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TECHNICAL MEMORANDUM
SEPTEMBER 1997 GROUNDWATER SAMPLING RESULTS REPORT AND PROPOSED GROUNDWATER MONITORING PLAN

AMERICAN CHEMICAL SERVICE, INC.
NPL SITE
GRIFFITH, INDIANA

Montgomery Watson File No. 1252042

Prepared For:

ACS RD/RA Executive Committee

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January 1998

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TECHNICAL MEMORANDUM
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Prepared For:

ACS RD/RA Executive Committee

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EXECUTIVE SUMMARY

This Technical Memorandum presents the results of the fourth quarter baseline groundwater sampling event for the American Chemical Service (ACS) NPL Site in Griffith, Indiana. It also provides a summary of the baseline sampling data in the context of previous sampling results and it includes a proposal for a long-term groundwater monitoring plan on the basis of the accumulated data and future requirements.

The fourth sampling event for the baseline groundwater monitoring was initiated on September 22, 1997 with the measurement of water levels at staff gauges, piezometers, and monitoring wells on the ACS Site. During the next two weeks, groundwater samples were collected from 24 upper aquifer and 23 lower aquifer monitoring wells and submitted under standard chain-of-custody for laboratory analyses of the full scan Target Compound List (TCL) organic and Target Analyte List (TAL) parameters. The detected analytes and concentrations were generally consistent with previous sampling results. On October 2, 1997, groundwater samples were collected from five residential wells in the vicinity and submitted for laboratory analysis of TCL/TAL parameters.

Groundwater contour maps were developed for the upper and lower aquifers based on the September 1997 water level data. The interpreted groundwater flow patterns are consistent with flow patterns observed at the Site since the Remedial Investigation in 1991. Historically, the water table has been higher to the east of the ACS facility and lower to the west and south. Prior to construction of the barrier wall, there was a groundwater mound beneath the ACS Site, resulting from infiltration through the unvegetated surface of the ACS facility and from the ACS firepond. The resulting mound created a hydraulic barrier that prevented east-to-west groundwater flow beneath the Site, and caused the groundwater to flow north and south from a divide just east of Colfax Avenue; northward flow was directed around the ACS facility and southward flow was toward an area with lower water table levels.

There has been little change in the regional groundwater flow following completion of the barrier wall and perimeter groundwater containment system (PGCS) at the ACS Site. These two remedial projects completed in June and July 1997, only resulted in small localized changes in groundwater direction and velocity in the upper aquifer, mostly related to the 1500 foot groundwater extraction trench that is integral to the PGCS. The water table map developed from the September 1997 water level data shows that groundwater flow is still from east to west, with flow being diverted north around the ACS facility and to the south. The hydraulic barrier formerly caused by surface water infiltration on the ACS Site, has been replaced by the barrier wall. There is no observable change in the groundwater flow pattern in the lower aquifer resulting from the remedial construction. The lower aquifer potentiometric map developed from the September 1997 water level data indicates that, just as in the past, groundwater flow is from south to north in the lower sand aquifer beneath the ACS NPL Site.

Four primary areas of buried waste have been identified as sources of groundwater contamination at the Site: the On-Site Containment Area, the Still Bottoms Area, the Off-Site Containment Area, and the Kapica-Pazmey Drum Recycling Area. Previous sampling, beginning in 1989 for the Remedial Investigation, has indicated that groundwater contamination extends southeast from the Off-Site Containment Area and north and west from the ACS facility in the upper aquifer. Monitoring wells installed in 1996 have delineated the outer extent of groundwater impacts in each area. Benzene and chloroethane are the predominant groundwater contaminants. Other constituents such as semi-volatile organic compounds, PCBs, pesticides, metals, and inorganic parameters are not found consistently, or at significant concentrations in Site groundwater.

The only observed lower aquifer impact has been related to monitoring well MW9, which was installed in 1990 just west of the ACS facility. Soon after installation, chloroethane was detected in MW9, and then in 1995, benzene was detected in a sample from the well. A dye tracer test conducted during 1997 indicated that there is a leak between the upper and lower aquifer at MW9, probably along the well casing. MW9 is scheduled for abandonment in February 1998 to eliminate the pathway between the upper and lower aquifer. Replacement well MW9R will be constructed five to ten feet north (downgradient) from the MW9 location to evaluate the effectiveness of the abandonment and the magnitude of the residual impact from the leakage.

Groundwater flow in both the upper and lower aquifer is relatively simple. Both the upper and lower aquifers are homogeneous sand, with little evidence of stratigraphic complexities such as interbedded silts or clays. The hydraulic gradients have also been consistent through time in both aquifers. In the lower aquifer, the hydraulic gradient, and therefore the groundwater flow path, has been from south to north. In the upper aquifer, groundwater flow paths have been more complex because of multiple recharge and discharge areas, but the resulting water table configuration, and therefore groundwater flow pattern has been stable over the past nine years. On the basis of aquifer tests in the upper and lower aquifer, the calculated groundwater flow rate is on the order of 50 feet per year in most parts of both aquifers.

Residential wells were sampled during the remedial investigation and during 1996 and 1997. In some events there were occasional traces of VOCs reported in several samples, but these appear to be unrelated to the ACS site and none of the detections exceeded levels of concern such as MCLs.

Construction of the PGCS and the barrier wall has isolated the primary sources of groundwater contamination. Nonetheless, groundwater monitoring of the upper and lower aquifers will be required at the Site. Section 4 of this Tech Memo proposes a long term monitoring plan, based on the results of the baseline sampling. The monitoring plan addresses: 1) sampling locations, 2) sampling parameters, 3) sampling frequency and 4), a protocol for modifying the locations, parameters, and frequency when contaminant concentrations and distributions change with time. The plan has been developed to provide comprehensive coverage of the upper and lower aquifers at the site.

A total of 19 monitoring wells are proposed to monitor groundwater quality in three areas of groundwater contamination identified in the upper aquifer: one to the north, one to the west, and the other to the southeast of the ACS NPL Site. Perimeter and internal monitoring wells have been defined for each of these areas. The perimeter wells for each area are near the margins of groundwater impact. Future monitoring at these locations will confirm that the groundwater contamination is remaining contained, or provide early warning that it may be expanding. Internal wells have been identified in the north and southeast areas. Results of periodic samples from these wells will provide an indication of the performance of the PGCS and barrier wall, show changes in groundwater quality over time, and provide a warning if groundwater impacts are becoming more significant.

Seventeen lower aquifer monitoring wells are proposed in the monitoring plan to: 1) document background groundwater quality, 2) monitor the behavior of the area of contamination associated with groundwater leakage between the upper and lower aquifer at MW9, and 3). monitoring the point of compliance at the downgradient boundary (north side) of the Site.

Although a wide range of contaminants has been identified in the buried waste at the ACS Site, chloroethane and benzene are the only compounds that have been found consistently and at relatively high concentrations in groundwater outside the waste areas. Statistical analysis of the baseline data indicates that chloroethane and benzene are strongly associated with the areas of groundwater contamination identified at the ACS Site. Chemical evaluation also indicates that these two compounds are good indicators for other potential contaminants such as semi-volatile compounds. As a result, benzene and chloroethane have been identified as indicator parameters for organic impacts in both the upper and lower aquifers. On the basis of statistical analysis, four metals: iron, manganese, aluminum, and lead have been identified as indicators of inorganic impacts to the upper and lower aquifers. Based on these relationships, benzene and chloroethane as well as the four metals have been selected as parameters for routine periodic sampling at all upper and lower aquifer monitoring wells proposed in this plan.

An approximately annual sampling frequency is proposed for the ACS Site because the groundwater flow rate is slow, the characteristics of the aquifers are relatively uniform, and the contaminant distribution appears stable. The hydraulic conductivity of the sand matrix in both the upper and lower aquifers, combined with the observed hydraulic gradients, result in groundwater flow velocities on the order of 50 feet per year. At this rate of flow, sampling quarterly would result in samples being collected at 10 to 15 foot intervals along a given groundwater flow path. Annual sampling will adequately represent the conditions of the aquifer by providing data corresponding to 50 to 100 foot intervals along flow paths.

Groundwater sampling at the ACS Site over the ten years since the remedial investigation was initiated, has confirmed that the groundwater contamination at the Site is characterized by two volatile organic compounds, benzene and chloroethane. While concentrations decrease with distance from the Site, it is these two compounds that consistently constitute the principal groundwater impact. Furthermore, the distribution of these contaminants and

the shapes of the contaminated areas are consistent with the groundwater flow patterns. Based on these considerations, it is reasonable to use a sampling frequency of once a year.

Strictly annual sampling would lead to collection of samples during the same season each year. Since there are seasonal variations in recharge and discharge, the proposed sampling will be off-set by one quarter each year. For the first three years, samples will be collected every third quarter. In subsequent years, groundwater samples will be collected every fifth quarter. In this way, samples will be collected on average when the groundwater has migrated about 100 feet, and samples will represent different seasons.

Contaminant levels are anticipated to change in the future. Concentrations should decline as effects of the PGCS and barrier wall are realized, but concentrations may also increase locally due to changes in groundwater flow path. The monitoring plan proposes a protocol to either increase or decrease sampling locations, parameters, and frequency as aquifer impacts change. If and when significant increases in indicator contaminants are seen in a particular well or area, the affected well or wells would be re-sampled to confirm the result. If the result is confirmed, the affected well or wells would be re-sampled again and analyzed for the broader range of compounds represented by the indicator. At each step, the U.S. EPA and Indiana Department of Environmental Management (IDEM) would be informed of the activity. Upon confirmation that contamination levels are increasing, or an affected areas is expanding, a plan for response would be submitted to U.S. EPA for approval. In the future, when sampling data indicate that groundwater contamination has decreased below clean-up objectives, the U.S. EPA will be petitioned to modify the monitoring plan by reducing the locations, parameters, and/or frequency of sampling.

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TABLE OF CONTENTS

Section		Page
1.0	INTRODUCTION	1
2.0	SEPTEMBER 1997 SAMPLING	2
2.1	Purpose and Scope	2
2.2	Water Levels	3
2.2.1	Plots of Water Table and Lower Aquifer Potentiometric Surface	3
2.2.2	Vertical Gradients Calculated for the Upper and Lower Aquifers	3
2.2.3	Calculated Vertical Gradients Between the Upper and Lower Aquifers	4
2.3	Groundwater Sampling	4
2.3.1	Upper Aquifer Analytical Results	4
2.3.2	Lower Aquifer Analytical Results	4
2.4	Residential Well Sampling	5
3.0	EVALUATION OF BASELINE SAMPLING DATA	6
3.1	Summary of Available Groundwater Data	6
3.2	Groundwater Flow System	6
3.2.1	Groundwater Flow in the Upper Aquifer	6
3.2.2	Vertical Gradients in the Upper Aquifer	7
3.2.3	Groundwater Flow in the Lower Aquifer	8
3.2.4	Vertical Gradients in the Lower Aquifer	9
3.2.5	Vertical Gradient Between Upper and Lower Aquifer	9
3.3	Identified Sources of Groundwater Contamination	10
3.4	Indicator Contaminants and Areas of Groundwater Contamination	10
3.4.1	Upper Aquifer	11
3.4.2	Lower Aquifer	13
4.0	PROPOSED LONG-TERM GROUNDWATER MONITORING PLAN	15
4.1	Water Level Measurements	16
4.1.1	Upper Aquifer Gauging Points	16
4.1.2	Lower Aquifer Gauging Points	17
4.2	Groundwater Sampling and Analysis	17
4.2.1	Monitoring Wells	17
4.2.2	Private Wells	18
4.2.3	Other Monitoring Points	18
4.2.4	Analytical Parameters	18
4.2.4.1	VOCs	18
4.2.4.2	Metals	19
4.3	Sampling Frequency	20
4.4	Sampling and Analytical Procedures	20
4.4.1	Water Level Measurements	20
4.4.2	Groundwater Sampling	20

TABLE OF CONTENTS

Section		Page
4.5	Protocol to Revise Monitoring Plan	20
4.6	Reporting	21

LIST OF TABLES

Table 1	Groundwater Elevations – September 22, 1997
Table 2	Vertical Gradients in Wetlands – September 1997
Table 3	Vertical Gradients in Lower Aquifer – September 1997
Table 4	Vertical Gradients Between Upper and Lower Aquifers – September 1997
Table 5	Summary of Field Parameter Measurements
Table 6	Upper Aquifer Detections – September 1997
Table 7	Lower Aquifer Detections – September 1997
Table 8	Summary of Residential Well Sampling Results – October 1997
Table 9	Proposed Groundwater Level Gauging Points
Table 10	Proposed Upper Aquifer Monitoring Program Wells
Table 11	Proposed Lower Aquifer Monitoring Program Wells
Table 12	Intrawell 95% Upper Confidence Limits of the Prediction Interval
Table 13	Statistical Comparison of Metals Concentrations

LIST OF FIGURES

Figure 1	Water Table Map - September 1997
Figure 2	Water Table Map – November 1996
Figure 3	Lower Aquifer Potentiometric Surface – September 1997
Figure 4	VOCs Detected in Upper Aquifer Monitoring Wells
Figure 5	VOCs Detected in Lower Aquifer Monitoring Wells
Figure 6	Spacial and Temporal Variability of Historical VOC and SVOC Detections - Upper Aquifer
Figure 7	Spacial and Temporal Variability of Historical VOC and SVOC Detections - Lower Aquifer
Figure 8	Monitoring Wells Proposed for Long-Term Monitoring in the Upper Aquifer
Figure 9	Monitoring Wells Proposed for Long-Term Monitoring in the Lower Aquifer

LIST OF APPENDICES

Appendix A	Groundwater Flow Velocity Calculations
Appendix B	Statistical Methods Summary
Appendix C	Time Trend Plots

One copy of the second volume containing Appendices D through H has been provided to U.S. EPA, IDEM, and B&VWS. Additional copies of the second volume are available upon request to Montgomery Watson.

Appendix D	Upper Aquifer and Field and Trip Blank Laboratory Data
Appendix E	Lower Aquifer Laboratory Data
Appendix F	Residential Well Laboratory Data
Appendix G	Data Validation Summaries
Appendix H	Black & Veatch Split Groundwater Analytical Results

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1.0 INTRODUCTION

This Technical Memorandum provides a summary of the Baseline Groundwater sampling conducted at the American Chemical Service (ACS) NPL Site (Site) in Griffith, Indiana during 1996 and 1997. The baseline sampling consisted of four consecutive sampling rounds of groundwater monitoring at approximately 48 monitoring wells. These rounds included samples collected at the monitoring network wells in: 1) March, August, and November 1996, 2) April and March 1997, 3) June 1997, and 4) September 1997. The monitoring included: the measurement of water levels at monitoring wells, piezometers and staff gauges; the measurement of field parameters, and the collection and submittal of water samples for analysis of Target Compound List (TCL) organic and Target Analyte List (TAL) inorganic parameters.

The remainder of this Technical Memorandum includes three sections: Section 2 provides a listing of the September 1997 sampling event, Section 3 presents a summary and evaluation of the four events of Baseline Sampling, and Section 4 presents a proposed long-term groundwater monitoring plan based on the Baseline Sampling results.

2.0 SEPTEMBER 1997 SAMPLING

2.1 PURPOSE AND SCOPE

The fourth round of the Baseline Groundwater Sampling Program, conducted in September 1997, consisted of measuring water levels and collecting groundwater samples.

- Water levels were measured at staff gauges and upper and lower aquifer wells and piezometers on September 22, 1997.

- Groundwater samples were collected from 24 monitoring wells screened in the upper aquifer and 23 monitoring wells screened in the lower aquifer during the weeks of September 22, 1997 and September 29, 1997 and analyzed for TCL/TAL parameters.

In addition, and at the request of U.S. EPA, water samples were collected at five nearby residences and analyzed for full scan TCL/TAL parameters.

As defined in the October 1996 Phase 2 Upper Aquifer Technical Memorandum (revised June 1997), the objectives of monitoring the upper aquifer are to:

- Monitor groundwater quality at the boundaries of the known extent of contamination to determine whether the contaminant plume in the upper aquifer is stable or expanding.

- Measure water levels in the upper aquifer to determine how remedial actions affect groundwater flow patterns at the Site.

- Monitor groundwater quality in the plume interior to determine how contaminant concentrations change in response to remedial actions.

The objectives of monitoring of the lower aquifer (listed in the September 1996 Lower Aquifer Investigation Report (revised June 1997), are to:

- Verify the historic northerly horizontal groundwater gradient;

- Monitor the effect, if any, of remedial actions on groundwater flow patterns; and

- Monitor for the presence of contaminants that may migrate from the upper aquifer to the lower aquifer.

Monitoring well locations and sampling parameters for the September 1997 upper aquifer monitoring activities are described in the Phase II Upper Aquifer Investigation Technical Memorandum, revised June 1997. Well locations and sampling parameters for the

September 1997 lower aquifer monitoring activities are described in the Lower Aquifer Investigation Report Technical Memorandum, revised June 1997.

As in previous sampling events, the September sampling was conducted in accordance with U.S. EPA-approved Specific Operating Procedures (SOPs), and the approved Quality Assurance Project Plan (QAPP).

2.2 WATER LEVELS

Water levels were measured at the monitoring wells, piezometers, and staff gauges on September 22, 1997. Three additional sets of paired piezometers (P101-P106) were installed on September 25, 1997. These piezometer pairs were installed to complete the level monitoring system for the barrier wall built around the waste areas at the Site during 1997. In addition, piezometers P1, P20, P40, P41, and P49, which were damaged during barrier wall construction, were replaced. The new piezometers were surveyed, but because they were installed after the September 22, 1997 gauging event, these piezometers are not included in the tables and figures accompanying this Technical Memorandum.

2.2.1 Plots of Water Table and Lower Aquifer Potentiometric Surface

Water level measurements are presented in Table 1, which also includes map coordinates (reference points), top of inside the well casing elevations, and calculated groundwater elevations for the measurement points. Figure 1 is a water table contour map prepared from the calculated groundwater elevations (plotted adjacent to the well, piezometer, and staff gauge symbol). Figure 2 is a water table contour plot for November 1996 before the barrier wall and perimeter groundwater containment system were constructed. Figure 3 shows the potentiometric surface for the lower aquifer based on the groundwater elevations at the uppermost well at each lower aquifer well nest (calculated groundwater elevations are plotted adjacent to well and piezometer symbols).

2.2.2 Vertical Gradients Calculated for the Upper and Lower Aquifers

Vertical gradients were calculated for both the upper and lower aquifers on the basis of water level measurement data from adjacent wells and piezometers screened at different depths in each aquifer.

A summary of vertical hydraulic gradients calculated for nested piezometers in the wetland area is presented in Table 2. Vertical gradients were calculated by dividing the difference in head between nested piezometers by the distance between the screen midpoints. Vertical gradients in the wetland area appear to be upward but low in magnitude.

Vertical gradients calculated for nested wells screened within the lower aquifer during the September 1997 water level monitoring event are presented in Table 3. The gradients were calculated by dividing the difference in head between nested wells by the distance between the bottom of the upper screen and the top of the lower screen at each well location.

Four of the gradients calculated between upper, middle, and lower zones were downward, two were upward, and four were within the margin of potential error in the water level measurements. The largest downward gradient was calculated for MW8/MW31, where a difference of 1 foot was recorded between MW8 and MW31. This is clearly a measurement error, since previously, MW8 and MW31 have shown water elevations that are within several hundredths of a foot of each other. The largest upward gradient was observed at the MW29/MW34/MW9 well nest, where an upward gradient of 0.0013 was calculated between wells MW29 and MW34. Where gradients are measurable, there seems to be a general downward gradient from the upper to the middle part of the lower aquifer and an upward gradient from the bottom to the middle of the lower aquifer. As a result, there is little overall gradient between the top and bottom of the lower aquifer.

2.2.3 Calculated Vertical Gradients Between the Upper and Lower Aquifers

Calculated vertical gradients between wells screened in the upper aquifer and lower aquifer are presented in Table 4. In general head levels are more than ten feet higher in the upper aquifer than in the lower aquifer. Vertical gradients were calculated by dividing the difference in head between the upper and lower aquifer wells by the thickness of the clay confining layer between the two wells. Strong downward vertical gradients ranged from -0.37 calculated between MW17 and MW28 to -0.82 between P27 and MW9.

2.3 GROUNDWATER SAMPLING

Prior to sampling, monitoring wells were purged using low-flow methods in accordance with the approved Monitoring Well Sampling SOP for the Upper Aquifer Investigation (revision: March 21, 1997). Field parameters, pH, specific conductivity, temperature, and turbidity, were measured and recorded during well purging activities (Table 5).

2.3.1 Upper Aquifer Analytical Results

Laboratory analytical reports for VOC, SVOC, PCB, and inorganic compound analyses of samples from upper aquifer monitoring wells are compiled in Appendix D. Compounds detected in samples are summarized in Table 6. The detections of primary contaminants of concern (as identified in previous sampling rounds) are summarized for each upper aquifer well on Figure 4. The results are consistent with previous sampling data and are discussed in the context of all four quarters of baseline sampling in Section 3. Appendix C contains time trend plots for benzene and chloroethane in upper wells and also a listing of all analytical detections in each upper aquifer well.

2.3.2 Lower Aquifer Analytical Results

Laboratory analytical reports for VOC, SVOC, PCB, and inorganic compound analyses of samples from the lower aquifer monitoring wells are compiled in Appendix E. Compounds detected in samples are summarized in Table 7 for each lower aquifer well and shown on Figure 5. The results of the sampling are consistent with previous results and are discussed in the context of all four quarters of baseline sampling in Section 3. Appendix C contains

3.0 EVALUATION OF BASELINE SAMPLING DATA

3.1 SUMMARY OF AVAILABLE GROUNDWATER DATA

The Remedial Investigation for the ACS NPL Site was initiated in 1988. Since that time 28 upper aquifer monitoring and 25 lower aquifer monitoring wells have been installed and sampled numerous times. In addition, more than 100 upper aquifer piezometers, three lower aquifer piezometers, and 12 surface water staff gauges have been installed and used to develop groundwater elevation maps on numerous occasions. Water levels and samples from these points have been used to complete a number of hydrogeologic evaluations starting with the Hydrogeologic Technical Memorandum and continuing with the Remedial Investigation Report and subsequent monitoring reports. The following evaluation of the groundwater flow system, aquifer geochemistry, and contaminant distributions is based on previous reports and the Baseline Groundwater monitoring conducted in 1996 and 1997.

3.2 GROUNDWATER FLOW SYSTEM

3.2.1 Groundwater Flow in the Upper Aquifer

Following the collection of water level information in June 1997, two remedial construction projects have been completed: the Perimeter Groundwater Containment System (PGCS) and the Barrier Wall and Extraction System (BWES). The effect of these structures on the upper aquifer groundwater flow system is evident in comparing Figures 1 and 2. Figure 2 illustrates the water table configuration prior to construction and Figure 1 illustrates the water table configuration after construction. Comparison of the contour patterns on these two figures indicates that changes have occurred locally in the flow pattern but that the general regional groundwater flow paths are unchanged.

The highest groundwater levels in the upper aquifer (other than inside the barrier wall) are located east of the ACS facility as indicated by MW18 and P60 (Figure 1). These high water levels suggest the presence of a groundwater mound approximately along Reder Road. Groundwater flows to the north and south from this mound. The lowest groundwater elevations are to the west and south of the ACS facility. To the west, the groundwater sinks are the drainage ditch between SG11, SG5, SG6 and SG3, and the Griffith Landfill leachate collection system (shown by SG2 and P22). The water table is also lower to the south at locations such as MW43 and MW44. In general, groundwater flow in the vicinity of the Site is from the groundwater mound along Reder road, toward the groundwater lows in the west and south. In addition, the collection trench for the PGCS is a groundwater sink to the northwest and west of the ACS facility, as shown by the water table depression between P82 and P91.

The barrier wall prevents groundwater flow directly to the west from Colfax Avenue. Groundwater flows both north and south from the Reder Road mound. The flow to the north curves around the north end of the barrier wall and is collected in the PGCS

extraction trench (P83) or discharged to the drainage ditch (just beyond MW48). Groundwater also flows south from the Reder Road mound toward the south/southwest.

The effect of the PGCS extraction system and effluent discharge is evident in the wetland to the west of the ACS facility. The 629 and 630 contour lines west of the ACS facility illustrate this effect. The 629 foot elevation contour line wraps around most of the PGCS extraction trench due to lower water levels at P91, P88, and P85. A few hundred feet further to the west, the 630 foot contour line outlines a local groundwater high caused by treated water discharges into the wetlands from the PGCS.

While the barrier wall now prevents groundwater flow west across Colfax Avenue, westerly flow across Colfax Avenue was previously limited by a hydraulic barrier. Figure 2 (the November 1996 water table plot) shows similar general groundwater flow from east of Colfax toward the groundwater lows at the drainage ditch, the landfill leachate collection system or the far south part of the Site. Prior to construction of the barrier wall, surface water infiltration to the water table on the ACS Site and through the ACS facility fire pond (shown by SG7) caused a groundwater high near the center of the Site, resulting in radial groundwater flow from the ACS Site, and a hydraulic barrier to westerly flow across Colfax Avenue.

The upper aquifer matrix is a homogeneous silty sand with no evidence interlayering or bedding complexities. Since the water table maps are based on water levels collected at 12 staff gauges, 28 wells, and more than 100 piezometers, very little interpolation has been required to develop detailed contour plots. All water tables maps developed for the ACS site since the remedial investigation in 1991 have consistently shown the same general groundwater flow patterns. While the contour lines defining the water table are curved, they clearly show consistent groundwater flow pathways from recharge to discharge areas. The average calculated groundwater flow velocity in the upper aquifer is on the order of 50 feet per year, but the rate probably ranges from a minimum rate of less than 10 feet per year to greater than 200 feet per year. The only locations where the groundwater velocity may exceed 100 feet per year are in the vicinity of the PGCS extraction trench and the Griffith Landfill leachate collection system. (Detailed groundwater velocity calculations, based on the RI aquifer tests and the pumping test conducted in March 1995, are summarized in Appendix A.)

Because of the homogeneity of the upper aquifer and the relative simplicity of the groundwater flow paths, the total number of staff gauges, wells, and piezometers can be reduced for future monitoring events. The level measurement locations necessary to develop accurate water table maps are presented in Section 4.1.1.

3.2.2 Vertical Gradients in the Upper Aquifer

U.S. EPA was concerned that there might be downward gradients in the upper aquifer in the wetland, and so required the installation of four sets of nested piezometers in the wetland to the west of the ACS facility. Table 2 shows the upper aquifer vertical gradient calculations based on the September 1997 water level measurements. The vertical

consistent gradient from south to north. Based on these hydraulic gradients and the hydraulic conductivity values calculated from slug test results during the RI, the groundwater flow rate in the lower aquifer is on the order of 50 feet per year. (Appendix A contains the lower aquifer groundwater velocity calculations.) If the hydraulic gradient is decreasing, the groundwater velocity would be decreasing proportionately.

3.2.4 Vertical Gradients in the Lower Aquifer

Seven nested well sets have been installed in the lower aquifer. At each location, there are two or three monitoring wells and/or piezometers, each screened at a different depth within the lower aquifer. The water levels recorded for each of these wells are summarized in Table 1 and were used to calculate vertical hydraulic gradients between well screen intervals and the top and bottom of the lower aquifer at each location. Table 3 summarizes these calculated vertical gradients. Vertical gradients in the lower aquifer have been similarly calculated for each of the past five quarters. Tabulated below are the vertical gradients calculated between the top and bottom of the lower aquifer during that time period.

Well/Piezo Nest	August 1996	November 1996	March 1997	June 1997	September 1997
MW7/MW36	0.0	0.0004	-0.0006	-0.0010	0.0
MW8/MW32	0.0002	0.0002	0.0	0.0	NA
MW9/MW34	-0.0002	-0.0002	0.0005	0.0	0.0
MW51/MW33	NA	-0.0004	0.0	0.0	0.0
MW28/PZ43	-0.0006	0.0028	0.0	0.0	0.0
MW52/MW53	NA	NA	-0.0008	-0.0004	-0.0004
MW54/MW55	NA	NA	0.0008	0.0	0.0

Note

Value of "0.0" indicates that the vertical gradient was not measurable.

NA = A water level necessary for the calculation was not available

From a review of the accumulated data between August 1996 and September 1997, it is apparent that there are not consistent or significant vertical gradients across the lower aquifer. Therefore, it will not be necessary to measure water levels at all lower aquifer wells in each nested location in future monitoring activities. The water level from just the upper most well in each lower aquifer nest will be sufficient to develop the lower aquifer potentiometric maps. The level measurement locations necessary to develop accurate lower aquifer potentiometric maps are presented in Section 4.1.2.

3.2.5 Vertical Gradient Between Upper and Lower Aquifer

The average groundwater elevations in the upper and lower aquifers are approximately 632 and 621 feet amsl, respectively. The confining clay layer between the upper and lower aquifer varies in thickness from greater than 30 feet to the south to less than 5 feet in the wetland to the northwest (MW-10C area). The calculated downward gradients show a high degree of variability which is due to the differing clay confining layer thickness rather than the difference in head drop from the upper to lower aquifer. Despite the variability of the

calculated gradient, there is a strong downward gradient from the upper to the lower aquifer.

3.3 IDENTIFIED SOURCES OF GROUNDWATER CONTAMINATION

The source areas for the groundwater contamination are located in the upper aquifer at the ACS Site. Prior to the Remedial Investigation, a number of sources were identified within the ACS facility (On-Site Area) and the "Off-Site" area as they were labeled. Further investigations have defined the vertical and horizontal extent of buried waste.

From its incorporation in 1955 until 1990, ACS's primary business was reclaiming spent solvents from a variety of users. The general process was to accept spent hydrocarbon solvents in drums or tanker trucks, distill them and either sell or return the reclaimed product to the user. Between 1955 and 1975, the still bottoms and residues were buried within the ACS NPL Site. In addition, any uncontained spills of spent or reclaimed solvents would have remained on the Site. The following areas have been identified by site investigations as containing organic contaminants:

- Within the Operating ACS Facility
  - Treatment Lagoon #1
  - Still Bottoms Area
  - On-Site Containment Area

- In the Off-Site Area
  - Off-Site Containment Area
  - Kapica-Pazmey Area

Prior to construction of the barrier wall in 1997, these areas were the source of groundwater contamination. Figure 6 shows that these areas are now contained inside the Barrier Wall and therefore, have been eliminated as sources of groundwater contamination for areas outside the wall.

3.4 INDICATOR CONTAMINANTS AND AREAS OF GROUNDWATER CONTAMINATION

In order to facilitate evaluation of the analytical data collected during the baseline groundwater sampling program, VOC, SVOC, and metals results from the four quarterly sampling events were statistically analyzed. For each analyte detected, the 95% upper confidence limit of the prediction interval (95% UCLP) has been calculated. The 95% UCLP was calculated based on the mean (i.e., the average) of the concentrations and the amount of variability in the data used to calculate the mean. Because the 95% UCLP incorporates the variability inherent in the detected concentrations, the statistical result can be used to easily compare concentrations between individual wells, between groupings of wells, and future results, when obtained, to historic results within the same well. A

summary of the statistical approach, including background data and statistical summary tables, is included in Appendix B.

3.4.1 Upper Aquifer

The 95% UCLPs (µg/L) for VOC and SVOC compounds detected in samples collected from upper aquifer wells during the four quarters of baseline groundwater sampling are summarized on Figure 6. The frequency of detection of each compound in the four sampling events is also indicated on the figure. Time trend plots for benzene and chloroethane in upper aquifer wells are included in Appendix C.

Analytical results for samples from wells such as MW48, MW49, MW13 and MW6 that are near identified groundwater contaminant source areas show consistent, relatively high concentrations of benzene and chloroethane and lower concentrations of several other VOCs and/or SVOCs; the other VOCs and SVOCs were typically not detected consistently in all sampling events. Based on these results, benzene and chloroethane are indicators of groundwater impacts from the Site. These contaminants should also be good indicators of downgradient impacts because they are both relatively soluble and mobile in groundwater.

The distribution of benzene and/or chloroethane relative to identified site source areas is consistent with the groundwater flow pattern in the upper aquifer. For example, based on the water table configurations shown on Figures 1 and 2, transport from a source or sources near MW6 would be expected to the south and southeast in the direction of wells such as MW19 and MW45; both benzene and chloroethane are present in groundwater at MW19 and MW45. Benzene at relatively low concentrations is also present at MW15 in this southern area.

Samples from several other monitoring wells located in the north and west part of the Site show detections of chloroethane and/or benzene. Groundwater flow in the north part of the Site appears to be to the northwest and west, controlled by regionally higher groundwater to the east and local discharge to the drainage ditch which enters the Site between wells MW13 and MW49. Recent changes in benzene concentrations at MW48 and MW49 between the June and September 1997 sampling events are probably attributable to changes in local groundwater flow patterns as a result of construction and operation of the PGCS. In other words, contaminants near the north port of the ACS facility are being "pulled" past these two wells and into the PGCS trenched. Although high benzene concentrations are found at MW48, benzene is not detected at MW37, about 300 feet further to the west. This is strong evidence that the benzene impact ends in the vicinity of the drainage ditch. There is a strong gradient directly to the west from the ACS facility, where groundwater discharges to the PGCS. Samples from MW46, which is furthest to the west, have consistently contained benzene but only at low concentrations, indicating that the impacted area ends about 500 feet from the western ACS fence line.

To the east, only well MW12 has shown either of the indicator contaminants; one of the four samples from this well contained benzene at a low concentration. In this area, groundwater flow appears to be westerly toward the Site but the gradient is very low. Due

to the low gradient, it is possible that there have been temporary flow reversals in the past that resulted in the temporary transport of benzene to this location

Analytical results for a number of wells that are either farther from the identified sources than those where indicator contaminants are present or are upgradient of the sources, show phenol and, in some cases, bis(2-ethylhexyl)phthalate and dimethylphthalate detections. These wells include MW18, MW37, MW38, MW40, MW41, MW42, MW43, MW44 and MW47. The phthalate detections at these locations appear to reflect field or laboratory artifacts rather than site impacts for the following reasons. (This concept is further supported by lower aquifer results in section 3.4.2.)

- Phthalates are recognized common field and laboratory artifacts because they may be associated with plastics.

- Phthalates are relatively immobile in groundwater and are not likely to be the first compounds to arrive at a location downgradient from a source.

- Phthalates are only reported at a few wells (MW37, MW42, MW43 and MW44) and at all these locations they were not detected consistently in samples (i.e., only in one of the four sampling events).

- Phthalates are not reported consistently at the same locations as indicator contaminants, and hence site impacts, are present. For example, bis(2-ethylhexyl)phthalate is reported at 8, and dimethylphthalate at 1, of the 11 locations where benzene and/or chloroethane were detected. At all these locations, the phthalate compound was detected in only one sampling event. This pattern also suggests that the phthalate detections at site-impacted wells are field or laboratory artifacts.

- When bis(2-ethylhexyl)phthalate or dimethylphthalate were detected at wells with benzene and/or chloroethane, the concentrations were generally lower than those in the wells where indicator contaminants are absent. This concentration pattern is strong evidence that the phthalates are artifacts rather than a result of site activities.

Phenol has been reported at all monitoring wells, but generally not for all sampling events. Most of these detections do not appear to be site-related for the following reasons.

- In many wells that are peripheral to the Site and do not show benzene and/or chloroethane (MW18, MW37, MW38, MW40, MW41, MW42, MW43, MW44, and MW47), phenol is the only compound detected (at some wells phthalates may also be reported, but as noted above, these compounds appear to be field or laboratory artifacts).

- The highest 95% UCLP phenol concentrations (about 200 µg/L) are at locations near site sources where benzene and chloroethane levels are also high (e.g., MW48 and MW49). This relationship suggests that site sources may contribute some phenol to groundwater. However, the concentrations near these source areas are not high enough to account for the levels at most downgradient wells that contain benzene and/or chloroethane and, especially, peripheral wells where benzene and/or chloroethane are absent.

- The phenol levels in some of the peripheral wells are higher than nearby and upgradient wells that contain benzene and/or chloroethane. For example, the phenol concentration at MW47 is higher than at MW19, and the concentrations at MW 41 and MW43 similar to that at MW45, which shows relatively high benzene and chloroethane concentrations.

Together, these relationships suggest another widespread source for phenol. It is likely, since the area was largely a wetland, that the phenols at most locations are natural, produced by the decay of organic material.

Assuming that detections of only phenol (and possibly phthalates) are unrelated to Site contamination, three areas of groundwater contamination have been designated: south, north and west. Each area includes wells where groundwater in the upper aquifer has been affected by site activities. The south area includes wells MW6, MW19 and MW45. Based on the pattern of groundwater flow in this area, well MW18 is upgradient with respect to the area of groundwater contamination, wells MW42 and MW43 are downgradient, and wells MW15, MW41, MW44 and MW47 are sidegradient. The low levels of benzene reported at MW15 suggest that this well is located at the boundary of the south area.

The north area includes wells MW48 and MW49. Based on the pattern of groundwater flow in the north part of the Site, MW40 is upgradient from the area of groundwater contamination, MW37 is downgradient and MW38 and MW39 are sidegradient. Well MW11 may also be sidegradient based on the one reported detection of tetrachloroethene.

The west area includes wells MW13 and MW14. Prior to the time when the PGCS began discharging to the wetlands, MW46 was downgradient from the source area at the ACS plant. However, the continuous PGCS discharge since June 1997 introduces a mound of clean groundwater between the site and MW46. Future sampling at MW46 will collect primarily the treated water that is discharged into the wetland and infiltrates into the ground.

3.4.2 Lower Aquifer

The 95% UCLPs (µg/L) for VOC and SVOC compounds detected in samples collected from lower aquifer wells during the four quarters of baseline groundwater sampling are summarized on Figure 7. The frequency of detection of each compound in the four sampling events is also indicated on the figure. Time trend plots for benezene and chloroethane in lower aquifer wells MW9 and MW10C are included in Appendix C.

