an overall picture of water quality at the site. Similarly, monitoring for all analytes is required to maintain consistency of data.

3. With respect to suspending monitoring in Wells HC-103, MW-102R, and MW-108R, Ecology will agree to suspend water quality monitoring in HC-103 for the present. Ecology may require that water quality monitoring be resumed at any time. Water level monitoring in HC-103 is to be continued and the well is to be maintained in a serviceable state. Ecology is willing to agree to this suspension because HC-103 monitors ground water from approximately the same part of the site as MW-104 and has shown higher concentrations of hazardous substances.

Ecology will require continued monitoring of Wells MW-102R and MW-108R. Reference to Report Figure 3-9 indicates these wells do not monitor ground water from approximately the same areas as other wells. Both of these wells are in areas of ground water elevation contours which indicate more closely-spaced wells are appropriate.



LANDAU  
ASSOCIATES,  
INC.

Environmental and Geotechnical Services

April 22, 1998

Mr. Jeff Bowman  
King County Industrial Waste  
130 Nickerson Street, Suite 200  
Seattle, Washington 98109-1658

**RE: REQUEST FOR LETTER OF APPROVAL  
DISCHARGE OF PURGE WATER TO SANITARY SEWER  
UNION STATION PROPERTY**

Dear Mr. Bowman:

The purpose of this letter is to obtain authorization for discharge of purge water from monitoring wells at the Union Station property in Seattle, Washington into the King County sanitary sewer system. As I mentioned during our telephone conversation on April 16, 1998, I am requesting authorization to discharge purge water from monitoring wells upon completion of quarterly sampling events. I understand that the normal procedure is to submit chemical analysis results prior to authorization, but due to the small volumes of water involved, the likely small changes in water quality from the previous sampling, and the lack of storage space on the property, I am requesting authorization based on analytical results from 1996 and 1997. Once quarterly sampling begins, results from the prior quarter can be sent to you before discharge of additional water. Quarterly sampling at the site is scheduled to begin in June 1998 and continue for a period of at least two years. The following paragraphs provide some project history and discussion of the contamination present in the groundwater near the site.

The Union Station property, which was the site of a former railroad station, coal gasification plant, and metal foundry, is located northeast of the Kingdome as shown on Figure 1. Union Station Associates has entered into a Consent Decree with the Washington State Department of Ecology (Ecology) and is in the process of constructing commercial and retail facilities, including a parking garage. The property wells are located in what will be the garage.

Groundwater samples have been analyzed from seven monitoring wells located on the property: HC-101, HC-102, HC-103, MW-104, MW-105, MW-106, and MW-107 and two upgradient wells located adjacent to the property: B-4 and B-6. The locations of these wells are shown on Figure 2. A complete round of sampling from these wells was done during November 1996 and October 1997. Results from these sampling events are summarized in Tables 1 and 2, respectively. These results show the presence of low levels of carcinogenic polynuclear aromatic hydrocarbons (CPAH), total petroleum hydrocarbons (THP), volatile

organic compounds (VOC), and metals. During recent construction activities at the site, monitoring wells HC-101, HC-102, and MW-106 have been replaced by new monitoring wells MW-101R, MW-102R and MW-108R, respectively. The replacement wells are similar to the original wells with respect to location and depth.

Based on previous sampling, the total purge volume generated during quarterly sampling of the nine wells is expected to be a maximum of about 100 gallons. With your authorization, purge water generated during quarterly sampling of individual wells would be temporarily stored in an appropriate container until all well sampling is completed and then discharged into an approved sanitary sewer receptacle.

In addition for authorization to discharge purge water from quarterly sampling of the nine monitoring wells for the next two years, I would also like authorization to discharge development water from replacement well MW-108 (formally well MW-106) and purge water from testing of wells (MW-101R and MW-102R (formally HC-101 and HC-102) to the sanitary sewer system. The total volume of groundwater generated from these activities is expected to be about 50 gallons. This water will be stored onsite until your authorization for discharge is received.

I would be happy to meet you at the site, at your convenience, for any inspection that you may require. Please call me if you have any questions or need additional information.

Post-it* Fax Note	7671	Date	4/24/98	# of pages	1
To	Jim Bet	From	Jeff Bauman		
To/Dept	Landau	Co.	KCIW		
Phone #		Phone #	689-3071		
Fax #	925/778-6409	Fax #			

LANDAU ASSOCIATES, INC.

By:   
*James Bet*  
James Bet  
Senior Staff Geologist

Attachments

This discharge as described, meets King County limits and is approved.	
<i>Jeff Bauman</i>	
Signature	
Industrial Waste Investigator	
Title	Date
	4/24/98





Landau  
Associates

Environmental and Geotechnical Services

00101

April 17, 2001

Mr. Jeff Bowman  
King County Industrial Waste  
130 Nickerson Street, Suite 200  
Seattle, Washington 98109-1658

**RE: REQUEST FOR LETTER OF APPROVAL  
DISCHARGE OF PURGE WATER TO SANITARY SEWER  
EXTENSION TO PERMIT DATED APRIL 1998  
UNION STATION PROPERTY**

Dear Mr. Bowman:

The purpose of this letter is to obtain an extension to the authorization for discharge (dated April 1998) of purge water from monitoring wells at the Union Station property in Seattle, Washington into the King County sanitary sewer system. We are requesting authorization to discharge purge water from monitoring wells upon completion of quarterly sampling events. We understand that the normal procedure is to submit chemical analysis results prior to authorization, but, due to the small volumes of water involved, the likely small changes in water quality from previous sampling, the lack of storage space on the property, and your previous authorization to discharge, we request authorization based on analytical results from 2000. Quarterly sampling will continue at least throughout 2001. Although sampling frequency may decrease, sampling is likely to continue for a number of years. The following paragraphs provide some project history and discussion of the contamination present in the groundwater near the site.

The Union Station property, which was the site of a former railroad station, coal gasification plant, and metal foundry, is located northeast of Safeco Stadium as shown on Figure 1. Union Station Associates has entered into a Consent Decree with the Washington State Department of Ecology (Ecology) and has constructed a parking garage and retail/commercial facilities at the site. The property wells are located in the garage.

The Consent Decree requires quarterly groundwater monitoring. Groundwater samples have been analyzed from seven monitoring wells located on the property (HC-103, MW-101R, MW-102R, MW-104, MW-105, MW-107R, and MW-108R) and two upgradient wells located adjacent to the property (B-4 and B-6R). The locations of these wells are shown on Figure 2. Sampling of these wells has been

performed since October 1997. Results from the September 2000 and December 2000 sampling events are typical and are summarized in Tables 1 and 2, respectively. Please note that all concentrations listed are in units of µg/L or parts per billion. These results show the presence of low levels of carcinogenic polynuclear aromatic hydrocarbons, total petroleum hydrocarbons, some volatile and semivolatile organic compounds, and some metals.

Based on previous sampling, the maximum total purge volume generated during quarterly sampling of nine wells is about 90 gallons. Future sampling will include only eight wells; thus, there will be a decrease in the volume of purge water to be discharged each quarter. With your authorization, purge water generated during quarterly sampling of individual wells would be temporarily stored in an appropriate container until well sampling is completed and then discharged into an approved sanitary sewer receptacle. The discharged water would be a mixture of the water generated from the eight wells.