Benzene and/or chloroethane have been reported in the lower aquifer at only a few locations. Chloroethane was detected at MW9 (soon to be replaced by MW9R), MW10C and MW29, and benzene at MW9, MW29, MW33 and MW53. The presence of indicator contaminants at MW9 is attributable to downward leakage along the well casing from the upper to the lower aquifer. A tracer test conducted at this location, as discussed in Section 2, documented the leakage. MW29 is located adjacent to MW9, but it is screened 15 feet lower. The concentrations of benzene at MW29, MW33 and MW53 are much lower than at MW9. The detections at MW29 indicate that the benzene extends approximately 15 feet below MW9. The other detections at MW10C, MW33 and MW53 likely represent transport through the lower aquifer from MW9, which is directly upgradient.

Bis(2-ethylhexyl)phthalate was reported in samples from many lower aquifer wells; dimethylphthalate was detected at only one well. As in the upper aquifer, the occurrence of these compounds does not correlate with benzene and/or chloroethane, providing further evidence that the phthalate detections at the Site are due to field or laboratory artifacts.

Phenol was reported for most of the lower aquifer wells, including wells such as MW22 and MW50, that are upgradient from the Site. Moreover, the phenol levels at some of the lower aquifer wells, including upgradient wells, were higher than those measured in the shallow aquifer, even near identified source areas. These distribution and concentration patterns strongly support the earlier conclusion that phenols are present in groundwater throughout the area and are not derived from site activities.

Based on the baseline groundwater sampling results, only one area of groundwater contamination is present in the lower aquifer. This area includes MW9/MW29 and the downgradient wells MW10C, MW33 and MW53.

4.0 PROPOSED LONG-TERM GROUNDWATER MONITORING PLAN

The Statement of Work (SOW) included as Attachment 2 of the September 30, 1994 Administrative Order for the American Chemical Service Superfund Site states that the respondents shall implement:

> "...a groundwater monitoring program designed to detect changes in water quality or concentrations of hazardous substances, contaminants, or pollutants in the groundwater at and beyond the point of compliance and shall include upgradient, downgradient and transgradient monitoring. The groundwater monitoring program shall provide for verification sampling and updating of the current local hydrogeological setting and associated conditions. The program shall consist of summarizing currently available information; installing additional monitoring wells, piezometers, and soil borings; and performing in field measurements or analysis of water levels, pH, temperature, specific conductance, hydraulic conductivity, and other measurements or analyses as approved by EPA, after reasonable opportunity for review and comment by the state. The results of this investigation shall be submitted in report form to EPA for review and approval and shall be incorporated into the work plans."

As discussed in Section 3.2, construction work conducted recently at the ACS Site has modified groundwater flow patterns locally. A barrier wall with internal extraction trenches (BWES) has been constructed around the areas of buried waste and a series of piezometers has been installed to allow documentation of the water levels inside and outside the barrier wall. A perimeter groundwater containment system (PGCS) that includes a 1,500 foot extraction trench has also been installed to prevent further off-site migration of contaminated groundwater to the north and west of the ACS facility. Piezometers have been installed along the trench to allow documentation of gradients induced by pumping. A water treatment plant has been constructed to treat the groundwater extracted from inside the barrier wall and from the PGCS. Influent and effluent samples will be collected to document the quality of the untreated and treated water, as part of the Site monitoring.

The following site-specific objectives have been developed for the long term monitoring plan at the ACS NPL Site:

- Collect water level data to monitor groundwater flow in the upper and lower aquifers;
- Collect water level data to document the performance of the PGCS and BWES;
- Monitor hydrogeologic conditions (i.e., groundwater flow patterns and horizontal groundwater velocities) in the upper and lower aquifers;

- Monitor the quality of untreated groundwater directed to the plant for treatment;
- Monitor treated water quality to evaluate compliance with the effluent standards;
- Monitor changes in groundwater quality over time;
- Monitor the migration, if any, of contaminants; and
- Assess when cleanup objectives have been met.

The proposed monitoring plan has been developed to meet these objectives, in the context of the groundwater flow system and the nature and extent of the contaminated groundwater. The three variables in the groundwater monitoring plan are: 1) sampling locations, 2) chemical constituents, and 3), sampling frequency. The following sections present these variables in the context to the monitoring objectives.

4.1 WATER LEVEL MEASUREMENTS

Although both upper and lower aquifers have exhibited seasonal rise and fall in water levels, the water table and potentiometric surface in the upper and lower aquifers have showed consistent groundwater flow paths in all measurements since the remedial investigation started in 1988. Multi-level piezometer/well nests were installed in 1996 so that vertical gradients could be documented within both the upper and lower aquifers. The accumulated data show that there are upward gradients in the upper aquifer where it discharges to the wetland (which are expected) and that there are no significant vertical gradient patterns or trends in the lower aquifer. Therefore, it is proposed that collection of water levels at wells and piezometers nested in the same aquifer will be discontinued in future monitoring. The proposed water level measurement program includes the upper and lower aquifer wells and the staff gauge listed in Table 9 (this table is designed to serve as a field work sheet). The proposed networks of upper and lower aquifer gauging points are described below.

4.1.1 Upper Aquifer Gauging Points

Proposed upper aquifer gauging points include:

- Those wells that are to be sampled as part of the upper aquifer sampling program (see Section 4.2)
- Those wells and piezometers that are already included as part of the PGCS and BWES gauging activities
- Wells or piezometers that fill remaining gaps in the gauging network
- A staff gauge in the pond to the southeast of the Site

The proposed upper aquifer wells and staff gauge in the water level measurement program are shown on Figure 8. This figure shows that the distribution of gauging locations is adequate to prepare a representative water table map. Water levels will be measured at these wells, piezometers and staff gauge during each sampling event, and a water table map will be developed using the data collected.

4.1.2 Lower Aquifer Gauging Points

Because groundwater flow in the lower aquifer is simpler (north with a small northwest flow component), fewer gauging points are necessary to depict the potentiometric surface. Therefore, the wells listed in Table 9 are proposed to be gauged during each sampling event. At clustered locations along the northern boundary of the Site (Figure 9) only the upper most lower aquifer wells are proposed for gauging, because water levels from the middle or lower, lower aquifer wells does not yield additional useful information. These wells will provide adequate data to prepare a potentiometric surface map for the lower aquifer.

4.2 GROUNDWATER SAMPLING AND ANALYSIS

4.2.1 Monitoring Wells

Based on the information collected during site investigations and the four quarters of baseline groundwater monitoring, a network of wells has been proposed for future monitoring. The proposed network includes wells to address each of four identified areas of groundwater contamination. Three areas (south, north and west) are in the upper aquifer and one is in the lower aquifer. The selected wells for upper aquifer areas are listed in Table 10 and those for the lower aquifer are listed in Table 11.

Tables 10 and 11 also indicate the spatial relationship of each well to the area of groundwater contamination that it monitors. The internal wells are screened within the area of groundwater contamination. Groundwater samples collected at these wells during the four baseline sampling events consistently showed detections of organics at relatively high concentrations. Upgradient, downgradient, and sidegradient wells are located near the margins of the areas of groundwater contamination. During the baseline sampling, these wells have been found to be either free of contamination or to have relatively low levels of organic contaminants.

The downgradient and sidegradient wells will function as monitoring wells while those designated as internal will document dissipation of the contamination with the cut-off of the source.. Data from the monitoring wells will be used to evaluate the migration, if any, of contaminants. Internal well results will be used to monitor changes in groundwater quality over time and to assess when remediation goals have been met. Analytical data for naturally-occurring inorganic analytes at the upgradient wells will be used to calculate background concentrations.

In addition to the area of groundwater contamination defined for the lower aquifer, the point of groundwater compliance for the lower aquifer will also be monitored. The point of groundwater compliance for the lower aquifer, as defined in the ROD, is the downgradient site boundary. Therefore, as shown in Figure 9, lower aquifer monitoring wells located upgradient of the point of compliance and downgradient of the Site will be included in the groundwater monitoring program. Due to the uniform flow direction and slow groundwater movement in the lower aquifer, any contaminant concentration increases detected in these wells will provide sufficiently early warning to initiate appropriate remedial responses before contaminated groundwater moves off-site.

Monitoring wells that have been either consistently free of contamination or have only shown sporadic detections of organics at low concentrations (i.e., below the sample quantitation limit) during the four quarters of baseline sampling are not included in the groundwater monitoring program.

4.2.2 Private Wells

Private wells will not be routinely sampled. However, indications that contaminant migration toward the area residences is occurring will trigger private well sampling. Under these conditions, three to five private wells would be sampled each year to ensure that the groundwater supply of nearby residents has not been contaminated.

4.2.3 Other Monitoring Points

In accordance with the Performance Standard Verification Plan (PSVP) for the PGCS, the influent and effluent of the groundwater treatment system will be sampled during each of the periodic sampling events. Results for these samples will provide information to document the performance of the PGCS.

4.2.4 Analytical Parameters

The analytical parameters to be included as indicator contaminants in the groundwater monitoring program are shown in the following table. The basis for the selection of these parameters is discussed in the following subsections and in Section 3.4.

Groundwater Monitoring Program Analytical Parameters

VOCs	Inorganic Parameters
Benzene	Lead
Chloroethane	Aluminum
	Iron
	Manganese

4.2.4.1 VOCs. Benzene and chloroethane have been included as indicator contaminants in the analytical list for the groundwater monitoring program because: 1) they are the most consistently detected organic parameters in the upper aquifer, 2) they most clearly define the areas of contamination, and 3), they serve as appropriate surrogates for the other detected organic parameters. Usually both of these VOCs were detected whenever and wherever SVOCs were detected within the areas of concern (aside from phenol and the

phthalates which are discussed in detail in Section 3.4). The 95% UCLPs calculated for benzene and chloroethane at each well are shown in Table 12.

Of the organic parameters detected at the Site, benzene concentrations must diminish the most to meet ROD remediation levels. Benzene is one of the more water soluble hydrocarbon VOCs, typically moving at the front of hydrocarbon plumes. Based on relative solubilities in water, persistence, frequency of detection, and concentration levels, benzene is an appropriate surrogate for non-chlorinated compounds including ethylbenzene, toluene, xylene, 2-butanone, 4-methyl-2-pentanone, and acetone.

As with benzene and related hydrocarbons, the concentration of chloroethane has been consistently greater than the concentration of other chlorinated hydrocarbons at internal well locations. Chloroethane is one of the most water soluble of the chlorinated hydrocarbons detected in the areas of groundwater contamination. Although chloroethane does not have a ROD remediation level, it is one of the major daughter products in the degradation of more highly chlorinated hydrocarbons such as 1,1-DCA. Therefore, changing concentrations of chloroethane would be indicative of changing concentrations of the more highly chlorinated hydrocarbons. Chloroethane is an appropriate surrogate for the chlorinated hydrocarbons such as methylene chloride, 1,2-DCE, vinyl chloride, chloromethane, tetrachloroethene, chlorobenzene, and 1,1-DCA detected during the sampling events of the baseline groundwater monitoring program.

4.2.4.2 Metals. During the baseline sampling events, many inorganic analytes have been detected, including arsenic, barium, beryllium, chromium, lead, manganese, mercury, nickel, potassium, selenium, vanadium, and zinc. Most of the metals detected in the upper aquifer are naturally-occurring and cannot be directly attributed to site contamination. Some of the detections may also reflect particulates in the samples which were not filtered. The 95% UCLP was determined for metals detected in each well grouping (e.g., downgradient) for each area of groundwater contamination. The 95% UCLPs calculated for metals are shown in Table 12.

The criteria for metals to be included as indicator contaminants in the groundwater monitoring program are:

- The inorganic parameter must have been detected at least four or more times during baseline groundwater monitoring;

- The 95% UCLP calculated for each inorganic parameter concentration within the interior of the area of groundwater contamination must be greater than or equal to the MCL, secondary MCL or the ROD remediation level (whichever is lower); and

- There must be a significant difference in concentration in the concentration levels during the baseline sampling events between interior wells and upgradient, downgradient, and sidegradient wells.

The metals that meet these criteria and were selected for inclusion in the groundwater monitoring program are aluminum, lead, iron, and manganese. 95 % UCLP values for each area are listed on Table 13. These metals are all naturally occurring. However, elevated iron and manganese concentrations can be indicative of reducing conditions resulting from the biodegradation of organic compounds in the subsurface environment. Conversely, declines in iron and manganese concentration can indicate a change in the subsurface environment and less efficient biodegradation due to a lack of organic carbon. Therefore, these analytes can serve as surrogates for organic contamination and as evidence of the natural biological attenuation of organic compounds.

4.3 SAMPLING FREQUENCY

Given the homogeneity of the upper and lower sand aquifers, the well defined flow paths, and the average groundwater seepage velocities of 50 to 100 feet per year, annual sampling will be a reasonable frequency (see Section 3.2 for further details). However, strictly annual sampling would lead to collecting samples during the same season each year. Since there is seasonable variably in groundwater recharge and discharge, the proposed sampling frequency will be off-set by one quarter each year. For the first three years, the sampling frequency will be every third quarter. For subsequent years, the sampling frequency will be every fifth quarter. The sampling schedules for the upper and lower aquifer are presented in Tables 10 and 11, respectively.

4.4 SAMPLING AND ANALYTICAL PROCEDURES

4.4.1 Water Level Measurements

Water levels will be measured at monitoring wells in the upper and lower aquifers prior to sampling the wells. Water levels will be monitored in a single day to minimize potential water level variability with time.

4.4.2 Groundwater Sampling

All monitoring wells will be purged and sampled using low-flow methods in accordance with the approved Monitoring Well Sampling Proposal and Protocol SOP for the Upper Aquifer Investigation (revision: July 25, 1996). Field parameters, pH, specific conductance, temperature, and turbidity, will be measured and recorded during well purging. Sampling activities are expected to be conducted over a two week period. Standard SW-846 methods will be used for laboratory analyses. Data validation is not proposed unless there are indications of groundwater data inconsistencies.

4.5 PROTOCOL TO REVISE MONITORING PLAN

This section describes procedures to modify the sampling plan in response to possible future changes in monitoring results. The procedures address possible significant increases

in contaminant levels in an area of groundwater contamination that may require expanding the sampling network or changing the frequency of sampling and/or the parameter list. Procedures are also included to discontinue sampling for an area when VOC concentrations fall below the ROD remediation level and MCLs, and when metals concentrations fall below ROD remediation levels or the background level.

In the event that the concentration of one or more indicator contaminants increases as specified below, U.S. EPA will be notified and the well(s) at which the increase(s) was (were) observed will be re-sampled during the following 90 days. The sample(s) will be analyzed for the exceeding indicator contaminant(s). When analytical results are received and evaluated, they will be forwarded to U.S. EPA along with a plan for supplemental action. If the original exceedance(s) is (are) not confirmed, no further action will be recommended. However, if the results confirm the exceedance(s), the well will be recommended again for sampling/analysis within the next 90 days. This time the sample will be analyzed for indicator contaminants that showed exceedances, as well as the broader scan of similar compounds (e.g., if there is an exceedance for benzene, the sample will be analyzed for full-scan VOCs). When the results of this analysis is received, a report will be prepared for U.S. EPA that summarizes the data obtained in the original, confirmatory and supplemental events. This report will also present recommendations for revising the subsequent routine monitoring program, if necessary. Revisions to the groundwater monitoring program may include the installation of additional wells, the replacement of existing wells, and, if warranted, additional remedial actions.

For the purpose of determining whether increases in concentrations have occurred, the baseline groundwater sampling data have been used to calculate intrawell 95% UCLPs (Table 12). An exceedance of one of these values will constitute an increase in concentration and trigger the actions described in the preceding paragraph.

When the monitoring results for an area of groundwater contamination indicate that indicator contaminants are either below the remediation level (for benzene) or equivalent to background concentrations (for the metals) for two consecutive monitoring events, U.S. EPA will be notified of the intent to eliminate the wells representing that area of groundwater contamination from the monitoring program. A revised monitoring plan which does not include that area of groundwater contamination will then be submitted to U.S. EPA for approval.

4.6 REPORTING

Reporting will consist of a letter report summarizing the activities related to each groundwater monitoring event and will include groundwater levels, potentiometric and water table maps, time trend analysis of each of the parameters being monitored, and a copy of the laboratory reporting forms. Groundwater monitoring reports will be sent to U.S. EPA in the quarter following the sampling event.

If concentration exceedances are measured and confirmed for indicator contaminants during the routine monitoring program, additional reporting as described in Section 4.5 will be necessary.

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Table 1
Groundwater Elevations - September 22, 1997
American Chemical Service, Inc. NPL Site

Lower Aquifer Wells

Well Designation	Reference Points East	North	TOIC	9/22/97 Depth	Elevation	Notes
MW-7	6113	6732	641.46	19.92	621.54	
MW36	6164	6768	637.85	16.32	621.53	
MW-8	5934	7506	640.43	**18.23**	622.20	Apparent Measurement Error: Depth should be 19.23
MW31	5907	7505	641.64	20.45	621.19	
MW32	5902	7507	641.84	20.64	621.20	
MW-9	4893	6990	639.05	17.45	621.60	
MW29	4886	7012	638.06	16.48	621.58	
MW34	4880	7002	638.14	16.53	621.61	
MW-10	5200	7784	635.49	14.27	621.22	
MW30	5194	7774	634.25	13.19	621.06	
MW33	5189	7774	634.13	13.07	621.06	
MW51	5198	7767	634.16	13.09	621.07	
MW-10C	5229	7554	637.45	16.10	621.35	In Sand Seam in Confining Layer
MW-21	4546	7067	633.76	12.24	621.52	
MW-22	5208	4898	636.48	14.26	622.22	
MW-23	4717	7404	633.31		633.31	
MW-24	4596	8033	635.22	14.06	621.16	
MW28	5657	5696	648.77	26.72	622.05	
MW50	5269	5383	649.43	27.42	622.01	
ATMW-4D	5297	7311	637.99	NM	NM	ACS facility Well - Hornet's Nes
W-2	5292	7307	638.46	9.35	629.11	Lower Aquifer Well
M-1D	4359	5747	638.32	16.36	621.96	Griffith Landfill Well
M-2D	3997	6495	637.11	15.31	621.80	Griffith Landfill Well
M-3D	4144	6821	632.19	10.46	621.73	Griffith Landfill Well
M-4D	4949	6538	633.32	11.71	621.61	Griffith Landfill Well
MW35	4934	6542	634.50		NM	Discovered Damaged 3/97
M-5D	4171	7094	634.18	12.64	621.54	Griffith Landfill Well
MW52	4996	7814	632.74	11.56	621.18	
MW53	4977	7833	632.87	11.71	621.16	
MW54	5590	7592	636.05	15.06	620.99	
MW55	5595	7604	636.63	15.63	621.00	

Lower Aquifer Piezometers

Well Designation	Reference Points East	North	TOIC	9/22/97 Depth	Elevation	Notes
PZ44	6170	6766	638.47	16.96	621.51	
PZ42	5662	5696	648.44	26.39	622.05	
PZ43	5662	5702	648.69	26.64	622.05	

Table 1
Groundwater Elevations - September 22, 1997
American Chemical Service, Inc. NPL Site

Upper Aquifer Wells

Well Designation	Reference Points East	North	TOIC	9/22/97 Depth	Elevation	Notes
MW-2	5033	6839	638.05	9.26	628.79	Functional for water levels only
MW-3	5299	7314	636.62	8.56	628.06	
MW-4	6112	7126	641.05	8.28	632.77	
MW-5	5788	6482	642.13	9.01	633.12	
MW-6	5298	5520	655.28		655.28	
MW-11	6377	7329	640.47	7.69	632.78	
MW-12	6019	6352	642.74	9.54	633.20	
MW-13	5050	7814	634.08	3.96	630.12	
MW-14	4882	6995	638.56	9.39	629.17	
MW-15	4721	5003	637.89	6.47	631.42	
MW-16	5065	6596	638.52		NM	Not found - lost due to barrier well construction
MW-17	5656	5677	647.14	14.62	632.52	
MW-18	5836	5746	644.89	10.39	634.50	
MW-19	5231	4943	635.78	4.41	631.37	
MW-20	5095	5028	642.98	11.52	631.46	
AM-05	5224	6360	637.28	1.30	635.98	Labeled "Test Well"; Not shown on potentiometric map
Red Well	5204	6466	639.01	3.39	635.62	Not shown on potentiometric map
W-1	5305	7323	637.33	15.93	621.40	Not shown on potentiometric map
MW37	5395	7976	636.78	6.37	630.41	
MW38	5903	8216	636.51	6.72	629.79	
MW39	6253	7947	637.77	6.69	631.08	
MW40	6349	6831	639.46	6.73	632.73	
MW41	6242	4517	632.74	8.03	624.71	
MW42	6264	3808	632.32	7.29	625.03	
MW43	5880	3719	633.56	7.63	625.93	
MW44	5390	4303	633.04	4.60	628.44	
MW45	5830	4388	635.35	6.98	628.37	
MW46	4526	7424	633.32	3.07	630.25	
MW47	5958	5084	640.54	7.63	632.91	
MW48	5669	7814	636.36	6.30	630.06	
MW49	5551	7650	637.00	7.15	629.85	

Upper Aquifer Landfill Wells

Well Designation	Reference Points East	North	TOIC	9/22/97 Depth	Elevation	Notes
M-1S	4362	5743	639.09	8.21	630.88	
M-2S	3999	6491	637.12	7.89	629.23	
M-3S	4142	6819	631.88	4.71	627.17	
M-4S	4953	6537	633.42	6.31	627.11	
M-5S	4170	7089	634.17		634.17	

Table 1
Groundwater Elevations - September 22, 1997
American Chemical Service, Inc. NPL Site

Staff Gauges

Well Designation	Reference Points			9/22/97		Notes
	East	North	TOSG	Depth	Elevation	
SG-1	5023	6196	633.50	NM	633.50	Dry
SG-2	4423	6864	622.84	2.74	620.10	
SG-3	4180	7123	631.17	1.97	629.20	
SG-4	5228	6611	635.73	0.20	635.53	
SG-5	5464	7713	633.36	NM	633.36	Dry
SG-6	4495	8075	632.97	2.68	630.29	
SG-7	5403	6889	637.01	1.33	635.68	
SG-9	3846	6336	632.42		NM	Not Found
SG-10	6748	7238	637.29	3.05	634.24	
SG-8R	5409	5252	634.70	2.75	631.95	
SG-11	5859	8245	634.62	NM	634.62	Dry
SG-12	5596	7867	634.12	NM	634.12	Dry

Table 1
Groundwater Elevations - September 22, 1997
American Chemical Service, Inc. NPL Site

Piezometers

Well Designation	Reference Points East	North	TOC	9/22/97 Depth	Elevation	Notes
LW-1	4807	5070	644.57		644.57	
LW-2	4662	5465	649.70	17.88	631.82	
P-1	5696	6388	643.49			New 9/97 - Installed after water level monitoring
P-2	5577	6165	645.57	NM	NM	Destroyed 6/97
P-3	5453	6470	639.87	4.13	635.74	
P-4	5432	6228	639.25	NM	NM	Not Found
P-5	5285	6510	636.70	1.33	635.37	Buried in Brush
P-6	5150	6551	638.75	NM	NM	Not Found 6/97
P-7	5950	6630	643.63	10.43	633.20	
P-8	6156	6734	639.27	6.20	633.07	
P-9	6134	6994	638.88	5.91	632.97	
P-10	5413	5852	649.32	13.25	636.07	Top of inner casing cracked 3/97 & 6/97
P-11	5199	5900	649.14	12.72	636.42	Bent, free product present 3/97 & 6/97
P-12	5076	5723	650.08	13.63	636.45	Free Product in Piezometer 3/97 & 6/97
P-13	4878	5735	651.20	18.80	632.40	
P-14	5014	5914	645.33	13.34	631.99	
P-15	5003	6187	639.93	9.90	630.03	
P-16	4673	5749	648.80	16.08	632.72	
P-17	4584	6006	654.64	22.65	631.99	Inside Griffith Landfill
P-18	4623	6224	649.84	5.18	644.66	Inside Griffith Landfill
P-19	4977	5043	639.71	NM	NM	Not Found
P-20	5087	6212	641.13			New 9/97 - Installed after water level monitoring
P-21	4569	6537	632.82	NM	NM	Not Found
P-22	4636	6732	634.30	8.53	625.77	
P-23	4689	7018	636.18	7.74	628.44	
P-24	5002	7178	636.06	7.22	628.84	
P-25	5131	7510	635.01	6.62	628.39	
P-26	4764	7309	634.23	4.73	629.50	
P-27	4904	7020	639.70	11.04	628.66	
P-28	5883	7486	644.53	13.99	630.54	
P-29	5738	6619	642.37	6.63	635.74	Free Product in piezometer 9/97
P-30	5626	6793	642.42	NM	NM	Not Found
P-31	5480	7159	641.03	5.25	635.78	
P-32	5746	7026	642.32	6.63	635.69	
P-33	5226	7129	640.20	5.30	634.90	
P-34	5279	6692	639.46	4.13	635.33	

Table 1
Groundwater Elevations - September 22, 1997
American Chemical Service, Inc. NPL Site

Piezometers Cont.

P-35	5515	6572	641.44	5.66	635.78	Free Product in piezometer 9/97
P-36	5410	6851	645.89	10.19	635.70	
P-37	5330	6949	641.37	NM	NM	Destroyed 3/97
P-38	5149	6992	639.87	NM	NM	Destroyed 3/97
P-39	5940	6902	642.00	6.32	635.68	
P-40	5931	7241	638.77			New 9/97 - Installed after water level monitoring
P-41	5663	7377	637.23			New 9/97 - Installed after water level monitoring
P-49	5145	6949	638.98			New 9/97 - Installed after water level monitoring
P-50	5129	6964	639.59		NM	Not Found
P-51	3876	6859	635.07		NM	Not Found
P-52	4100	7845	636.66	7.32	629.34	
P-53	4597	8015	636.18	5.92	630.26	
P-54	4936	8081	638.28	7.89	630.39	
P-55	5628	7979	636.08	6.38	629.70	
P-56	6405	7665	639.46	7.20	632.26	
P-57	6783	7573	638.05	5.12	632.93	
P-58	6454	6932	638.30	5.73	632.57	
P-59	6389	6590	639.22	6.13	633.09	
P-60	6111	6051	640.23	6.88	633.35	
P-61	5533	5284	638.58	6.97	631.61	
P-62	5665	4945	637.06	6.26	630.80	
P-63	5483	7689	637.70	8.08	629.62	
EW-1	5113	6942	639.50		NM	Not Found
P-64	4617	7065	634.87	6.14	628.73	
P-65	4615	7063	634.77	5.93	628.84	
P-66	4729	7034	636.02	7.56	628.46	
P-67	4732	7034	636.06	7.54	628.52	
P-68	4743	7752	634.48	3.81	630.67	
P-69	4741	7751	634.66	3.97	630.69	
P-70	4880	7680	635.38	5.11	630.27	
P-71	4876	7682	635.32	4.84	630.48	

Table 1
Groundwater Elevations - September 22, 1997
American Chemical Service, Inc. NPL Site

New Piezometers - Upper Aquifer

Well	Reference Points			9/22/97		
Designation	East	North	TOC	Depth	Elevation	Notes
P-81	5577	7581	636.19	7.05	629.14	New 6/97
P-82	5577	7572	635.77	6.78	628.99	New 6/97
P-83	5577	7562	635.95	6.84	629.11	New 6/97
P-84	5322	7603	634.35	5.35	629.00	New 6/97
P-85	5326	7594	634.08	5.14	628.94	New 6/97
P-86	5329	7585	634.41	5.57	628.84	New 6/97
P-87	5121	7466	633.88	5.63	628.25	New 6/97
P-88	5130	7460	633.90	5.96	627.94	New 6/97
P-89	5137	7454	634.02	6.09	627.93	New 6/97
P-90	4881	7152	632.59	4.84	627.75	New 6/97
P-91	4889	7145	632.97	5.58	627.39	New 6/97
P-92	4896	7138	633.63	6.05	627.58	New 6/97
P-93	5136	7067	638.79	NM	NM	Not Found 9/97
P-94	5146	7061	638.98	NM	NM	Not Found 9/97
P-95	5146	6532	638.58	10.29	628.29	New 6/97
P-96	5156	6537	638.39	2.96	635.43	New 6/97
P-97	5098	6283	638.39	9.05	629.34	New 6/97
P-98	5130	6279	639.35	2.79	636.56	New 6/97
P-99	5020	5945	644.35	12.37	631.98	New 6/97
P-100	5031	5948	643.93	7.04	636.89	New 6/97
P-101	5550	5979	650.08			New 9/97 - Installed after water level monitoring
P-102	5517	5996	647.18			New 9/97 - Installed after water level monitoring
P-103	5672	6248	644.97			New 9/97 - Installed after water level monitoring
P-104	6267	5639	646.68			New 9/97 - Installed after water level monitoring
P-105	6678	5885	638.86			New 9/97 - Installed after water level monitoring
P-106	6685	5871	638.10			New 9/97 - Installed after water level monitoring
P-107	5766	7339	637.42	5.80	631.62	New 6/97
P-108	5757	7324	638.13	2.75	635.38	New 6/97

Note
All depth measurements and elevations are in units of feet.

Table 2
Vertical Gradients in Wetlands - September 1997
American Chemical Service, Inc. NPL Site
Griffith, Indiana

Piezometer Nest	Screen Interval		Screen Midpoint	Separation (feet)	Groundwater Elevation			Hydraulic Gradient
	Top	Bottom			Upper	Lower	delta	
P64	629.05	624.10	626.58	5	628.73			
P65	622.20	620.20	621.20			628.84	0.11	0.022
P66	629.45	625.10	627.28	8	628.46			
P67	620.50	618.50	619.50			628.52	0.06	0.007
P68	628.15	623.80	625.98	6	630.67			
P69	621.10	618.60	619.85			630.69	0.02	0.003
P70	628.55	624.20	626.38	6	630.27			
P71	621.00	619.00	620.00			630.48	0.21	0.035

Notes:
(-) = Downward Gradient
(+) = Upward Gradient
Water Levels Collected by Montgomery Watson on September 22, 1997.

Table 3
Vertical Gradients in Lower Aquifer - September 1997
American Chemical Service, Inc. NPL Site
Griffith, Indiana

Well Nest	Screen Interval Top	Screen Interval Bottom	Separation (feet)	Lowest Measurable Gradient	Groundwater Elevation Upper	Groundwater Elevation Upper	Groundwater Elevation Middle	Groundwater Elevation Lower	Groundwater Elevation delta	Vertical Gradients Upper/ Upper	Vertical Gradients Upper/ Middle	Vertical Gradients Middle/ Lower	Vertical Gradients Upper/ Lower
MW7	595.9	590.9			NA	621.54				NA			
PZ44	578.4	573.4	13	0.0008			621.51		-0.03		-0.002		
MW36	552.7	542.7	21	0.0005				621.53	0.02			0.001	WU
MW8	598.2	593.2			NA	error				NA			
MW31	574.6	564.6	19	0.0005			621.19		NA		NA		
MW32	547.3	537.3	17	0.0006				621.20	0.01			WU	WU
MW9	605.9	600.9			NA	621.60				NA			
MW29	585.9	575.9	15	0.0007			621.58		-0.02		-0.001		
MW34	552.8	542.8	23	0.0004				621.61	0.03			0.0013	WU
MW51	611.9	601.9			621.07								
MW10	603.0	598.0	-1	-0.0091		621.22			0.15	-0.136			
MW30	585.0	575.0	13	0.0008			621.06		-0.16		-0.012		
MW33	556.0	546.0	19	0.0005				621.06	0			WU	WU
MW28	588.7	578.7			NA	622.05				NA			
PZ42	568.5	563.5	10	0.0010			622.05		0		WU		
PZ43	554.5	549.5	9	0.0011				622.05	0			WU	WU
MW52	615.6	605.6			NA	621.18				NA			
MW53	555.7	545.7	50	0.0002			NA	621.16	-0.02		NA	NA	-0.0004
MW54	608.1	598.1			NA	620.99				NA			
MW55	547.6	537.6	51	0.0002			NA	621.00	0.01		NA	NA	WU

Notes:

Water levels collected by Montgomery Watson on September 22, 1997.

Positive values indicate upward gradient. Negative values indicate downward gradient

NA = Not Applicable. Calculating vertical gradient only for upper/lower interval at this location.

WU = Within Uncertainty of measurement error.

error = Apparent water level measurement error based on historical data

Table 4
Vertical Gradients Between Upper and Lower Aquifers - September 1997
American Chemical Service, Inc. NPL Site
Griffith, Indiana

Well Designation	Screen Interval		Screen Midpoint	Separation (feet)	Groundwater Elevation			Hydraulic Gradient
	Top	Bottom			Upper	Lower	delta	
P28	634.30	629.30	631.80	11	630.54			
MW8	598.20	593.20	595.70			622.20	-8.34	-0.76
P27	631.02	626.02	628.52	8.5	628.66			
MW9	605.90	600.90	603.40			621.60	-7.06	-0.83
P8	635.36	630.36	632.86	18	633.07			
MW7	595.90	590.90	593.40			621.54	-11.53	-0.64
MW17	632.94	622.94	627.94	28	632.52			
MW28	588.70	578.70	583.70			622.05	-10.47	-0.37

Notes:
(-) = Downward Gradient
(+) = Upward Gradient
Water levels collected by Montgomery Watson on September 22, 1997.