I would be happy to meet you at the site, at your convenience, for any inspection that you may require. Please call me if you have any questions or need additional information.

LANDAU ASSOCIATES, INC.

By:

*Lusty J. Henderson*  
for Victoria R. England  
Senior Staff Hydrogeologist

VRE/tam

4/18/01 S:\WPROCA29002\discharge request.doc

Attachments

cc: Kevin Daniels, Union Station Associates  
Brad Marten, Marten Brown Inc.

Post-it® Fax Note	7671	Date	4/24	# of pages	1
To	Landau	From	Barnes		
Co./Dept.		Co.	KCIW		
Phone #		Phone #			
Fax #	425/778-6407	Fax #			

This discharge as described meets King County limits and is approved.

*[Signature]*

Signature

*Investigator*

Title

*4/24/01*

Date

206/263-3071

# Data Validation Technical Memoranda

TO: Kristy Hendrickson, Project Manager, Landau Associates

FROM: Stacy Fischer, Landau Associates

DATE: November 6, 2000

RE: **UNION STATION  
3RD QUARTER 2000 GROUNDWATER SAMPLING  
LABORATORY DATA QUALITY EVALUATION**

This memorandum provides the results of a data quality evaluation for ten groundwater samples collected at the Union Station property on September 27, 2000 for the quarterly groundwater sampling event. A data quality evaluation was performed for the following analyses:

- Total petroleum hydrocarbons (TPH) [Washington State Department of Ecology (Ecology) Methods WTPH-G and WTPH-D]
- Volatile organic compounds (VOCs) [U.S. Environmental Protection Agency (EPA) method 8260]
- VOCs (EPA method 8260 with selective ion monitoring)
- Carcinogenic polynuclear aromatic hydrocarbons (cPAHs) (EPA method 8270 with selective ion monitoring)
- Semivolatile organic compounds (SVOCs) (EPA method 8270)
- Dissolved metals (EPA method 6010/7000)
- Total dissolved solids and total suspended solids (EPA methods 160.1 and 160.2, respectively)
- Total cyanide (EPA method 335.2).

All of the above analyses were performed by Analytical Resources, Inc. (ARI) laboratory located in Seattle, Washington. This data quality evaluation covers ARI data package CF72.

The data quality evaluation was performed in accordance with Appendix A of the *Union Station Property Cleanup Action Plan* (Landau Associates 1997), and with applicable portions of the EPA *Contract Laboratory Program National Functional Guidelines for Organic Data Review* and *Contract Laboratory Program National Functional Guidelines for Inorganic Data Review* (EPA 1994a,b).

The evaluation considered the following elements:

- Chain-of-custody records
- Holding times
- Blank results (laboratory, method, and field)



- Surrogate recoveries
- Laboratory matrix spikes and matrix spike duplicates (MS/MSD) (including laboratory control samples)
- Duplicate analyses (field and laboratory)
- Quantitation limits
- Completeness.

Data validation qualifiers are added to sample results based on the evaluation of data quality. The absence of a data qualifier indicates that the datum is acceptable without qualification. Data validation qualifiers are summarized in Table 1.

### **CHAIN-OF-CUSTODY RECORD**

Signed chain-of-custody records accompanied each data package. All analyses requested were performed. One 40-ml vial was received by the laboratory with no identification. Six 40-ml vials were submitted for each sample with the exception of sample MW-104, which only had five identified vials. The unlabeled vial was assumed to be MW-104; however, the vial was not used for analysis and was merely archived.

### **HOLDING TIMES**

For all analyses and all samples, the time between sample collection, extraction, and analysis was determined to be within EPA holding times.

### **SURROGATE SPIKE RECOVERIES**

All surrogate recoveries for all analyses were within laboratory control limits for all samples with the following exceptions:

- SVOCs. Recovery for one of the surrogates associated with the diluted SVOC analysis of sample MW-107R was below the lower laboratory control limit. No qualifiers were assigned because, in accordance with the EPA functional guidelines, two or more SVOC surrogates within the same fraction must be outside the control limits to require qualification of the data.
- SVOCs. Recovery for one of the surrogates associated with the method blank analysis exceeded the laboratory upper control limit. No qualifiers were assigned because, in accordance with the EPA functional guidelines, two or more SVOC surrogates within the same fraction must be outside the control limits to require qualification of the data and no SVOCs were detected in the method blank.

- SVOCs. All surrogates were diluted out during the diluted analysis of samples B-4 and MW-101R. No qualifiers were added due to surrogates being diluted out.

#### **MATRIX SPIKE/MATRIX SPIKE DUPLICATE**

One matrix spike (MS) was performed with each organic analysis, the total cyanide analysis, and the dissolved metals analysis. One matrix spike duplicate (MSD) was performed with each organic analysis. MS/MSDs were prepared using a project sample. Recoveries and relative percent differences (RPDs) were within the laboratory or method control limits with the following exceptions:

- Acenaphthene was not recovered in the matrix spike duplicate sample due to the high concentration of acenaphthene in the parent sample relative to the spike amount. Recovery of acenaphthene in the associated matrix spike was less than the lower laboratory control limit, indicating a potential low bias. Additionally, recovery of acenaphthene in the associated laboratory control sample was less than the lower laboratory control limit, which also indicates a low bias; therefore, all acenaphthene results were qualified as estimated (J detects, UJ nondetects), as indicated in Table 1.
- Recovery of pyrene in both the matrix spike and matrix spike duplicate samples was less than the lower laboratory control limit, indicating a potential low bias. All pyrene results were qualified as estimated (J detects; UJ nondetects), as indicated in Table 1.

#### **LABORATORY DUPLICATE**

One laboratory duplicate or laboratory replicate was analyzed for dissolved metals, total cyanide, total suspended solids and total dissolved solids. All RPDs (or RSDs for replicates) were within the method-specified control limits. No qualification of the data was necessary.

#### **LABORATORY CONTROL SAMPLE (BLANK SPIKE) RESULTS**

One laboratory control sample, blank spike, or standard reference material sample was analyzed with each batch of samples. Recoveries were within the laboratory or method control limits with the following exception:

- Recovery of acenaphthene in the laboratory control sample associated with the SVOC analyses was less than the lower laboratory control limit, indicating a potential low bias. All acenaphthene results were qualified as estimated (J detects, UJ nondetects), as indicated in Table 1.

#### **METHOD BLANKS**

Method blanks were analyzed with each batch of samples. No contamination was detected in the method blanks. No qualification of the data was necessary.

## FIELD TRIP BLANKS

One trip blank was submitted to the laboratory for both the full scan and the selected ion monitoring VOC analyses. No contamination was detected in the trip blank; therefore, no qualification of the data was required.

One trip blank was analyzed with the WTPH-G analysis. No contamination was detected in the trip blank; therefore, no qualification of the data was required.