Table 5

Summary of Field Parameter Measurements
American Chemical Service, Inc. NPL Site
Griffith, Indiana

Well ID	Field Parameters				
	pH (std. units)	Conductivity (umhos/cm)	Conductivity (adjusted to 25°C)	Temperature (°C)	Turbidity (NTU)
M1S	6.56	2730	3500	14.0	52
M3S	6.78	1154	1354	17.6	13
M4S	6.26	2150	2432	19.2	99
MW4D	7.26	847	1083	14.1	133
MW6	6.43	1690	2092	15.4	28
MW7	8.28	677	888	13.1	98
MW8	7.80	460	594	13.7	45
MW09	6.60	1265	1574	15.2	91
MW10C	7.14	1620	2093	13.7	251
MW11	6.25	305	385	14.6	315
MW12	6.91	410	534	13.4	155
MW13	7.07	928	1215	13.2	24
MW14	6.48	611	691	19.2	407
MW15	7.01	4350	5397	15.3	15
MW18	6.89	746	930	15.1	5
MW19	7.45	5220	6141	17.5	34
MW21	11.34	646	835	13.7	45
MW22	9.11	3350	4491	12.3	86
MW23	7.04	829	1082	13.3	150
MW24	6.98	1034	1353	13.2	370
MW28	7.34	669	876	13.2	323
MW29	7.13	1060	1410	12.6	19
MW30	7.49	850	1139	12.3	168
MW31	7.46	674	913	11.9	175
MW32	7.44	759	1043	11.4	201
MW33	6.64	2990	3955	12.8	26
MW34	7.36	890	1190	12.4	17
MW36	7.36	827	1106	12.4	97
MW37	7.04	662	825	15.1	86
MW38	6.93	568	719	14.5	143
MW39	6.77	1354	1680	15.3	229
MW40	6.56	285	349	15.8	24
MW41	6.75	386	445	18.4	12
MW42	6.85	955	1134	17.1	335
MW43	6.78	900	1074	16.9	344
MW44	7.54	747	985	12.9	72
MW45	6.81	1280	1465	18.7	10
MW46	6.58	1078	1372	14.3	20
MW47	5.44	146	163	19.7	32
MW48	6.74	931	1138	15.9	57
MW49	6.76	782	929	17.1	27
MW50	7.18	3770	4883	13.6	444
MW51	7.01	1500	1963	13.2	168
MW52	7.01	1500	1974	13.0	92
MW53	6.56	3500	4768	11.7	257
MW54	7.46	1209	1616	12.4	100
MW55	7.21	851	1169	11.4	189

Notes:
NTU = nephelometric turbidity units

Table 6
Upper Aquifer Detections - September 1997
American Chemical Services
Griffith, Indiana

Well	Analyte	Date	Result	DVQ	LQ	Unit
Inorganics						
MW06	Aluminum	9/23/97	180	J	BN	ug/L
MW06	Arsenic	9/23/97	42			ug/L
MW06	Barium	9/23/97	369			ug/L
MW06	Calcium	9/23/97	174000	J		ug/L
MW06	Chromium	9/23/97	33			ug/L
MW06	Cobalt	9/23/97	2		B	ug/L
MW06	Iron	9/23/97	14300			ug/L
MW06	Lead	9/23/97	9			ug/L
MW06	Magnesium	9/23/97	34200	J		ug/L
MW06	Manganese	9/23/97	2170			ug/L
MW06	Nickel	9/23/97	25		B	ug/L
MW06	Potassium	9/23/97	16900	J	E	ug/L
MW06	Sodium	9/23/97	79300	J	E	ug/L
MW11	Aluminum	9/29/97	421			ug/L
MW11	Barium	9/29/97	27		B	ug/L
MW11	Calcium	9/29/97	35700			ug/L
MW11	Chromium	9/29/97	3		B	ug/L
MW11	Cobalt	9/29/97	1		B	ug/L
MW11	Iron	9/29/97	1600			ug/L
MW11	Magnesium	9/29/97	11400			ug/L
MW11	Manganese	9/29/97	525			ug/L
MW11	Nickel	9/29/97	4		B	ug/L
MW11	Potassium	9/29/97	1150	J	BE	ug/L
MW11	Vanadium	9/29/97	1		B	ug/L
MW12	Aluminum	10/1/97	1690			ug/L
MW12	Arsenic	10/1/97	8	J	B	ug/L
MW12	Barium	10/1/97	72		B	ug/L
MW12	Calcium	10/1/97	47400			ug/L
MW12	Chromium	10/1/97	9	J	B	ug/L
MW12	Cobalt	10/1/97	2	J	B	ug/L
MW12	Copper	10/1/97	15	J	B	ug/L
MW12	Iron	10/1/97	24400			ug/L
MW12	Lead	10/1/97	12			ug/L
MW12	Magnesium	10/1/97	17300			ug/L
MW12	Manganese	10/1/97	1210			ug/L
MW12	Nickel	10/1/97	7		B	ug/L
MW12	Potassium	10/1/97	2930	J	BE	ug/L
MW12	Vanadium	10/1/97	20		B	ug/L
MW13	Barium	10/1/97	68		B	ug/L
MW13	Calcium	10/1/97	130000			ug/L
MW13	Iron	10/1/97	4420			ug/L
MW13	Magnesium	10/1/97	37000			ug/L
MW13	Manganese	10/1/97	604			ug/L

Table 6
Upper Aquifer Detections - September 1997
American Chemical Services
Griffith, Indiana

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW13	Potassium	10/1/97	2020	J	BE	ug/L
MW13	Sodium	10/1/97	24600	J	E	ug/L
MW14	Aluminum	9/29/97	7180			ug/L
MW14	Arsenic	9/29/97	9		B	ug/L
MW14	Barium	9/29/97	88		B	ug/L
MW14	Calcium	9/29/97	96400			ug/L
MW14	Chromium	9/29/97	26			ug/L
MW14	Cobalt	9/29/97	8		B	ug/L
MW14	Copper	9/29/97	32			ug/L
MW14	Iron	9/29/97	25900			ug/L
MW14	Lead	9/29/97	20			ug/L
MW14	Magnesium	9/29/97	22000			ug/L
MW14	Manganese	9/29/97	290			ug/L
MW14	Nickel	9/29/97	22		B	ug/L
MW14	Potassium	9/29/97	6440	J	E	ug/L
MW14	Vanadium	9/29/97	21		B	ug/L
MW14	Zinc	9/29/97	59			ug/L
MW15	Aluminum	9/23/97	487	J	N	ug/L
MW15	Arsenic	9/23/97	58			ug/L
MW15	Barium	9/23/97	1360			ug/L
MW15	Calcium	9/23/97	73000	J		ug/L
MW15	Chromium	9/23/97	13			ug/L
MW15	Cobalt	9/23/97	5		B	ug/L
MW15	Copper	9/23/97	13	J	B	ug/L
MW15	Iron	9/23/97	7010			ug/L
MW15	Lead	9/23/97	1		B	ug/L
MW15	Magnesium	9/23/97	74300	J		ug/L
MW15	Manganese	9/23/97	141			ug/L
MW15	Nickel	9/23/97	24		B	ug/L
MW15	Potassium	9/23/97	118000	J	E	ug/L
MW15	Sodium	9/23/97	415000	J	E	ug/L
MW15	Vanadium	9/23/97	1		B	ug/L
MW18	Barium	9/29/97	32		B	ug/L
MW18	Calcium	9/29/97	64200			ug/L
MW18	Chromium	9/29/97	71			ug/L
MW18	Copper	9/29/97	13		B	ug/L
MW18	Lead	9/29/97	14			ug/L
MW18	Magnesium	9/29/97	18900			ug/L
MW18	Manganese	9/29/97	85			ug/L
MW18	Nickel	9/29/97	6		B	ug/L
MW18	Potassium	9/29/97	3220	J	BE	ug/L
MW18	Selenium	9/29/97	4		B	ug/L
MW18	Sodium	9/29/97	67500	J	E	ug/L
MW18	Vanadium	9/29/97	2		B	ug/L

Table 6
Upper Aquifer Detections - September 1997
American Chemical Services
Griffith, Indiana

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW19	Aluminum	9/29/97	402			ug/L
MW19	Arsenic	9/29/97	27			ug/L
MW19	Barium	9/29/97	648			ug/L
MW19	Calcium	9/29/97	85300			ug/L
MW19	Chromium	9/29/97	8		B	ug/L
MW19	Cobalt	9/29/97	2		B	ug/L
MW19	Copper	9/29/97	184			ug/L
MW19	Iron	9/29/97	4660			ug/L
MW19	Lead	9/29/97	2		B	ug/L
MW19	Magnesium	9/29/97	63900			ug/L
MW19	Manganese	9/29/97	243			ug/L
MW19	Nickel	9/29/97	17		B	ug/L
MW19	Potassium	9/29/97	98000	J	E	ug/L
MW19	Sodium	9/29/97	719000	J	E	ug/L
MW37	Aluminum	9/26/97	1310			ug/L
MW37	Arsenic	9/26/97	2		B	ug/L
MW37	Barium	9/26/97	34		B	ug/L
MW37	Beryllium	9/26/97	1		B	ug/L
MW37	Calcium	9/26/97	84200			ug/L
MW37	Chromium	9/26/97	7		B	ug/L
MW37	Cobalt	9/26/97	6		B	ug/L
MW37	Copper	9/26/97	12		B	ug/L
MW37	Iron	9/26/97	9440			ug/L
MW37	Magnesium	9/26/97	26600			ug/L
MW37	Manganese	9/26/97	682			ug/L
MW37	Nickel	9/26/97	14		B	ug/L
MW37	Potassium	9/26/97	2060	J	BE	ug/L
MW37	Sodium	9/26/97	17300			ug/L
MW37	Vanadium	9/26/97	3		B	ug/L
MW38	Aluminum	9/25/97	1280			ug/L
MW38	Arsenic	9/25/97	5		B	ug/L
MW38	Barium	9/25/97	54		B	ug/L
MW38	Calcium	9/25/97	57800			ug/L
MW38	Chromium	9/25/97	9		B	ug/L
MW38	Cobalt	9/25/97	2		B	ug/L
MW38	Copper	9/25/97	14		B	ug/L
MW38	Iron	9/25/97	16200			ug/L
MW38	Magnesium	9/25/97	20500			ug/L
MW38	Manganese	9/25/97	594			ug/L
MW38	Nickel	9/25/97	12		B	ug/L
MW38	Potassium	9/25/97	959	J	BE	ug/L
MW38	Vanadium	9/25/97	14		B	ug/L
MW38	Zinc	9/25/97	56			ug/L
MW39	Aluminum	9/25/97	366			ug/L

Table 6
Upper Aquifer Detections - September 1997
American Chemical Services
Griffith, Indiana

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW39	Barium	9/25/97	78		B	ug/L
MW39	Calcium	9/25/97	110000			ug/L
MW39	Chromium	9/25/97	7		B	ug/L
MW39	Iron	9/25/97	7300			ug/L
MW39	Magnesium	9/25/97	19200			ug/L
MW39	Manganese	9/25/97	802			ug/L
MW39	Nickel	9/25/97	7		B	ug/L
MW39	Potassium	9/25/97	8190	J	E	ug/L
MW39	Sodium	9/25/97	123000			ug/L
MW40	Aluminum	9/29/97	2140			ug/L
MW40	Barium	9/29/97	24		B	ug/L
MW40	Calcium	9/29/97	34100			ug/L
MW40	Chromium	9/29/97	5		B	ug/L
MW40	Cobalt	9/29/97	3		B	ug/L
MW40	Copper	9/29/97	21		B	ug/L
MW40	Iron	9/29/97	6430			ug/L
MW40	Magnesium	9/29/97	14100			ug/L
MW40	Manganese	9/29/97	198			ug/L
MW40	Nickel	9/29/97	10		B	ug/L
MW40	Potassium	9/29/97	2220	J	BE	ug/L
MW40	Vanadium	9/29/97	12		B	ug/L
MW41	Aluminum	9/29/97	486			ug/L
MW41	Barium	9/29/97	28		B	ug/L
MW41	Calcium	9/29/97	55200			ug/L
MW41	Chromium	9/29/97	7		B	ug/L
MW41	Cobalt	9/29/97	1		B	ug/L
MW41	Copper	9/29/97	12		B	ug/L
MW41	Lead	9/29/97	3			ug/L
MW41	Magnesium	9/29/97	18500			ug/L
MW41	Manganese	9/29/97	280			ug/L
MW41	Nickel	9/29/97	8		B	ug/L
MW41	Potassium	9/29/97	964	J	BE	ug/L
MW41	Vanadium	9/29/97	1		B	ug/L
MW42	Aluminum	9/26/97	1880			ug/L
MW42	Arsenic	9/26/97	13			ug/L
MW42	Barium	9/26/97	97		B	ug/L
MW42	Calcium	9/26/97	118000			ug/L
MW42	Chromium	9/26/97	14			ug/L
MW42	Cobalt	9/26/97	2		B	ug/L
MW42	Copper	9/26/97	22		B	ug/L
MW42	Iron	9/26/97	11100			ug/L
MW42	Magnesium	9/26/97	44400			ug/L
MW42	Manganese	9/26/97	697			ug/L
MW42	Nickel	9/26/97	12		B	ug/L

Table 6
Upper Aquifer Detections - September 1997
American Chemical Services
Griffith, Indiana

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW42	Potassium	9/26/97	2350	J	BE	ug/L
MW42	Sodium	9/26/97	18000			ug/L
MW42	Vanadium	9/26/97	4		B	ug/L
MW43	Aluminum	9/26/97	12700			ug/L
MW43	Arsenic	9/26/97	81			ug/L
MW43	Barium	9/26/97	128		B	ug/L
MW43	Beryllium	9/26/97	2		B	ug/L
MW43	Cadmium	9/26/97	1		B	ug/L
MW43	Calcium	9/26/97	134000			ug/L
MW43	Chromium	9/26/97	95			ug/L
MW43	Cobalt	9/26/97	20		B	ug/L
MW43	Copper	9/26/97	75			ug/L
MW43	Iron	9/26/97	47500			ug/L
MW43	Lead	9/26/97	33			ug/L
MW43	Magnesium	9/26/97	63600			ug/L
MW43	Manganese	9/26/97	857			ug/L
MW43	Nickel	9/26/97	82			ug/L
MW43	Potassium	9/26/97	5610	J	E	ug/L
MW43	Selenium	9/26/97	2		B	ug/L
MW43	Vanadium	9/26/97	31		B	ug/L
MW43	Zinc	9/26/97	104			ug/L
MW44	Aluminum	9/29/97	457			ug/L
MW44	Arsenic	9/29/97	11			ug/L
MW44	Barium	9/29/97	112		B	ug/L
MW44	Calcium	9/29/97	83300			ug/L
MW44	Copper	9/29/97	4		B	ug/L
MW44	Iron	9/29/97	2510			ug/L
MW44	Magnesium	9/29/97	34500			ug/L
MW44	Manganese	9/29/97	44			ug/L
MW44	Potassium	9/29/97	1370	J	BE	ug/L
MW44	Sodium	9/29/97	18900	J	E	ug/L
MW45	Arsenic	9/29/97	44			ug/L
MW45	Barium	9/29/97	110		B	ug/L
MW45	Calcium	9/29/97	112000			ug/L
MW45	Cobalt	9/29/97	3		B	ug/L
MW45	Copper	9/29/97	9		B	ug/L
MW45	Iron	9/29/97	15900			ug/L
MW45	Lead	9/29/97	9			ug/L
MW45	Magnesium	9/29/97	28400			ug/L
MW45	Manganese	9/29/97	480			ug/L
MW45	Nickel	9/29/97	10		B	ug/L
MW45	Potassium	9/29/97	8350	J	E	ug/L
MW45	Sodium	9/29/97	101000	J	E	ug/L
MW46	Arsenic	9/25/97	3		B	ug/L

Table 6
Upper Aquifer Detections - September 1997
American Chemical Services
Griffith, Indiana

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW46	Barium	9/25/97	126		B	ug/L
MW46	Calcium	9/25/97	115000			ug/L
MW46	Chromium	9/25/97	2		B	ug/L
MW46	Iron	9/25/97	19000			ug/L
MW46	Magnesium	9/25/97	30900			ug/L
MW46	Manganese	9/25/97	1390			ug/L
MW46	Nickel	9/25/97	4		B	ug/L
MW46	Potassium	9/25/97	1190	J	BE	ug/L
MW46	Sodium	9/25/97	70000			ug/L
MW47	Aluminum	10/1/97	724	J	N	ug/L
MW47	Barium	10/1/97	13		B	ug/L
MW47	Calcium	10/1/97	13700			ug/L
MW47	Cobalt	10/1/97	2		B	ug/L
MW47	Copper	10/1/97	6		B	ug/L
MW47	Iron	10/1/97	569			ug/L
MW47	Lead	10/1/97	8			ug/L
MW47	Magnesium	10/1/97	3990		B	ug/L
MW47	Manganese	10/1/97	17			ug/L
MW47	Nickel	10/1/97	3		B	ug/L
MW47	Potassium	10/1/97	959	J	BE	ug/L
MW47	Vanadium	10/1/97	2		B	ug/L
MW48	Aluminum	9/29/97	330			ug/L
MW48	Arsenic	9/29/97	12			ug/L
MW48	Barium	9/29/97	141		B	ug/L
MW48	Calcium	9/29/97	107000			ug/L
MW48	Chromium	9/29/97	8		B	ug/L
MW48	Cobalt	9/29/97	4		B	ug/L
MW48	Copper	9/29/97	13		B	ug/L
MW48	Iron	9/29/97	24500			ug/L
MW48	Lead	9/29/97	8			ug/L
MW48	Magnesium	9/29/97	15100			ug/L
MW48	Manganese	9/29/97	504			ug/L
MW48	Nickel	9/29/97	19		B	ug/L
MW48	Potassium	9/29/97	8270	J	E	ug/L
MW48	Sodium	9/29/97	42700	J	E	ug/L
MW48	Vanadium	9/29/97	2		B	ug/L
MW49	Aluminum	9/24/97	1130	J	N	ug/L
MW49	Arsenic	9/24/97	37			ug/L
MW49	Barium	9/24/97	120		B	ug/L
MW49	Calcium	9/24/97	80300	J		ug/L
MW49	Chromium	9/24/97	10		B	ug/L
MW49	Cobalt	9/24/97	2		B	ug/L
MW49	Copper	9/24/97	6	J	B	ug/L
MW49	Iron	9/24/97	28200			ug/L

Table 6
Upper Aquifer Detections - September 1997
American Chemical Services
Griffith, Indiana

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW49	Lead	9/24/97	3			ug/L
MW49	Magnesium	9/24/97	9980	J		ug/L
MW49	Manganese	9/24/97	2210			ug/L
MW49	Nickel	9/24/97	12		B	ug/L
MW49	Potassium	9/24/97	5480	J	E	ug/L
MW49	Sodium	9/24/97	25800	J	E	ug/L
MW49	Vanadium	9/24/97	2		B	ug/L
Indicator Parameters						
MW18	Nitrate	9/30/97	5000			ug/L
MW18	Sulfate	9/30/97	103000			ug/L
MW18	TKN	9/30/97	0	J		ug/L
MW18	TOC	9/30/97	2000			ug/L
MW19	Ammonia-N	9/30/97	38000			ug/L
MW19	BOD	9/30/97	3000			ug/L
MW19	Sulfate	9/30/97	12000			ug/L
MW19	TKN	9/30/97	40000			ug/L
MW19	TOC	9/30/97	12000			ug/L
MW38	Ammonia-N	9/25/97	0			ug/L
MW38	BOD	9/25/97	0			ug/L
MW38	Nitrate	9/25/97	0			ug/L
MW38	Orthophosphate	9/25/97	0			ug/L
MW38	Sulfate	9/25/97	22000			ug/L
MW38	TKN	9/25/97	1000			ug/L
MW38	TOC	9/25/97	7000			ug/L
MW39	Ammonia-N	9/25/97	4000			ug/L
MW39	BOD	9/25/97	0			ug/L
MW39	Nitrate	9/25/97	0			ug/L
MW39	Orthophosphate	9/25/97	0			ug/L
MW39	Sulfate	9/25/97	7000			ug/L
MW39	TKN	9/25/97	4000			ug/L
MW39	TOC	9/25/97	5000			ug/L
MW40	Ammonia-N	9/29/97	0			ug/L
MW40	BOD	9/29/97	0			ug/L
MW40	Nitrate	9/29/97	0			ug/L
MW40	Nitrite	9/29/97	0			ug/L
MW40	Orthophosphate	9/29/97	0			ug/L
MW40	Sulfate	9/29/97	51000			ug/L
MW40	TKN	9/29/97	0			ug/L
MW40	TOC	9/29/97	3000			ug/L
MW41	Nitrate	9/30/97	0			ug/L
MW41	Sulfate	9/30/97	30000			ug/L
MW41	TKN	9/30/97	0			ug/L
MW41	TOC	9/30/97	2000			ug/L
MW45	Ammonia-N	9/30/97	1000			ug/L

Table 6
Upper Aquifer Detections - September 1997
American Chemical Services
Griffith, Indiana

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW45	BOD	9/30/97	4000			ug/L
MW45	TKN	9/30/97	2000			ug/L
MW45	TOC	9/30/97	5000			ug/L
MW48	Ammonia-N	9/30/97	7000			ug/L
MW48	BOD	9/30/97	16000			ug/L
MW48	Nitrate	9/30/97	0			ug/L
MW48	TKN	9/30/97	8000			ug/L
MW48	TOC	9/30/97	12000			ug/L
SVOCs						
MW06	2,4-Dimethylphenol	9/23/97	3		J	ug/L
MW06	Bis(2-Chloroethyl)Ether	9/23/97	31			ug/L
MW06	Isophorone	9/23/97	2		J	ug/L
MW06	Phenol	9/23/97	60			ug/L
MW12	Chloropropane)	10/1/97	87			ug/L
MW12	Dimethylphthalate	10/1/97	3	J	J	ug/L
MW12	Phenol	10/1/97	24			ug/L
MW13	Bis(2-Ethylhexyl)Phthalate	10/1/97	2	J	J	ug/L
MW13	Phenol	10/1/97	7	J	J	ug/L
MW14	Bis(2-Ethylhexyl)Phthalate	9/29/97	3	J	J	ug/L
MW14	Phenol	9/29/97	18			ug/L
MW15	Phenol	9/23/97	26			ug/L
MW18	Phenol	9/29/97	21			ug/L
MW19	Bis(2-Chloroethyl)Ether	9/29/97	12			ug/L
MW19	Phenol	9/29/97	31			ug/L
MW39	Bis(2-Chloroethyl)Ether	9/25/97	2		J	ug/L
MW41	Phenol	9/29/97	34			ug/L
MW42	Phenol	9/26/97	41	J		ug/L
MW43	Phenol	9/26/97	75	J		ug/L
MW44	Bis(2-Ethylhexyl)Phthalate	9/29/97	15			ug/L
MW44	Dimethylphthalate	9/29/97	9	J	J	ug/L
MW44	Phenol	9/29/97	11		J	ug/L
MW45	1,2-Dichlorobenzene	9/29/97	5	J	J	ug/L
MW45	1,4-Dichlorobenzene	9/29/97	3	J	J	ug/L
MW45	Chloropropane)	9/29/97	7	J	J	ug/L
MW45	2-Methylnaphthalene	9/29/97	5	J	J	ug/L
MW45	Bis(2-Chloroethyl)Ether	9/29/97	13	J	J	ug/L
MW45	Naphthalene	9/29/97	100			ug/L
MW45	Phenol	9/29/97	50			ug/L
MW46	Bis(2-Chloroethyl)Ether	9/25/97	5		J	ug/L
MW47	Phenol	10/1/97	39			ug/L
MW48	Phenol	9/29/97	8	J	J	ug/L
MW49	Chloropropane)	9/24/97	30			ug/L
MW49	Anthracene	9/24/97	1		J	ug/L
MW49	Bis(2-Chloroethyl)Ether	9/24/97	13		J	ug/L

Table 6
Upper Aquifer Detections - September 1997
American Chemical Services
Griffith, Indiana

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW49	Bis(2-Ethylhexyl)Phthalate	9/24/97	11		J	ug/L
MW49	Isophorone	9/24/97	6		J	ug/L
MW49	Phenol	9/24/97	130			ug/L
VOCs						
MW06	1,2-Dichloroethane	9/23/97	3		J	ug/L
MW06	1,2-Dichloroethene (total)	9/23/97	2		J	ug/L
MW06	Benzene	9/23/97	140			ug/L
MW06	Chlorobenzene	9/23/97	1		J	ug/L
MW06	Chloroethane	9/23/97	140	J		ug/L
MW06	Ethylbenzene	9/23/97	13			ug/L
MW06	Vinyl Chloride	9/23/97	4		J	ug/L
MW06	Xylene (total)	9/23/97	29			ug/L
MW12	Chlorobenzene	10/1/97	5	J	J	ug/L
MW13	Benzene	10/1/97	33			ug/L
MW13	Chloroethane	10/1/97	160			ug/L
MW13	Methylene Chloride	10/1/97	1	J	J	ug/L
MW14	Toluene	9/29/97	1	J	J	ug/L
MW15	Benzene	9/23/97	4		J	ug/L
MW19	Benzene	9/29/97	1	J	J	ug/L
MW19	Chloroethane	9/29/97	18			ug/L
MW39	1,2-Dichloroethene (total)	9/25/97	4		J	ug/L
MW39	Benzene	9/25/97	4		J	ug/L
MW39	Chloroethane	9/25/97	2		J	ug/L
MW45	Benzene	9/29/97	860			ug/L
MW45	Chlorobenzene	9/29/97	26	J	J	ug/L
MW45	Chloroethane	9/29/97	120			ug/L
MW45	Xylene (total)	9/29/97	33	J	J	ug/L
MW46	Benzene	9/25/97	2		J	ug/L
MW48	Benzene	9/29/97	9500			ug/L
MW48	Chloroethane	9/29/97	980			ug/L
MW49	Benzene	9/24/97	8200		E	ug/L
MW49	Chloroethane	9/24/97	810			ug/L

Table 7
Lower Aquifer Detections - September 1997
American Chemical Services
Griffith, Indiana

Well	Analyte	Date	Result	DVQ	LQ	Unit
Inorganics						
MW07	Aluminum	9/24/97	1280	J	N	ug/L
MW07	Barium	9/24/97	132		B	ug/L
MW07	Calcium	9/24/97	102000	J		ug/L
MW07	Chromium	9/24/97	44			ug/L
MW07	Cobalt	9/24/97	2		B	ug/L
MW07	Copper	9/24/97	11	J	B	ug/L
MW07	Iron	9/24/97	5570			ug/L
MW07	Lead	9/24/97	4			ug/L
MW07	Magnesium	9/24/97	28600	J		ug/L
MW07	Manganese	9/24/97	205			ug/L
MW07	Nickel	9/24/97	31		B	ug/L
MW07	Potassium	9/24/97	2190	J	BE	ug/L
MW07	Sodium	9/24/97	20200	J	E	ug/L
MW07	Vanadium	9/24/97	3		B	ug/L
MW08	Aluminum	9/24/97	839	J	N	ug/L
MW08	Arsenic	9/24/97	6		B	ug/L
MW08	Barium	9/24/97	111		B	ug/L
MW08	Calcium	9/24/97	55200	J		ug/L
MW08	Chromium	9/24/97	37			ug/L
MW08	Cobalt	9/24/97	2		B	ug/L
MW08	Iron	9/24/97	3420			ug/L
MW08	Lead	9/24/97	3			ug/L
MW08	Magnesium	9/24/97	17700	J		ug/L
MW08	Manganese	9/24/97	134			ug/L
MW08	Nickel	9/24/97	23		B	ug/L
MW08	Potassium	9/24/97	1410	J	BE	ug/L
MW08	Sodium	9/24/97	13500	J	E	ug/L
MW08	Vanadium	9/24/97	2		B	ug/L
MW09	Aluminum	9/29/97	863			ug/L
MW09	Arsenic	9/29/97	3		B	ug/L
MW09	Barium	9/29/97	349			ug/L
MW09	Calcium	9/29/97	155000			ug/L
MW09	Chromium	9/29/97	12			ug/L
MW09	Cobalt	9/29/97	6		B	ug/L
MW09	Iron	9/29/97	16900			ug/L
MW09	Lead	9/29/97	3		B	ug/L
MW09	Magnesium	9/29/97	26100			ug/L
MW09	Manganese	9/29/97	219			ug/L
MW09	Nickel	9/29/97	13		B	ug/L
MW09	Potassium	9/29/97	11000	J	E	ug/L
MW09	Sodium	9/29/97	66400	J	E	ug/L
MW09	Vanadium	9/29/97	5		B	ug/L
MW10C	Aluminum	9/24/97	6990	J	N	ug/L

Table 7
Lower Aquifer Detections - September 1997
American Chemical Services
Griffith, Indiana

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW10C	Arsenic	9/24/97	10			ug/L
MW10C	Barium	9/24/97	337			ug/L
MW10C	Calcium	9/24/97	141000	J		ug/L
MW10C	Chromium	9/24/97	360			ug/L
MW10C	Cobalt	9/24/97	14		B	ug/L
MW10C	Copper	9/24/97	46	J		ug/L
MW10C	Iron	9/24/97	21300			ug/L
MW10C	Lead	9/24/97	19			ug/L
MW10C	Magnesium	9/24/97	65900	J		ug/L
MW10C	Manganese	9/24/97	447			ug/L
MW10C	Nickel	9/24/97	257			ug/L
MW10C	Potassium	9/24/97	7460	J	E	ug/L
MW10C	Sodium	9/24/97	158000	J	E	ug/L
MW10C	Vanadium	9/24/97	15		B	ug/L
MW10C	Zinc	9/24/97	119	J		ug/L
MW21	Barium	10/1/97	182		B	ug/L
MW21	Calcium	10/1/97	952			ug/L
MW21	Chromium	10/1/97	8		B	ug/L
MW21	Cobalt	10/1/97	1		B	ug/L
MW21	Iron	10/1/97	2750			ug/L
MW21	Lead	10/1/97	1		B	ug/L
MW21	Magnesium	10/1/97	26400			ug/L
MW21	Manganese	10/1/97	166			ug/L
MW21	Potassium	10/1/97	4330	J	BE	ug/L
MW21	Sodium	10/1/97	38600	J	E	ug/L
MW22	Aluminum	9/29/97	579			ug/L
MW22	Barium	9/29/97	628			ug/L
MW22	Calcium	9/29/97	254000			ug/L
MW22	Chromium	9/29/97	20			ug/L
MW22	Cobalt	9/29/97	1		B	ug/L
MW22	Copper	9/29/97	125			ug/L
MW22	Iron	9/29/97	1340			ug/L
MW22	Lead	9/29/97	7			ug/L
MW22	Magnesium	9/29/97	39100			ug/L
MW22	Manganese	9/29/97	49			ug/L
MW22	Nickel	9/29/97	18		B	ug/L
MW22	Potassium	9/29/97	24700	J	E	ug/L
MW22	Sodium	9/29/97	338000	J	E	ug/L
MW23	Aluminum	9/25/97	2440			ug/L
MW23	Arsenic	9/25/97	4		B	ug/L
MW23	Barium	9/25/97	133		B	ug/L
MW23	Calcium	9/25/97	84800			ug/L
MW23	Chromium	9/25/97	19			ug/L
MW23	Cobalt	9/25/97	5		B	ug/L

Table 7
Lower Aquifer Detections - September 1997
American Chemical Services
Griffith, Indiana

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW23	Copper	9/25/97	20		B	ug/L
MW23	Iron	9/25/97	11300			ug/L
MW23	Magnesium	9/25/97	23800			ug/L
MW23	Manganese	9/25/97	377			ug/L
MW23	Nickel	9/25/97	20		B	ug/L
MW23	Potassium	9/25/97	3940	J	BE	ug/L
MW23	Sodium	9/25/97	75300			ug/L
MW23	Vanadium	9/25/97	7		B	ug/L
MW24	Aluminum	9/25/97	9660			ug/L
MW24	Arsenic	9/25/97	8		B	ug/L
MW24	Barium	9/25/97	330			ug/L
MW24	Beryllium	9/25/97	1		B	ug/L
MW24	Calcium	9/25/97	161000			ug/L
MW24	Chromium	9/25/97	62			ug/L
MW24	Cobalt	9/25/97	9		B	ug/L
MW24	Copper	9/25/97	58			ug/L
MW24	Iron	9/25/97	36300			ug/L
MW24	Lead	9/25/97	17			ug/L
MW24	Magnesium	9/25/97	45700			ug/L
MW24	Manganese	9/25/97	566			ug/L
MW24	Nickel	9/25/97	44			ug/L
MW24	Potassium	9/25/97	6240	J	E	ug/L
MW24	Selenium	9/25/97	3		B	ug/L
MW24	Sodium	9/25/97	62900			ug/L
MW24	Vanadium	9/25/97	20		B	ug/L
MW24	Zinc	9/25/97	62			ug/L
MW28	Aluminum	9/23/97	2850	J	N	ug/L
MW28	Arsenic	9/23/97	5		B	ug/L
MW28	Barium	9/23/97	123		B	ug/L
MW28	Beryllium	9/23/97	1		B	ug/L
MW28	Calcium	9/23/97	96800	J		ug/L
MW28	Chromium	9/23/97	71			ug/L
MW28	Cobalt	9/23/97	6		B	ug/L
MW28	Copper	9/23/97	40	J		ug/L
MW28	Iron	9/23/97	7090			ug/L
MW28	Lead	9/23/97	11			ug/L
MW28	Magnesium	9/23/97	39700	J		ug/L
MW28	Manganese	9/23/97	169			ug/L
MW28	Nickel	9/23/97	49			ug/L
MW28	Potassium	9/23/97	2980	J	BE	ug/L
MW28	Sodium	9/23/97	16400	J	E	ug/L
MW28	Vanadium	9/23/97	7		B	ug/L
MW29	Barium	9/29/97	116		B	ug/L
MW29	Calcium	9/29/97	93500			ug/L

Table 7
Lower Aquifer Detections - September 1997
American Chemical Services
Griffith, Indiana

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW29	Iron	9/29/97	5790			ug/L
MW29	Lead	9/29/97	1		B	ug/L
MW29	Magnesium	9/29/97	42500			ug/L
MW29	Manganese	9/29/97	97			ug/L
MW29	Potassium	9/29/97	2950	J	BE	ug/L
MW29	Sodium	9/29/97	73900	J	E	ug/L
MW30	Aluminum	10/1/97	1830	J	N	ug/L
MW30	Arsenic	10/1/97	4		B	ug/L
MW30	Barium	10/1/97	210			ug/L
MW30	Calcium	10/1/97	107000			ug/L
MW30	Chromium	10/1/97	50			ug/L
MW30	Cobalt	10/1/97	15		B	ug/L
MW30	Copper	10/1/97	40			ug/L
MW30	Iron	10/1/97	8590			ug/L
MW30	Lead	10/1/97	8			ug/L
MW30	Magnesium	10/1/97	49200			ug/L
MW30	Manganese	10/1/97	139			ug/L
MW30	Nickel	10/1/97	59			ug/L
MW30	Potassium	10/1/97	3260	J	BE	ug/L
MW30	Sodium	10/1/97	36600			ug/L
MW30	Vanadium	10/1/97	4		B	ug/L
MW31	Aluminum	9/24/97	1890	J	N	ug/L
MW31	Arsenic	9/24/97	8		B	ug/L
MW31	Barium	9/24/97	245			ug/L
MW31	Calcium	9/24/97	94900	J		ug/L
MW31	Chromium	9/24/97	89			ug/L
MW31	Cobalt	9/24/97	4		B	ug/L
MW31	Copper	9/24/97	44	J		ug/L
MW31	Iron	9/24/97	6230			ug/L
MW31	Lead	9/24/97	8			ug/L
MW31	Magnesium	9/24/97	34100	J		ug/L
MW31	Manganese	9/24/97	174			ug/L
MW31	Nickel	9/24/97	66			ug/L
MW31	Potassium	9/24/97	2410	J	BE	ug/L
MW31	Sodium	9/24/97	19800	J	E	ug/L
MW31	Vanadium	9/24/97	4		B	ug/L
MW32	Aluminum	9/24/97	780	J	N	ug/L
MW32	Barium	9/24/97	169		B	ug/L
MW32	Calcium	9/24/97	75200	J		ug/L
MW32	Chromium	9/24/97	21			ug/L
MW32	Cobalt	9/24/97	1		B	ug/L
MW32	Copper	9/24/97	13	J	B	ug/L
MW32	Iron	9/24/97	4860			ug/L
MW32	Lead	9/24/97	4			ug/L

Table 7
Lower Aquifer Detections - September 1997
American Chemical Services
Griffith, Indiana

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW32	Magnesium	9/24/97	47500	J		ug/L
MW32	Manganese	9/24/97	78			ug/L
MW32	Nickel	9/24/97	19		B	ug/L
MW32	Potassium	9/24/97	4630	J	BE	ug/L
MW32	Sodium	9/24/97	35400	J	E	ug/L
MW32	Vanadium	9/24/97	1		B	ug/L
MW33	Arsenic	10/1/97	20			ug/L
MW33	Barium	10/1/97	1280			ug/L
MW33	Calcium	10/1/97	290000			ug/L
MW33	Chromium	10/1/97	10		B	ug/L
MW33	Cobalt	10/1/97	3		B	ug/L
MW33	Copper	10/1/97	15		B	ug/L
MW33	Iron	10/1/97	27800			ug/L
MW33	Lead	10/1/97	2		B	ug/L
MW33	Magnesium	10/1/97	65900			ug/L
MW33	Manganese	10/1/97	128			ug/L
MW33	Nickel	10/1/97	22		B	ug/L
MW33	Potassium	10/1/97	15500	J	E	ug/L
MW33	Sodium	10/1/97	178000	J	E	ug/L
MW34	Barium	9/29/97	176		B	ug/L
MW34	Calcium	9/29/97	84300			ug/L
MW34	Chromium	9/29/97	17			ug/L
MW34	Copper	9/29/97	13		B	ug/L
MW34	Iron	9/29/97	3190			ug/L
MW34	Lead	9/29/97	3		B	ug/L
MW34	Magnesium	9/29/97	51000			ug/L
MW34	Manganese	9/29/97	42			ug/L
MW34	Nickel	9/29/97	17		B	ug/L
MW34	Potassium	9/29/97	4480	J	BE	ug/L
MW34	Sodium	9/29/97	37200	J	E	ug/L
MW36	Aluminum	9/24/97	4770	J	N	ug/L
MW36	Arsenic	9/24/97	3		B	ug/L
MW36	Barium	9/24/97	242			ug/L
MW36	Calcium	9/24/97	75400	J		ug/L
MW36	Chromium	9/24/97	81			ug/L
MW36	Cobalt	9/24/97	3		B	ug/L
MW36	Copper	9/24/97	38	J		ug/L
MW36	Iron	9/24/97	9550			ug/L
MW36	Lead	9/24/97	9			ug/L
MW36	Magnesium	9/24/97	46600	J		ug/L
MW36	Manganese	9/24/97	122			ug/L
MW36	Nickel	9/24/97	68			ug/L
MW36	Potassium	9/24/97	4690	J	BE	ug/L
MW36	Sodium	9/24/97	40600	J	E	ug/L

Table 7
Lower Aquifer Detections - September 1997
American Chemical Services
Griffith, Indiana

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW36	Vanadium	9/24/97	3		B	ug/L
MW50	Aluminum	10/1/97	12000	J	N	ug/L
MW50	Arsenic	10/1/97	7		B	ug/L
MW50	Barium	10/1/97	285			ug/L
MW50	Calcium	10/1/97	191000			ug/L
MW50	Chromium	10/1/97	130			ug/L
MW50	Cobalt	10/1/97	12		B	ug/L
MW50	Copper	10/1/97	36			ug/L
MW50	Iron	10/1/97	20200			ug/L
MW50	Lead	10/1/97	14			ug/L
MW50	Magnesium	10/1/97	87400			ug/L
MW50	Manganese	10/1/97	408			ug/L
MW50	Nickel	10/1/97	105			ug/L
MW50	Potassium	10/1/97	21000	J	E	ug/L
MW50	Sodium	10/1/97	481000			ug/L
MW50	Vanadium	10/1/97	19		B	ug/L
MW50	Zinc	10/1/97	57			ug/L
MW51	Aluminum	10/1/97	1040	J	N	ug/L
MW51	Barium	10/1/97	397			ug/L
MW51	Calcium	10/1/97	138000			ug/L
MW51	Chromium	10/1/97	8		B	ug/L
MW51	Cobalt	10/1/97	2		B	ug/L
MW51	Copper	10/1/97	7		B	ug/L
MW51	Iron	10/1/97	8660			ug/L
MW51	Magnesium	10/1/97	61600			ug/L
MW51	Manganese	10/1/97	128			ug/L
MW51	Nickel	10/1/97	11		B	ug/L
MW51	Potassium	10/1/97	3880	J	BE	ug/L
MW51	Sodium	10/1/97	108000	J	E	ug/L
MW51	Vanadium	10/1/97	2		B	ug/L
MW52	Aluminum	9/25/97	750			ug/L
MW52	Arsenic	9/25/97	42			ug/L
MW52	Barium	9/25/97	321			ug/L
MW52	Beryllium	9/25/97	1		B	ug/L
MW52	Calcium	9/25/97	114000			ug/L
MW52	Chromium	9/25/97	9		B	ug/L
MW52	Cobalt	9/25/97	2		B	ug/L
MW52	Copper	9/25/97	10		B	ug/L
MW52	Iron	9/25/97	5340			ug/L
MW52	Magnesium	9/25/97	44100			ug/L
MW52	Manganese	9/25/97	207			ug/L
MW52	Nickel	9/25/97	12		B	ug/L
MW52	Potassium	9/25/97	3640	J	BE	ug/L
MW52	Selenium	9/25/97	2		B	ug/L

Table 7
Lower Aquifer Detections - September 1997
American Chemical Services
Griffith, Indiana