## FIELD DUPLICATE RESULTS

One blind field duplicate sample was collected meeting the requirement specified in Appendix A of the Cleanup Action Plan, of one duplicate per 20 samples but no less than one blank per sampling round. RPDs between the blind field duplicate sample results were within project-specified control limits of 20 percent, except as described below and as indicated in Table 1.

- The RPDs between several detected VOC results (i.e., toluene; ethylbenzene; m,p-xylene; o-xylene; and 1,2,4-trimethylbenzene) for sample MW105 and the detected results for duplicate sample MW109 (analyzed by the full scan 8270 method) were greater than 20 percent. All detected 1,2,4-trimethylbenzene, toluene, ethylbenzene, m,p-xylene, and o-xylene results were qualified as estimated (J), as indicated in Table 1.
- The RPDs between the acenaphthene, 2-methylnaphthalene, and naphthalene (by EPA method 8270) results for MW105 and the detected result for duplicated sample MW109 was greater than 20 percent. All detected results for these compounds were qualified as estimated (J), as indicated in Table 1.

## REPORTING LIMITS

Method and/or project-specified reporting limits were met for all samples for all analytes with the following exception:

- The reporting limits for VOCs in samples MW-101R, MW-105, MW-107R, and B-4 exceeded the project-specified reporting limits due to dilution; however, all of these samples were also analyzed for vinyl chloride, 1,1-dichloroethene, carbon tetrachloride, tetrachloroethene, 1,1,2,2-tetrachloroethane, and acrylonitrile using selected ion monitoring. Project-specified reporting limits for these compounds were met using the selected ion monitoring method.

## OTHER

Other factors that may affect the use of the data, but which do not require further qualification, include:

- During the initial VOC analysis, the analyst suspected potential naphthalene carryover for samples MW107R, MW108R, and B6R; therefore, the analyst reanalyzed all three samples. The reanalysis results indicate that slight carryover likely occurred with sample B-6R and it is recommended that the reanalysis results for this sample be reported. For sample MW107R

and MW108R, the reanalysis results were generally slightly higher than the initial results, which does not indicate carryover during the initial analysis. Both set of results for these samples are valid.

#### **OVERALL DATA QUALITY AND COMPLETENESS**

Data precision was evaluated through laboratory, field, and matrix spike duplicates. Data accuracy was evaluated through laboratory control samples, surrogate spikes, and matrix spikes. Based on this data quality evaluation, all of the data were determined to be acceptable and no data were rejected. The completeness for this set of data is 99 percent, which exceeds the project goal of 90 percent.

#### **REFERENCES**

EPA. 1994a. *Contract Laboratory Program National Functional Guidelines for Organic Data Review*. U.S. Environmental Protection Agency.

EPA. 1994b. *Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*. U.S. Environmental Protection Agency.

Landau Associates. 1997. *Cleanup Action Plan, Union Station Property, Seattle, Washington*.

SJP/njb  
No. 429002.40



**TABLE 1**  
**SUMMARY OF DATA QUALIFIERS**  
**3<sup>rd</sup> QUARTER 2000 EVENT GROUNDWATER SAMPLE RESULTS**  
**ARI DATA PACKAGE CF72**

Analyte	Qualifier	Sample Number	Reason
Naphthalene (by EPA method 8270)	J, detects	MW-101R, MW-102R, MW-104, MW-105, MW-107R, MW-108R, MW-109, HC-103, B-4, B-6R	Poor precision demonstrated by high RPD in the field duplicate sample pair
Acenaphthene	J, detects UJ, nondetects	MW-101R, MW-102R, MW-104, MW-105, MW-107R, MW-108R, MW-109, HC-103, B-4, B-6R	Potential low bias due to low recovery in the LCS, MS, and MSD. Poor precision demonstrated by high RPD in the field duplicate sample pair.
Pyrene	J, detects UJ, nondetects	MW-101R, MW-102R, MW-104, MW-105, MW-107R, MW-108R, MW-109, HC-103, B-4, B-6R	Low recovery in the MS and MSD
2-Methylnaphthalene	J, detects	MW-101R, MW-102R, MW-104, MW-105, MW-107R, MW-108R, MW-109, HC-103, B-4, B-6R	Poor precision demonstrated by high RPD in the field duplicate sample pair.
Phenol	J, detects	MW-101R, MW-102R, MW-104, MW-105, MW-107R, MW-108R, MW-109, HC-103, B-4, B-6R	Poor precision demonstrated by high RPD in the field duplicate sample pair.
Toluene	J, detects	MW-101R, MW-102R, MW-104, MW-105, MW-107R, MW-108R, MW-109, HC-103, B-4, B-6R	Poor precision demonstrated by high RPD in the field duplicate sample pair.
Ethylbenzene	J, detects	MW-101R, MW-102R, MW-104, MW-105, MW-107R, MW-108R, MW-109, HC-103, B-4, B-6R	Poor precision demonstrated by high RPD in the field duplicate sample pair.

**TABLE 1**  
**SUMMARY OF DATA QUALIFIERS**  
**3<sup>rd</sup> QUARTER 2000 EVENT GROUNDWATER SAMPLE RESULTS**  
**ARI DATA PACKAGE CF72**

Analyte	Qualifier	Sample Number	Reason
m,p-Xylene	J, detects	MW-101R, MW-102R, MW-104, MW-105, MW-107R, MW-108R, MW-109, HC-103, B-4, B-6R	Poor precision demonstrated by high RPD in the field duplicate sample pair.
o-Xylene	J, detects	MW-101R, MW-102R, MW-104, MW-105, MW-107R, MW-108R, MW-109, HC-103, B-4, B-6R	Poor precision demonstrated by high RPD in the field duplicate sample pair.
1,2,4-Trimethylbenzene	J, detects	MW-101R, MW-102R, MW-104, MW-105, MW-107R, MW-108R, MW-109, HC-103, B-4, B-6R	Poor precision demonstrated by high RPD in the field duplicate sample pair.

---

J = The analyte is present in the sample; the reported concentration is an estimate.  
 UJ = The analyte was not detected in the sample; the reported sample detection limit is an estimate.  
 MS/MSD = Matrix spike/matrix spike duplicate.  
 LCS = Laboratory control samples.

TO: Kristy Hendrickson, Project Manager, Landau Associates

FROM: Mary Hubbard, Landau Associates

DATE: February 6, 2001

RE: **UNION STATION  
4TH QUARTER 2000 GROUNDWATER SAMPLING  
LABORATORY DATA QUALITY EVALUATION**

This memorandum provides the results of a data quality evaluation for nine groundwater samples collected at the Union Station property on December 20, 2000 for the quarterly groundwater sampling event. A data quality evaluation was performed for the following analyses:

- Total petroleum hydrocarbons (TPH) [Washington State Department of Ecology (Ecology) methods WTPH-G and WTPH-D (ext)]
- Volatile organic compounds (VOCs) [U.S. Environmental Protection Agency (EPA) method 8260]
- Carcinogenic polynuclear aromatic hydrocarbons (cPAHs) (EPA method 8270 with selective ion monitoring)
- Semivolatile organic compounds (SVOCs) (EPA method 8270)
- Dissolved metals (EPA method 6010/7000)
- Total dissolved solids and total suspended solids (EPA methods 160.1 and 160.2, respectively)
- Total cyanide (EPA method 9010) and Weak Acid Dissociable (WAD) cyanide (EPA method 4500-CN I).

All of the above analyses were performed by Analytical Resources, Inc. (ARI) laboratory located in Seattle, Washington. This data quality evaluation covers ARI data package CP44.

The data quality evaluation was performed in accordance with Appendix A of the *Union Station Property Cleanup Action Plan* (Landau Associates 1997), and with applicable portions of the EPA *Contract Laboratory Program National Functional Guidelines for Organic Data Review* and *Contract Laboratory Program National Functional Guidelines for Inorganic Data Review* (EPA 1994a,b).

The evaluation considered the following elements:

- Chain-of-custody records
- Holding times
- Blank results (laboratory, method, and field)

- Surrogate recoveries
- Laboratory matrix spikes and matrix spike duplicates (MS/MSD) (including laboratory control samples)
- Duplicate analyses (field and laboratory)
- Quantitation limits
- Completeness.

Data validation qualifiers are added to sample results based on the evaluation of data quality. The absence of a data qualifier indicates that the datum is acceptable without qualification. No data qualifiers were added to this data set.

#### **CHAIN-OF-CUSTODY RECORD**

Signed chain-of-custody records accompanied each data package. All analyses requested were performed.

#### **HOLDING TIMES**

For all analyses and all samples, the time between sample collection, extraction, and analysis was determined to be within EPA holding times.

#### **SURROGATE SPIKE RECOVERIES**

All surrogate recoveries for all analyses were within laboratory control limits for all samples with the following exceptions:

- SVOCs. Three surrogates were diluted out during the initial dilution analysis of sample B-4; recovery of the other five surrogates were within current laboratory control limits. All surrogates were diluted out during the second dilution analysis. No qualifiers were added due to surrogates being diluted out.
- SVOCs. All surrogates were diluted out during the dilution analysis of sample MW-101R. No qualifiers were added due to surrogates being diluted out.
- SVOCs. One surrogate was diluted out during the dilution analysis of sample MW-105. No qualifiers were added due to surrogates being diluted out.

#### **MATRIX SPIKE/MATRIX SPIKE DUPLICATE**

One matrix spike (MS) was performed with each organic analysis (except the WTPH-D analysis), the total cyanide analysis, and the dissolved metals analysis. One matrix spike duplicate (MSD) was

performed with each organic analysis (except the WTPH-D analysis). MS/MSDs were prepared using a project sample, and spiked with appropriate target analytes. Recoveries and relative percent differences (RPDs) were all within the laboratory or method control limits.

#### **LABORATORY DUPLICATE**

One laboratory duplicate or laboratory replicate was analyzed for dissolved metals, total cyanide, total weak acid dissociated cyanide, total suspended solids and total dissolved solids. All RPDs (or RSDs for replicates) for detected compounds were within the method-specified control limits. No qualification of the data was necessary.

#### **LABORATORY CONTROL SAMPLE (BLANK SPIKE) RESULTS**

One laboratory control sample, blank spike, or standard reference material sample was analyzed with each batch of samples. Recoveries were within the laboratory or method control limits with the following exception:

- No laboratory control limits were available for recoveries of the volatile organic compounds analyzed for in the laboratory control sample. Recoveries of these compounds were comparable to the laboratory control limits which exist for other volatile organic compounds analyzed for in this method; therefore, no qualification of the data was necessary.

#### **METHOD BLANKS**

Method blanks were analyzed with each batch of samples. No contamination was detected in the method blanks. No qualification of the data was necessary.

#### **FIELD TRIP BLANKS**

One trip blank was submitted to the laboratory for both the VOC and WTPH-G analyses. No contamination was detected in the trip blank; therefore, no qualification of the data was required.

#### **FIELD DUPLICATE RESULTS**

One blind field duplicate sample was collected meeting the requirement specified in Appendix A of the Cleanup Action Plan, of one duplicate per 20 samples but no less than one blank per sampling round. RPDs between the blind field duplicate sample results were all within project-specified control limits of 20 percent.

## REPORTING LIMITS

Method and/or project-specified reporting limits were met for all samples for all analytes with the following exceptions:

- VOCs. The reporting limits for several VOCs in samples MW-101R, MW-105, MW-107R, and B-4 exceeded the project-specified reporting limits due to required dilution. However, no analysis for selected volatiles by 8260 with SIM modification was necessary for these samples, because the project-specified reporting limit of 5 ppb for vinyl chloride, 1,1-dichloroethene, carbon tetrachloride, tetrachloroethene, and 1,1,2,2-tetrachloroethane was achieved during the initial analysis. For samples MW-102R, MW-104, MW-108R, MW-109, and B-6R, only the reporting limit for acrolein exceeds the project-targeted limits.
- SVOCs. Sample B-4 had reporting limits approximately 2-5 times the targeted limits, due to dilution requirements in the initial analysis of the sample.
- Metals. The quantitation limits for beryllium, cadmium, lead, silver and zinc were approximately 2-5 times the targeted limits for sample MW-108R, due to dilution requirements.

## OTHER

Other factors that may affect the use of the data, but which do not require further qualification, include:

- The analysis for cPAH was completed using a GC/MS technique, with selected ion monitoring (modified method 8270-SIM). The analyst noted that high naphthalene and acenaphthene concentrations in samples B-4, MW-101R, MW-105, MW-107R, and MW-108R in this analysis interfered with their respective internal standards. Consequently the analyst quantified the d10-2-methylnaphthalene surrogate from the d10-phenanthrene internal standard. This does not affect the quantitation of the target cPAH analytes.

## OVERALL DATA QUALITY AND COMPLETENESS

Data precision was evaluated through laboratory, field, and matrix spike duplicates. Data accuracy was evaluated through laboratory control samples, surrogate spikes, and matrix spikes. Based on this data quality evaluation, all of the data were determined to be acceptable and no data were rejected. The completeness for this set of data is 100 percent, which exceeds the project goal of 90 percent.

## REFERENCES

EPA. 1994a. *Contract Laboratory Program National Functional Guidelines for Organic Data Review*. U.S. Environmental Protection Agency.

EPA. 1994b. *Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*. U.S. Environmental Protection Agency.

Landau Associates. 1997. *Cleanup Action Plan, Union Station Property, Seattle, Washington*.



TO: Kristy Hendrickson, Project Manager, Landau Associates

FROM: Mary Hubbard, Landau Associates

DATE: May 3, 2001

RE: **UNION STATION  
1ST QUARTER 2001 GROUNDWATER SAMPLING  
LABORATORY DATA QUALITY EVALUATION**

This memorandum provides the results of a data quality evaluation for nine groundwater samples collected at the Union Station property on March 14, 2001 for the quarterly groundwater sampling event.