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW52	Sodium	9/25/97	145000			ug/L
MW52	Vanadium	9/25/97	2		B	ug/L
MW53	Aluminum	9/25/97	7490			ug/L
MW53	Antimony	9/25/97	2		B	ug/L
MW53	Arsenic	9/25/97	10			ug/L
MW53	Barium	9/25/97	1520			ug/L
MW53	Beryllium	9/25/97	2		B	ug/L
MW53	Calcium	9/25/97	230000			ug/L
MW53	Chromium	9/25/97	58			ug/L
MW53	Cobalt	9/25/97	7		B	ug/L
MW53	Copper	9/25/97	40			ug/L
MW53	Iron	9/25/97	27400			ug/L
MW53	Lead	9/25/97	17			ug/L
MW53	Magnesium	9/25/97	102000			ug/L
MW53	Manganese	9/25/97	417			ug/L
MW53	Nickel	9/25/97	62			ug/L
MW53	Potassium	9/25/97	29000	J	E	ug/L
MW53	Sodium	9/25/97	380000			ug/L
MW53	Vanadium	9/25/97	4		B	ug/L
MW53	Zinc	9/25/97	79			ug/L
MW54	Aluminum	9/24/97	1980	J	N	ug/L
MW54	Arsenic	9/24/97	5		B	ug/L
MW54	Barium	9/24/97	153		B	ug/L
MW54	Calcium	9/24/97	126000	J		ug/L
MW54	Chromium	9/24/97	46			ug/L
MW54	Cobalt	9/24/97	3		B	ug/L
MW54	Copper	9/24/97	39	J		ug/L
MW54	Iron	9/24/97	5480			ug/L
MW54	Lead	9/24/97	6			ug/L
MW54	Magnesium	9/24/97	52000	J		ug/L
MW54	Manganese	9/24/97	256			ug/L
MW54	Nickel	9/24/97	37		B	ug/L
MW54	Potassium	9/24/97	2750	J	BE	ug/L
MW54	Sodium	9/24/97	28700	J	E	ug/L
MW54	Vanadium	9/24/97	3		B	ug/L
MW55	Aluminum	9/24/97	6100	J	N	ug/L
MW55	Arsenic	9/24/97	6		B	ug/L
MW55	Barium	9/24/97	219			ug/L
MW55	Beryllium	9/24/97	1		B	ug/L
MW55	Calcium	9/24/97	78200	J		ug/L
MW55	Chromium	9/24/97	60			ug/L
MW55	Cobalt	9/24/97	4		B	ug/L
MW55	Copper	9/24/97	54	J		ug/L
MW55	Iron	9/24/97	5850			ug/L

Table 7
Lower Aquifer Detections - September 1997
American Chemical Services
Griffith, Indiana

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW55	Lead	9/24/97	17			ug/L
MW55	Magnesium	9/24/97	47700	J		ug/L
MW55	Manganese	9/24/97	388			ug/L
MW55	Nickel	9/24/97	61			ug/L
MW55	Potassium	9/24/97	6660	J	E	ug/L
MW55	Sodium	9/24/97	49500	J	E	ug/L
MW55	Vanadium	9/24/97	5		B	ug/L
SVOCs						
MW07	Phenol	9/24/97	48			ug/L
MW08	Bis(2-Chloroethyl)Ether	9/24/97	4		J	ug/L
MW08	Phenol	9/24/97	140			ug/L
MW09	Bis(2-Chloroethyl)Ether	9/29/97	35			ug/L
MW09	Isophorone	9/29/97	1	J	J	ug/L
MW10C	Bis(2-Ethylhexyl)Phthalate	9/24/97	8		J	ug/L
MW10C	Isophorone	9/24/97	1		J	ug/L
MW10C	Phenol	9/24/97	20			ug/L
MW21	Phenol	10/1/97	20			ug/L
MW22	Phenol	9/29/97	330			ug/L
MW28	Phenol	9/23/97	37	J		ug/L
MW29	Bis(2-Ethylhexyl)Phthalate	9/29/97	6	J	J	ug/L
MW29	Phenol	9/29/97	43			ug/L
MW30	Phenol	10/1/97	17			ug/L
MW31	Bis(2-Ethylhexyl)Phthalate	9/24/97	6		J	ug/L
MW31	Phenol	9/24/97	130			ug/L
MW32	Bis(2-Chloroethyl)Ether	9/24/97	2		J	ug/L
MW32	Bis(2-Ethylhexyl)Phthalate	9/24/97	10		J	ug/L
MW32	Phenol	9/24/97	110			ug/L
MW33	Bis(2-Ethylhexyl)Phthalate	10/1/97	76			ug/L
MW33	Isophorone	10/1/97	1	J	J	ug/L
MW33	Phenol	10/1/97	65			ug/L
MW34	Bis(2-Ethylhexyl)Phthalate	9/29/97	0		J	ug/L
MW34	Phenol	9/29/97	340			ug/L
MW36	Bis(2-Ethylhexyl)Phthalate	9/24/97	6		J	ug/L
MW36	Phenol	9/24/97	240			ug/L
MW50	Phenol	10/1/97	340			ug/L
MW51	Phenol	10/1/97	18			ug/L
MW53	Isophorone	9/25/97	5		J	ug/L
MW53	Phenol	9/25/97	50	J		ug/L
MW54	Phenol	9/24/97	160			ug/L
MW55	Bis(2-Ethylhexyl)Phthalate	9/24/97	32			ug/L
MW55	Phenol	9/24/97	7		J	ug/L
VOCs						
MW07	Toluene	9/24/97	1		J	ug/L
MW09	Benzene	9/29/97	290			ug/L

Table 7
Lower Aquifer Detections - September 1997
American Chemical Services
Griffith, Indiana

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW09	Chloroethane	9/29/97	1800			ug/L
MW10C	Chloroethane	9/24/97	420			ug/L
MW33	Benzene	10/1/97	1	J	J	ug/L
MW34	Toluene	9/29/97	1	J	J	ug/L
MW53	4-Methyl-2-Pentanone	9/25/97	5	J	J	ug/L
MW53	Benzene	9/25/97	2		J	ug/L
MW53	Toluene	9/25/97	1		J	ug/L
MW55	Toluene	9/24/97	1		J	ug/L

Table 8
Summary of Residential Well Sampling Results -- October 1997
American Chemical Service NPL Site
Griffith, Indiana

Parameter	ACS-PWD-02 10/2/97			ACS-PWK-02 10/2/97			ACS-PWRC-02 10/2/97			ACS-PWRE-02 10/2/97			ACS-PWY-02 10/2/97			ACS-PWY-92 10/2/97			ACS-PWZ-02 10/2/97		
	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
VOLATILES (ug/L)																					
Acetone		U/R	5		U/R	5		U/R	5		U/R	5		NA			U/R	5		U/R	5
Benzene		U/	1		U/	1		U/	1		U/	1		NA			U/	1		U/	1
Bromochloromethane		U/	1		U/	1		U/	1		U/	1		NA			U/	1		U/	1
Bromodichloromethane		U/	1		U/	1		U/	1		U/	1		NA			U/	1		U/	1
Bromoform		U/	1		U/	1		U/	1		U/	1		NA			U/	1		U/	1
Bromomethane		U/	1		U/	1		U/	1		U/	1		NA			U/	1		U/	1
2-Butanone		U/R	5		U/R	5		U/R	5		U/R	5		NA			U/R	5		U/R	5
Carbon Disulfide		U/	1		U/	1		U/	1		U/	1		NA			U/	1		U/	1
Carbon Tetrachloride		U/	1		U/	1		U/	1		U/	1		NA			U/	1		U/	1
Chlorobenzene		U/	1		U/	1		U/	1		U/	1		NA			U/	1		U/	1
Chloroethane		U/	1		U/	1		U/	1		U/	1		NA			U/	1		U/	1
Chloroform		U/	1		U/	1		U/	1		U/	1		NA			U/	1		U/	1
Chloromethane		U/R	1		U/R	1		U/R	1		U/R	1		NA			U/R	1		U/R	1
Dibromochloromethane		U/	1		U/	1		U/	1		U/	1		NA			U/	1		U/	1
1,2-Dibromo-3-Chloropropane		U/	1		U/	1		U/	1		U/	1		NA			U/	1		U/	1
1,2-Dibromoethane		U/	1		U/	1		U/	1		U/	1		NA			U/	1		U/	1
1,2-Dichlorobenzene		U/	1		U/	1		U/	1		U/	1		NA			U/	1		U/	1
1,3-Dichlorobenzene		U/	1		U/	1		U/	1		U/	1		NA			U/	1		U/	1
1,4-Dichlorobenzene		U/	1		U/	1		U/	1		U/	1		NA			U/	1		U/	1
1,1-Dichloroethane		U/	1		U/	1		U/	1		U/	1		NA			U/	1		U/	1
1,2-Dichloroethane		U/	1		U/	1		U/	1		U/	1		NA			U/	1		U/	1
1,1-Dichloroethene		U/	1		U/	1		U/	1		U/	1		NA			U/	1		U/	1
Cis-1,2-Dichloroethene		U/	1		U/	1		U/	1		U/	1		NA			U/	1		U/	1
Trans-1,2-Dichloroethene		U/	1		U/	1		U/	1		U/	1		NA			U/	1		U/	1
1,2-Dichloropropane		U/	1		U/	1		U/	1		U/	1		NA			U/	1		U/	1
Cis-1,3-Dichloropropene		U/	1		U/	1		U/	1		U/	1		NA			U/	1		U/	1
Trans-1,3-Dichloropropene		U/	1		U/	1		U/	1		U/	1		NA			U/	1		U/	1
Ethylbenzene		U/	1		U/	1		U/	1		U/	1		NA			U/	1		U/	1
2-Hexanone		U/	5		U/	5		U/	5		U/	5		NA			U/	5		U/	5
Methylene Chloride		U/	2		U/	2	0.2	J/	2	0.2	J/	2		NA			U/	2		U/	2
4-Methyl-2-Pentanone		U/	5		U/	5		U/	5		U/	5		NA			U/	5		U/	5
Styrene		U/	1		U/	1		U/	1		U/	1		NA			U/	1		U/	1
1,1,2,2-Tetrachloroethane		U/	1		U/	1		U/	1		U/	1		NA			U/	1		U/	1
Tetrachloroethene		U/	1		U/	1		U/	1		U/	1		NA			U/	1		U/	1
Toluene		U/	1		U/	1		U/	1		U/	1		NA			U/	1		U/	1
1,1,1-Trichloroethane		U/	1		U/	1		U/	1		U/	1		NA			U/	1		U/	1
1,1,2-Trichloroethane		U/	1		U/	1		U/	1		U/	1		NA			U/	1		U/	1
Trichloroethene		U/	1	0.2	J/	1		U/	1		U/	1		NA			U/	1		U/	1
Vinyl Chloride		U/	1		U/	1		U/	1		U/	1		NA			U/	1		U/	1
Xylene (Total)		U/	5		U/	5		U/	5		U/	5		NA			U/	5		U/	5

Table 8
Summary of Residential Well Sampling Results -- October 1997
American Chemical Service NPL Site
Griffith, Indiana

Parameter	ACS-PWD-02 10/2/97			ACS-PWK-02 10/2/97			ACS-PWRC-02 10/2/97			ACS-PWRE-02 10/2/97			ACS-PWY-02 10/2/97			ACS-PWY-92 10/2/97			ACS-PWZ-02 10/2/97		
	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
Semivolatiles (ug/L)																					
Bis(2-Chloroethyl)Ether	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5
Phenol	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5
2-Chlorophenol	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5
1,3-Dichlorobenzene	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5
1,4-Dichlorobenzene	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5
1,2-Dichlorobenzene	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5
2-Methylphenol	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5
2,2'-oxybis(1-Chloropropane)	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5
4-Methylphenol	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5
N-Nitroso-Di-N-Propylamine	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5
Hexachloroethane	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5
Nitrobenzene	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5
Isophorone	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5
2-Nitrophenol	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5
2,4-Dimethylphenol	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5
Bis(2-Chloroethoxy)Methane	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5
2,4-Dichlorophenol	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5
1,2,4-Trichlorobenzene	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5
Naphthalene	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5
4-Chloroaniline	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5
Hexachlorobutadiene	U/UJ		5	U/UJ		5	U/UJ		5	U/UJ		5	U/UJ		5	U/UJ		5	U/UJ		5
4-Chloro-3-Methylphenol	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5
2-Methylnaphthalene	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5
Hexachlorocyclopentadiene	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5
2,4,6-Trichlorophenol	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5
2,4,5-Trichlorophenol	U/		20	U/		20	U/		20	U/		20	U/		20	U/		20	U/		20
2-Chloronaphthalene	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5
2-Nitroaniline	U/		20	U/		20	U/		20	U/		20	U/		20	U/		20	U/		20
Dimethylphthalate	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5
Acenaphthylene	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5
2,6-Dinitrotoluene	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5
3-Nitroaniline	U/		20	U/		20	U/		20	U/		20	U/		20	U/		20	U/		20
Acenaphthene	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5
2,4-Dinitrophenol	U/		20	U/		20	U/		20	U/		20	U/		20	U/		20	U/		20
4-Nitrophenol	U/		20	U/		20	U/		20	U/		20	U/		20	U/		20	U/		20
Dibenzofuran	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5
2,4-Dinitrotoluene	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5
Diethylphthalate	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5
4-Chlorophenyl-phenylether	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5
Fluorene	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5	U/		5

Table 8
Summary of Residential Well Sampling Results -- October 1997
American Chemical Service NPL Site
Griffith, Indiana

Parameter	ACS-PWD-02 10/2/97			ACS-PWK-02 10/2/97			ACS-PWRC-02 10/2/97			ACS-PWRE-02 10/2/97			ACS-PWY-02 10/2/97			ACS-PWY-92 10/2/97			ACS-PWZ-02 10/2/97		
	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
Semivolatiles (ug/L) (continued)																					
4-Nitroaniline		U/	20		U/	20		U/	20		U/	20		U/	20		U/	20		U/	20
4,6-Dinitro-2-Methylphenol		U/	20		U/	20		U/	20		U/	20		U/	20		U/	20		U/	20
N-Nitrosodiphenylamine		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5
4-Bromophenyl-phenylether		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5
Hexachlorobenzene		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5
Pentachlorophenol		U/	20		U/	20		U/	20		U/	20		U/	20		U/	20		U/	20
Phenanthrene		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5
Anthracene		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5
Carbazole		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5
Di-N-Butylphthalate		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5
Fluoranthene		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5
Pyrene		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5
Butylbenzylphthalate		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5
3,3'-Dichlorobenzidine		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5
Benzo(a)Anthracene		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5
Chrysene		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5
Bis(2-Ethylhexyl)Phthalate		U/	5		U/	5		J/U	5		U/	5		U/	5		U/	5		U/	5
Di-N-Octylphthalate		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5
Benzo(b)Fluoranthene		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5
Benzo(k)Fluoranthene		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5
Benzo(a)Pyrene		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5
Indeno(1,2,3-Cd)Pyrene		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5
Dibenz(A,H)Anthracene		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5
Benzo(G,H,I)Perylene		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5

Table 8
Summary of Residential Well Sampling Results -- October 1997
American Chemical Service NPL Site
Griffith, Indiana

Parameter	ACS-PWD-02 10/2/97 CONC	LQ/DVQ	RDL	ACS-PWK-02 10/2/97 CONC	LQ/DVQ	RDL	ACS-PWRC-02 10/2/97 CONC	LQ/DVQ	RDL	ACS-PWRE-02 10/2/97 CONC	LQ/DVQ	RDL	ACS-PWY-02 10/2/97 CONC	LQ/DVQ	RDL	ACS-PWY-92 10/2/97 CONC	LQ/DVQ	RDL	ACS-PWZ-02 10/2/97 CONC	LQ/DVQ	RDL
Pesticide/PCBs (ug/L)																					
alpha-BHC		U/	0.01		U/	0.01		U/	0.01		U/	0.01		U/	0.01		U/	0.01		U/	0.01
beta-BHC		U/	0.01		U/	0.01		U/	0.01		U/	0.01		U/	0.01		U/	0.01		U/	0.01
delta-BHC		U/	0.01		U/	0.01		U/	0.01		U/	0.01		U/	0.01		U/	0.01		U/	0.01
gamma-BHC (Lindane)		U/	0.01		U/	0.01		U/	0.01		U/	0.01		U/	0.01		U/	0.01		U/	0.01
Heptachlor		U/	0.01		U/	0.01		U/	0.01		U/	0.01		U/	0.01		U/	0.01		U/	0.01
Aldrin		U/	0.01		U/	0.01		U/	0.01		U/	0.01		U/	0.01		U/	0.01		U/	0.01
Heptachlor epoxide		U/	0.01		U/	0.01		U/	0.01		U/	0.01		U/	0.01		U/	0.01		U/	0.01
Endosulfan I		U/	0.01		U/	0.01		U/	0.01		U/	0.01		U/	0.01		U/	0.01		U/	0.01
Dieldrin		U/	0.02		U/	0.02		U/	0.02		U/	0.02		U/	0.02		U/	0.02		U/	0.02
4,4'-DDE		U/	0.02		U/	0.02		U/	0.02		U/	0.02		U/	0.02		U/	0.02		U/	0.02
Endrin		U/	0.02		U/	0.02		U/	0.02		U/	0.02		U/	0.02		U/	0.02		U/	0.02
Endosulfan II		U/	0.02		U/	0.02		U/	0.02		U/	0.02		U/	0.02		U/	0.02		U/	0.02
4,4'-DDD		U/	0.02		U/	0.02		U/	0.02		U/	0.02		U/	0.02		U/	0.02		U/	0.02
Endosulfan sulfate		U/	0.02		U/	0.02		U/	0.02		U/	0.02		U/	0.02		U/	0.02		U/	0.02
4,4'-DDT		U/	0.02		U/	0.02		U/	0.02		U/	0.02		U/	0.02		U/	0.02		U/	0.02
Methoxychlor		U/	0.1		U/	0.1		U/	0.1		U/	0.1		U/	0.1		U/	0.1		U/	0.1
Endrin ketone		U/	0.02		U/	0.02		U/	0.02		U/	0.02		U/	0.02		U/	0.02		U/	0.02
Endrin aldehyde		U/	0.02		U/	0.02		U/	0.02		U/	0.02		U/	0.02		U/	0.02		U/	0.02
alpha-Chlordane		U/	0.01		U/	0.01		U/	0.01		U/	0.01		U/	0.01		U/	0.01		U/	0.01
gamma-Chlordane		U/	0.01		U/	0.01		U/	0.01		U/	0.01		U/	0.01		U/	0.01		U/	0.01
Toxaphene		U/	1		U/	1		U/	1		U/	1		U/	1		U/	1		U/	1
Aroclor-1016		U/	0.2		U/	0.2		U/	0.2		U/	0.2		U/	0.2		U/	0.2		U/	0.2
Aroclor-1221		U/	0.4		U/	0.4		U/	0.4		U/	0.4		U/	0.4		U/	0.4		U/	0.4
Aroclor-1232		U/	0.2		U/	0.2		U/	0.2		U/	0.2		U/	0.2		U/	0.2		U/	0.2
Aroclor-1242		U/	0.2		U/	0.2		U/	0.2		U/	0.2		U/	0.2		U/	0.2		U/	0.2
Aroclor-1248		U/	0.2		U/	0.2		U/	0.2		U/	0.2		U/	0.2		U/	0.2		U/	0.2
Aroclor-1254		U/	0.2		U/	0.2		U/	0.2		U/	0.2		U/	0.2		U/	0.2		U/	0.2
Aroclor-1260		U/	0.2		U/	0.2		U/	0.2		U/	0.2		U/	0.2		U/	0.2		U/	0.2

Table 8
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American Chemical Service NPL Site
Griffith, Indiana

Parameter	ACS-PWD-02 10/2/97			ACS-PWK-02 10/2/97			ACS-PWRC-02 10/2/97			ACS-PWRE-02 10/2/97			ACS-PWY-02 10/2/97			ACS-PWY-92 10/2/97			ACS-PWZ-02 10/2/97		
	CONC	LQ/DYQ	RDL	CONC	LQ/DYQ	RDL	CONC	LQ/DYQ	RDL	CONC	LQ/DYQ	RDL	CONC	LQ/DYQ	RDL	CONC	LQ/DYQ	RDL	CONC	LQ/DYQ	RDL
Metals (ug/L)																					
Aluminum		BN/UJ	11.7	103	BN/J	10		UN/UJ	10		UN/UJ	10		UN/UJ	10		UN/UJ	10		UN/UJ	10
Antimony		U/	1		U/	1		U/	1		U/	1		U/	1		U/	1		U/	1
Arsenic		U/	2		U/	2		U/	2		U/	2		U/	2		U/	2		U/	2
Barium	150	B/	1	48.5	B/	1	178	B/	1	2.7	B/	1	131	B/	1	132	B/	1	13.2	B/	1
Beryllium		U/	1		U/	1		U/	1		U/	1		U/	1		U/	1		U/	1
Cadmium		U/	1		U/	1		U/	1		U/	1		U/	1		U/	1		U/	1
Calcium	95300	/	8	89500	/	8	96800	/	8	1470	B/	8	80600	/	8	82900	/	8	45100	/	8
Chromium		U/	1		U/	1		U/	1		U/	1		U/	1		B/U	3.8		U/	1
Cobalt		U/	1		U/	1		U/	1		U/	1		U/	1		U/	1		U/	1
Copper	71.2	/	1	102	/	1	3	B/	1	12.1	B/	1	2.7	B/	1	1.3	B/	1	14.2	B/	1
Iron	2750	/	6	150	/	6	2270	/	6	114	/	6	2560	/	6	2540	/	6		B/U	39.8
Lead	10.2	/	1	11.3	/	1		U/	1		B/U	1.2		U/	1		U/	1		B/U	2
Magnesium	49600	/	3	30500	/	3	53900	/	3	923	B/	3	42700	/	3	43500	/	3	16000	/	3
Manganese	46.2	/	1	854	/	1	17.3	/	1		U/	1	29.3	/	1	28.2	/	1		U/	1
Mercury		U/	0.2		U/	0.2		U/	0.2		U/	0.2		U/	0.2		U/	0.2		U/	0.2
Nickel	4.3	B/	1	2.7	B/	1	1.2	B/	1		U/	1	5.5	B/	1	1.3	B/	1	1.1	B/	1
Potassium	1950	BE/J	16	5310	E/J	16	3450	BE/J	16	2510	BE/J	16	2730	BE/J	16	2800	BE/J	16	3840	BE/J	16
Selenium		U/	2		U/	2		U/	2		U/	2	2.2	B/	2		U/	2		U/	2
Silver		U/	1		U/	1		U/	1		U/	1		U/	1		U/	1		U/	1
Sodium	24100	/	22	108000	/	22	29100	/	22	191000	/	22	22300	/	22	24300	/	22	9430	/	22
Thallium		U/	2		U/	2		B/U	2.6		B/U	2		B/U	2.6		U/	2		U/	2
Vanadium		U/	1		U/	1		U/	1		U/	1		U/	1		U/	1		U/	1
Zinc	1140	/	1	64.8	/	1		B/U	17.3		B/U	10.1		/U	23.4		/U	26.6	158	/	1
Cyanide		U/	10		U/	10		U/	10		U/	10		U/	10		U/	10		U/	10

Table 9
Proposed Groundwater Level Gauging Points
American Chemical Service, Inc. NPL Site

Lower Aquifer Wells

Well Designation	Reference Points			Date _____		Notes
	East	North	TOIC	Depth	Elevation	
MW8	5934	7506	640.43			
MW31	5907	7505	641.64			
MW32	5902	7507	641.84			
MW9R	4893	6990	639.05			
MW29	4886	7012	638.06			
MW30	5194	7774	634.25			
MW33	5189	7774	634.13			
MW51	5198	7767	634.16			
MW10C	5229	7554	637.45			
MW24	4596	8033	635.22			
MW28	5657	5696	648.77			
MW50	5269	5383	649.43			
MW52	4996	7814	632.74			
MW53	4977	7833	632.87			
MW54	5590	7592	636.05			
MW55	5595	7604	636.63			

Upper Aquifer Wells

Well Designation	Reference Points			Date _____		Notes
	East	North	TOIC	Depth	Elevation	
MW2	5033	6839	638.05			
MW4	6112	7126	641.05			
MW6	5298	5520	655.28			
MW11	6377	7329	640.47			
MW12	6019	6352	642.74			
MW13	5050	7814	634.08			
MW14	4882	6995	638.56			
MW15	4721	5003	637.89			
MW18	5836	5746	644.89			
MW19	5231	4943	635.78			
MW37	5395	7976	636.78			
MW38	5903	8216	636.51			
MW39	6253	7947	637.77			
MW40	6349	6831	639.46			
MW41	6242	4517	632.74			
MW42	6264	3808	632.32			
MW43	5880	3719	633.56			
MW44	5390	4303	633.04			
MW45	5830	4388	635.35			
MW46	4526	7424	633.32			
MW47	5958	5084	640.54			
MW48	5669	7814	636.36			
MW49	5551	7650	637.00			

Table 9
Proposed Groundwater Level Gauging Points
American Chemical Service, Inc. NPL Site

Staff Gauges

Well Designation	Reference Points			Date _____		Notes
	East	North	TOSG	Depth	Elevation	
SG8R	5409	5252	634.70			

Upper Aquifer Piezometers

Well Designation	Reference Points			Date _____		Notes
	East	North	TOC	Depth	Elevation	
P23	4689	7018	636.18			
P24	5002	7178	636.06			
P25	5131	7510	635.01			
P26	4764	7309	634.23			
P27	4904	7020	639.70			
P28	5883	7486	644.53			
P40	5931	7241	638.77			
P41	5663	7377	637.23			

New Piezometers - Upper Aquifer

Well Designation	Reference Points			Date _____		Notes
	East	North	TOC	Depth	Elevation	
P81	5577	7581	636.19			
P82	5577	7572	635.77			
P83	5577	7562	635.95			
P84	5322	7603	634.35			
P85	5326	7594	634.08			
P86	5329	7585	634.41			
P87	5121	7466	633.88			
P88	5130	7460	633.90			
P89	5137	7454	634.02			
P90	4881	7152	632.59			
P91	4889	7145	632.97			
P92	4896	7138	633.63			
P93	5136	7067	638.79			
P94	5146	7061	638.98			
P95	5146	6532	638.58			
P96	5156	6537	638.39			
P97	5098	6283	638.39			
P98	5130	6279	639.35			
P99	5020	5945	644.35			
P100	5031	5948	643.93			
P101	5550	5979	650.08			
P102	5517	5996	647.18			
P103	5672	6248	644.97			
P104	6267	5639	646.68			
P105	6678	5885	638.86			
P106	6685	5871	638.10			
P107	5766	7339	637.42			
P108	5757	7324	638.13			

Note: All depth measurements and elevations are in units of feet.

Table 10
Proposed Upper Aquifer Monitoring Program Wells
American Chemical Service, Inc. NPL Site

	Area of Groundwater Contamination	Well Identification	Location with Respect to Area of Groundwater Contamination	Monitoring Parameters									
				1st Qrtr 1998	4th Qrtr 1998	3rd Qrtr 1999	2nd Qrtr 2000	3rd Qrtr 2001	4th Qrtr 2002	1st Qrtr 2003	2nd Qrtr 2004	3rd Qrtr 2005	4th Qrtr 2006
1	North	MW40	Upgradient	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M
2		MW48	Internal	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M
3		MW49	Internal	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M
4		MW38	Side Gradient	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M
5		MW39	Side Gradient	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M
6		MW37	Downgradient	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M
7	West	MW13	Internal	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M
8		MW14	Internal	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M
9		MW46	Side Gradient	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M
10	South	MW18	Upgradient	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M
11		MW06	Internal	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M
12		MW19	Internal	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M
13		MW45	Internal	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M
14		MW44	Side Gradient	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M
15		MW41	Side Gradient	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M
16		MW47	Side Gradient	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M
17		MW15	Side Gradient	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M
18		MW42	Downgradient	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M
19		MW43	Downgradient	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M

Notes:
B,C,M = Benzene, Chloroethane, Metals (Pb, Al, Fe, Mn)

Table 11
Proposed Lower Aquifer Monitoring Program Wells
American Chemical Service, Inc. NPL Site

	Well Identification	Well Screen Depth in Lower Aquifer	Location with Respect to Area of GW Contamination	Monitoring Parameters									
				1st Qrtr 1998	4th Qrtr 1998	3rd Qrtr 1999	2nd Qrtr 2000	3rd Qrtr 2001	4th Qrtr 2002	1st Qrtr 2003	2nd Qrtr 2004	3rd Qrtr 2005	4th Qrtr 2006
1	MW28	Upper	Upgradient	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M
2	MW50	Upper	Upgradient	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M
3	MW10C	Upper	Internal	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M
4	MW9R	Upper	Internal	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M
5	MW29	Middle	Internal	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M
6	MW24	Upper	Downgradient	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M
7	MW52	Upper	Downgradient	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M
8	MW53	Lower	Downgradient	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M
9	MW51	Middle	Downgradient	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M
10	MW33	Lower	Downgradient	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M
11	MW30	Middle	Downgradient	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M
12	MW55	Lower	Downgradient	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M
13	MW54	Upper	Downgradient	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M
14	MW8	Upper	Downgradient	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M
15	MW32	Lower	Downgradient	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M
16	MW31	Middle	Downgradient	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M	B,C,M

Notes:
B,C,M = Benzene, Chloroethane, Metals (Pb, Al, Fe, Mn)

Table 12
Intrawell 95% Upper Confidence Limits of the Prediction Interval
American Chemical Services
Griffith, Indiana

South Area of Concern

Internal	Benzene	Chloroethane	Aluminum	Iron	Lead	Manganese
MW06	490	1,300	260	29,000	18	4,500
MW19	8	25	530	5,100	6	350
MW45	1,500	310	780	19,000	64	900
Upgradient	**Benzene**	**Chloroethane**	**Aluminum**	**Iron**	**Lead**	**Manganese**
MW18	19	19	46	440	21	1,200
Downgradient	**Benzene**	**Chloroethane**	**Aluminum**	**Iron**	**Lead**	**Manganese**
MW42	19	19	1,900	18,000	3	1,100
MW43	19	19	20,000	66,000	51	1,100
Side	**Benzene**	**Chloroethane**	**Aluminum**	**Iron**	**Lead**	**Manganese**
MW15	4	19	840	9,600	3	750
MW41	19	19	1,700	ND	23	650
MW44	19	19	2,800	15,000	1	160
MW47	19	19	2,600	1,800	35	37

ND = Not determined. Not enough background data was available.

North Area of Concern

Internal	Benzene	Chloroethane	Aluminum	Iron	Lead	Manganese
MW48	13,000	1,300	330	35,000	8	820
MW49	12,000	1,100	1,900	44,000	10	3,500
Upgradient	**Benzene**	**Chloroethane**	**Aluminum**	**Iron**	**Lead**	**Manganese**
MW40	19	19	3,600	10,000	7	1,200
Downgradient	**Benzene**	**Chloroethane**	**Aluminum**	**Iron**	**Lead**	**Manganese**
MW37	19	19	2,300	16,000	5	970
Side	**Benzene**	**Chloroethane**	**Aluminum**	**Iron**	**Lead**	**Manganese**
MW38	19	19	2,300	26,000	8	1,800
MW39	19	7	800	23,000	4	1,200

West Area of Concern

Internal	Benzene	Chloroethane	Aluminum	Iron	Lead	Manganese
MW13	940	850	670	7,300	8	730
MW14	41	1,000	21,000	57,000	28	1,200
Side	**Benzene**	**Chloroethane**	**Aluminum**	**Iron**	**Lead**	**Manganese**
MW46	2	19	1,300	25,000	10	1,600

Table 13
Statistical Comparison of Metal Concentrations
American Chemical Services
Griffith, Indiana

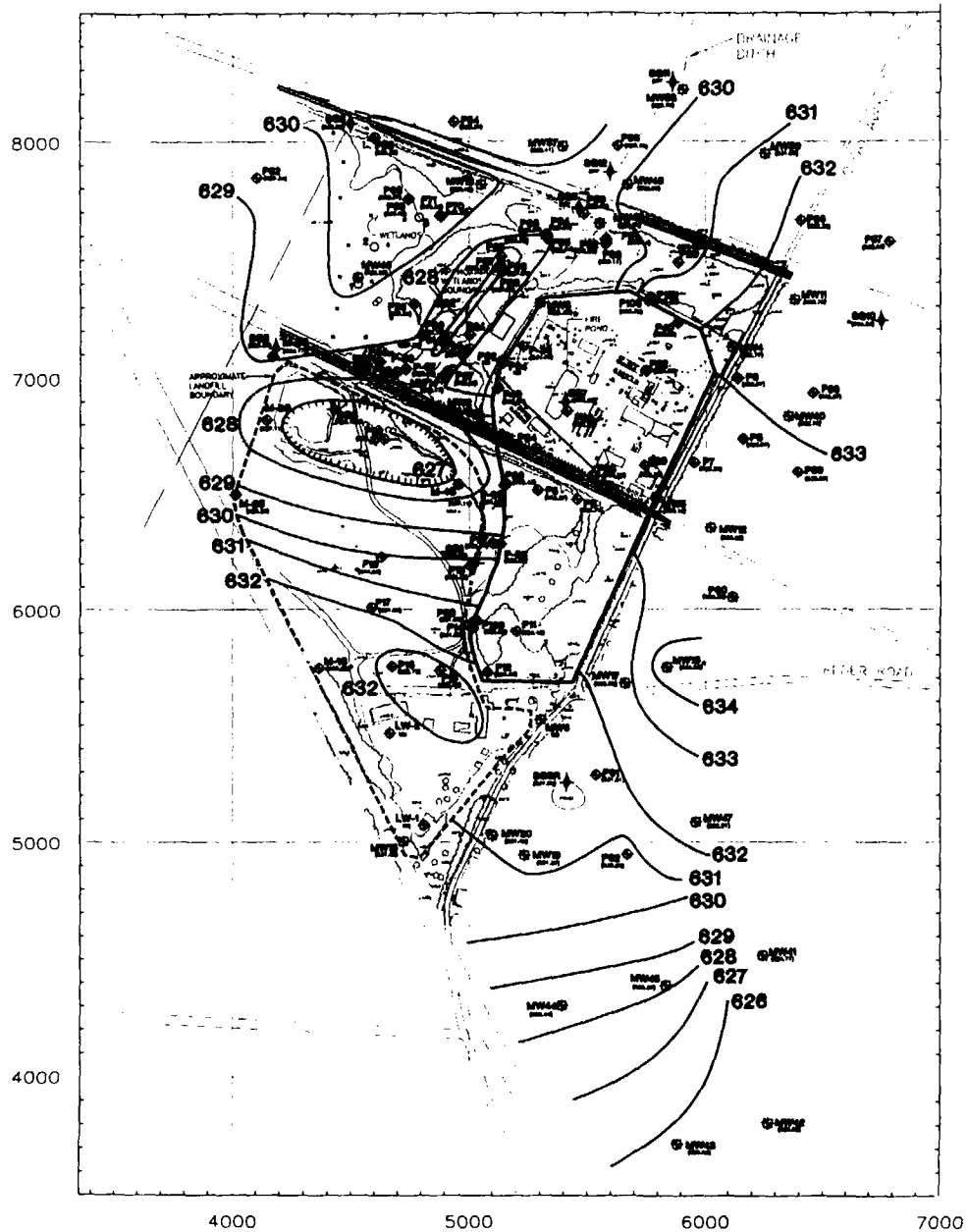
North and West Areas of Concern

Analyte	MCL	ROD	95% UCLP (ug/L)			
			Internal	Side Gradient	Up Gradient	Down Gradient
Aluminum		NP	14,000	1,200	3,600	2,300
Antimony	6	NP	2	4	8	8
Arsenic	50	8.8	37	5	2	2
Barium	2000	NP	164	150	29	43
Cadmium	5	NP	3	3	7	7
Calcium	NP	NP	170,000	130,000	49,000	130,000
Chromium	100	NP	36	10	7	11
Cobalt	NP	NP	12	7	5	8
Copper	1300	NP	26	14	21	19
Iron		NP	33,000	25,000	10,000	16,000
Lead	15	NP	19	8	7	5
Magnesium	NP	NP	36,000	35,000	20,000	27,000
Manganese		3300 - 275	2,300	1,700	1,200	970
Nickel	100	NP	20	710	10	21
Vanadium	NP	NP	34	14	19	5
Zinc		NP	68	25	31	27

South Area of Concern

Analyte	MCL	ROD	95% UCLP (ug/L)			
			Internal	Side Gradient	Up Gradient	Down Gradient
Aluminum		NP	740	1,700	46	13,000
Antimony	6	NP	1	3	8	5
Arsenic	50	8.8	62	59	9	84
Barium	2000	NP	950	2,600	43	130
Cadmium	5	NP	3	3	7	1
Calcium	NP	NP	230,000	94,000	110,000	150,000
Chromium	100	NP	27	30	120	51
Cobalt	NP	NP	6	5	1	16
Copper	1300	NP	52	27	26	69
Iron		NP	18,000	15,000	440	48,000
Lead	15	NP	38	23	21	31
Magnesium	NP	NP	74,000	100,000	37,000	63,000
Manganese		3300 - 275	2,700	500	1,200	1,000
Nickel	100	NP	40	24	10	37
Vanadium	NP	NP	10	10	3	32
Zinc		NP	29	19	35	33

SMUCO-1



LEGEND

- UPPER AQUIFER WELL LOCATION AND DESIGNATION
- LEACHATE WELL LOCATION AND DESIGNATION
- PIEZOMETER LOCATION AND DESIGNATION
- STAFF GAUGE LOCATION AND DESIGNATION
- SURFACE DISCHARGE LOCATION FOR PERIMETER GROUND WATER CONTAINMENT SYSTEM
- (632) ELEVATION
- (632)* ELEVATION MEASURED BUT NOT USED FOR DETERMINATION OF THE POTENTIOMETRIC SURFACE
- 630 —— GROUNDWATER ELEVATION CONTOUR BASED ON GROUNDWATER ELEVATION DATA
- 630 - - - - GROUNDWATER ELEVATION CONTOUR BASED ON HYDROGEOLOGIC CONDITIONS
- BARRIER WALL
- PERIMETER GROUND WATER CONTAINMENT SYSTEM
- GRIFFITH LANDFILL BOUNDARY