A data quality evaluation was performed for the following analyses:

- Total petroleum hydrocarbons (TPH) [Washington State Department of Ecology (Ecology) methods WTPH-G and WTPH-Dx]
- Volatile organic compounds (VOCs) [U.S. Environmental Protection Agency (EPA) method 8260]
- Carcinogenic polynuclear aromatic hydrocarbons (cPAHs) (EPA method 8270 with selective ion monitoring)
- Semivolatile organic compounds (SVOCs) (EPA method 8270)
- Dissolved metals (EPA method 200.8/7470)
- Total dissolved solids and total suspended solids (EPA methods 160.1 and 160.2, respectively)
- Total cyanide (EPA method 9010) and Weak Acid Dissociable (WAD) cyanide (Standard method 4500-CN I).

All of the above analyses were performed by Analytical Resources, Inc. (ARI) laboratory located in Seattle, Washington. This data quality evaluation covers ARI data package CV96.

The data quality evaluation was performed in accordance with Appendix A of the *Union Station Property Cleanup Action Plan* (Landau Associates 1997), and with applicable portions of the EPA *Contract Laboratory Program National Functional Guidelines for Organic Data Review* and *Contract Laboratory Program National Functional Guidelines for Inorganic Data Review* (EPA 1994a,b).

The evaluation considered the following elements:

- Chain-of-custody records
- Holding times
- Blank results (laboratory, method, and field)

- Surrogate recoveries
- Laboratory matrix spikes and matrix spike duplicates (MS/MSD) (including laboratory control samples)
- Duplicate analyses (field and laboratory)
- Quantitation limits
- Completeness.

Data validation qualifiers are added to sample results based on the evaluation of data quality. The absence of a data qualifier indicates that the datum is acceptable without qualification. The data qualifiers added to this data set are summarized in Table 1.

### **CHAIN-OF-CUSTODY RECORD**

A signed chain-of-custody record accompanied the data package. All analyses requested were performed.

### **HOLDING TIMES**

For all analyses and all samples, the time between sample collection, extraction, and analysis was determined to be within EPA holding times, with the following exceptions:

- The holding time for the cPAH analysis was exceeded by 5 days for sample B-6R. This sample required re-extraction and re-analysis, due to the low recovery of a surrogate in the initial analysis. All cPAH results for this sample have been qualified as estimates (J), as indicated in Table 1.
- All samples were analyzed for total dissolved solids one day outside of the method specified holding time; therefore, all total dissolved solids results have been qualified as estimates (J), as indicated in Table 1.

### **SURROGATE SPIKE RECOVERIES**

For all analyses and all samples, surrogate recoveries were within laboratory control limits with the following exceptions:

- SVOCs. All surrogates were diluted out during the dilution analysis of samples MW-101R, MW107R, MW109, and B-4. However, no qualifiers were added to the data because the recovery of the surrogates in the initial analysis were all within the current laboratory control limits, except for the recovery of nitrobenzene in samples MW109 and B-4. The recovery of nitrobenzene in these two samples was slightly above the laboratory control limits. All other surrogate recoveries for these samples were acceptable; therefore, no data qualifiers were added.



- Recovery of the surrogate methylarachidate in the initial analysis of sample B-6R for WTPH-D was below the current laboratory control limit. The sample was re-extracted and re-analyzed. The surrogate recovery was below the current laboratory control limit again, suggesting a possible matrix effect. The diesel range and motor oil range results for this sample were, therefore, qualified as estimates (UJ) based on this low surrogate recovery, to indicate a potential low bias in the sample results.

### **MATRIX SPIKE/MATRIX SPIKE DUPLICATE**

One matrix spike/matrix spike duplicate (MS/MSD) was performed with each organic analysis. One matrix spike (MS) was performed with the conventionals and metals analyses. MS/MSDs were prepared using a project sample, and spiked with appropriate target analytes. Recoveries and relative percent differences (RPDs) were all within the laboratory or method control limits, with the following exceptions:

- SVOCs. The recovery of the semivolatile organic compound 4-nitrophenol was slightly below the laboratory control limits in the MS and MSD samples. However, because the recoveries were only 0.1 to 1.4% below the recommended limits, and because the recovery of this compound in the laboratory control sample was acceptable, no data qualifiers were added.
- VOCs. The recovery of the volatile organic compound naphthalene was above the laboratory control limits in the MS and MSD samples (as high as 257% recovery). This analyte was qualified as an estimate (J) in the parent sample to indicate a potential high bias. Additionally, the RPD values between the MS and MSD results for naphthalene exceeded the project specified control limit.
- Conventionals. The recovery of WAD cyanide in the matrix spike was below the current laboratory control limits. However, the recovery of WAD cyanide in the standard reference material was acceptable. According to the U.S. EPA's National Functional Guidelines for data validation, data results should not be qualified based on the result of MS/MSD recoveries alone. Therefore, the result for this compound was not qualified.
- Metals. The recovery of mercury in the matrix spike was below the current laboratory control limits. However, the recovery of mercury in the blank spike was acceptable. According to the U.S. EPA's National Functional Guidelines for data validation, data results should not be qualified based on the result of MS/MSD recoveries alone. Therefore, the result for this compound was not qualified.

### **LABORATORY DUPLICATE**

One laboratory duplicate or laboratory replicate was analyzed for dissolved metals, total cyanide, total weak acid dissociable cyanide, total suspended solids and total dissolved solids. All RPDs (or RSDs for replicates) for detected compounds were within the method-specified control limits. No qualification of the data was necessary.

## **LABORATORY CONTROL SAMPLE (BLANK SPIKE) RESULTS**

One laboratory control sample, blank spike, or standard reference material sample was analyzed with each batch of samples. Recoveries were within the laboratory or method control limits with the following exception:

- The recoveries of five compounds in one of the three laboratory control samples analyzed for VOCs were above the laboratory control limits, indicating a potential high bias. However, because none of these compounds were detected in the associated project samples, no data were qualified.

## **METHOD BLANKS**

Method blanks were analyzed with each batch of samples. No contamination was detected in the method blanks. No qualification of the data was necessary.

## **FIELD TRIP BLANKS**

One trip blank was submitted to the laboratory for both the VOC and WTPH-G analyses. However, the trip blank was inadvertently analyzed only for WTPH-G, and not for VOCs, as required in the project QAPP. No TPH-G contamination was detected in the trip blank; therefore, no qualification of the data was required.

## **FIELD DUPLICATE RESULTS**

One blind field duplicate sample was collected meeting the requirement specified in Appendix A of the Cleanup Action Plan, of one duplicate per 20 samples but no less than one blank per sampling round. RPDs between the blind field duplicate sample results were all within project-specified control limits of 20 percent, with the following exceptions:

- WTPH-G. The RPD value between duplicate sample results for the gasoline range exceeded the project specified control limits. Therefore, this compound was qualified as an estimate (J) in the two duplicate samples, as indicated in Table 1.
- VOCs. The RPD value between duplicate sample results for naphthalene exceeded the project specified control limits. Therefore, this compound was qualified as an estimate (J) in the two duplicate samples, as indicated in Table 1.

## **REPORTING LIMITS**

Method and/or project-specified reporting limits were met for all samples for all analytes with the following exceptions:

- VOCs. The reporting limits for several VOCs in samples MW-101R, MW-105, MW-107R, and B-4 exceeded the project-specified reporting limits due to required dilution. However, no analysis for selected volatiles by 8260 with SIM modification was necessary for these samples, because the project-specified reporting limit of 5 ppb for vinyl chloride, 1,1-dichloroethene, carbon tetrachloride, tetrachloroethene, and 1,1,2,2-tetrachloroethane was achieved during the initial analysis. For samples MW-102R, MW-104, MW-108R, MW-109, and B-6R, only the reporting limit for acrolein exceeds the project-targeted limits.

## **OTHER**

Other factors that may affect the use of the data, but which do not require further qualification, include:

- The analyst who performed the semivolatiles analysis noted that sample B-4 showed an area below the QC limit for the second internal standard (d8-naphthalene) in the undiluted analysis due to the high level of naphthalene in the sample. However, all QC was compliant in the dilute analysis of the sample.
- The analysis for cPAH was completed using a GC/MS technique, with selected ion monitoring (modified method 8270-SIM). Sample B-6R showed a low recovery of the d14-dibenz(a,h)anthracene surrogate in the initial analysis. The sample was re-extracted and re-analyzed. All QC was compliant in the re-extract analysis.
- The analyst who performed the 8270-SIM cPAH analysis noted that sample MW101R showed an area below the QC limit for the first internal standard, d8-naphthalene, due to the high level of naphthalene in the sample. Consequently, the d10-2-methylnaphthalene surrogate was quantified against the second internal standard (d10-phenanthrene). In samples MW105, MW107R, and MW109, the high levels of naphthalene interfered with the d8-naphthalene internal standard. The d10-2-methylnaphthalene surrogate was quantified with the d10-acenaphthene for these samples also.
- During the initial 8270 SIM cPAH analysis, sample B-4 showed an area greater than the QC limit for the d10-acenaphthene internal standard. However, all QC in the dilute analysis was compliant. The analyst quantified the d10-2-methylnaphthalene surrogate in both analyses with the d10-phenanthrene internal standard.
- According to the laboratory, the QC problems described above with the internal standards resulting from the high naphthalene affect the earlier portion of the SIM PHA analysis. As only the heavier cPHAs are reported for this analysis, from the later portion of the run, these QC issues do not affect the reporting of these analytes.
- All samples were analyzed initially for WTPH-G on 3/19/01. All samples except the trip blank were re-analyzed on 3/20/01 because the standard bracketing the QC samples for this batch failed. All QC for the 3/20/01 analysis was compliant and the sample analyses are reported for the 3/20/01 analysis. Because only one vial was available for the trip blank, the analysis on 3/19/01 has been reported for the trip blank only.

## **OVERALL DATA QUALITY AND COMPLETENESS**

Data precision was evaluated through laboratory, field, and matrix spike duplicates. Data accuracy was evaluated through laboratory control samples, surrogate spikes, and matrix spikes. Based

on this data quality evaluation, all of the data were determined to be acceptable as qualified, and no data were rejected. The completeness for this set of data is 100 percent, which exceeds the project goal of 90 percent.

## REFERENCES

EPA. 1994a. *Contract Laboratory Program National Functional Guidelines for Organic Data Review*. U.S. Environmental Protection Agency.

EPA. 1994b. *Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*. U.S. Environmental Protection Agency.

Landau Associates. 1997. *Cleanup Action Plan, Union Station Property, Seattle, Washington*.

**TABLE 1**  
**SUMMARY OF DATA QUALIFIERS**  
**1st QUARTER 2001 EVENT GROUNDWATER SAMPLE RESULTS**  
**ARI DATA PACKAGE CV96**

Analyte	Qualifier	Sample Number	Reason
Naphthalene	J	MW107R, MW108R, MW109	Low precision in field duplicate and MS/MSD, and high recovery in MS/MSD
Total Dissolved Solids	J	MW101R, MW102R, MW104, MW105, MW107R, MW108R, MW109, B-4, B-6R	Holding time exceeded by 1 day
Benzo(a)anthracene	J	B-6R	Holding time exceeded by 5 days
Chrysene	J	B-6R	Holding time exceeded by 5 days
Benzo(b)fluoranthene	J	B-6R	Holding time exceeded by 5 days
Benzo(k)fluoranthene	J	B-6R	Holding time exceeded by 5 days
Benzo(a)pyrene	J	B-6R	Holding time exceeded by 5 days
Indeno(1,2,3-cd)pyrene	J	B-6R	Holding time exceeded by 5 days
Dibenz(a,h)anthracene	J	B-6R	Holding time exceeded by 5 days
Diesel range	UJ	B-6R	Low surrogate recovery
Motor Oil range	UJ	B-6R	Low surrogate recovery
Gas range	J	MW107R, MW109	Low precision in field duplicate

J = The analyte is present in the sample; the reported concentration is an estimate.

UJ = The analyte was not detected in the sample; the reported sample detection limit is an estimate.

TO: Kristy Hendrickson, Project Manager, Landau Associates

FROM: Stacy Fischer, Landau Associates

DATE: August 30, 2001

RE: **UNION STATION  
2<sup>ND</sup> QUARTER 2001 GROUNDWATER SAMPLING  
LABORATORY DATA QUALITY EVALUATION**

This memorandum provides the results of a data quality evaluation for nine groundwater samples collected at the Union Station property on June 27, 2001 for the quarterly groundwater sampling event. A data quality evaluation was performed for the following analyses:

- Total petroleum hydrocarbons (TPH) [Washington State Department of Ecology (Ecology) methods WTPH-G and WTPH-Dx]
- Volatile organic compounds (VOCs) [U.S. Environmental Protection Agency (EPA) method 8260]
- Carcinogenic polynuclear aromatic hydrocarbons (cPAHs) (EPA method 8270 with selective ion monitoring)
- Semivolatile organic compounds (SVOCs) (EPA method 8270)
- Dissolved metals (EPA method 200.8/7470)
- Total dissolved solids and total suspended solids (EPA methods 160.1 and 160.2, respectively)
- Total cyanide (EPA method 9010) and Weak Acid Dissociable (WAD) cyanide (Standard method 4500-CN I).
- Alkalinity (Standard Method 2320)
- Bromide (Standard Method 4500Br-B)
- Chloride (EPA method 325.2)
- Nitrate + Nitrite (EPA method 353.2), Nitrite (EPA method 354.1), Nitrate (EPA Calculation)
- Ortho-phosphorus (EPA method 365.2)
- Sulfate (EPA 375.2).

All of the above analyses were performed by Analytical Resources, Inc. (ARI) laboratory located in Seattle, Washington. This data quality evaluation covers ARI data package DH51.

The data quality evaluation was performed in accordance with Appendix A of the *Union Station Property Cleanup Action Plan* (CAP; Landau Associates 1997), and with applicable portions of the EPA

*Contract Laboratory Program National Functional Guidelines for Organic Data Review and Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (EPA 1994a,b).*

The evaluation considered the following elements:

- Chain-of-custody records
- Holding times
- Blank results (laboratory, method, and field)
- Surrogate recoveries
- Laboratory matrix spikes and matrix spike duplicates (MS/MSD) (including laboratory control samples)
- Duplicate analyses (field and laboratory)
- Quantitation limits
- Completeness.