NOTES

1. GROUNDWATER ELEVATIONS FOR WATER TABLE CONTOURS WERE MEASURED AT THE SITE ON SEPTEMBER 22, 1997.

north

0 500 1000

SCALE IN FEET

FIGURE 1

UPPER AQUIFER POTENTIOMETRIC SURFACE SEPTEMBER 22, 1997

SEPTEMBER 1997 GROUNDWATER SAMPLING RESULTS REPORT
AMERICAN CHEMICAL SERVICE, INC
NPL SITE
GRIFFITH, INDIANA

Developed By JMC
Drawn By DKP
Approved By TAB
Date 9/25/97
Reference
Revisions

Drawing Number
1252042
221602 B1

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QUALITY CONTROL
Graphic Standards Lead Professional
Technical Review Project Manager
Management Review Other

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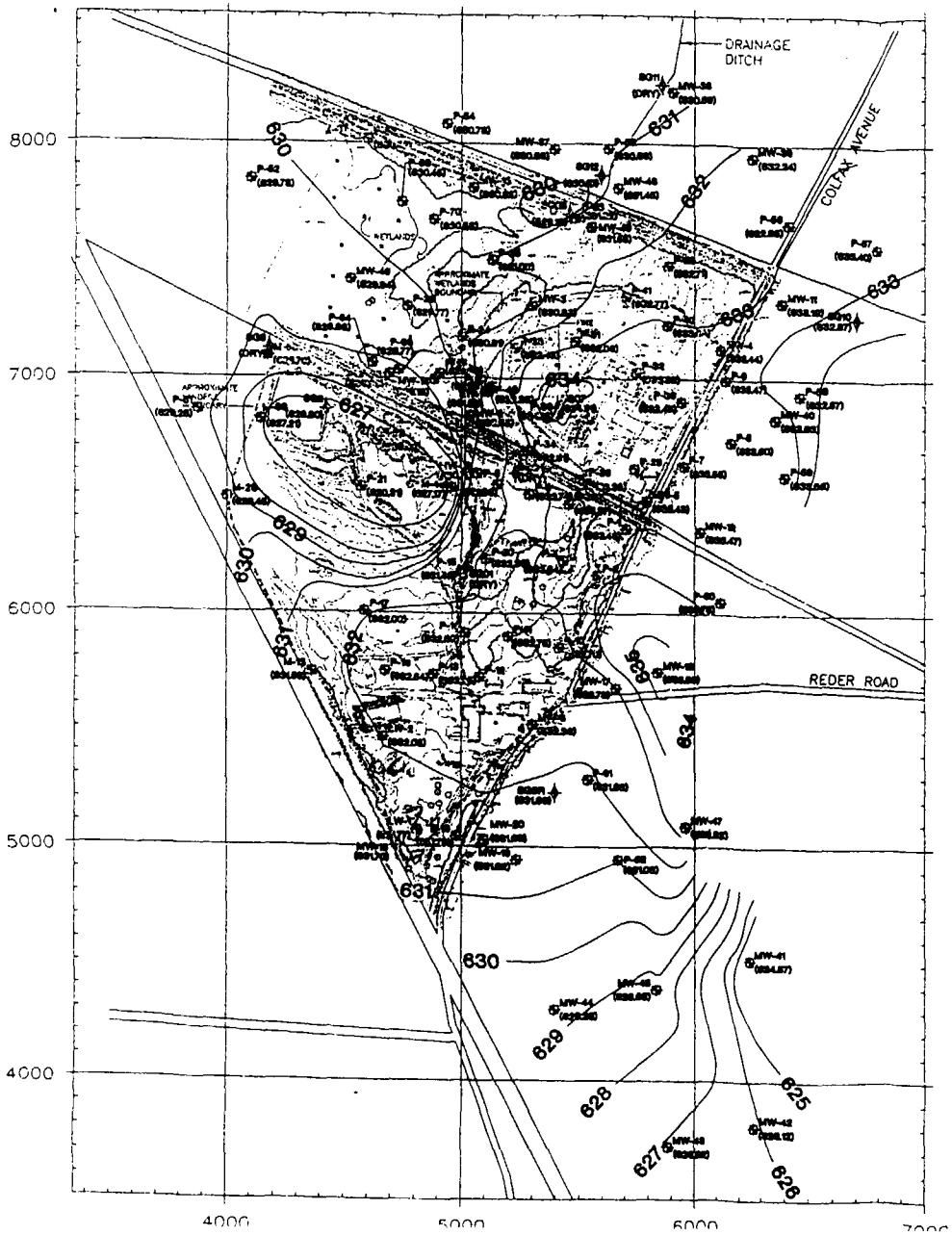

LEGEND

- MW-12 — UPPER AQUIFER WELL LOCATION AND NUMBER
- M-19 — LEACHATE/UPPER AQUIFER WELL LOCATION AND NUMBER
- P-61 — PIEZOMETER LOCATION AND NUMBER
- SG10 — STAFF GAUGE LOCATION AND NUMBER
- (630.62) — MEASURED WATER TABLE ELEVATION, IN FT. AMSL
- (—) — NOT MEASURED
- 635 — GROUNDWATER ELEVATION CONTOUR

NOTES

1. GROUNDWATER LEVELS FOR WATER TABLE CONTOURS WERE MEASURED AT THE SITE ON NOVEMBER 4, 1996.

north

0 500 1000

SCALE IN FEET

Developed By DAP
Drawn By CCM
Approved By
Date 1/29/99
Reference
Revisions

UPPER AQUIFER WATER TABLE ELEVATIONS NOVEMBER 4, 1996

FIRST QUARTER GROUNDWATER MONITORING RESULTS REPORT
AMERICAN CHEMICAL SERVICE, INC.
NPL SITE
GRIFFITH, INDIANA

Drawing Number
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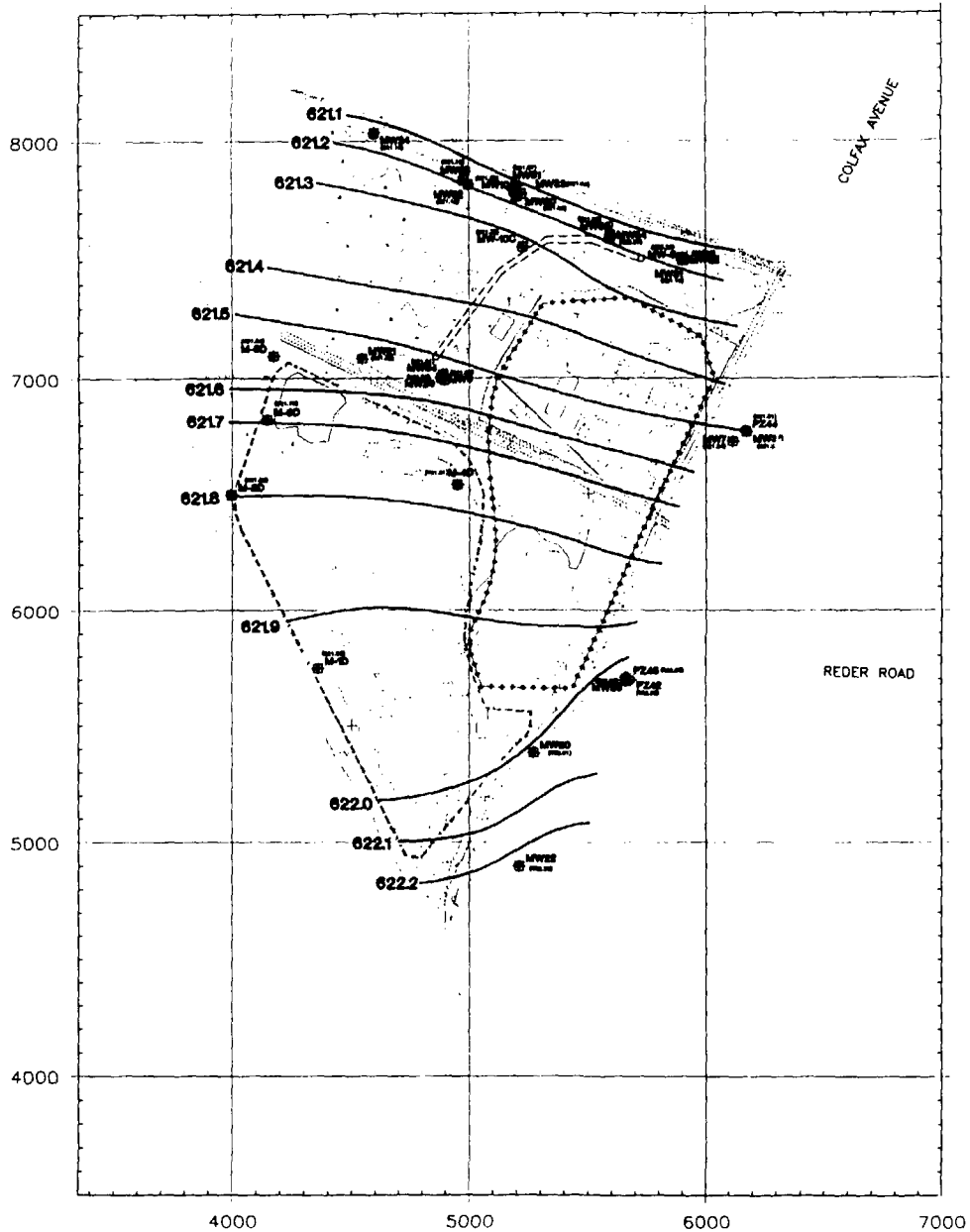

LEGEND

- LOWER AQUIFER MONITORING WELL LOCATION AND DESIGNATION, SHOWING MEASURED GROUNDWATER ELEVATION
- PIEZOMETER LOCATION AND DESIGNATION
- (632) ELEVATION
- 621.0 — GROUNDWATER ELEVATION CONTOUR
- BARRIER WALL
- GRIFFITH LANDFILL BOUNDARY
- PERIMETER GROUND WATER CONTAINMENT SYSTEM

NOTES

1. GROUNDWATER ELEVATIONS FOR THE POTENTIOMETRIC SURFACE CONTOURS WERE MEASURED AT THE SITE ON 09/22/97
2. CONTOUR INTERVAL = 0.1 FEET

north

0 500 1000

SCALE IN FEET

FIGURE 3

Developed By JMC
Drawn By DKP
Approved By TAB
Date 9/25/97
Reference
Revisions

LOWER AQUIFER POTENTIOMETRIC SURFACE
SEPTEMBER 22, 1997

1997 BASELINE GROUNDWATER SAMPLING RESULTS REPORT
AMERICAN CHEMICAL SERVICE, INC.
NPL SITE
GRIFFITH, INDIANA

Drawing Number
1252042
221602 **B3**

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Technical Review
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Management Review
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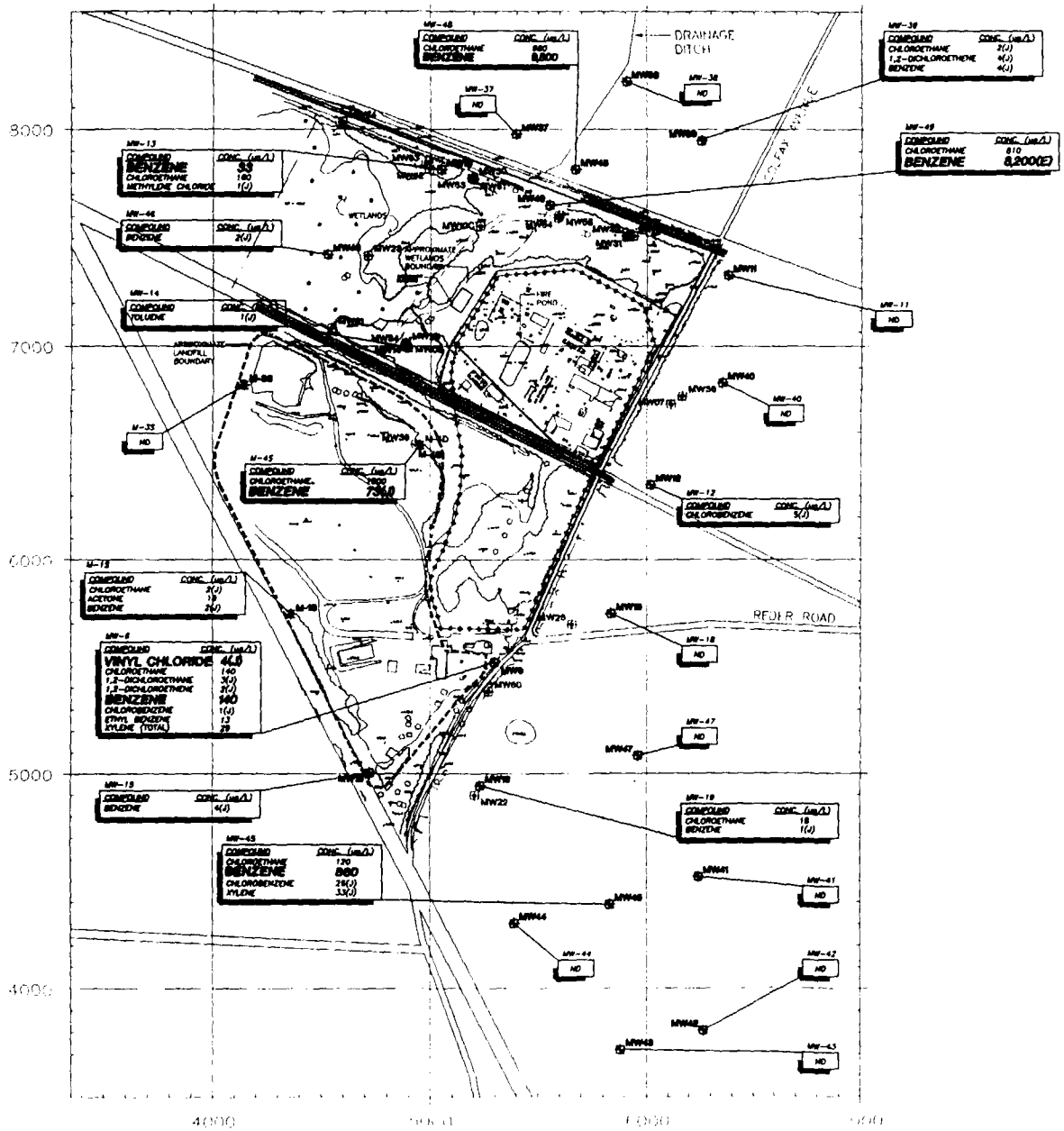

LEGEND

MW-12	UPPER AQUIFER WELL LOCATION AND DESIGNATION
MW06	LEACHATE/LOWER AQUIFER WELL LOCATION AND DESIGNATION
ug/L	MICROGRAMS PER LITER
(J)	INDICATES AN ESTIMATED VALUE
ND	NO VOC DETECTED
	BARRIER WALL
	PERIMETER GROUND WATER CONTAINMENT SYSTEM
	GRIFFITH LANDFILL BOUNDARY

NOTE

THE CONCENTRATION (AND ASSOCIATED COMPOUND) SHOWN IN BOLD EXCEEDED ROD REMEDIATION LEVELS

north

0 500 1000

SCALE IN FEET

FIGURE 4

VOCs DETECTED IN UPPER AQUIFER MONITORING WELLS

SEPTEMBER 1997 GROUNDWATER MONITORING RESULTS REPORT
AMERICAN CHEMICAL SERVICE, INC.
NPL SITE
GRIFFITH, INDIANA

Developed By PMS
Drawn By CCM
Approved By
Date
Reference
Revisions

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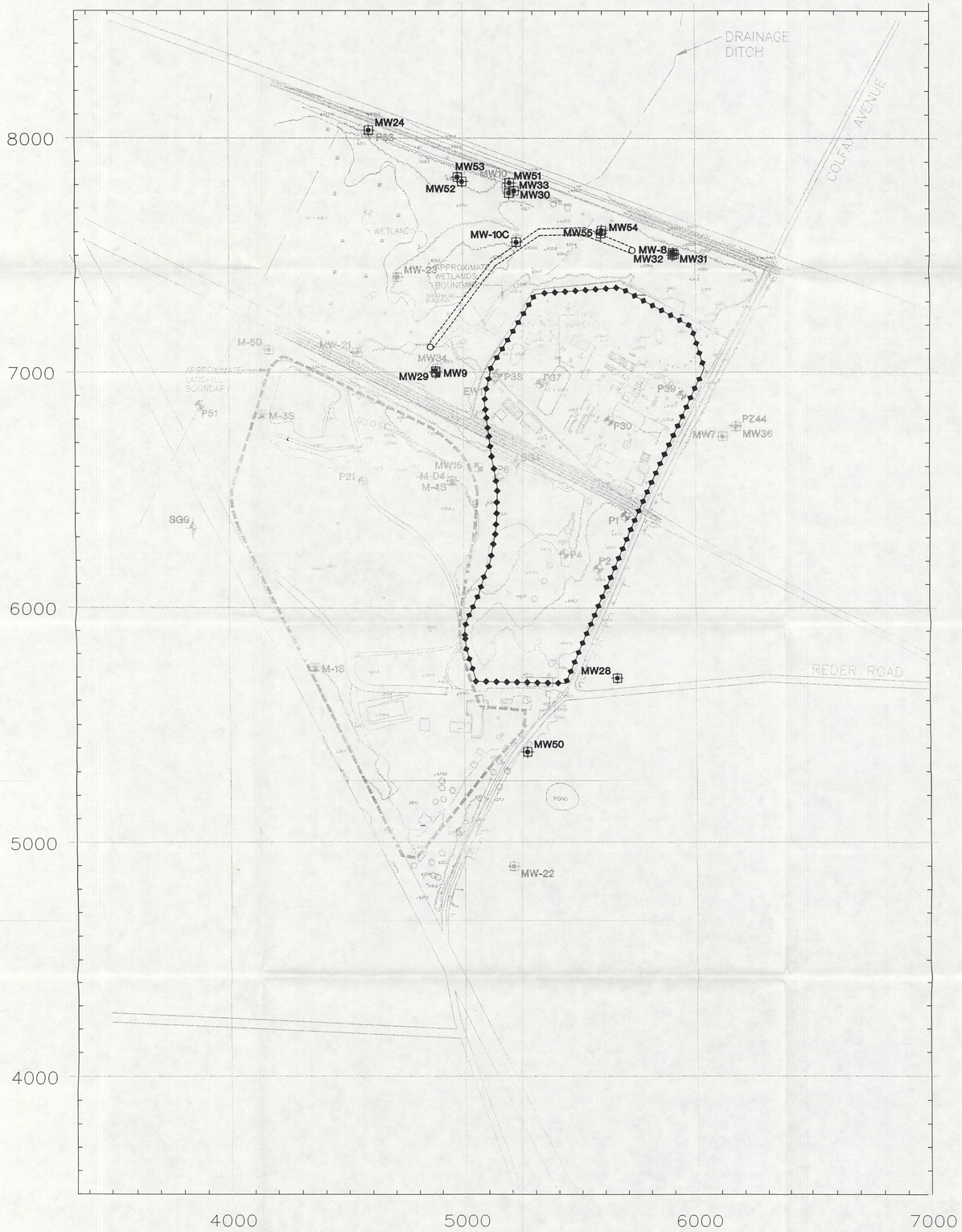

LEGEND

MW53	LOWER AQUIFER WELL LOCATION AND NUMBER TO BE SAMPLED
P61	PIEZOMETER NOT INCLUDED IN THE QUARTERLY MONITORING REPORT
MW12	MONITORING WELL NOT INCLUDED IN THE QUARTERLY MONITORING PROGRAM
M-1S	LEACHATE/LOWER AQUIFER WELL NOT INCLUDED IN THE QUARTERLY MONITORING REPORT
SG4	STAFF GAUGE NOT INCLUDED IN THE QUARTERLY MONITORING REPORT
	BARRIER WALL
	PERIMETER GROUND WATER CONTAINMENT SYSTEM
	GRIFFITH LANDFILL BOUNDARY

NOTES

1. SEE TABLE 9 FOR LOWER AQUIFER WELLS TO BE GAUGED

north

0 250 500

SCALE IN FEET

FIGURE 9

Management Review
Other

Technical Review
Project Manager

Graphic Standards
Lead Professional

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Developed By TAB
Drawn By DKP
Approved By TAB
Date 1/19/98
Reference
Revisions

MONITORING WELLS PROPOSED FOR LONG-TERM MONITORING IN THE LOWER AQUIFER

SEPTEMBER 1997 GROUNDWATER MONITORING RESULTS REPORT
AMERICAN CHEMICAL SERVICE, INC.
NPL SITE
GRIFFITH, INDIANA

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221602 B1

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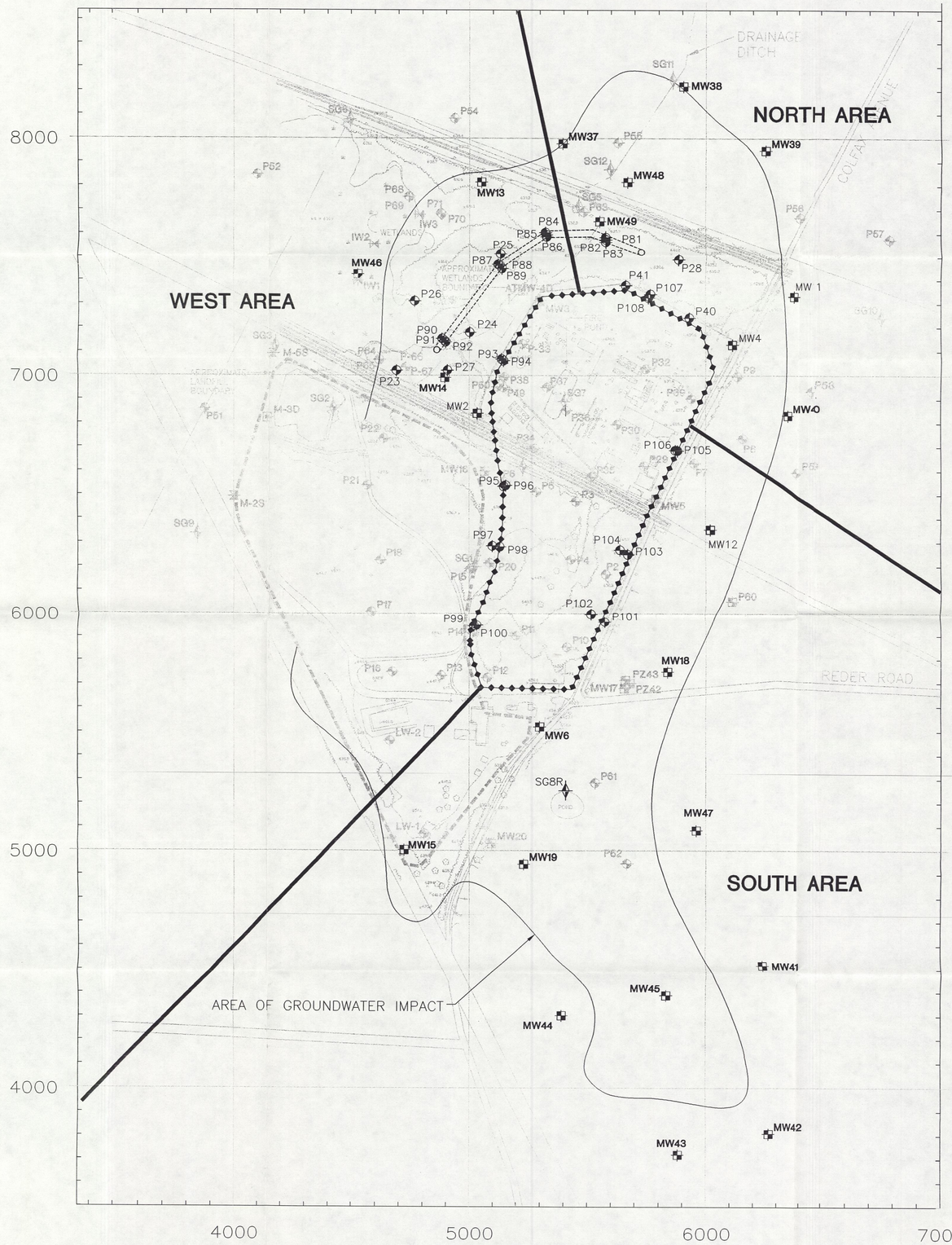

LEGEND

- MW39 — UPPER AQUIFER WELL LOCATION AND NUMBER TO BE SAMPLED AND GAUGED
- M-1S — LEACHATE/UPPER AQUIFER WELL LOCATION AND DESIGNATION TO BE SAMPLED
- MW11 — UPPER AQUIFER WELL LOCATION AND NUMBER TO BE GAUGED
- SG8R — STAFF GAUGE TO BE GAUGED
- P61 — PIEZOMETER LOCATION AND DESIGNATION TO BE GAUGED
- MW12 — MONITORING WELL NOT INCLUDED IN THE QUARTERLY MONITORING PROGRAM
- P81 — PIEZOMETER NOT INCLUDED IN THE QUARTERLY MONITORING PROGRAM
- SG10 — STAFF GAUGE NOT INCLUDED IN THE QUARTERLY MONITORING PROGRAM
- BARRIER WALL
- PERIMETER GROUND WATER CONTAINMENT SYSTEM
- GRIFFITH LANDFILL BOUNDARY
- NORTH/ SOUTH/ WEST AREA BOUNDRY LINES

north

0 250 500

SCALE IN FEET

FIGURE 8

Management Review
Other

Technical Review
Project Manager

QUALITY CONTROL
Graphic Standards
Lead Professional

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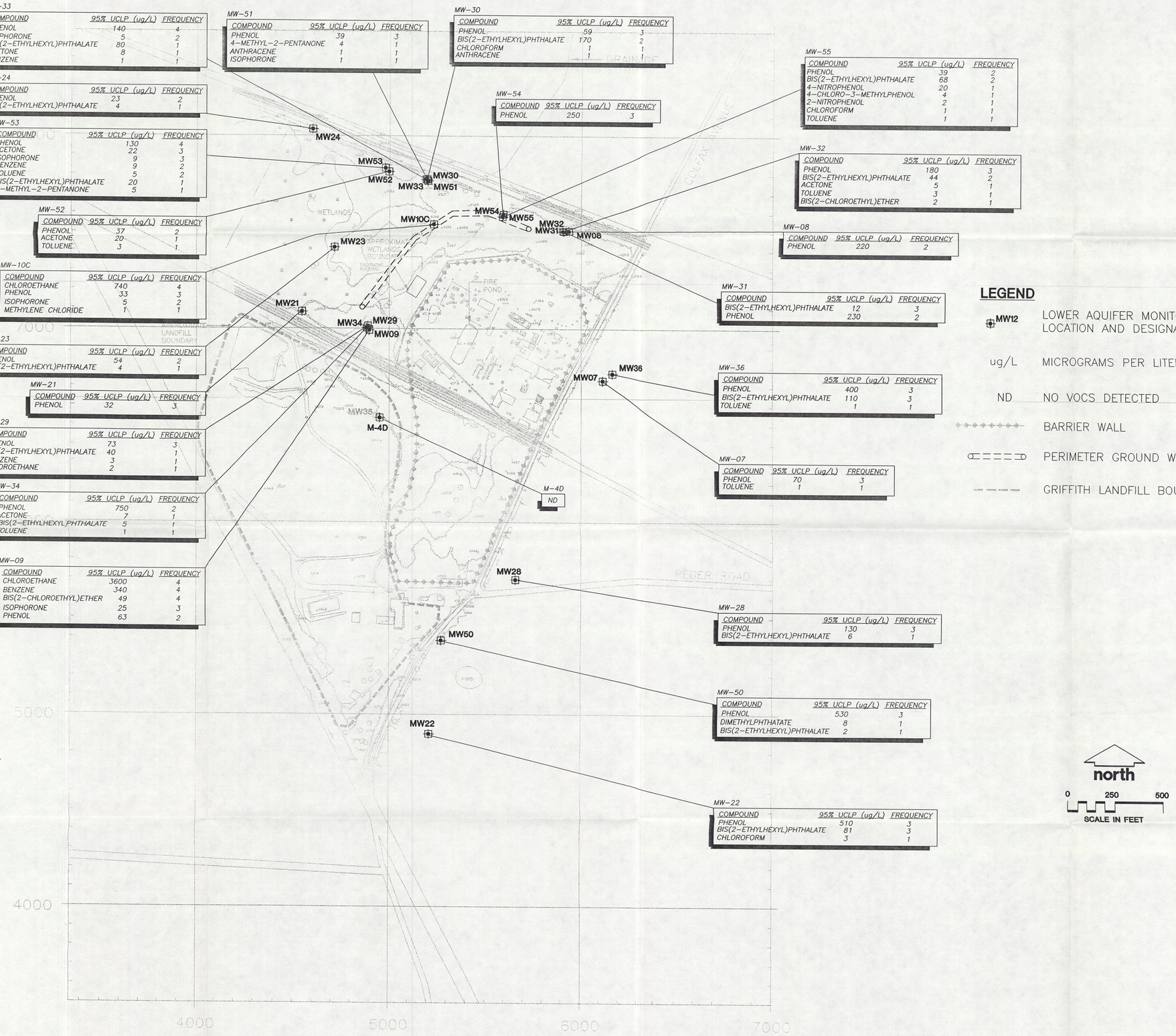
Developed By TAB
Approved By TAB
Drawn By DKP
Date 1/19/98
Reference J:/1252042/MW0WS/SEP197/PROPOSED_MW.dwg
Revisions

MONITORING WELLS PROPOSED FOR LONG-TERM MONITORING IN THE UPPER AQUIFER

SEPTEMBER 1997 GROUNDWATER MONITORING RESULTS REPORT
AMERICAN CHEMICAL SERVICE, INC.
NPL SITE
GRIFFITH, INDIANA

Drawing Number
1252042
221602 B1

MONTGOMERY WATSON



LEGEND

MW12	LOWER AQUIFER MONITORING WELL LOCATION AND DESIGNATION
ug/L	MICROGRAMS PER LITER
ND	NO VOCS DETECTED
	BARRIER WALL
	PERIMETER GROUND WATER CONTAINMENT SYSTEM
	GRIFFITH LANDFILL BOUNDARY

FIGURE 7

Management Review
Other
Technical Review
Project Manager
1/16/97
Graphic Standards CCM
Lead Professional
QUALITY CONTROL

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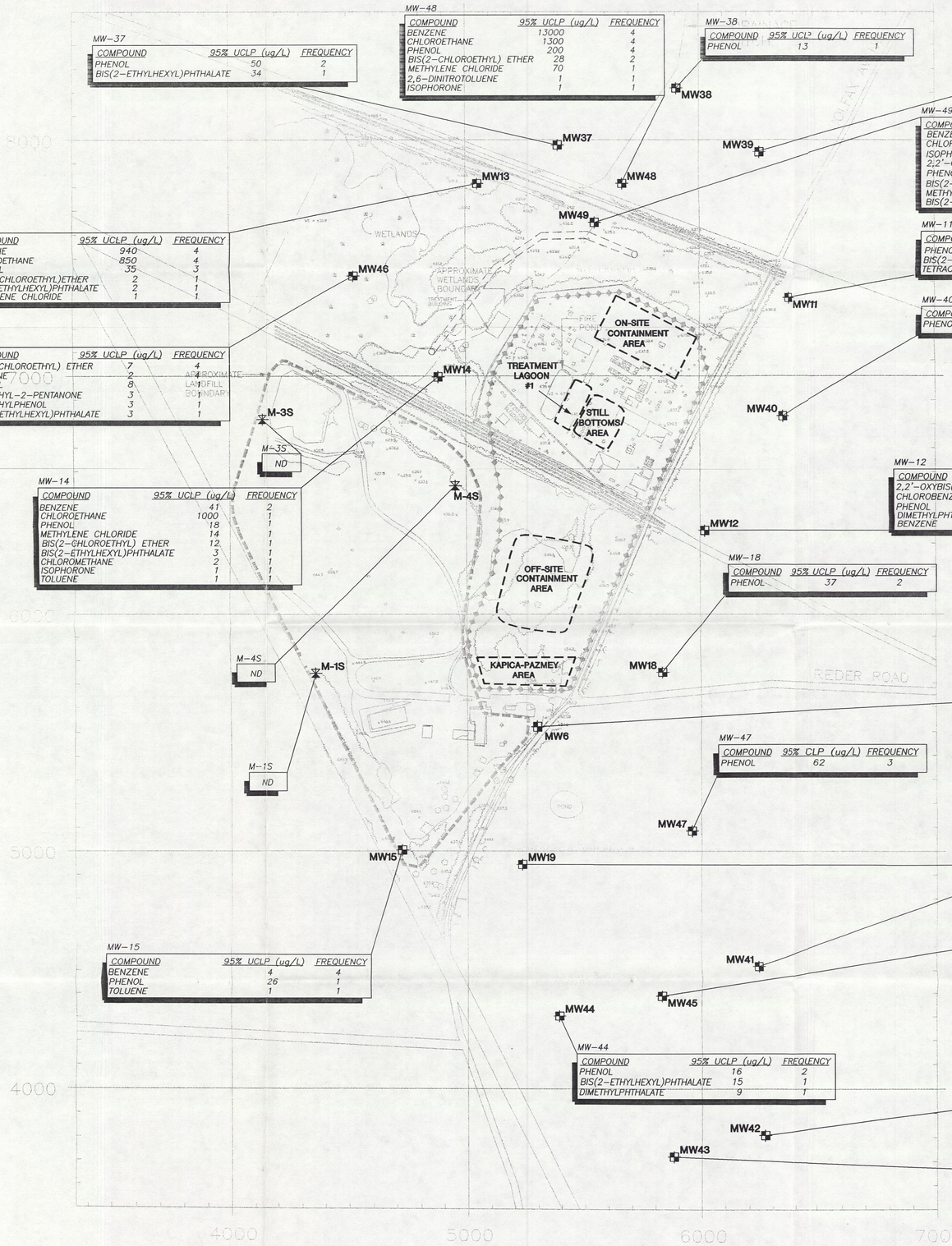
Date 1/19/98
Reference J:/1252042/MWDWGS/SEPT97/SPIDY2_3RD_1997.dwg
Revisions

SPACIAL AND TEMPORAL VARIABILITY OF HISTORICAL VOC AND SVOC DETECTIONS LOWER AQUIFER

SEPTEMBER 1997 GROUNDWATER MONITORING RESULTS REPORT
AMERICAN CHEMICAL SERVICE, INC.
NPL SITE
GRIFFITH, INDIANA

Drawing Number
1252.042 **B12**

MONTGOMERY WATSON



MW-37

COMPOUND	95% UCLP (ug/L)	FREQUENCY
PHENOL	50	2
BIS(2-ETHYLHEXYL)PHTHALATE	34	1

MW-48

COMPOUND	95% UCLP (ug/L)	FREQUENCY
BENZENE	13000	4
CHLOROETHANE	1300	4
PHENOL	200	4
BIS(2-CHLOROETHYL) ETHER	28	2
METHYLENE CHLORIDE	70	1
2,6-DINITROTOLUENE	1	1
ISOPHORONE	1	1

MW-38

COMPOUND	95% UCL² (ug/L)	FREQUENCY
PHENOL	13	1

MW-39

COMPOUND	95% UCLP (ug/L)	FREQUENCY
BENZENE	19	4
CHLOROETHANE	7	3
1,2-DICHLOROETHENE (TOTAL)	4	3
BIS(2-CHLOROETHYL) ETHER	3	2
PHENOL	10	1
BIS(2-ETHYLHEXYL)PHTHALATE	4	1
VINYL CHLORIDE	1	1

MW-49

COMPOUND	95% UCLP (ug/L)	FREQUENCY
BENZENE	12000	4
CHLOROETHANE	1100	4
ISOPHORONE	12	4
2,2'-OXYBIS(1-CHLOROPROPANE)	48	3
PHENOL	220	2
BIS(2-CHLOROETHYL) ETHER	28	2
METHYLENE CHLORIDE	70	1
BIS(2-ETHYLHEXYL)PHTHALATE	11	1

MW-13

COMPOUND	95% UCLP (ug/L)	FREQUENCY
BENZENE	940	4
CHLOROETHANE	850	4
PHENOL	35	3
BIS(2-CHLOROETHYL)ETHER	2	1
BIS(2-ETHYLHEXYL)PHTHALATE	2	1
METHYLENE CHLORIDE	1	1

MW-11

COMPOUND	95% UCLP (ug/L)	FREQUENCY
PHENOL	10	2
BIS(2-ETHYLHEXYL)PHTHALATE	7	1
TETRACHLOROETHENE	1	1

MW-40

COMPOUND	95% UCLP (ug/L)	FREQUENCY
PHENOL	6	2

MW-46

COMPOUND	95% UCLP (ug/L)	FREQUENCY
BIS(2-CHLOROETHYL) ETHER	7	4
BENZENE	2	1
PHENOL	8	1
4-METHYL-2-PENTANONE	3	1
4-METHYLPHENOL	3	1
BIS(2-ETHYLHEXYL)PHTHALATE	3	1

M-3S

ND

MW-14

COMPOUND	95% UCLP (ug/L)	FREQUENCY
BENZENE	41	2
CHLOROETHANE	1000	1
PHENOL	18	1
METHYLENE CHLORIDE	14	1
BIS(2-CHLOROETHYL) ETHER	12	1
BIS(2-ETHYLHEXYL)PHTHALATE	3	1
CHLOROMETHANE	2	1
ISOPHORONE	1	1
TOLUENE	1	1

MW-12

COMPOUND	95% UCLP (ug/L)	FREQUENCY
2,2'-OXYBIS(1-CHLOROPROPANE)	180	4
CHLOROBENZENE	7	4
PHENOL	47	3
DIMETHYLPHTHALATE	3	1
BENZENE	2	1