Data validation qualifiers are added to sample results based on the evaluation of data quality. The absence of a data qualifier indicates that the datum is acceptable without qualification. The data qualifiers added to this data set are summarized in Table 1.

#### **CHAIN-OF-CUSTODY RECORD**

A signed chain-of-custody record accompanied the data package. All analyses requested were performed.

#### **HOLDING TIMES**

For all analyses and all samples, the time between sample collection, extraction, and analysis was determined to be within EPA holding times, with the following exceptions:

- The holding time for the second VOC re-analysis of sample MW-109 was exceeded by 1 day. The reanalysis was performed for quantification of naphthalene; therefore, only the naphthalene result for MW-109 was qualified as an estimate (J).
- All samples were analyzed for total dissolved solids and total suspended solids 1 day outside of the method-specified holding time; therefore, all total dissolved solids and total suspended solids results have been qualified as estimates (J), as indicated in Table 1.
- The laboratory noted that for the samples collected from MW105 and MW108R for WTPH-G analyses, the pH was 6. A pH greater than 2 indicates that the samples were not properly preserved. The recommended holding time for unpreserved samples for NWTPH-G analysis is 7 days. For sample MW105 the modified holding time was exceeded by 7 days and for sample MW108R the modified holding time was exceeded by 6 days. Gasoline-range hydrocarbon results for these two samples were qualified as estimates (J).

## **SURROGATE SPIKE RECOVERIES**

For all analyses and all samples, surrogate recoveries were within laboratory control limits with the following exceptions:

- SVOCs. All surrogates were diluted out during the dilution analysis of samples MW-101R, MW107R, MW109, and B-4. However, no qualifiers were added to the data because the recovery of the surrogates in the initial analysis were all within the current laboratory control limits.
- Recoveries of the surrogate o-terphenyl in the initial analyses of samples MW101R and B4 for WTPH-D were slightly below the current laboratory control limit. Sample MW101R was re-extracted and re-analyzed. The surrogate recovery for the reanalysis was within current laboratory analysis; however, the diesel result for the reanalysis was less than the diesel result reported for the initial analysis, which indicates that the initial analysis was not biased low as was suggested by the surrogate recovery. No qualifiers were added to the diesel and oil results for MW101R. Sample B4 was not re-extracted and reanalyzed because the laboratory indicated that the low surrogate recovery was due to matrix interference from high concentrations of the target analytes in the sample. The diesel and oil results for sample B4 were qualified as estimates (J).

## **MATRIX SPIKE/MATRIX SPIKE DUPLICATE**

One matrix spike/matrix spike duplicate (MS/MSD) was performed with each organic analysis. One matrix spike (MS) was performed with the conventionals and metals analyses. MS/MSDs were prepared using a project sample, and spiked with appropriate target analytes. Recoveries and relative percent differences (RPDs) were all within the laboratory or method control limits, with the following exceptions:

- SVOCs. The recovery of the semivolatile organic compound 4-nitrophenol was below the laboratory control limits in the MS and MSD samples. Because the recovery of this compound in the laboratory control sample was also below the specified control limits, 4-nitrophenol results were qualified as estimates for all of the samples.
- Conventionals. The recovery of sodium in the MS sample was above the laboratory control. Because the concentration of sodium in the parent sample was 30 times the spiked sodium concentration, no qualifiers were added to the data.

## **LABORATORY DUPLICATE**

One laboratory duplicate or laboratory replicate was analyzed for dissolved metals, total cyanide, total weak acid dissociable cyanide, total suspended solids and total dissolved solids. All RPDs (or RSDs for replicates) for detected compounds were within the method-specified control limits. No qualification of the data was necessary.



## LABORATORY CONTROL SAMPLE (BLANK SPIKE) RESULTS

One laboratory control sample, blank spike, or standard reference material sample was analyzed with each batch of samples. Recoveries were within the laboratory or method control limits with the following exception:

- The recoveries of 2-chlorophenol, acenaphthene, and 4-nitrophenol in the laboratory control sample for SVOCs were below the laboratory control limits, indicating a potential low bias. Results for these compounds were qualified as estimated (J detects, UJ nondetects) for all of the samples, as indicated in Table 1.

## METHOD BLANKS

Method blanks were analyzed with each batch of samples. Contamination was detected in the method blank associated with the WTPH-Dx analysis as follows:

- Diesel and motor oil were detected in the method blanks associated with the WTPH-Dx analyses. Motor oil was not detected in the associated project samples at concentrations below 5 times the blank concentration; therefore, no qualification of the motor oil results was not necessary. Diesel was detected in sample MW101R at a concentration less than 5 times the associated blank concentration. The diesel result for MW101R was qualified at a nondetect (U), as indicated in Table 1.

## FIELD TRIP BLANKS

One trip blank was submitted to the laboratory for both the VOC and NWTPH-G analyses. No contamination was detected in the trip blanks. No qualification of the data was necessary.

## FIELD DUPLICATE RESULTS

One blind field duplicate sample was collected meeting the requirement specified in Appendix A of the Cleanup Action Plan of one duplicate per 20 samples, but no less than one blank per sampling round. RPDs between the blind field duplicate sample results were all within project-specified control limits of 20 percent, with the following exceptions:

- Conventionals. The RPD value between duplicate sample results for total suspended solids and ortho-phosphorous results exceeded the project specified control limits. Therefore, this compound was qualified as an estimate (J) in the two duplicate samples, as indicated in Table 1.
- VOCs. The RPD value between duplicate sample results for toluene; ethylbenzene; m,p-xylene; o-xylene; and 1,2,4-trimethylbenzene exceeded the project specified control limits. Therefore, results for these compounds were qualified as estimates (J) in the two duplicate samples, as indicated in Table 1.

## REPORTING LIMITS

Method and/or project-specified reporting limits were met for all samples for all analytes, except acrolein.

## OTHER

Other factors that may affect the use of the data, but which do not require further qualification, include:

- During the initial 8270 SIM cPAH analysis, for sample MW101R, MW105, MW107R, MW108R, MW109, and B-4, the first internal standard (d8-naphthalene) was suppressed by the naphthalene concentrations in the samples. The analyst quantified the d10-2-methylnaphthalene surrogate in both analyses with the d10-phenanthrene internal standard.
- According to the laboratory, the QC problems, described above with the internal standards resulting from the high naphthalene, affect the earlier portion of the SIM PAH analysis. As only the heavier cPAHs are reported for this analysis, from the later portion of the run, these QC issues do not affect the reporting of these analytes.

## OVERALL DATA QUALITY AND COMPLETENESS

Data precision was evaluated through laboratory, field, and matrix spike duplicates. Data accuracy was evaluated through laboratory control samples, surrogate spikes, and matrix spikes. Based on this data quality evaluation, all of the data were determined to be acceptable as qualified, and no data were rejected. The completeness for this set of data is 100 percent, which exceeds the project goal of 90 percent.