MW-18

COMPOUND	95% UCLP (ug/L)	FREQUENCY
PHENOL	37	2

MW-06

COMPOUND	95% UCLP (ug/L)	FREQUENCY
CHLOROETHANE	1300	4
BENZENE	480	4
BIS(2-CHLOROETHYL) ETHER	84	4
1,2-DICHLOROETHENE (TOTAL)	49	4
PHENOL	110	2
XYLENE (TOTAL)	77	2
METHYLENE CHLORIDE	38	2
ISOPHORONE	25	2
VINYL CHLORIDE	25	2
ETHYLBENZENE	23	2
1,1-DICHLOROETHANE	21	2
BIS(2-ETHYLHEXYL)PHTHALATE	16	1
1,2-DICHLOROETHANE	3	1
2,4-DIMETHYLPHENOL	3	1
DIETHYLPHTHALATE	2	1

M-4S

ND

M-1S

ND

MW-47

COMPOUND	95% CLP (ug/L)	FREQUENCY
PHENOL	62	3

MW-19

COMPOUND	95% UCLP (ug/L)	FREQUENCY
CHLOROETHANE	25	4
BIS(2-CHLOROETHYL) ETHER	15	4
BENZENE	8	3
PHENOL	55	2
ACETONE	12	2
BIS(2-ETHYLHEXYL)PHTHALATE	14	1
4-METHYL-2-PENTANONE	5	1
DIETHYLPHTHALATE	4	1

MW-41

COMPOUND	95% UCLP (ug/L)	FREQUENCY
PHENOL	62	2

MW-15

COMPOUND	95% UCLP (ug/L)	FREQUENCY
BENZENE	4	4
PHENOL	26	1
TOLUENE	1	1

MW-45

COMPOUND	95% UCLP (ug/L)	FREQUENCY
BENZENE	1500	4
XYLENE (TOTAL)	500	4
CHLOROETHANE	310	4
NAPHTHALENE	170	4
PHENOL	71	4
CHLOROBENZENE	56	4
BIS(2-CHLOROETHYL) ETHER	20	4
2-METHYLNAPHTHALENE	9	4
1,2-DICHLOROBENZENE	4	3
2,2'-OXYBIS(1-CHLOROPROPANE)	14	2
1,4-DICHLOROBENZENE	4	2
1,2-DICHLOROETHANE	25	1
ETHYLBENZENE	10	1

MW-44

COMPOUND	95% UCLP (ug/L)	FREQUENCY
PHENOL	16	2
BIS(2-ETHYLHEXYL)PHTHALATE	15	1
DIMETHYLPHTHALATE	9	1

MW-42

COMPOUND	95% UCLP (ug/L)	FREQUENCY
PHENOL	41	2
BIS(2-ETHYLHEXYL)PHTHALATE	4	1

MW-43

COMPOUND	95% UCLP (ug/L)	FREQUENCY
PHENOL	75	2
BIS(2-ETHYLHEXYL)PHTHALATE	3	1

LEGEND

MW-12	UPPER AQUIFER WELL LOCATION AND NUMBER
M-1S	LEACHATE/UPPER AQUIFER WELL LOCATION AND DESIGNATION
ug/L	MICROGRAMS PER LITER
ND	NO VOCS DETECTED
	BARRIER WALL
	PERIMETER GROUND WATER CONTAINMENT SYSTEM
	GRIFFITH LANDFILL BOUNDARY

north

0 250 500

SCALE IN FEET

FIGURE 6

Management Review
Other

Technical Review
Project Manager

1/8/97

Graphic Standards CCM
Lead Professional

QUALITY CONTROL

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Developed By TAB
Approved By TAB
Reference
Revisions

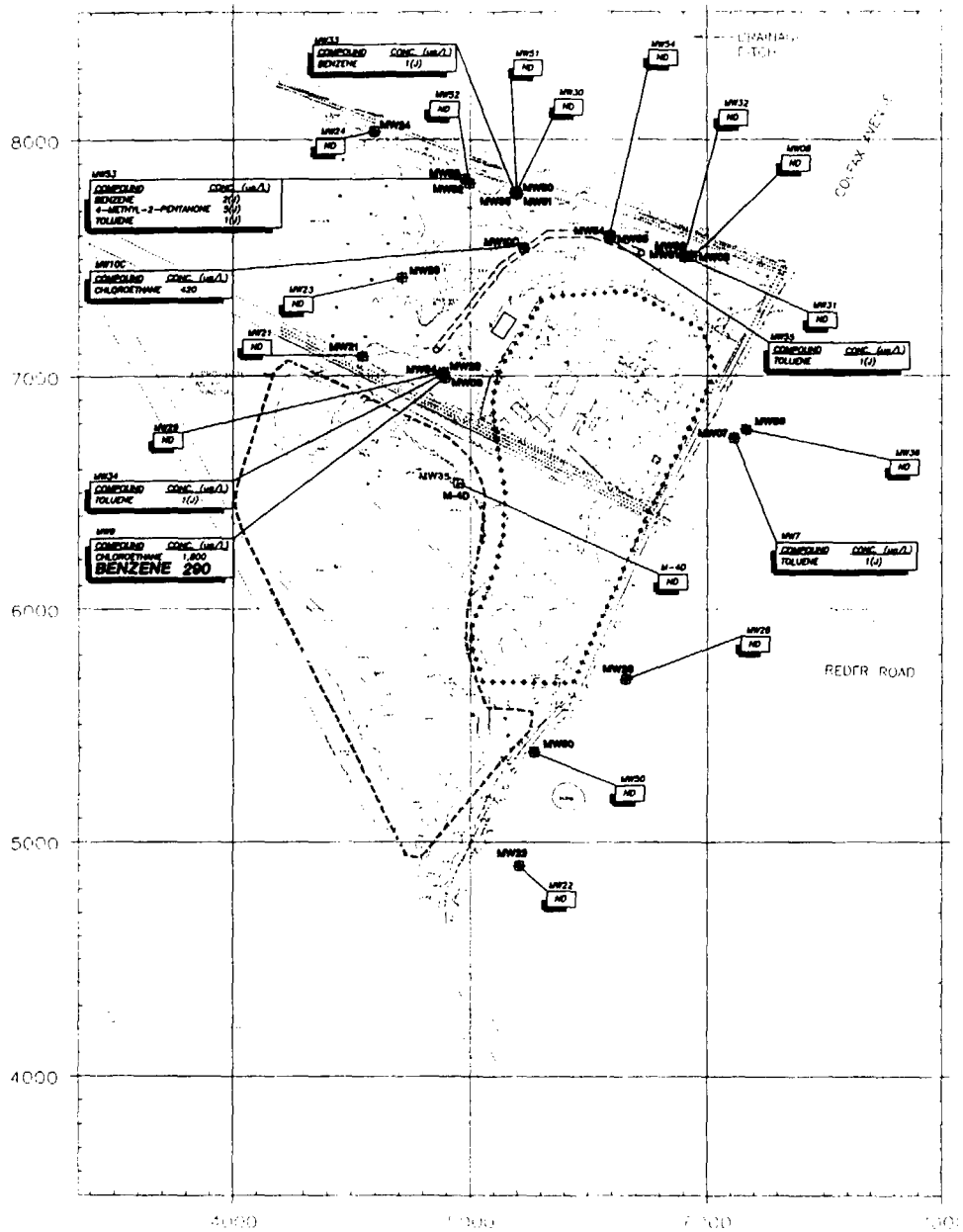
Drawn By DKP
Date 1/19/98
J:/1252/042/MWDWGS/SEP197/HIS_VOC_SVOC1.dwg

SPACIAL AND TEMPORAL VARIABILITY OF HISTORICAL VOC AND SVOC DETECTIONS
UPPER AQUIFER

SEPTEMBER 1997 GROUNDWATER MONITORING RESULTS REPORT
AMERICAN CHEMICAL SERVICE, INC.
NPL SITE
GRIFFITH, INDIANA

Drawing Number
1252042 **B11**

MONTGOMERY WATSON



LEGEND

MW12	LOWER AQUIFER MONITORING WELL LOCATION AND DESIGNATION
M-18	LEACHATE WELL LOCATION AND DESIGNATION
ug/L	MICROGRAMS PER LITER
(J)	INDICATES AN ESTIMATED VALUE
ND	NO VOC DETECTED
•••••••	BARRIER WALL
⊂⊃⊂⊃⊂⊃	PERIMETER GROUND WATER CONTAINMENT SYSTEM
– – – –	GRIFFITH LANDFILL BOUNDARY

NOTE

THE CONCENTRATION (AND ASSOCIATED COMPOUND) SHOWN IN BOLD EXCEEDED ROD REMEDIATION LEVELS

north

0 500 1000

SCALE IN FEET

FIGURE 5

VOCs DETECTED IN LOWER AQUIFER MONITORING WELLS

SEPTEMBER 1997 GROUNDWATER MONITORING RESULTS REPORT
AMERICAN CHEMICAL SERVICE, INC.
NPL SITE
GRIFFITH, INDIANA

Developed By PMS | Drawn By CCM
Approved By | Date
Reference
Revisions

Drawing Number 1252.042 B12

MONTGOMERY WATSON

QUALITY CONTROL | Graphic Standards CCM 1/16/97 | Technical Review | Management Review
Lead Professional | Project Manager | Other

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APPENDICES

A

APPENDIX A

GROUNDWATER FLOW VELOCITY CALCULATIONS

Estimates of ACS Aquifer Test Results

Source: Table 2-4, Remedial Investigation Report (Warzyn, June 1991)

Slug Test Results: Upper Aquifer Monitoring Wells

East Side Mon Wells	**K (cm/sec)**	
MW-4	1.40E-03	
MW-5	1.10E-03	
MW-6	1.50E-03	
MW-11	1.30E-03	
MW-12	1.90E-03	
MW-15	2.00E-03	
MW-17		
MW-18	3.50E-03	
		1.81E-03

West Side Mon Wells	**K (cm/sec)**	
MW-1	1.70E-03	
MW-2	1.50E-03	
MW-3	2.10E-03	
MW-13	5.00E-03	
MW-14	2.10E-03	
MW-16	1.50E-03	
		2.32E-03

Average: 2.05E-03
Min: 1.10E-03
Max: 5.00E-03

Lower Aquifer Mon Wells	**K (cm/sec)**	
MW-7	2.30E-02	
MW-8	2.20E-02	
MW-9	2.10E-02	
MW-10	2.30E-02	
Average:		**2.2E-02**

Aquifer Characteristics

Two Aquifers Separated by Clay Aquiclude

Upper Aquifer

Fine to coarse Sand, little gravel, trace clay

Hydraulic Conductivity

Mean:	2.0E-03 cm/sec
Max:	5.0E-03 cm/sec
Min:	1.1E-03 cm/sec

Clay Aquiclude (RI, Tables 2-2 & 4-7)

Lean Clay, trace sand

Hyraulic Conductivity

Mean:	5.0E-08 cm/sec
Max:	7.0E-07 cm/sec
Min:	6.0E-09 cm/sec

Lower Aquifer (From Table 2-4)

Fine to medium Sand, some gravel

Hyraulic Conductivity

Mean:	2.2E-02 cm/sec
Max:	2.3E-02 cm/sec
Min:	2.1E-02 cm/sec

Upper Aquifer

	Hydraulic Conductivity cm/sec	Hydraulic Conductivity ft/year	Gradient ft/ft	Effective Porosity	GW Velocity
Min:	1.1E-03	1139	0.0025	0.3	9 feet/year
Max:	5.0E-03	5177	0.01	0.2	259 feet/year
Average:	2.0E-03	2118	0.005	0.25	42 feet/year

Lower Aquifer

	Hydraulic Conductivity cm/sec	Hydraulic Conductivity ft/year	Gradient ft/ft	Effective Porosity	GW Velocity
Min:	2.1E-02	21742	0.00035	0.2	38 feet/year
Max:	2.3E-02	23813	0.0006	0.3	48 feet/year
Average:	2.2E-02	22778	0.0005	0.25	46 feet/year

APPENDIX B

STATISTICAL METHODS SUMMARY

Statistical Analyses

The 95% upper confidence limit of the prediction interval was calculated for a number of parameters detected during baseline monitoring. For each well grouping (e.g., upgradient wells or North Area of Groundwater Contamination), two tables are included. The first table is a summary of the statistical analyses of the detected parameters. The second table shows the background data used to calculate the prediction interval. These tables have been provided to support the statistics in the following tables and figures:

- Table 12 Statistical Comparison of Metal Concentrations
- Table 13 Intrawell 95% Upper Confidence Limits of the Prediction Interval
- Figure 7 Spatial and Temporal Variability of Historical VOC and SVOC Detections in the Lower Aquifer
- Figure 8 Spatial and Temporal Variability of Historical VOC and SVOC Detections in the Upper Aquifer

The parametric prediction interval assumes that data follows a normal or transformed-normal distribution. The distribution of the data was evaluated by applying the Shapiro-Francia test (USEPA, 1992) for normality to the raw data or, when applicable, to the Ladder of Powers (Helsel and Hirsch, 1992) transformed data. The raw or transformed data were then used to calculate the parametric prediction interval.

If between 25% and 50% of the background data concentrations for a specific parameter were below the sample quantitation limit, the sample mean and standard deviation were adjusted according to the Method of Cohen as described by the USEPA (USEPA, April 1989). Non-detects were incorporated into the background data at one-half the sample quantitation limit. If the background data were not able to be normalized, or contained between 50% and 90% of the observations below the sample quantitation limit, the non-parametric prediction interval was determined by setting the upper limit of the prediction interval at the highest concentration detected. If the background data contained greater than 90% of the observations below the sample quantitation limit, the prediction interval was set at the highest detection or the PQL.

REFERENCES

Helsel, D.R.; Hirsch, R.M.; 1992, *Statistical Methods in Water Resources*. Elsevier.

USEPA, June 1989, *Interim Final Guidance*, Statistical Analysis of Ground-Water Monitoring Data at RCRA Facilities. Office of Solid Waste Management Division, United States Environmental Protection Agency, Washington D.C.

USEPA, June 1992, *Addendum to Interim Final Guidance*, Statistical Analysis of Ground-Water Monitoring Data at RCRA Facilities. Office of Solid Waste Management Division, United States Environmental Protection Agency, Washington D.C.

Statistical Summary
Metals in the South Area of Concern

Constituent Name	Upper Limit	Background	Background Mean	Standard Deviation	% Non-detects	Cohens	Transformation	Alpha	Method
SAOC Internal Monitoring Wells									
Aluminum (UG/L)	738.275875	12	245.989	251.149	22.22222222	Yes	non-	0.1	Param.
Antimony (UG/L)	1	12	n/a	n/a	88.88888889	n/a	n/a	0.1818	NP (NDs)
Arsenic (UG/L)	61.83022877	12	5.089	1.484	8.333333333	No	square root(x)	0.05	Param.
Barium (UG/L)	946.154632	12	6.489	1.78	0	No	cube root(x)	0.05	Param.
Cadmium (UG/L)	2.833728344	12	n/a	n/a	100	n/a	n/a	1.00E-02	Poisson
Calcium (UG/L)	226900.8374	12	122077.778	53477.303	0	No	non-	0.1	Param.
Chromium (UG/L)	27.186457	12	10.801	8.154	25	Yes	non-	0.1	Param.
Cobalt (UG/L)	5.599109	12	3.111	1.269	11.11111111	No	non-	0.1	Param.
Copper (UG/L)	52	12	n/a	n/a	44.44444444	n/a	n/a	0.1818	NP (cohens)
Iron (UG/L)	18189.10005	12	8421.667	5225.443	0	No	non-	0.05	Param.
Lead (UG/L)	38	12	n/a	n/a	22.22222222	n/a	n/a	0.1818	NP (cohens)
Magnesium (UG/L)	74456.7423	12	41777.778	16671.741	0	No	non-	0.1	Param.
Manganese (UG/L)	2713.004015	12	8.656	2.831	0	No	cube root(x)	0.05	Param.
Nickel (UG/L)	40.020329	12	22.153	9.115	22.22222222	Yes	non-	0.1	Param.
Vanadium (UG/L)	10	12	n/a	n/a	77.77777778	n/a	n/a	0.1818	NP (NDs)
Zinc (UG/L)	28.70021948	12	n/a	n/a	100	n/a	n/a	1.00E-02	Poisson
SAOC Sidegradient Monitoring Wells									
Aluminum (UG/L)	1710	16	n/a	n/a	25	n/a	n/a	0.05882	NP (cohens)
Antimony (UG/L)	3.291808208	16	n/a	n/a	93.75	n/a	n/a	1.00E-02	Poisson
Arsenic (UG/L)	59	16	n/a	n/a	56.25	n/a	n/a	0.05882	NP (NDs)
Barium (UG/L)	2590.142053	16	4.314	1.962	6.25	No	ln(x)	0.05	Param.
Cadmium (UG/L)	2.618047462	16	n/a	n/a	100	n/a	n/a	1.00E-02	Poisson
Calcium (UG/L)	94100	16	n/a	n/a	0	n/a	failed	0.05882	NP (normality)
Chromium (UG/L)	31	16	n/a	n/a	56.25	n/a	n/a	0.05882	NP (NDs)
Cobalt (UG/L)	5	16	n/a	n/a	50	n/a	failed	0.05882	NP (normality)
Copper (UG/L)	27	16	n/a	n/a	50	n/a	n/a	0.05882	NP (cohens)
Iron (UG/L)	14700	16	n/a	n/a	20	n/a	n/a	0.0625	NP (cohens)
Lead (UG/L)	23	16	n/a	n/a	43.75	n/a	failed	0.05882	NP (normality)
Magnesium (UG/L)	101427.3046	16	157.619	89.019	6.25	No	square root(x)	0.05	Param.
Manganese (UG/L)	504.5462958	16	10.891	6.403	0	No	square root(x)	0.05	Param.
Nickel (UG/L)	24	16	n/a	n/a	43.75	n/a	n/a	0.05882	NP (cohens)
Vanadium (UG/L)	10	16	n/a	n/a	50	n/a	failed	0.05882	NP (normality)
Zinc (UG/L)	19.26348552	15	n/a	n/a	100	n/a	n/a	1.00E-02	Poisson
SAOC Upgradient Monitoring Wells									
Aluminum (UG/L)	46.20241689	4	n/a	n/a	100	n/a	n/a	1.00E-02	Poisson
Antimony (UG/L)	7.970192717	4	n/a	n/a	100	n/a	n/a	1.00E-02	Poisson
Arsenic (UG/L)	9.268777696	4	n/a	n/a	100	n/a	n/a	0.01	Poisson
Barium (UG/L)	43.364469	4	31.5	4.509	0	No	non-	0.025	Param.
Cadmium (UG/L)	7.494633405	4	n/a	n/a	100	n/a	n/a	1.00E-02	Poisson
Calcium (UG/L)	107402.9324	4	74500	12505.199	0	No	non-	0.05	Param.
Chromium (UG/L)	118.742759	4	25.434	35.463	25	Yes	non-	0.05	Param.
Cobalt (UG/L)	1	4	n/a	n/a	75	n/a	n/a	0.2	NP (NDs)
Copper (UG/L)	25.790099	4	7	7.141	50	Yes	non-	0.05	Param.
Iron (UG/L)	441.96075	4	208	88.92	50	Yes	non-	0.025	Param.

Statistical Summary
Metals in the South Area of Concern

Constituent Name	Upper Limit	Background	Background Mean	Standard Deviation	% Non-detects	Cohens	Transformation	Alpha	Method
Lead (UG/L)	20.883977	4	6	5.657	0	No	non-	0.05	Param.
Magnesium (UG/L)	36799.5884	4	23575	5026.181	0	No	non-	0.05	Param.
Manganese (UG/L)	1216.324076	4	11.977	8.703	0	No	square root(x)	0.025	Param.
Nickel (UG/L)	9.83599	4	3	2.598	50	Yes	non-	0.05	Param.
Vanadium (UG/L)	3.278663	4	1	0.866	50	Yes	non-	0.05	Param.
Zinc (UG/L)	34.90352743	4	n/a	n/a	100	n/a	n/a	1.00E-02	Poisson
SAOC Downgradient Monitoring Wells									
Aluminum (UG/L)	13071.7486	8	50.442	29.354	0	No	square root(x)	0.05	Param.
Antimony (UG/L)	5.21812878	8	n/a	n/a	100	n/a	n/a	1.00E-02	Poisson
Arsenic (UG/L)	84.05744984	8	4.54	2.303	0	No	square root(x)	0.05	Param.
Barium (UG/L)	126.884737	8	87.625	19.537	0	No	non-	0.05	Param.
Cadmium (UG/L)	1	8	n/a	n/a	87.5	n/a	n/a	0.1111	NP (NDs)
Calcium (UG/L)	150752.1617	8	123833.333	12367.969	0	No	non-	0.05	Param.
Chromium (UG/L)	51.397515	8	13.88	14.259	25	Yes	non-	0.05	Param.
Cobalt (UG/L)	16.36965	8	5.441	5.021	33.33333333	Yes	non-	0.05	Param.
Copper (UG/L)	68.686097	8	38	14.099	50	Yes	non-	0.05	Param.
Iron (UG/L)	47587.33406	8	17723.75	14861.19	12.5	No	non-	0.05	Param.
Lead (UG/L)	31.317787	8	8	10.713	50	Yes	non-	0.05	Param.
Magnesium (UG/L)	62530.62701	8	49333.333	6063.552	0	No	non-	0.05	Param.
Manganese (UG/L)	1040.34823	8	687.625	175.528	0	No	non-	0.05	Param.
Nickel (UG/L)	37.368874	8	15.873	9.876	33.33333333	Yes	non-	0.05	Param.
Vanadium (UG/L)	31.640965	8	9.112	10.351	33.33333333	Yes	non-	0.05	Param.
Zinc (UG/L)	32.57376693	8	n/a	n/a	100	n/a	n/a	1.00E-02	Poisson

Statistical Summary
Metals in the North and West Areas of Concern

Constituent Name	Upper Limit	Background	Background Mean	Standard Deviation	% Non-detects	Cohens	Transformation	Alpha	Method
North and West Areas of Concern Internal Monitoring Wells									
Aluminum (UG/L)	13800	16	n/a	n/a	33.33333333	n/a	n/a	0.2	NP (cohens)
Antimony (UG/L)	2	16	n/a	n/a	75	n/a	n/a	0.2	NP (NDs)
Arsenic (UG/L)	37	16	n/a	n/a	37.5	n/a	failed	0.05882	NP (normality)
Barium (UG/L)	163.626652	16	97.625	36.526	0	No	non-	0.05	Param.
Cadmium (UG/L)	2.618047462	16	n/a	n/a	100	n/a	n/a	1.00E-02	Poisson
Calcium (UG/L)	165770.1418	16	100683.333	34820.549	0	No	non-	0.15	Param.
Chromium (UG/L)	36	16	n/a	n/a	60	n/a	n/a	0.2308	NP (NDs)
Cobalt (UG/L)	12	16	n/a	n/a	25	n/a	n/a	0.2	NP (cohens)
Copper (UG/L)	26	16	n/a	n/a	83.33333333	n/a	n/a	0.2	NP (NDs)
Iron (UG/L)	33000	16	n/a	n/a	0	n/a	failed	0.05882	NP (normality)
Lead (UG/L)	19	16	n/a	n/a	58.33333333	n/a	n/a	0.2	NP (NDs)
Magnesium (UG/L)	36187.38379	16	19344.167	9010.89	0	No	non-	0.15	Param.
Manganese (UG/L)	2268.867835	16	8.913	2.34	0	No	cube root(x)	0.05	Param.
Nickel (UG/L)	20.418247	16	11.164	4.951	50	Yes	non-	0.15	Param.
Vanadium (UG/L)	34	16	n/a	n/a	41.66666667	n/a	n/a	0.2	NP (cohens)
Zinc (UG/L)	68.48823929	16	n/a	n/a	91.66666667	n/a	n/a	1.00E-02	Poisson
North and West Areas of Concern Side Gradient Monitoring Wells									
Aluminum (UG/L)	1199.655868	12	441.423	405.644	33.33333333	Yes	non-	0.05	Param.
Antimony (UG/L)	3.529345042	12	n/a	n/a	100	n/a	n/a	1.00E-02	Poisson
Arsenic (UG/L)	5.482524	12	3.408	1.11	41.66666667	Yes	non-	0.05	Param.
Barium (UG/L)	152.148072	12	80.833	38.152	0	No	non-	0.05	Param.
Cadmium (UG/L)	2.956221671	12	n/a	n/a	91.66666667	n/a	n/a	1.00E-02	Poisson
Calcium (UG/L)	128990.8182	12	1.16827E+20	8.56071E+19	0	No	x^4	0.05	Param.
Chromium (UG/L)	9.689495	12	5.374	2.309	50	Yes	non-	0.05	Param.
Cobalt (UG/L)	7	12	n/a	n/a	50	n/a	n/a	0.07692	NP (cohens)
Copper (UG/L)	14	12	n/a	n/a	83.33333333	n/a	n/a	0.07692	NP (NDs)
Iron (UG/L)	25445.38385	12	13160	6572.512	0	No	non-	0.05	Param.
Lead (UG/L)	8	12	n/a	n/a	83.33333333	n/a	n/a	0.07692	NP (NDs)
Magnesium (UG/L)	35392.92314	12	22925	6670.168	0	No	non-	0.05	Param.
Manganese (UG/L)	1744.076813	12	981.833	407.79	0	No	non-	0.05	Param.
Nickel (UG/L)	712	12	n/a	n/a	41.66666667	n/a	failed	0.07692	NP (normality)
Vanadium (UG/L)	14	12	n/a	n/a	50	n/a	n/a	0.07692	NP (cohens)
Zinc (UG/L)	25.19245466	12	n/a	n/a	91.66666667	n/a	n/a	1.00E-02	Poisson
North and West Areas of Concern Upgradient Monitoring Wells									
Aluminum (UG/L)	3611.546164	4	1381.75	847.464	0	No	non-	0.05	Param.
Antimony (UG/L)	8.421689896	4	n/a	n/a	100	n/a	n/a	1.00E-02	Poisson
Arsenic (UG/L)	2	4	n/a	n/a	75	n/a	non-	0.1111	NP (NDs)
Barium (UG/L)	29.19671	4	25.25	1.5	0	No	non-	0.025	Param.
Cadmium (UG/L)	7.494633405	4	n/a	n/a	100	n/a	n/a	1.00E-02	Poisson
Calcium (UG/L)	48995.3709	4	24000	9499.825	0	No	non-	0.05	Param.
Chromium (UG/L)	6.769125	4	4.25	0.957	0	No	non-	0.05	Param.
Cobalt (UG/L)	5	4	n/a	n/a	25	n/a	failed	0.2	NP (normality)
Copper (UG/L)	21	4	n/a	n/a	75	n/a	n/a	0.2	NP (NDs)
Iron (UG/L)	10131.13477	4	3152.999	2652.134	25	Yes	non-	0.025	Param

Statistical Summary
Metals in the North and West Areas of Concern

Constituent Name	Upper Limit	Background	Background Mean	Standard Deviation	% Non-detects	Cohens	Transformation	Alpha	Method
Lead (UG/L)	7	4	n/a	n/a	75	n/a	n/a	0.2	NP (NDs)
Magnesium (UG/L)	20267.04989	4	8425.842	4500.409	25	Yes	non-	0.05	Param
Manganese (UG/L)	1193.45062	4	427.75	291.015	0	No	non-	0.025	Param.
Nickel (UG/L)	10	4	n/a	n/a	75	n/a	n/a	0.2	NP (NDs)
Vanadium (UG/L)	19.249305	4	6.32	4.914	25	Yes	non-	0.05	Param.
Zinc (UG/L)	31.26356374	4	n/a	n/a	100	n/a	n/a	1.00E-02	Poisson
North and West Areas of Concern Downgradient Monitoring Wells									
Aluminum (UG/L)	2278.325573	4	924.053	514.709	25	Yes	non-	0.05	Param.
Antimony (UG/L)	8.421689896	4	n/a	n/a	100	n/a	n/a	1.00E-02	Poisson
Arsenic (UG/L)	2	4	n/a	n/a	75	n/a	non-	0.1111	NP (NDs)
Barium (UG/L)	43.024742	4	24.25	7.136	0	No	non-	0.025	Param.
Cadmium (UG/L)	7.494633405	4	n/a	n/a	100	n/a	n/a	1.00E-02	Poisson
Calcium (UG/L)	126537.1958	4	205.434	57.118	0	No	square root(x)	0.05	Param.
Chromium (UG/L)	10.857304	4	4.309	2.489	25	Yes	non-	0.05	Param.
Cobalt (UG/L)	7.631138	4	5	1	25	Yes	non-	0.05	Param.
Copper (UG/L)	18.724442	4	9.484	3.512	50	Yes	non-	0.05	Param.
Iron (UG/L)	15672.67681	4	2825.187	4882.86	25	Yes	non-	0.025	Param.
Lead (UG/L)	4.5	4	n/a	n/a	75	n/a	n/a	0.2	NP (NDs)
Magnesium (UG/L)	26600	4	n/a	n/a	0	n/a	failed	0.2	NP (normality)
Manganese (UG/L)	971.57601	4	318.5	248.21	0	No	non-	0.025	Param.
Nickel (UG/L)	21.057104	4	9.299	4.469	25	Yes	non-	0.05	Param.
Vanadium (UG/L)	4.63114	4	2	1	25	Yes	non-	0.05	Param.
Zinc (UG/L)	27.02049722	4	n/a	n/a	100	n/a	n/a	1.00E-02	Poisson

Statistical Background Data
Metals in the South Area of Concern

Well	Date	Analyte	Concentration	Units
Down Gradient Monitoring Wells				
MW42	03/25/97	Antimony	<1	ug/L
MW42	09/26/97	Antimony	<1	ug/L
MW43	03/26/97	Antimony	<1	ug/L
MW43	09/26/97	Antimony	<1	ug/L
MW42	03/25/97	Cadmium	<1	ug/L
MW42	06/26/97	Cadmium	<1	ug/L
MW42	09/26/97	Cadmium	<1	ug/L
MW43	03/26/97	Cadmium	<1	ug/L
MW43	06/26/97	Cadmium	<1	ug/L
MW42	06/26/97	Antimony	<2	ug/L
MW43	06/26/97	Antimony	<2	ug/L
MW42	06/26/97	Lead	<2	ug/L
MW42	09/26/97	Lead	<6	ug/L
MW42	06/26/97	Chromium	<8	ug/L
MW42	06/26/97	Nickel	<8	ug/L
MW42	06/26/97	Copper	<9	ug/L
MW42	06/26/97	Zinc	<18	ug/L
MW42	03/25/97	Zinc	<20	ug/L
MW42	09/26/97	Zinc	<30	ug/L
MW43	06/26/97	Zinc	<56	ug/L
MW43	03/26/97	Zinc	<68	ug/L
MW43	09/26/97	Cadmium	1	ug/L
MW42	08/07/96	Arsenic	2	ug/L
MW42	03/25/97	Cobalt	2	ug/L
MW42	06/26/97	Cobalt	2	ug/L
MW42	09/26/97	Cobalt	2	ug/L
MW42	03/25/97	Vanadium	2	ug/L
MW42	06/26/97	Vanadium	2	ug/L
MW42	03/25/97	Lead	3	ug/L
MW42	09/26/97	Vanadium	4	ug/L
MW42	03/25/97	Chromium	5	ug/L
MW42	03/25/97	Nickel	7	ug/L
MW43	06/26/97	Cobalt	8	ug/L
MW42	06/26/97	Arsenic	8	ug/L
MW42	09/26/97	Nickel	12	ug/L
MW43	03/26/97	Cobalt	13	ug/L
MW43	06/26/97	Vanadium	13	ug/L
MW42	09/26/97	Arsenic	13	ug/L
MW42	03/25/97	Arsenic	14	ug/L
MW42	09/26/97	Chromium	14	ug/L
MW43	06/26/97	Lead	16	ug/L
MW43	08/08/96	Arsenic	18	ug/L
MW42	03/25/97	Copper	19	ug/L
MW43	09/26/97	Cobalt	20	ug/L
MW43	03/26/97	Lead	21	ug/L
MW42	09/26/97	Copper	22	ug/L
MW43	06/26/97	Nickel	23	ug/L

Statistical Background Data
Metals in the South Area of Concern

Well	Date	Analyte	Concentration	Units
MW43	03/26/97	Vanadium	25	ug/L
MW43	03/26/97	Chromium	26	ug/L
MW43	06/26/97	Chromium	26	ug/L
MW43	03/26/97	Nickel	29	ug/L
MW43	09/26/97	Vanadium	31	ug/L
MW43	06/26/97	Arsenic	31	ug/L
MW43	09/26/97	Lead	33	ug/L
MW43	03/26/97	Arsenic	35	ug/L
MW43	06/26/97	Copper	39	ug/L
MW43	03/26/97	Copper	45	ug/L
MW43	08/08/96	Barium	63	ug/L
MW42	06/26/97	Barium	71	ug/L
MW43	09/26/97	Copper	75	ug/L
MW43	06/26/97	Barium	81	ug/L
MW43	09/26/97	Arsenic	81	ug/L
MW43	09/26/97	Nickel	82	ug/L
MW42	03/25/97	Barium	83	ug/L
MW43	03/26/97	Barium	88	ug/L
MW42	08/07/96	Barium	90	ug/L
MW43	09/26/97	Chromium	95	ug/L
MW42	09/26/97	Barium	97	ug/L
MW43	09/26/97	Zinc	104	ug/L
MW43	09/26/97	Barium	128	ug/L
MW43	08/08/96	Manganese	374	ug/L
MW43	06/26/97	Manganese	586	ug/L
MW42	06/26/97	Manganese	597	ug/L
MW43	03/26/97	Manganese	666	ug/L
MW42	09/26/97	Manganese	697	ug/L
MW42	06/26/97	Aluminum	725	ug/L
MW42	03/25/97	Aluminum	752	ug/L
MW42	03/25/97	Manganese	796	ug/L
MW42	08/07/96	Aluminum	808	ug/L
MW43	09/26/97	Manganese	857	ug/L
MW42	08/07/96	Manganese	928	ug/L
MW42	09/26/97	Aluminum	1880	ug/L
MW43	08/08/96	Aluminum	2920	ug/L
MW43	06/26/97	Aluminum	4270	ug/L
MW42	06/26/97	Iron	6300	ug/L
MW42	03/25/97	Iron	9920	ug/L
MW43	03/26/97	Aluminum	10100	ug/L
MW42	09/26/97	Iron	11100	ug/L
MW43	09/26/97	Aluminum	12700	ug/L
MW43	08/08/96	Iron	13900	ug/L
MW43	06/26/97	Iron	22200	ug/L
MW43	03/26/97	Iron	29200	ug/L
MW42	06/26/97	Magnesium	38700	ug/L
MW42	09/26/97	Magnesium	44400	ug/L
MW43	09/26/97	Iron	47500	ug/L
MW43	08/08/96	Magnesium	48100	ug/L

Statistical Background Data
Metals in the South Area of Concern

Well	Date	Analyte	Concentration	Units
MW42	03/25/97	Magnesium	49000	ug/L
MW42	08/07/96	Magnesium	49800	ug/L
MW43	03/26/97	Magnesium	55000	ug/L
MW43	06/26/97	Magnesium	55400	ug/L
MW43	09/26/97	Magnesium	63600	ug/L
MW42	06/26/97	Calcium	105000	ug/L
MW43	08/08/96	Calcium	115000	ug/L
MW42	09/26/97	Calcium	118000	ug/L
MW43	06/26/97	Calcium	123000	ug/L
MW43	03/26/97	Calcium	128000	ug/L
MW42	03/25/97	Calcium	133000	ug/L
MW43	09/26/97	Calcium	134000	ug/L
MW42	08/07/96	Calcium	139000	ug/L
MW42	08/07/96	Cadmium	<1	ug/L
MW43	08/08/96	Cadmium	<1	ug/L
MW42	08/07/96	Antimony	<2	ug/L
MW43	08/08/96	Antimony	<2	ug/L
MW42	08/07/96	Lead	<6	ug/L
MW43	08/08/96	Lead	<8	ug/L
MW42	08/07/96	Cobalt	<10	ug/L
MW43	08/08/96	Cobalt	<10	ug/L
MW42	08/07/96	Zinc	<10	ug/L
MW42	08/07/96	Copper	<16	ug/L
MW42	08/07/96	Nickel	<20	ug/L
MW42	08/07/96	Vanadium	<20	ug/L
MW43	08/08/96	Vanadium	<20	ug/L
MW43	08/08/96	Nickel	<26	ug/L
MW43	08/08/96	Zinc	<29	ug/L
MW43	08/08/96	Copper	<38	ug/L
MW42	08/07/96	Iron	<3340	ug/L
Internal Monitoring Wells				
MW06	04/03/97	Antimony	<1	ug/L
MW06	09/23/97	Antimony	<1	ug/L
MW19	11/05/96	Antimony	<1	ug/L
MW19	03/27/97	Antimony	<1	ug/L
MW19	09/29/97	Antimony	<1	ug/L
MW45	09/29/97	Antimony	<1	ug/L
MW06	11/07/96	Cadmium	<1	ug/L
MW06	04/03/97	Cadmium	<1	ug/L
MW06	07/01/97	Cadmium	<1	ug/L
MW06	09/23/97	Cadmium	<1	ug/L
MW19	11/05/96	Cadmium	<1	ug/L
MW19	03/27/97	Cadmium	<1	ug/L
MW19	06/30/97	Cadmium	<1	ug/L
MW19	09/29/97	Cadmium	<1	ug/L
MW45	04/02/97	Cadmium	<1	ug/L
MW45	06/26/97	Cadmium	<1	ug/L
MW45	09/29/97	Cadmium	<1	ug/L