## REFERENCES

- EPA. 1994a. *Contract Laboratory Program National Functional Guidelines for Organic Data Review*. U.S. Environmental Protection Agency.
- EPA. 1994b. *Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*. U.S. Environmental Protection Agency.
- Landau Associates. 1997. *Cleanup Action Plan, Union Station Property, Seattle, Washington*.

**TABLE 1**  
**SUMMARY OF DATA QUALIFIERS**  
**2nd QUARTER 2001 EVENT GROUNDWATER SAMPLE RESULTS**  
**ARI DATA PACKAGE DH51**

Analyte	Qualifier	Sample Number	Reason
Naphthalene	J	MW109	Holding time exceeded by 1 day
Toluene	J	MW101R, MW109	Low precision in field duplicate results
Ethylbenzene	J	MW101R, MW109	Low precision in field duplicate results
m,p-xylene	J	MW101R, MW109	Low precision between field duplicate results
o-xylene	J	MW101R, MW109	Low precision between field duplicate results
1,2,4-trimethylbenzene	J	MW101R, MW109R	Low precision between field duplicate results
4-nitrophenol	UJ	MW101R, MW102R, MW104, MW105, MW107R, MW108R, MW109, B4, B6R	Low laboratory control sample, matrix spike, and matrix spike duplicate recoveries
2-chlorophenol	UJ	MW101R, MW102R, MW104, MW105, MW107R, MW108R, MW109, B-4, B-6R	Low laboratory control sample recovery
Acenaphthene	J	MW101, MW102R, MW104, MW108R, MW109	Low laboratory control sample recovery
	UJ	B6R	Low laboratory control sample recovery
Total Dissolved Solids	J	MW101R, MW102R, MW104, MW105, MW107R, MW108R, MW109, B-4, B-6R	Holding time exceeded by 1 day
Total Suspended Solids	J	MW101R, MW102R, MW104, MW105, MW107R, MW108R, MW109, B-4, B-6R	Holding time exceeded by 1 day
	J	MW101R, MW109	Low precision in field duplicate
Ortho-phosphorous	J	MW101R, MW109	Low precision in field duplicate
Diesel range	J	B-4	Low surrogate recovery
	U (DNR)	MW101R	Method blank contamination; use result from initial analysis
Motor Oil range	J	B4	Low surrogate recovery
Gas range	J	MW105	Holding time exceeded by 7 days
	UJ	MW108R	Holding time exceeded by 6 days

J = The analyte is present in the sample; the reported concentration is an estimate.

UJ = The analyte was not detected in the sample; the reported sample detection limit is an estimate.

# Screening Levels Based on Background

Background calculations

2400  
3100  
3200  
3800  
4100  
4500  
4800  
5200  
5900  
6000  
6000  
6200  
9000

**Union Station: 429002.30**

**B4, Gasoline Range Hydrocarbons**

**Screening level based on background: 10/97 - 6/01.**

MTCASat 3.0			
Number of samples		Uncensored values	
Uncensored	13	Mean	4938.46
Censored	0	Lognormal mean	4968.25
TOTAL	13	Std. devn.	1741.43
		Median	4800
		Min.	2400
		Max.	9000
Lognormal distribution?		Normal distribution?	
r-squared is: 0.97		r-squared is: 0.93	
Recommendations:			
Use lognormal distribution.			
Distribution selection		Value corresponding to that percentile is:	
1	Enter percentile	90	7591.00
1 = Lognormal		50th	4663.73
2 = Normal		4 X 50th	18654.93
3 = Nonparametric method		Coefficient of Variation = 0.39	

Background calculations

2300  
2400  
2900  
3500  
3600  
3800  
3800  
4200  
4500  
4700  
5900  
6400  
7700

**Union Station: 429002.30**  
**B4, Diesel Range Hydrocarbons**  
**Screening level based on background: 10/97 - 6/01.**

MTCASat 3.0				
Number of samples			Uncensored values	
Uncensored	13		Mean	4284.62
Censored	0		Lognormal mean	4303.94
TOTAL	13		Std. devn.	1579.48
			Median	3800
			Min.	2300
			Max.	7700
Lognormal distribution?			Normal distribution?	
r-squared is: 0.98			r-squared is: 0.93	
Recommendations:				
Use lognormal distribution.				
Distribution selection			Value corresponding to that percentile is:	
1		Enter percentile	90	6586.21
1 = Lognormal			50th	4035.28
2 = Normal			4 X 50th	16141.12
3 = Nonparametric method			Coefficient of Variation = 0.4	



Background calculations

180  
240  
280  
300  
350  
350  
350  
370  
390  
400  
420  
430  
450

**Union Station: 429002.30**

B-4, Acenaphthene

Screening level based on background: 10/97 - 6/01

MTCASat 3.0			
Number of samples		Uncensored values	
Uncensored	13	Mean	346.92
Censored	0	Lognormal mean	348.84
TOTAL	13	Std. devn.	78.57
		Median	350
		Min.	180
		Max.	450
Lognormal distribution?		Normal distribution?	
r-squared is: 0.88		r-squared is: 0.94	
Recommendations:			
Use normal distribution.			
Distribution selection		Enter percentile	Value corresponding to that percentile is:
	2	90	455.95
1 = Lognormal		50th	346.92
2 = Normal		4 X 50th	1387.69
3 = Nonparametric method		Coefficient of Variation = 0.25	

Background calculations

UNION STATION: 429002.30

B-6, Arsenic

Screening level based on background: 10/97 - 6/01

6  
11.7  
12  
13  
13  
13.3  
14  
17  
20  
21  
27  
33  
35

MTCASat 3.0			
Number of samples		Uncensored values	
Uncensored	13	Mean	18.15
Censored	0	Lognormal mean	18.37
TOTAL	13	Std. devn.	8.74
		Median	14
		Min.	6
		Max.	35
Lognormal distribution?		Normal distribution?	
r-squared is: 0.94		r-squared is: 0.89	
Recommendations:			
Use lognormal distribution.			
Distribution selection		Value corresponding	
	Enter percentile	to that percentile is:	
1	90	32.07	
1 = Lognormal	50th	16.34	
2 = Normal	4 X 50th	65.35	
3 = Nonparametric method	Coefficient of Variation = 0.56		



Background calculations

94  
120  
130  
130  
140  
140  
140  
150  
160  
160  
180  
230  
260

**UNION STATION: 429002.30**

B-4, Benzene

Screening level based on background: 10/97 - 6/01

MTCASat 3.0			
Number of samples		Uncensored values	
Uncensored	13	Mean	156.46
Censored	0	Lognormal mean	156.67
TOTAL	13	Std. devn.	44.90
		Median	140
		Min.	94
		Max.	260
Lognormal distribution?		Normal distribution?	
r-squared is: 0.93		r-squared is: 0.86	
Recommendations:			
Use lognormal distribution.			
Distribution selection		Enter percentile	Value corresponding to that percentile is:
1		90	219.43
1 = Lognormal		50th	151.22
2 = Normal		4 X 50th	604.88
3 = Nonparametric method		Coefficient of Variation = 0.3	