Statistical Background Data
Metals in the South Area of Concern

Well	Date	Analyte	Concentration	Units
MW19	03/27/97	Lead	<1	ug/L
MW45	04/02/97	Lead	<1	ug/L
MW06	04/03/97	Vanadium	<1	ug/L
MW06	07/01/97	Vanadium	<1	ug/L
MW06	09/23/97	Vanadium	<1	ug/L
MW19	11/05/96	Vanadium	<1	ug/L
MW19	03/27/97	Vanadium	<1	ug/L
MW19	09/29/97	Vanadium	<1	ug/L
MW45	04/02/97	Vanadium	<1	ug/L
MW45	06/26/97	Vanadium	<1	ug/L
MW45	09/29/97	Vanadium	<1	ug/L
MW06	11/07/96	Antimony	<2	ug/L
MW06	07/01/97	Antimony	<2	ug/L
MW19	06/30/97	Antimony	<2	ug/L
MW45	06/26/97	Antimony	<2	ug/L
MW45	09/29/97	Chromium	<3	ug/L
MW45	06/26/97	Copper	<4	ug/L
MW45	06/26/97	Chromium	<5	ug/L
MW19	11/05/96	Copper	<5	ug/L
MW19	11/05/96	Chromium	<7	ug/L
MW19	06/30/97	Copper	<7	ug/L
MW06	09/23/97	Copper	<8	ug/L
MW45	06/26/97	Nickel	<8	ug/L
MW19	11/05/96	Zinc	<9	ug/L
MW06	04/03/97	Zinc	<10	ug/L
MW45	04/02/97	Zinc	<12	ug/L
MW06	11/07/96	Zinc	<13	ug/L
MW19	06/30/97	Zinc	<14	ug/L
MW19	03/27/97	Zinc	<16	ug/L
MW19	09/29/97	Zinc	<16	ug/L
MW45	09/29/97	Zinc	<16	ug/L
MW06	09/23/97	Zinc	<20	ug/L
MW45	06/26/97	Zinc	<21	ug/L
MW19	03/27/97	Arsenic	<24	ug/L
MW06	07/01/97	Zinc	<27	ug/L
MW06	04/03/97	Aluminum	<87	ug/L
MW45	09/29/97	Aluminum	<100	ug/L
MW45	06/26/97	Aluminum	<183	ug/L
MW45	04/02/97	Antimony	1	ug/L
MW19	11/05/96	Cobalt	1	ug/L
MW06	04/03/97	Lead	1	ug/L
MW06	09/23/97	Cobalt	2	ug/L
MW19	03/27/97	Cobalt	2	ug/L
MW19	06/30/97	Cobalt	2	ug/L
MW19	09/29/97	Cobalt	2	ug/L
MW19	11/05/96	Lead	2	ug/L
MW19	09/29/97	Lead	2	ug/L
MW19	06/30/97	Vanadium	2	ug/L
MW06	07/01/97	Cobalt	3	ug/L

Statistical Background Data
Metals in the South Area of Concern

Well	Date	Analyte	Concentration	Units
MW45	06/26/97	Cobalt	3	ug/L
MW45	09/29/97	Cobalt	3	ug/L
MW06	11/07/96	Cobalt	4	ug/L
MW06	04/03/97	Cobalt	4	ug/L
MW45	04/02/97	Cobalt	4	ug/L
MW19	06/30/97	Lead	4	ug/L
MW06	11/07/96	Vanadium	4	ug/L
MW19	03/27/97	Copper	5	ug/L
MW19	03/27/97	Chromium	6	ug/L
MW19	09/29/97	Chromium	8	ug/L
MW06	11/07/96	Copper	8	ug/L
MW06	11/07/96	Lead	8	ug/L
MW45	09/29/97	Copper	9	ug/L
MW06	09/23/97	Lead	9	ug/L
MW45	09/29/97	Lead	9	ug/L
MW19	06/30/97	Chromium	10	ug/L
MW06	07/01/97	Lead	10	ug/L
MW45	09/29/97	Nickel	10	ug/L
MW06	07/01/97	Chromium	11	ug/L
MW06	04/03/97	Arsenic	11	ug/L
MW45	04/02/97	Chromium	12	ug/L
MW45	06/26/97	Lead	12	ug/L
MW06	07/01/97	Copper	15	ug/L
MW19	06/30/97	Nickel	16	ug/L
MW45	04/02/97	Nickel	16	ug/L
MW06	07/01/97	Arsenic	16	ug/L
MW06	07/01/97	Nickel	17	ug/L
MW19	09/29/97	Nickel	17	ug/L
MW45	04/02/97	Arsenic	17	ug/L
MW19	11/05/96	Nickel	18	ug/L
MW19	03/27/97	Nickel	19	ug/L
MW06	04/03/97	Chromium	20	ug/L
MW19	06/30/97	Arsenic	21	ug/L
MW45	08/08/96	Arsenic	22	ug/L
MW06	11/07/96	Chromium	24	ug/L
MW45	06/26/97	Arsenic	24	ug/L
MW06	09/23/97	Nickel	25	ug/L
MW19	11/05/96	Arsenic	27	ug/L
MW19	09/29/97	Arsenic	27	ug/L
MW06	09/23/97	Chromium	33	ug/L
MW06	04/03/97	Nickel	33	ug/L
MW45	08/08/96	Lead	38	ug/L
MW06	11/07/96	Nickel	39	ug/L
MW06	09/23/97	Arsenic	42	ug/L
MW45	09/29/97	Arsenic	44	ug/L
MW45	04/02/97	Copper	48	ug/L
MW06	04/03/97	Copper	52	ug/L
MW06	11/07/96	Arsenic	72	ug/L
MW45	06/26/97	Barium	84	ug/L

Statistical Background Data
Metals in the South Area of Concern

Well	Date	Analyte	Concentration	Units
MW45	08/08/96	Barium	84	ug/L
MW06	07/01/97	Aluminum	106	ug/L
MW45	09/29/97	Barium	110	ug/L
MW45	04/02/97	Barium	117	ug/L
MW45	04/02/97	Aluminum	148	ug/L
MW06	11/07/96	Aluminum	150	ug/L
MW19	03/27/97	Manganese	165	ug/L
MW06	07/01/97	Barium	168	ug/L
MW06	09/23/97	Aluminum	180	ug/L
MW06	04/03/97	Barium	182	ug/L
MW19	09/29/97	Copper	184	ug/L
MW19	06/30/97	Manganese	243	ug/L
MW19	09/29/97	Manganese	243	ug/L
MW19	11/05/96	Manganese	268	ug/L
MW06	11/07/96	Barium	281	ug/L
MW19	11/05/96	Aluminum	283	ug/L
MW19	03/27/97	Aluminum	322	ug/L
MW06	09/23/97	Barium	369	ug/L
MW19	09/29/97	Aluminum	402	ug/L
MW45	06/26/97	Manganese	416	ug/L
MW19	06/30/97	Aluminum	421	ug/L
MW45	09/29/97	Manganese	480	ug/L
MW06	04/03/97	Manganese	486	ug/L
MW19	06/30/97	Barium	587	ug/L
MW45	08/08/96	Manganese	641	ug/L
MW19	09/29/97	Barium	648	ug/L
MW19	03/27/97	Barium	666	ug/L
MW19	11/05/96	Barium	673	ug/L
MW45	04/02/97	Manganese	688	ug/L
MW45	08/08/96	Aluminum	776	ug/L
MW06	07/01/97	Manganese	1580	ug/L
MW06	04/03/97	Iron	1590	ug/L
MW06	09/23/97	Manganese	2170	ug/L
MW06	11/07/96	Manganese	2900	ug/L
MW06	07/01/97	Iron	3230	ug/L
MW19	06/30/97	Iron	4370	ug/L
MW19	03/27/97	Iron	4630	ug/L
MW19	09/29/97	Iron	4660	ug/L
MW19	11/05/96	Iron	4810	ug/L
MW45	08/08/96	Iron	9570	ug/L
MW45	06/26/97	Iron	10100	ug/L
MW45	04/02/97	Iron	11400	ug/L
MW06	09/23/97	Iron	14300	ug/L
MW45	09/29/97	Iron	15900	ug/L
MW06	11/07/96	Iron	16500	ug/L
MW45	06/26/97	Magnesium	23200	ug/L
MW45	08/08/96	Magnesium	27500	ug/L
MW45	09/29/97	Magnesium	28400	ug/L
MW06	04/03/97	Magnesium	32200	ug/L

Statistical Background Data
Metals in the South Area of Concern

Well	Date	Analyte	Concentration	Units
MW45	04/02/97	Magnesium	32200	ug/L
MW06	09/23/97	Magnesium	34200	ug/L
MW06	07/01/97	Magnesium	34400	ug/L
MW06	11/07/96	Magnesium	37600	ug/L
MW19	06/30/97	Magnesium	56200	ug/L
MW19	09/29/97	Magnesium	63900	ug/L
MW19	03/27/97	Magnesium	65000	ug/L
MW19	11/05/96	Magnesium	67700	ug/L
MW19	03/27/97	Calcium	72700	ug/L
MW19	06/30/97	Calcium	73400	ug/L
MW19	11/05/96	Calcium	79400	ug/L
MW19	09/29/97	Calcium	85300	ug/L
MW45	06/26/97	Calcium	89100	ug/L
MW45	08/08/96	Calcium	97100	ug/L
MW45	09/29/97	Calcium	112000	ug/L
MW45	04/02/97	Calcium	120000	ug/L
MW06	07/01/97	Calcium	174000	ug/L
MW06	09/23/97	Calcium	174000	ug/L
MW06	04/03/97	Calcium	177000	ug/L
MW06	11/07/96	Calcium	216000	ug/L
MW45	08/08/96	Cadmium	<1	ug/L
MW45	08/08/96	Antimony	<2	ug/L
MW45	08/08/96	Cobalt	<10	ug/L
MW45	08/08/96	Zinc	<15	ug/L
MW45	08/08/96	Vanadium	<20	ug/L
MW45	08/08/96	Copper	<21	ug/L
MW45	08/08/96	Nickel	<35	ug/L
Side Gradient Monitoring Wells				
MW47	08/07/96	Cadmium	<1	ug/L
MW15	11/07/96	Antimony	<1	ug/L
MW15	09/23/97	Antimony	<1	ug/L
MW41	03/25/97	Antimony	<1	ug/L
MW41	09/29/97	Antimony	<1	ug/L
MW44	03/26/97	Antimony	<1	ug/L
MW44	09/29/97	Antimony	<1	ug/L
MW47	03/27/97	Antimony	<1	ug/L
MW47	10/01/97	Antimony	<1	ug/L
MW15	11/07/96	Cadmium	<1	ug/L
MW15	04/03/97	Cadmium	<1	ug/L
MW15	06/25/97	Cadmium	<1	ug/L
MW15	09/23/97	Cadmium	<1	ug/L
MW41	03/25/97	Cadmium	<1	ug/L
MW41	06/25/97	Cadmium	<1	ug/L
MW41	09/29/97	Cadmium	<1	ug/L
MW44	03/26/97	Cadmium	<1	ug/L
MW44	06/26/97	Cadmium	<1	ug/L
MW44	09/29/97	Cadmium	<1	ug/L
MW47	03/27/97	Cadmium	<1	ug/L

Statistical Background Data
Metals in the South Area of Concern

Well	Date	Analyte	Concentration	Units
MW47	06/26/97	Cadmium	<1	ug/L
MW47	10/01/97	Cadmium	<1	ug/L
MW41	03/25/97	Cobalt	<1	ug/L
MW41	06/25/97	Cobalt	<1	ug/L
MW44	03/26/97	Cobalt	<1	ug/L
MW44	09/29/97	Cobalt	<1	ug/L
MW47	03/27/97	Cobalt	<1	ug/L
MW15	04/03/97	Lead	<1	ug/L
MW44	06/26/97	Lead	<1	ug/L
MW44	09/29/97	Lead	<1	ug/L
MW15	04/03/97	Vanadium	<1	ug/L
MW15	06/25/97	Vanadium	<1	ug/L
MW44	03/26/97	Vanadium	<1	ug/L
MW44	09/29/97	Vanadium	<1	ug/L
MW47	03/27/97	Vanadium	<1	ug/L
MW15	06/25/97	Antimony	<2	ug/L
MW41	06/25/97	Antimony	<2	ug/L
MW44	06/26/97	Antimony	<2	ug/L
MW47	06/26/97	Antimony	<2	ug/L
MW41	06/25/97	Arsenic	<2	ug/L
MW41	09/29/97	Arsenic	<2	ug/L
MW47	03/27/97	Arsenic	<2	ug/L
MW47	06/26/97	Arsenic	<2	ug/L
MW47	10/01/97	Arsenic	<2	ug/L
MW15	11/07/96	Chromium	<2	ug/L
MW47	10/01/97	Chromium	<2	ug/L
MW15	11/07/96	Copper	<2	ug/L
MW15	11/07/96	Lead	<2	ug/L
MW41	03/25/97	Arsenic	<3	ug/L
MW47	03/27/97	Copper	<3	ug/L
MW44	09/29/97	Chromium	<4	ug/L
MW44	09/29/97	Nickel	<4	ug/L
MW15	06/25/97	Lead	<5	ug/L
MW47	06/26/97	Nickel	<5	ug/L
MW15	06/25/97	Chromium	<6	ug/L
MW41	06/25/97	Nickel	<6	ug/L
MW41	06/25/97	Chromium	<7	ug/L
MW47	06/26/97	Chromium	<7	ug/L
MW41	03/25/97	Nickel	<7	ug/L
MW47	06/26/97	Copper	<8	ug/L
MW44	03/26/97	Arsenic	<9	ug/L
MW41	06/25/97	Copper	<9	ug/L
MW15	04/03/97	Zinc	<9	ug/L
MW44	03/26/97	Zinc	<10	ug/L
MW15	06/25/97	Copper	<12	ug/L
MW44	09/29/97	Zinc	<12	ug/L
MW15	11/07/96	Zinc	<13	ug/L
MW47	03/27/97	Zinc	<17	ug/L
MW15	09/23/97	Zinc	<18	ug/L

Statistical Background Data
Metals in the South Area of Concern

Well	Date	Analyte	Concentration	Units
MW47	10/01/97	Zinc	<20	ug/L
MW44	06/26/97	Zinc	<28	ug/L
MW41	09/29/97	Zinc	<30	ug/L
MW41	06/25/97	Zinc	<37	ug/L
MW47	06/26/97	Zinc	<42	ug/L
MW15	06/25/97	Zinc	<44	ug/L
MW15	11/07/96	Aluminum	<135	ug/L
MW47	06/26/97	Magnesium	<1950	ug/L
MW41	03/25/97	Zinc	<10	ug/L
MW15	04/03/97	Antimony	1	ug/L
MW41	09/29/97	Cobalt	1	ug/L
MW47	06/26/97	Cobalt	1	ug/L
MW15	09/23/97	Lead	1	ug/L
MW44	03/26/97	Lead	1	ug/L
MW47	03/27/97	Nickel	1	ug/L
MW15	09/23/97	Vanadium	1	ug/L
MW41	06/25/97	Vanadium	1	ug/L
MW41	09/29/97	Vanadium	1	ug/L
MW44	03/26/97	Chromium	2	ug/L
MW47	03/27/97	Chromium	2	ug/L
MW44	06/26/97	Cobalt	2	ug/L
MW47	10/01/97	Cobalt	2	ug/L
MW47	03/27/97	Lead	2	ug/L
MW15	11/07/96	Vanadium	2	ug/L
MW47	10/01/97	Vanadium	2	ug/L
MW41	09/29/97	Lead	3	ug/L
MW47	10/01/97	Nickel	3	ug/L
MW41	03/25/97	Vanadium	3	ug/L
MW15	04/03/97	Cobalt	4	ug/L
MW15	06/25/97	Cobalt	4	ug/L
MW44	03/26/97	Copper	4	ug/L
MW44	09/29/97	Copper	4	ug/L
MW44	03/26/97	Nickel	4	ug/L
MW44	06/26/97	Vanadium	4	ug/L
MW47	06/26/97	Vanadium	4	ug/L
MW15	04/03/97	Chromium	5	ug/L
MW15	11/07/96	Cobalt	5	ug/L
MW15	09/23/97	Cobalt	5	ug/L
MW44	08/08/96	Arsenic	6	ug/L
MW47	10/01/97	Copper	6	ug/L
MW41	09/29/97	Chromium	7	ug/L
MW41	03/25/97	Chromium	7	ug/L
MW47	03/27/97	Barium	8	ug/L
MW47	10/01/97	Lead	8	ug/L
MW47	03/27/97	Manganese	8	ug/L
MW41	09/29/97	Nickel	8	ug/L
MW41	06/25/97	Lead	10	ug/L
MW44	09/29/97	Arsenic	11	ug/L
MW47	06/26/97	Barium	12	ug/L

Statistical Background Data
Metals in the South Area of Concern

Well	Date	Analyte	Concentration	Units
MW41	09/29/97	Copper	12	ug/L
MW47	06/26/97	Lead	12	ug/L
MW47	10/01/97	Barium	13	ug/L
MW15	09/23/97	Chromium	13	ug/L
MW15	09/23/97	Copper	13	ug/L
MW41	03/25/97	Lead	13	ug/L
MW41	03/25/97	Copper	16	ug/L
MW47	06/26/97	Manganese	16	ug/L
MW41	06/25/97	Barium	17	ug/L
MW47	10/01/97	Manganese	17	ug/L
MW44	06/26/97	Nickel	18	ug/L
MW15	04/03/97	Nickel	19	ug/L
MW15	06/25/97	Nickel	19	ug/L
MW41	08/07/96	Barium	19	ug/L
MW15	11/07/96	Nickel	23	ug/L
MW47	08/07/96	Lead	23	ug/L
MW15	09/23/97	Nickel	24	ug/L
MW15	04/03/97	Copper	26	ug/L
MW44	06/26/97	Copper	27	ug/L
MW47	08/07/96	Manganese	27	ug/L
MW41	09/29/97	Barium	28	ug/L
MW41	03/25/97	Barium	31	ug/L
MW44	06/26/97	Chromium	31	ug/L
MW15	04/03/97	Arsenic	37	ug/L
MW44	08/08/96	Manganese	38	ug/L
MW15	06/25/97	Arsenic	41	ug/L
MW44	06/26/97	Arsenic	41	ug/L
MW44	09/29/97	Manganese	44	ug/L
MW44	03/26/97	Manganese	46	ug/L
MW15	09/23/97	Arsenic	58	ug/L
MW15	11/07/96	Arsenic	59	ug/L
MW41	06/25/97	Manganese	73	ug/L
MW44	08/08/96	Barium	106	ug/L
MW44	06/26/97	Manganese	108	ug/L
MW44	09/29/97	Barium	112	ug/L
MW44	03/26/97	Barium	115	ug/L
MW15	09/23/97	Manganese	141	ug/L
MW44	06/26/97	Barium	150	ug/L
MW15	06/25/97	Manganese	167	ug/L
MW15	04/03/97	Manganese	276	ug/L
MW41	09/29/97	Manganese	280	ug/L
MW41	06/25/97	Aluminum	289	ug/L
MW41	06/25/97	Iron	302	ug/L
MW15	06/25/97	Aluminum	308	ug/L
MW41	03/25/97	Manganese	324	ug/L
MW44	03/26/97	Aluminum	394	ug/L
MW47	03/27/97	Iron	405	ug/L
MW41	08/07/96	Manganese	414	ug/L
MW44	09/29/97	Aluminum	457	ug/L

Statistical Background Data
Metals in the South Area of Concern

Well	Date	Analyte	Concentration	Units
MW15	04/03/97	Aluminum	472	ug/L
MW41	09/29/97	Aluminum	486	ug/L
MW15	09/23/97	Aluminum	487	ug/L
MW47	03/27/97	Aluminum	533	ug/L
MW15	11/07/96	Manganese	534	ug/L
MW47	10/01/97	Iron	569	ug/L
MW47	10/01/97	Aluminum	724	ug/L
MW41	03/25/97	Aluminum	1040	ug/L
MW15	06/25/97	Barium	1070	ug/L
MW47	06/26/97	Iron	1130	ug/L
MW41	03/25/97	Iron	1170	ug/L
MW15	04/03/97	Barium	1240	ug/L
MW15	09/23/97	Barium	1360	ug/L
MW15	11/07/96	Barium	1470	ug/L
MW47	06/26/97	Aluminum	1630	ug/L
MW44	06/26/97	Aluminum	1710	ug/L
MW47	03/27/97	Magnesium	2070	ug/L
MW44	03/26/97	Iron	2170	ug/L
MW44	09/29/97	Iron	2510	ug/L
MW47	08/07/96	Magnesium	2630	ug/L
MW47	10/01/97	Magnesium	3990	ug/L
MW15	06/25/97	Iron	5510	ug/L
MW15	04/03/97	Iron	5550	ug/L
MW47	06/26/97	Calcium	6130	ug/L
MW15	09/23/97	Iron	7010	ug/L
MW47	03/27/97	Calcium	7330	ug/L
MW15	11/07/96	Iron	7900	ug/L
MW47	08/07/96	Calcium	8530	ug/L
MW41	06/25/97	Magnesium	10900	ug/L
MW41	03/25/97	Magnesium	11300	ug/L
MW41	08/07/96	Magnesium	13300	ug/L
MW47	10/01/97	Calcium	13700	ug/L
MW44	06/26/97	Iron	14700	ug/L
MW41	09/29/97	Magnesium	18500	ug/L
MW41	06/25/97	Calcium	33300	ug/L
MW44	09/29/97	Magnesium	34500	ug/L
MW44	06/26/97	Magnesium	36100	ug/L
MW41	03/25/97	Calcium	36200	ug/L
MW44	03/26/97	Magnesium	37100	ug/L
MW44	08/08/96	Magnesium	37200	ug/L
MW41	08/07/96	Calcium	44000	ug/L
MW41	09/29/97	Calcium	55200	ug/L
MW15	06/25/97	Magnesium	66800	ug/L
MW15	06/25/97	Calcium	67900	ug/L
MW15	09/23/97	Calcium	73000	ug/L
MW15	04/03/97	Magnesium	73600	ug/L
MW15	09/23/97	Magnesium	74300	ug/L
MW15	04/03/97	Calcium	78800	ug/L
MW44	09/29/97	Calcium	83300	ug/L

Statistical Background Data
Metals in the South Area of Concern

Well	Date	Analyte	Concentration	Units
MW44	06/26/97	Calcium	85700	ug/L
MW44	08/08/96	Calcium	90500	ug/L
MW44	03/26/97	Calcium	90900	ug/L
MW15	11/07/96	Magnesium	93100	ug/L
MW15	11/07/96	Calcium	94100	ug/L
MW41	08/07/96	Cadmium	<1	ug/L
MW44	08/08/96	Cadmium	<1	ug/L
MW41	08/07/96	Arsenic	<1	ug/L
MW47	08/07/96	Arsenic	<1	ug/L
MW41	08/07/96	Antimony	<2	ug/L
MW44	08/08/96	Antimony	<2	ug/L
MW47	08/07/96	Antimony	<2	ug/L
MW41	08/07/96	Lead	<2	ug/L
MW44	08/08/96	Lead	<2	ug/L
MW47	08/07/96	Barium	<10	ug/L
MW41	08/07/96	Cobalt	<10	ug/L
MW44	08/08/96	Cobalt	<10	ug/L
MW47	08/07/96	Cobalt	<10	ug/L
MW41	08/07/96	Copper	<10	ug/L
MW41	08/07/96	Zinc	<10	ug/L
MW44	08/08/96	Zinc	<10	ug/L
MW47	08/07/96	Zinc	<10	ug/L
MW47	08/07/96	Copper	<15	ug/L
MW44	08/08/96	Copper	<16	ug/L
MW41	08/07/96	Nickel	<20	ug/L
MW47	08/07/96	Nickel	<20	ug/L
MW41	08/07/96	Vanadium	<20	ug/L
MW44	08/08/96	Vanadium	<20	ug/L
MW47	08/07/96	Vanadium	<20	ug/L
MW44	08/08/96	Nickel	<23	ug/L
MW41	08/07/96	Aluminum	<90	ug/L
MW44	08/08/96	Aluminum	<175	ug/L
MW47	08/07/96	Iron	<254	ug/L
MW47	08/07/96	Aluminum	<383	ug/L
MW44	08/08/96	Iron	<1480	ug/L
MW41	08/07/96	Iron	<1670	ug/L
Up Gradient Monitoring Wells				
MW18	11/05/96	Antimony	<1	ug/L
MW18	03/27/97	Antimony	<1	ug/L
MW18	09/29/97	Antimony	<1	ug/L
MW18	11/05/96	Cadmium	<1	ug/L
MW18	03/27/97	Cadmium	<1	ug/L
MW18	06/25/97	Cadmium	<1	ug/L
MW18	09/29/97	Cadmium	<1	ug/L
MW18	03/27/97	Cobalt	<1	ug/L
MW18	06/25/97	Cobalt	<1	ug/L
MW18	09/29/97	Cobalt	<1	ug/L
MW18	11/05/96	Copper	<1	ug/L

Statistical Background Data
Metals in the South Area of Concern

Well	Date	Analyte	Concentration	Units
MW18	03/27/97	Vanadium	<1	ug/L
MW18	06/25/97	Vanadium	<1	ug/L
MW18	06/25/97	Antimony	<2	ug/L
MW18	11/05/96	Arsenic	<2	ug/L
MW18	03/27/97	Arsenic	<2	ug/L
MW18	06/25/97	Arsenic	<2	ug/L
MW18	09/29/97	Arsenic	<2	ug/L
MW18	06/25/97	Nickel	<2	ug/L
MW18	11/05/96	Nickel	<3	ug/L
MW18	06/25/97	Chromium	<6	ug/L
MW18	06/25/97	Copper	<7	ug/L
MW18	11/05/96	Zinc	<7	ug/L
MW18	03/27/97	Zinc	<14	ug/L
MW18	11/05/96	Aluminum	<16	ug/L
MW18	09/29/97	Zinc	<20	ug/L
MW18	09/29/97	Aluminum	<36	ug/L
MW18	06/25/97	Iron	<54	ug/L
MW18	03/27/97	Aluminum	<56	ug/L
MW18	06/25/97	Aluminum	<56	ug/L
MW18	06/25/97	Zinc	<67	ug/L
MW18	09/29/97	Iron	<208	ug/L
MW18	11/05/96	Cobalt	1	ug/L
MW18	11/05/96	Vanadium	1	ug/L
MW18	11/05/96	Lead	2	ug/L
MW18	03/27/97	Lead	2	ug/L
MW18	09/29/97	Vanadium	2	ug/L
MW18	03/27/97	Copper	3	ug/L
MW18	03/27/97	Nickel	3	ug/L
MW18	06/25/97	Lead	6	ug/L
MW18	09/29/97	Nickel	6	ug/L
MW18	09/29/97	Copper	13	ug/L
MW18	09/29/97	Lead	14	ug/L
MW18	11/05/96	Chromium	17	ug/L
MW18	06/25/97	Manganese	24	ug/L
MW18	06/25/97	Barium	25	ug/L
MW18	03/27/97	Chromium	30	ug/L
MW18	09/29/97	Barium	32	ug/L
MW18	03/27/97	Barium	34	ug/L
MW18	11/05/96	Barium	35	ug/L
MW18	09/29/97	Chromium	71	ug/L
MW18	03/27/97	Manganese	83	ug/L
MW18	09/29/97	Manganese	85	ug/L
MW18	03/27/97	Iron	165	ug/L
MW18	11/05/96	Iron	288	ug/L
MW18	11/05/96	Manganese	609	ug/L
MW18	09/29/97	Magnesium	18900	ug/L
MW18	06/25/97	Magnesium	19600	ug/L
MW18	03/27/97	Magnesium	27300	ug/L
MW18	11/05/96	Magnesium	28500	ug/L

Statistical Background Data
Metals in the South Area of Concern

Well	Date	Analyte	Concentration	Units
MW18	06/25/97	Calcium	63700	ug/L
MW18	09/29/97	Calcium	64200	ug/L
MW18	11/05/96	Calcium	81600	ug/L
MW18	03/27/97	Calcium	88500	ug/L

Statistical Background Data
Metals in the North and West Areas of Concern

Well	Date	Analyte	Concentration	Units
Down Gradient Monitoring Wells				
MW37	03/25/97	Aluminum	<633	ug/L
MW37	06/25/97	Aluminum	664	ug/L
MW37	09/26/97	Aluminum	1310	ug/L
MW37	08/07/96	Aluminum	1410	ug/L
MW37	03/25/97	Antimony	<1	ug/L
MW37	09/26/97	Antimony	<1	ug/L
MW37	06/25/97	Antimony	<2	ug/L
MW37	08/07/96	Antimony	<2	ug/L
MW37	03/25/97	Arsenic	<2	ug/L
MW37	06/25/97	Arsenic	<2	ug/L
MW37	09/26/97	Arsenic	2	ug/L
MW37	08/07/96	Arsenic	<1	ug/L
MW37	03/25/97	Barium	17	ug/L
MW37	06/25/97	Barium	22	ug/L
MW37	08/07/96	Barium	24	ug/L
MW37	09/26/97	Barium	34	ug/L
MW37	08/07/96	Cadmium	<1	ug/L
MW37	03/25/97	Cadmium	<1	ug/L
MW37	06/25/97	Cadmium	<1	ug/L
MW37	09/26/97	Cadmium	<1	ug/L
MW37	06/25/97	Calcium	27400	ug/L
MW37	03/25/97	Calcium	32700	ug/L
MW37	08/07/96	Calcium	34300	ug/L
MW37	09/26/97	Calcium	84200	ug/L
MW37	03/25/97	Chromium	2	ug/L
MW37	06/25/97	Chromium	4	ug/L
MW37	09/26/97	Chromium	7	ug/L
MW37	03/25/97	Cobalt	4	ug/L
MW37	06/25/97	Cobalt	5	ug/L
MW37	09/26/97	Cobalt	6	ug/L
MW37	08/07/96	Cobalt	<10	ug/L
MW37	03/25/97	Copper	<7	ug/L
MW37	06/25/97	Copper	7	ug/L
MW37	09/26/97	Copper	12	ug/L
MW37	08/07/96	Copper	<20	ug/L
MW37	03/25/97	Iron	1850	ug/L
MW37	06/25/97	Iron	2140	ug/L
MW37	09/26/97	Iron	9440	ug/L
MW37	08/07/96	Iron	<1240	ug/L
MW37	06/25/97	Lead	<4	ug/L
MW37	09/26/97	Lead	<4	ug/L
MW37	03/25/97	Lead	4	ug/L
MW37	08/07/96	Lead	<9	ug/L
MW37	08/07/96	Magnesium	9160	ug/L
MW37	06/25/97	Magnesium	9490	ug/L
MW37	03/25/97	Magnesium	10800	ug/L
MW37	09/26/97	Magnesium	26600	ug/L

Statistical Background Data
Metals in the North and West Areas of Concern

Well	Date	Analyte	Concentration	Units
MW37	06/25/97	Manganese	154	ug/L
MW37	03/25/97	Manganese	165	ug/L
MW37	08/07/96	Manganese	273	ug/L
MW37	09/26/97	Manganese	682	ug/L
MW37	03/25/97	Nickel	5	ug/L
MW37	06/25/97	Nickel	9	ug/L
MW37	09/26/97	Nickel	14	ug/L
MW37	08/07/96	Nickel	<20	ug/L
MW37	03/25/97	Vanadium	1	ug/L
MW37	06/25/97	Vanadium	2	ug/L
MW37	09/26/97	Vanadium	3	ug/L
MW37	08/07/96	Vanadium	<20	ug/L
MW37	06/25/97	Zinc	<18	ug/L
MW37	03/25/97	Zinc	<20	ug/L
MW37	09/26/97	Zinc	<24	ug/L
MW37	08/07/96	Zinc	<10	ug/L
Internal Monitoring Wells				
MW13	10/01/97	Aluminum	<172	ug/L
MW13	03/25/97	Aluminum	96	ug/L
MW13	11/07/96	Aluminum	232	ug/L
MW13	06/27/97	Aluminum	427	ug/L
MW13	11/07/96	Antimony	<1	ug/L
MW13	03/25/97	Antimony	<1	ug/L
MW13	10/01/97	Antimony	<1	ug/L
MW13	06/27/97	Antimony	<2	ug/L
MW13	11/07/96	Arsenic	<2	ug/L
MW13	03/25/97	Arsenic	<2	ug/L
MW13	06/27/97	Arsenic	<2	ug/L
MW13	10/01/97	Arsenic	<2	ug/L
MW13	03/25/97	Barium	55	ug/L
MW13	11/07/96	Barium	66	ug/L
MW13	06/27/97	Barium	68	ug/L
MW13	10/01/97	Barium	68	ug/L
MW13	11/07/96	Cadmium	<1	ug/L
MW13	03/25/97	Cadmium	<1	ug/L
MW13	06/27/97	Cadmium	<1	ug/L
MW13	10/01/97	Cadmium	<1	ug/L
MW13	03/25/97	Calcium	103000	ug/L
MW13	06/27/97	Calcium	107000	ug/L
MW13	11/07/96	Calcium	118000	ug/L
MW13	10/01/97	Calcium	130000	ug/L
MW13	10/01/97	Chromium	<1	ug/L
MW13	11/07/96	Chromium	<3	ug/L
MW13	03/25/97	Chromium	<4	ug/L
MW13	06/27/97	Chromium	<4	ug/L
MW13	03/25/97	Cobalt	<1	ug/L
MW13	10/01/97	Cobalt	<1	ug/L
MW13	11/07/96	Cobalt	2	ug/L

Statistical Background Data
Metals in the North and West Areas of Concern

Well	Date	Analyte	Concentration	Units
MW13	06/27/97	Cobalt	2	ug/L
MW13	03/25/97	Copper	<2	ug/L
MW13	10/01/97	Copper	<2	ug/L
MW13	06/27/97	Copper	<4	ug/L
MW13	11/07/96	Copper	<6	ug/L
MW13	10/01/97	Iron	4420	ug/L
MW13	11/07/96	Iron	5240	ug/L
MW13	06/27/97	Iron	5780	ug/L
MW13	03/25/97	Iron	6090	ug/L
MW13	03/25/97	Lead	<1	ug/L
MW13	10/01/97	Lead	<1	ug/L
MW13	11/07/96	Lead	<2	ug/L
MW13	06/27/97	Lead	<2	ug/L
MW13	03/25/97	Magnesium	27800	ug/L
MW13	06/27/97	Magnesium	30000	ug/L
MW13	11/07/96	Magnesium	32000	ug/L
MW13	10/01/97	Magnesium	37000	ug/L
MW13	10/01/97	Manganese	604	ug/L
MW13	06/27/97	Manganese	656	ug/L
MW13	03/25/97	Manganese	657	ug/L
MW13	11/07/96	Manganese	674	ug/L
MW13	03/25/97	Nickel	<2	ug/L
MW13	10/01/97	Nickel	<2	ug/L
MW13	06/27/97	Nickel	<4	ug/L
MW13	11/07/96	Nickel	3	ug/L
MW13	03/25/97	Vanadium	<1	ug/L
MW13	10/01/97	Vanadium	<1	ug/L
MW13	11/07/96	Vanadium	2	ug/L
MW13	06/27/97	Vanadium	2	ug/L
MW13	11/07/96	Zinc	<12	ug/L
MW13	03/25/97	Zinc	<12	ug/L
MW13	10/01/97	Zinc	<12	ug/L
MW13	06/27/97	Zinc	<17	ug/L
MW14	11/06/96	Aluminum	780	ug/L
MW14	03/27/97	Aluminum	2550	ug/L
MW14	09/29/97	Aluminum	7180	ug/L
MW14	06/30/97	Aluminum	13800	ug/L
MW14	11/06/96	Antimony	<1	ug/L
MW14	03/27/97	Antimony	<1	ug/L
MW14	09/29/97	Antimony	<1	ug/L
MW14	06/30/97	Antimony	2	ug/L
MW14	11/06/96	Arsenic	<2	ug/L
MW14	03/27/97	Arsenic	<2	ug/L
MW14	09/29/97	Arsenic	9	ug/L
MW14	06/30/97	Arsenic	11	ug/L
MW14	03/27/97	Barium	33	ug/L
MW14	09/29/97	Barium	88	ug/L
MW14	06/30/97	Barium	112	ug/L
MW14	11/06/96	Barium	122	ug/L

Statistical Background Data
Metals in the North and West Areas of Concern

Well	Date	Analyte	Concentration	Units
MW14	11/06/96	Cadmium	<1	ug/L
MW14	03/27/97	Cadmium	<1	ug/L
MW14	06/30/97	Cadmium	<1	ug/L
MW14	09/29/97	Cadmium	<1	ug/L
MW14	03/27/97	Calcium	26100	ug/L
MW14	09/29/97	Calcium	96400	ug/L
MW14	06/30/97	Calcium	104000	ug/L
MW14	11/06/96	Calcium	142000	ug/L
MW14	11/06/96	Chromium	<9	ug/L
MW14	03/27/97	Chromium	12	ug/L
MW14	09/29/97	Chromium	26	ug/L
MW14	06/30/97	Chromium	36	ug/L
MW14	03/27/97	Cobalt	2	ug/L
MW14	09/29/97	Cobalt	8	ug/L
MW14	11/06/96	Cobalt	9	ug/L
MW14	06/30/97	Cobalt	12	ug/L
MW14	03/27/97	Copper	<9	ug/L
MW14	11/06/96	Copper	11	ug/L
MW14	06/30/97	Copper	26	ug/L
MW14	09/29/97	Copper	32	ug/L
MW14	11/06/96	Iron	1650	ug/L
MW14	03/27/97	Iron	5610	ug/L
MW14	09/29/97	Iron	25900	ug/L
MW14	06/30/97	Iron	33000	ug/L
MW14	11/06/96	Lead	10	ug/L
MW14	03/27/97	Lead	17	ug/L
MW14	06/30/97	Lead	19	ug/L
MW14	09/29/97	Lead	20	ug/L
MW14	03/27/97	Magnesium	6830	ug/L
MW14	09/29/97	Magnesium	22000	ug/L
MW14	06/30/97	Magnesium	25600	ug/L
MW14	11/06/96	Magnesium	26200	ug/L
MW14	03/27/97	Manganese	60	ug/L
MW14	09/29/97	Manganese	290	ug/L
MW14	06/30/97	Manganese	351	ug/L
MW14	11/06/96	Manganese	831	ug/L
MW14	06/30/97	Nickel	<29	ug/L
MW14	03/27/97	Nickel	9	ug/L
MW14	11/06/96	Nickel	17	ug/L
MW14	09/29/97	Nickel	22	ug/L
MW14	11/06/96	Vanadium	4	ug/L
MW14	03/27/97	Vanadium	6	ug/L
MW14	09/29/97	Vanadium	21	ug/L
MW14	06/30/97	Vanadium	34	ug/L
MW14	11/06/96	Zinc	<21	ug/L
MW14	03/27/97	Zinc	<27	ug/L
MW14	09/29/97	Zinc	59	ug/L
MW14	06/30/97	Zinc	63	ug/L
MW48	03/27/97	Aluminum	<46	ug/L

Statistical Background Data
Metals in the North and West Areas of Concern

Well	Date	Analyte	Concentration	Units
MW48	06/26/97	Aluminum	<146	ug/L
MW48	09/29/97	Aluminum	330	ug/L
MW48	08/06/96	Aluminum	<254	ug/L
MW48	09/29/97	Antimony	<1	ug/L
MW48	06/26/97	Antimony	<2	ug/L
MW48	03/27/97	Antimony	2	ug/L
MW48	08/06/96	Antimony	<2	ug/L
MW48	03/27/97	Arsenic	6	ug/L
MW48	06/26/97	Arsenic	9	ug/L
MW48	08/06/96	Arsenic	11	ug/L
MW48	09/29/97	Arsenic	12	ug/L
MW48	03/27/97	Barium	125	ug/L
MW48	06/26/97	Barium	125	ug/L
MW48	09/29/97	Barium	141	ug/L
MW48	08/06/96	Barium	160	ug/L
MW48	03/27/97	Cadmium	<1	ug/L
MW48	06/26/97	Cadmium	<1	ug/L
MW48	09/29/97	Cadmium	<1	ug/L
MW48	08/06/96	Cadmium	<1	ug/L
MW48	06/26/97	Calcium	107000	ug/L
MW48	09/29/97	Calcium	107000	ug/L
MW48	03/27/97	Calcium	133000	ug/L
MW48	08/06/96	Calcium	142000	ug/L
MW48	06/26/97	Chromium	<4	ug/L
MW48	03/27/97	Chromium	2	ug/L
MW48	09/29/97	Chromium	8	ug/L
MW48	03/27/97	Cobalt	3	ug/L
MW48	06/26/97	Cobalt	3	ug/L
MW48	09/29/97	Cobalt	4	ug/L
MW48	08/06/96	Cobalt	<10	ug/L
MW48	03/27/97	Copper	<1	ug/L
MW48	06/26/97	Copper	<5	ug/L
MW48	09/29/97	Copper	13	ug/L
MW48	08/06/96	Copper	<14	ug/L
MW48	06/26/97	Iron	23300	ug/L
MW48	09/29/97	Iron	24500	ug/L
MW48	03/27/97	Iron	24900	ug/L
MW48	08/06/96	Iron	30800	ug/L
MW48	03/27/97	Lead	<1	ug/L
MW48	06/26/97	Lead	<2	ug/L
MW48	09/29/97	Lead	8	ug/L
MW48	08/06/96	Lead	<3	ug/L
MW48	06/26/97	Magnesium	14300	ug/L
MW48	09/29/97	Magnesium	15100	ug/L
MW48	03/27/97	Magnesium	19600	ug/L
MW48	08/06/96	Magnesium	20100	ug/L
MW48	06/26/97	Manganese	504	ug/L
MW48	09/29/97	Manganese	504	ug/L
MW48	03/27/97	Manganese	618	ug/L

Statistical Background Data
Metals in the North and West Areas of Concern

Well	Date	Analyte	Concentration	Units
MW48	08/06/96	Manganese	688	ug/L
MW48	06/26/97	Nickel	<16	ug/L
MW48	03/27/97	Nickel	14	ug/L
MW48	09/29/97	Nickel	19	ug/L
MW48	08/06/96	Nickel	<20	ug/L
MW48	03/27/97	Vanadium	2	ug/L
MW48	06/26/97	Vanadium	2	ug/L
MW48	09/29/97	Vanadium	2	ug/L
MW48	08/06/96	Vanadium	<20	ug/L
MW48	03/27/97	Zinc	<6	ug/L
MW48	06/26/97	Zinc	<26	ug/L
MW48	09/29/97	Zinc	<53	ug/L
MW48	08/06/96	Zinc	<10	ug/L
MW49	04/03/97	Aluminum	258	ug/L
MW49	06/25/97	Aluminum	273	ug/L
MW49	09/24/97	Aluminum	1130	ug/L
MW49	08/06/96	Aluminum	<110	ug/L
MW49	09/24/97	Antimony	<1	ug/L
MW49	06/25/97	Antimony	<2	ug/L
MW49	04/03/97	Antimony	2	ug/L
MW49	08/06/96	Antimony	<2	ug/L
MW49	04/03/97	Arsenic	11	ug/L
MW49	08/06/96	Arsenic	24	ug/L
MW49	06/25/97	Arsenic	26	ug/L
MW49	09/24/97	Arsenic	37	ug/L
MW49	04/03/97	Barium	56	ug/L
MW49	08/06/96	Barium	96	ug/L
MW49	09/24/97	Barium	120	ug/L
MW49	06/25/97	Barium	127	ug/L
MW49	04/03/97	Cadmium	<1	ug/L
MW49	06/25/97	Cadmium	<1	ug/L
MW49	09/24/97	Cadmium	<1	ug/L
MW49	08/06/96	Cadmium	<1	ug/L
MW49	04/03/97	Calcium	50700	ug/L
MW49	09/24/97	Calcium	80300	ug/L
MW49	08/06/96	Calcium	81200	ug/L
MW49	06/25/97	Calcium	94200	ug/L
MW49	06/25/97	Chromium	<4	ug/L
MW49	04/03/97	Chromium	2	ug/L
MW49	09/24/97	Chromium	10	ug/L
MW49	04/03/97	Cobalt	2	ug/L
MW49	06/25/97	Cobalt	2	ug/L
MW49	09/24/97	Cobalt	2	ug/L
MW49	08/06/96	Cobalt	<10	ug/L
MW49	04/03/97	Copper	<3	ug/L
MW49	06/25/97	Copper	<5	ug/L
MW49	09/24/97	Copper	6	ug/L
MW49	08/06/96	Copper	<11	ug/L
MW49	04/03/97	Iron	9050	ug/L

Statistical Background Data
Metals in the North and West Areas of Concern

Well	Date	Analyte	Concentration	Units
MW49	08/06/96	Iron	20100	ug/L
MW49	06/25/97	Iron	26700	ug/L
MW49	09/24/97	Iron	28200	ug/L
MW49	04/03/97	Lead	1	ug/L
MW49	09/24/97	Lead	3	ug/L
MW49	06/25/97	Lead	6	ug/L
MW49	08/06/96	Lead	<2	ug/L
MW49	04/03/97	Magnesium	7200	ug/L
MW49	09/24/97	Magnesium	9980	ug/L
MW49	08/06/96	Magnesium	10700	ug/L
MW49	06/25/97	Magnesium	11800	ug/L
MW49	04/03/97	Manganese	810	ug/L
MW49	08/06/96	Manganese	1950	ug/L
MW49	06/25/97	Manganese	2150	ug/L
MW49	09/24/97	Manganese	2210	ug/L
MW49	04/03/97	Nickel	10	ug/L
MW49	09/24/97	Nickel	12	ug/L
MW49	06/25/97	Nickel	14	ug/L
MW49	08/06/96	Nickel	<20	ug/L
MW49	04/03/97	Vanadium	<1	ug/L
MW49	06/25/97	Vanadium	<1	ug/L
MW49	09/24/97	Vanadium	2	ug/L
MW49	08/06/96	Vanadium	<20	ug/L
MW49	04/03/97	Zinc	<30	ug/L
MW49	09/24/97	Zinc	<44	ug/L
MW49	06/25/97	Zinc	<77	ug/L
MW49	08/06/96	Zinc	<10	ug/L
Side Gradient Monitoring Wells				
MW38	06/25/97	Aluminum	134	ug/L
MW38	03/25/97	Aluminum	791	ug/L
MW38	09/25/97	Aluminum	1280	ug/L
MW38	08/07/96	Aluminum	<118	ug/L
MW38	03/25/97	Antimony	<1	ug/L
MW38	09/25/97	Antimony	<1	ug/L
MW38	06/25/97	Antimony	<2	ug/L
MW38	08/07/96	Antimony	<2	ug/L
MW38	06/25/97	Arsenic	<2	ug/L
MW38	03/25/97	Arsenic	<6	ug/L
MW38	08/07/96	Arsenic	4	ug/L
MW38	09/25/97	Arsenic	5	ug/L
MW38	03/25/97	Barium	28	ug/L
MW38	06/25/97	Barium	33	ug/L
MW38	08/07/96	Barium	36	ug/L
MW38	09/25/97	Barium	54	ug/L
MW38	03/25/97	Cadmium	<1	ug/L
MW38	06/25/97	Cadmium	<1	ug/L
MW38	09/25/97	Cadmium	<1	ug/L
MW38	08/07/96	Cadmium	<1	ug/L

Statistical Background Data
Metals in the North and West Areas of Concern

Well	Date	Analyte	Concentration	Units
MW38	03/25/97	Calcium	30600	ug/L
MW38	06/25/97	Calcium	54900	ug/L
MW38	09/25/97	Calcium	57800	ug/L
MW38	08/07/96	Calcium	63500	ug/L
MW38	03/25/97	Chromium	<4	ug/L
MW38	06/25/97	Chromium	<4	ug/L
MW38	09/25/97	Chromium	9	ug/L
MW38	03/25/97	Cobalt	2	ug/L
MW38	09/25/97	Cobalt	2	ug/L
MW38	06/25/97	Cobalt	7	ug/L
MW38	08/07/96	Cobalt	<10	ug/L
MW38	06/25/97	Copper	<10	ug/L
MW38	03/25/97	Copper	<12	ug/L
MW38	09/25/97	Copper	14	ug/L
MW38	08/07/96	Copper	<12	ug/L
MW38	06/25/97	Iron	1940	ug/L
MW38	08/07/96	Iron	6440	ug/L
MW38	03/25/97	Iron	12800	ug/L
MW38	09/25/97	Iron	16200	ug/L
MW38	06/25/97	Lead	<1	ug/L
MW38	09/25/97	Lead	<10	ug/L
MW38	03/25/97	Lead	8	ug/L
MW38	08/07/96	Lead	<2	ug/L
MW38	03/25/97	Magnesium	10100	ug/L
MW38	06/25/97	Magnesium	19400	ug/L
MW38	09/25/97	Magnesium	20500	ug/L
MW38	08/07/96	Magnesium	22000	ug/L
MW38	03/25/97	Manganese	250	ug/L
MW38	08/07/96	Manganese	511	ug/L
MW38	09/25/97	Manganese	594	ug/L
MW38	06/25/97	Manganese	1270	ug/L
MW38	03/25/97	Nickel	<8	ug/L
MW38	09/25/97	Nickel	12	ug/L
MW38	06/25/97	Nickel	22	ug/L
MW38	08/07/96	Nickel	<20	ug/L
MW38	06/25/97	Vanadium	3	ug/L
MW38	03/25/97	Vanadium	10	ug/L
MW38	09/25/97	Vanadium	14	ug/L
MW38	08/07/96	Vanadium	<20	ug/L
MW38	03/25/97	Zinc	<20	ug/L
MW38	06/25/97	Zinc	<73	ug/L
MW38	09/25/97	Zinc	56	ug/L
MW38	08/07/96	Zinc	<10	ug/L
MW39	06/25/97	Aluminum	153	ug/L
MW39	09/25/97	Aluminum	366	ug/L
MW39	03/25/97	Aluminum	520	ug/L
MW39	08/06/96	Aluminum	<273	ug/L
MW39	03/25/97	Antimony	<1	ug/L
MW39	09/25/97	Antimony	<1	ug/L

Statistical Background Data
Metals in the North and West Areas of Concern

Well	Date	Analyte	Concentration	Units
MW39	06/25/97	Antimony	<2	ug/L
MW39	08/06/96	Antimony	<2	ug/L
MW39	06/25/97	Arsenic	<2	ug/L
MW39	09/25/97	Arsenic	<2	ug/L
MW39	03/25/97	Arsenic	<4	ug/L
MW39	08/06/96	Arsenic	2	ug/L
MW39	06/25/97	Barium	68	ug/L
MW39	09/25/97	Barium	78	ug/L
MW39	08/06/96	Barium	81	ug/L
MW39	03/25/97	Barium	95	ug/L
MW39	03/25/97	Cadmium	<1	ug/L
MW39	06/25/97	Cadmium	<1	ug/L
MW39	09/25/97	Cadmium	<1	ug/L
MW39	08/06/96	Cadmium	<1	ug/L
MW39	06/25/97	Calcium	101000	ug/L
MW39	09/25/97	Calcium	110000	ug/L
MW39	03/25/97	Calcium	118000	ug/L
MW39	08/06/96	Calcium	125000	ug/L
MW39	06/25/97	Chromium	<2	ug/L
MW39	03/25/97	Chromium	6	ug/L
MW39	09/25/97	Chromium	7	ug/L
MW39	06/25/97	Cobalt	<1	ug/L
MW39	09/25/97	Cobalt	<1	ug/L
MW39	03/25/97	Cobalt	1	ug/L
MW39	08/06/96	Cobalt	<10	ug/L
MW39	06/25/97	Copper	<3	ug/L
MW39	09/25/97	Copper	<4	ug/L
MW39	03/25/97	Copper	<9	ug/L
MW39	08/06/96	Copper	<16	ug/L
MW39	06/25/97	Iron	6730	ug/L
MW39	09/25/97	Iron	7300	ug/L
MW39	08/06/96	Iron	9710	ug/L
MW39	03/25/97	Iron	17300	ug/L
MW39	06/25/97	Lead	<1	ug/L
MW39	09/25/97	Lead	<2	ug/L
MW39	03/25/97	Lead	4	ug/L
MW39	08/06/96	Lead	<2	ug/L
MW39	06/25/97	Magnesium	17500	ug/L
MW39	09/25/97	Magnesium	19200	ug/L
MW39	03/25/97	Magnesium	20600	ug/L
MW39	08/06/96	Magnesium	22300	ug/L
MW39	06/25/97	Manganese	779	ug/L
MW39	09/25/97	Manganese	802	ug/L
MW39	03/25/97	Manganese	876	ug/L
MW39	08/06/96	Manganese	1060	ug/L
MW39	06/25/97	Nickel	<3	ug/L
MW39	03/25/97	Nickel	<7	ug/L
MW39	09/25/97	Nickel	7	ug/L
MW39	08/06/96	Nickel	712	ug/L

Statistical Background Data
Metals in the North and West Areas of Concern

Well	Date	Analyte	Concentration	Units
MW39	06/25/97	Vanadium	<1	ug/L
MW39	09/25/97	Vanadium	<1	ug/L
MW39	03/25/97	Vanadium	2	ug/L
MW39	08/06/96	Vanadium	<20	ug/L
MW39	06/25/97	Zinc	<10	ug/L
MW39	09/25/97	Zinc	<13	ug/L
MW39	03/25/97	Zinc	<36	ug/L
MW39	08/06/96	Zinc	<10	ug/L
MW46	09/25/97	Aluminum	<186	ug/L
MW46	03/25/97	Aluminum	<441	ug/L
MW46	06/24/97	Aluminum	544	ug/L
MW46	08/05/96	Aluminum	821	ug/L
MW46	03/25/97	Antimony	<1	ug/L
MW46	09/25/97	Antimony	<1	ug/L
MW46	06/24/97	Antimony	<2	ug/L
MW46	08/05/96	Antimony	<2	ug/L
MW46	03/25/97	Arsenic	2	ug/L
MW46	09/25/97	Arsenic	3	ug/L
MW46	08/05/96	Arsenic	4	ug/L
MW46	06/24/97	Arsenic	4	ug/L
MW46	06/24/97	Barium	110	ug/L
MW46	09/25/97	Barium	126	ug/L
MW46	03/25/97	Barium	129	ug/L
MW46	08/05/96	Barium	132	ug/L
MW46	06/24/97	Cadmium	<1	ug/L
MW46	09/25/97	Cadmium	<1	ug/L
MW46	03/25/97	Cadmium	1	ug/L
MW46	08/05/96	Cadmium	<1	ug/L
MW46	06/24/97	Calcium	112000	ug/L
MW46	03/25/97	Calcium	114000	ug/L
MW46	09/25/97	Calcium	115000	ug/L
MW46	08/05/96	Calcium	115000	ug/L
MW46	09/25/97	Chromium	2	ug/L
MW46	06/24/97	Chromium	4	ug/L
MW46	03/25/97	Chromium	5	ug/L
MW46	09/25/97	Cobalt	<1	ug/L
MW46	03/25/97	Cobalt	2	ug/L
MW46	06/24/97	Cobalt	2	ug/L
MW46	08/05/96	Cobalt	<10	ug/L
MW46	03/25/97	Copper	<3	ug/L
MW46	09/25/97	Copper	<3	ug/L
MW46	06/24/97	Copper	5	ug/L
MW46	08/05/96	Copper	<13	ug/L
MW46	03/25/97	Iron	17800	ug/L
MW46	09/25/97	Iron	19000	ug/L
MW46	06/24/97	Iron	21000	ug/L
MW46	08/05/96	Iron	21700	ug/L
MW46	03/25/97	Lead	<1	ug/L
MW46	09/25/97	Lead	<2	ug/L

Statistical Background Data
Metals in the North and West Areas of Concern

Well	Date	Analyte	Concentration	Units
MW46	06/24/97	Lead	<3	ug/L
MW46	08/05/96	Lead	<5	ug/L
MW46	06/24/97	Magnesium	29700	ug/L
MW46	08/05/96	Magnesium	30500	ug/L
MW46	09/25/97	Magnesium	30900	ug/L
MW46	03/25/97	Magnesium	32400	ug/L
MW46	03/25/97	Manganese	1350	ug/L
MW46	06/24/97	Manganese	1390	ug/L
MW46	09/25/97	Manganese	1390	ug/L
MW46	08/05/96	Manganese	1510	ug/L
MW46	09/25/97	Nickel	4	ug/L
MW46	03/25/97	Nickel	5	ug/L
MW46	06/24/97	Nickel	5	ug/L
MW46	08/05/96	Nickel	<20	ug/L
MW46	09/25/97	Vanadium	<1	ug/L
MW46	03/25/97	Vanadium	2	ug/L
MW46	06/24/97	Vanadium	3	ug/L
MW46	08/05/96	Vanadium	<20	ug/L
MW46	09/25/97	Zinc	<12	ug/L
MW46	06/24/97	Zinc	<16	ug/L
MW46	03/25/97	Zinc	<19	ug/L
MW46	08/05/96	Zinc	<10	ug/L
Up Gradient Monitoring Wells				
MW40	08/07/96	Aluminum	406	ug/L
MW40	06/26/97	Aluminum	941	ug/L
MW40	03/25/97	Aluminum	2040	ug/L
MW40	09/29/97	Aluminum	2140	ug/L
MW40	03/25/97	Antimony	<1	ug/L
MW40	09/29/97	Antimony	<1	ug/L
MW40	06/26/97	Antimony	<2	ug/L
MW40	08/07/96	Antimony	<2	ug/L
MW40	06/26/97	Arsenic	<2	ug/L
MW40	09/29/97	Arsenic	<2	ug/L
MW40	03/25/97	Arsenic	<4	ug/L
MW40	08/07/96	Arsenic	1	ug/L
MW40	06/26/97	Barium	24	ug/L
MW40	09/29/97	Barium	24	ug/L
MW40	08/07/96	Barium	26	ug/L
MW40	03/25/97	Barium	27	ug/L
MW40	03/25/97	Cadmium	<1	ug/L
MW40	06/26/97	Cadmium	<1	ug/L
MW40	09/29/97	Cadmium	<1	ug/L
MW40	08/07/96	Cadmium	<1	ug/L
MW40	03/25/97	Calcium	14700	ug/L
MW40	06/26/97	Calcium	17200	ug/L
MW40	08/07/96	Calcium	30000	ug/L
MW40	09/29/97	Calcium	34100	ug/L
MW40	06/26/97	Chromium	<6	ug/L

Statistical Background Data
Metals in the North and West Areas of Concern

Well	Date	Analyte	Concentration	Units
MW40	03/25/97	Chromium	4	ug/L
MW40	09/29/97	Chromium	5	ug/L
MW40	03/25/97	Cobalt	3	ug/L
MW40	06/26/97	Cobalt	3	ug/L
MW40	09/29/97	Cobalt	3	ug/L
MW40	08/07/96	Cobalt	<10	ug/L
MW40	06/26/97	Copper	<8	ug/L
MW40	03/25/97	Copper	<13	ug/L
MW40	09/29/97	Copper	21	ug/L
MW40	08/07/96	Copper	<12	ug/L
MW40	06/26/97	Iron	3060	ug/L
MW40	03/25/97	Iron	3470	ug/L
MW40	09/29/97	Iron	6430	ug/L
MW40	08/07/96	Iron	<1190	ug/L
MW40	06/26/97	Lead	<5	ug/L
MW40	09/29/97	Lead	<8	ug/L
MW40	03/25/97	Lead	7	ug/L
MW40	08/07/96	Lead	<11	ug/L
MW40	06/26/97	Magnesium	<7030	ug/L
MW40	03/25/97	Magnesium	6160	ug/L
MW40	08/07/96	Magnesium	9540	ug/L
MW40	09/29/97	Magnesium	14100	ug/L
MW40	09/29/97	Manganese	198	ug/L
MW40	03/25/97	Manganese	296	ug/L
MW40	06/26/97	Manganese	365	ug/L
MW40	08/07/96	Manganese	852	ug/L
MW40	06/26/97	Nickel	<7	ug/L
MW40	03/25/97	Nickel	< 10	ug/L
MW40	09/29/97	Nickel	10	ug/L
MW40	08/07/96	Nickel	<20	ug/L
MW40	06/26/97	Vanadium	3	ug/L
MW40	03/25/97	Vanadium	4	ug/L
MW40	09/29/97	Vanadium	12	ug/L
MW40	08/07/96	Vanadium	<20	ug/L
MW40	06/26/97	Zinc	<20	ug/L
MW40	03/25/97	Zinc	<26	ug/L
MW40	09/29/97	Zinc	<35	ug/L
MW40	08/07/96	Zinc	<10	ug/L

Statistical Summary
VOCs and Metals in the South Area of Concern

Intra-Well Prediction Interval
VOCs in the South Area of Concern

Constituent	Well	Upper Limit	Observation	Exceeds	Background	Background Mean	Standard Deviation	Non-detec	Cohens	Transformation	Alpha	Method
Benzene (ug/L)	MW06	484.725197	140	No	4	133.5	133.488	0	No	non-	0.05	Param.
Benzene (ug/L)	MW15	4	4	No	4	n/a	n/a	0	n/a	failed	0.2	NP (normality)
Benzene (ug/L)	MW18	19.215204	5	No	4	n/a	n/a	100	n/a	n/a	1.00E-02	Poisson
Benzene (ug/L)	MW19	8.259043	1	No	4	2.999	1.999	25	Yes	non-	0.05	Param.
Benzene (ug/L)	MW41	19.215204	5	No	4	n/a	n/a	100	n/a	n/a	1.00E-02	Poisson
Benzene (ug/L)	MW42	19.215204	5	No	4	n/a	n/a	100	n/a	n/a	1.00E-02	Poisson
Benzene (ug/L)	MW43	19.215204	5	No	4	n/a	n/a	100	n/a	n/a	1.00E-02	Poisson
Benzene (ug/L)	MW44	19.215204	5	No	4	n/a	n/a	100	n/a	n/a	1.00E-02	Poisson
Benzene (ug/L)	MW45	1489.110687	860	No	4	857.5	240.052	0	No	non-	0.05	Param.
Benzene (ug/L)	MW47	19.215204	5	No	4	n/a	n/a	100	n/a	n/a	1.00E-02	Poisson
Chloroethane (ug/L)	MW06	1330.680597	140	No	4	14.671	8.288	0	No	square root(x)	0.05	Param.
Chloroethane (ug/L)	MW15	19.215204	5	No	4	n/a	n/a	100	n/a	n/a	1.00E-02	Poisson
Chloroethane (ug/L)	MW18	19.215204	5	No	4	n/a	n/a	100	n/a	n/a	1.00E-02	Poisson
Chloroethane (ug/L)	MW19	24.943387	18	No	4	16.25	3.304	0	No	non-	0.05	Param.
Chloroethane (ug/L)	MW41	19.215204	5	No	4	n/a	n/a	100	n/a	n/a	1.00E-02	Poisson
Chloroethane (ug/L)	MW42	19.215204	5	No	4	n/a	n/a	100	n/a	n/a	1.00E-02	Poisson
Chloroethane (ug/L)	MW43	19.215204	5	No	4	n/a	n/a	100	n/a	n/a	1.00E-02	Poisson
Chloroethane (ug/L)	MW44	19.215204	5	No	4	n/a	n/a	100	n/a	n/a	1.00E-02	Poisson
Chloroethane (ug/L)	MW45	306.118676	120	No	4	138	63.896	0	No	non-	0.05	Param.
Chloroethane (ug/L)	MW47	19.215204	5	No	4	n/a	n/a	100	n/a	n/a	1.00E-02	Poisson

Metals in the South Area of Concern

Constituent	Well	Upper Limit	Observation	Exceeds	Background	Background Mean	Standard Deviation	Non-detec	Cohens	Transformation	Alpha	Method
Aluminum (ug/L)	MW06	259.366823	180	No	4	123.104	51.789	25	Yes	non-	0.05	Param.
Aluminum (ug/L)	MW15	836.971579	487	No	4	324.752	194.676	25	Yes	non-	0.05	Param.
Aluminum (ug/L)	MW18	46.20241689	18	No	4	n/a	n/a	100	n/a	n/a	1.00E-02	Poisson
Aluminum (ug/L)	MW19	529.012996	402	No	4	357	65.376	0	No	non-	0.05	Param.
Aluminum (ug/L)	MW41	1734.884648	486	No	4	398.462	507.925	25	Yes	non-	0.05	Param.
Aluminum (ug/L)	MW42	1880	1880	No	4	n/a	n/a	0	n/a	failed	0.2	NP (normality)
Aluminum (ug/L)	MW43	19764.49135	12700	No	4	7497.5	4662.234	0	No	non-	0.05	Param.
Aluminum (ug/L)	MW44	2839.597156	457	No	4	538.895	874.412	25	Yes	non-	0.05	Param.
Aluminum (ug/L)	MW45	776	50	No	4	n/a	n/a	50	n/a	n/a	0.2	NP (cohens)
Aluminum (ug/L)	MW47	2551.739427	724	No	4	702.878	702.685	25	Yes	non-	0.05	Param.
Iron (ug/L)	MW06	28856.89227	14300	No	4	8905	7582.983	0	No	non-	0.05	Param.
Iron (ug/L)	MW15	9569.350144	7010	No	4	6492.5	1169.398	0	No	non-	0.05	Param.
Iron (ug/L)	MW18	441.96075	104	No	4	208	88.92	50	Yes	non-	0.05	Param.
Iron (ug/L)	MW19	5098.538358	4660	No	4	4617.5	182.825	0	No	non-	0.05	Param.
Iron (ug/L)	MW42	18220.9925	11100	No	4	7085.529	4232.182	25	Yes	non-	0.05	Param.
Iron (ug/L)	MW43	65840.94217	47500	No	4	28200	14305.943	0	No	non-	0.05	Param.
Iron (ug/L)	MW44	14700	2510	No	4	n/a	n/a	25	n/a	n/a	0.2	NP (cohens)

Statistical Summary
VOCs and Metals in the South Area of Concern

Iron (ug/L)	MW45	19310.50514	15900	No	4	11742.5	2876.321	0	No	non-	0.05	Param.
Iron (ug/L)	MW47	1771.185124	569	No	4	514.456	477.637	25	Yes	non-	0.05	Param.
Lead (ug/L)	MW06	17.741585	9	No	4	7	4.082	0	No	non-	0.05	Param.
Lead (ug/L)	MW15	2.5	1	No	4	n/a	n/a	75	n/a	n/a	0.2	NP (NDs)
Lead (ug/L)	MW18	20.883977	14	No	4	6	5.657	0	No	non-	0.05	Param.
Lead (ug/L)	MW19	6.10706	2	No	4	2.016	1.555	25	Yes	non-	0.05	Param.
Lead (ug/L)	MW41	23.482348	3	No	4	5.977	6.653	25	Yes	non-	0.05	Param.
Lead (ug/L)	MW42	3	3	No	4	n/a	n/a	75	n/a	n/a	0.2	NP (NDs)
Lead (ug/L)	MW43	51.286402	33	No	4	17.659	12.781	25	Yes	non-	0.05	Param.
Lead (ug/L)	MW44	1	0.5	No	4	n/a	n/a	75	n/a	n/a	0.2	NP (NDs)
Lead (ug/L)	MW45	64.488112	9	No	4	11.853	20.005	25	Yes	non-	0.05	Param.
Lead (ug/L)	MW47	34.524812	8	No	4	11.25	8.846	0	No	non-	0.05	Param.
Manganese (ug/L)	MW06	4467.62205	2170	No	4	1784	1019.946	0	No	non-	0.05	Param.
Manganese (ug/L)	MW15	751.692557	141	No	4	279.5	179.463	0	No	non-	0.05	Param.
Manganese (ug/L)	MW18	1216.324076	85	No	4	11.977	8.703	0	No	square root(x)	0.05	Param.
Manganese (ug/L)	MW19	347.48434	243	No	4	229.75	44.747	0	No	non-	0.05	Param.
Manganese (ug/L)	MW41	652.615797	280	No	4	272.75	144.373	0	No	non-	0.05	Param.
Manganese (ug/L)	MW42	1126.404021	697	No	4	754.5	141.347	0	No	non-	0.05	Param.
Manganese (ug/L)	MW43	1146.878827	857	No	4	620.75	199.962	0	No	non-	0.05	Param.
Manganese (ug/L)	MW44	159.4047401	44	No	4	7.493	1.951	0	No	square root(x)	0.05	Param.
Manganese (ug/L)	MW45	896.012808	480	No	4	556.25	129.131	0	No	non-	0.05	Param.
Manganese (ug/L)	MW47	37.493638	17	No	4	17	7.789	0	No	non-	0.05	Param.

Statistical Summary
VOCs and Metals in the North Area of Concern

Intra-Well Prediction Interval
VOCs in the North Area of Concern

Constituent	Well	Upper Limit	Observation	Exceeds	Background	Background Mean	Standard Deviation	% Non-detects	Cohens	Transformation	Alpha	Method
Benzene (ug/L)	MW37	19.215204	5	No	4	n/a	n/a	100	n/a	n/a	1.00E-02	Poisson
Benzene (ug/L)	MW38	19.215204	5	No	4	n/a	n/a	100	n/a	n/a	1.00E-02	Poisson
Benzene (ug/L)	MW39	19.17465429	4	No	4	1.794	0.336	0	No	cube root(x)	0.05	Param.
Benzene (ug/L)	MW40	19.215204	5	No	4	n/a	n/a	100	n/a	n/a	1.00E-02	Poisson
Benzene (ug/L)	MW48	12987.70116	9500	No	4	7875	1943.15	0	No	non-	0.05	Param.
Benzene (ug/L)	MW49	11992.70048	8200	No	4	4900	2695.676	0	No	non-	0.05	Param.
Chloroethane (ug/L)	MW37	19.215204	5	No	4	n/a	n/a	100	n/a	n/a	1.00E-02	Poisson
Chloroethane (ug/L)	MW38	19.215204	5	No	4	n/a	n/a	100	n/a	n/a	1.00E-02	Poisson
Chloroethane (ug/L)	MW39	7.352366	2	No	4	3.333	1.527	25	Yes	non-	0.05	Param.
Chloroethane (ug/L)	MW40	19.215204	5	No	4	n/a	n/a	100	n/a	n/a	1.00E-02	Poisson
Chloroethane (ug/L)	MW48	1344.768517	980	No	4	817.5	200.395	0	No	non-	0.05	Param.
Chloroethane (ug/L)	MW49	1081.238914	810	No	4	535	207.605	0	No	non-	0.05	Param.

Metals in the North Area of Concern

Constituent	Well	Upper Limit	Observation	Exceeds	Background	Background Mean	Standard Deviation	% Non-detects	Cohens	Transformation	Alpha	Method
Aluminum (ug/L)	MW37	2278.325573	1310	No	4	924.053	514.709	25	Yes	non-	0.05	Param.
Aluminum (ug/L)	MW38	2319.968599	1280	No	4	467.921	703.896	25	Yes	non-	0.05	Param.
Aluminum (ug/L)	MW39	803.879745	366	No	4	290.684	195.047	25	Yes	non-	0.05	Param.
Aluminum (ug/L)	MW40	3611.546164	2140	No	4	1381.75	847.464	0	No	non-	0.05	Param.
Aluminum (ug/L)	MW48	330	330	No	4	n/a	n/a	75	n/a	n/a	0.2	NP (NDs)
Aluminum (ug/L)	MW49	1883.159512	1130	No	4	345.181	584.529	25	Yes	non-	0.05	Param.
Iron (ug/L)	MW37	15672.67681	9440	No	4	2825.187	4882.86	25	Yes	non-	0.05	Param.
Iron (ug/L)	MW38	26137.71552	16200	No	4	9345	6382.296	0	No	non-	0.05	Param.
Iron (ug/L)	MW39	23067.87984	7300	No	4	10260	4867.806	0	No	non-	0.05	Param.
Iron (ug/L)	MW40	10131.13477	6430	No	4	3152.999	2652.134	25	Yes	non-	0.05	Param.
Iron (ug/L)	MW48	34697.17054	24500	No	4	25875	3352.984	0	No	non-	0.05	Param.
Iron (ug/L)	MW49	43947.32504	28200	No	4	21012.5	8716.687	0	No	non-	0.05	Param.
Lead (ug/L)	MW37	4.5	2	No	4	n/a	n/a	75	n/a	n/a	0.2	NP (NDs)
Lead (ug/L)	MW38	8	5	No	4	n/a	n/a	75	n/a	n/a	0.2	NP (NDs)
Lead (ug/L)	MW39	4	1	No	4	n/a	n/a	75	n/a	n/a	0.2	NP (NDs)
Lead (ug/L)	MW40	7	4	No	4	n/a	n/a	75	n/a	n/a	0.2	NP (NDs)
Lead (ug/L)	MW48	8	8	No	4	n/a	n/a	75	n/a	n/a	0.2	NP (NDs)
Lead (ug/L)	MW49	9.678612	3	No	4	2.499	2.729	25	Yes	non-	0.05	Param.
Manganese (ug/L)	MW37	971.57601	682	No	4	318.5	248.21	0	No	non-	0.05	Param.
Manganese (ug/L)	MW38	1799.813452	594	No	4	656.25	434.627	0	No	non-	0.05	Param.
Manganese (ug/L)	MW39	1214.479539	802	No	4	879.25	127.408	0	No	non-	0.05	Param.
Manganese (ug/L)	MW40	1193.45062	198	No	4	427.75	291.015	0	No	non-	0.05	Param.
Manganese (ug/L)	MW48	817.006733	504	No	4	578.5	90.648	0	No	non-	0.05	Param.
Manganese (ug/L)	MW49	3506.423708	2210	No	4	1780	656.15	0	No	non-	0.05	Param.

Statistical Summary
VOCs and Metals in the West Area of Concern

Intra-Well Prediction Interval
VOCs in the West Area of Concern

Constituent	Well	Upper Limit	Observation	Exceeds	Background	Background Mean	Standard Deviation	% Non-detects	Cohens	Transformation	Alpha	Method
Benzene (ug/L)	MW13	940.269797	33	No	4	204.75	279.544	0	No	non-	0.05	Param.
Benzene (ug/L)	MW14	41	5	No	4	n/a	n/a	50	n/a	n/a	0.2	NP (cohens)
Benzene (ug/L)	MW46	2	2	No	4	n/a	n/a	0	n/a	failed	0.2	NP (normality)
Chloroethane (ug/L)	MW13	845.632486	160	No	4	289.25	211.461	0	No	non-	0.05	Param.
Chloroethane (ug/L)	MW14	1000	5	No	4	n/a	n/a	75	n/a	n/a	0.2	NP (NDs)
Chloroethane (ug/L)	MW46	19.215204	5	No	4	n/a	n/a	100	n/a	n/a	1.00E-02	Poisson

Metals in the West Area of Concern

Constituent	Well	Upper Limit	Observation	Exceeds	Background	Background Mean	Standard Deviation	% Non-detects	Cohens	Transformation	Alpha	Method
Aluminum (ug/L)	MW13	668.525859	86	No	4	198.432	178.666	25	Yes	non-	0.05	Param.
Aluminum (ug/L)	MW14	21371.28994	7180	[illegible]	4	6077.5	5812.609	0	No	non-	0.05	Param.
Aluminum (ug/L)	MW46	1258.979985	93	No	4	447.204	308.526	50	Yes	non-	0.05	Param.
Iron (ug/L)	MW13	7307.178054	4420	No	4	5382.5	731.5	0	No	non-	0.05	Param.
Iron (ug/L)	MW14	56723.24065	25900	No	4	16540	15272.177	0	No	non-	0.05	Param.
Iron (ug/L)	MW46	24598.24489	19000	No	4	19875	1795.132	0	No	non-	0.05	Param.
Lead (ug/L)	MW13	8.421689896	0.5	No	4	n/a	n/a	100	n/a	n/a	1.00E-02	Poisson
Lead (ug/L)	MW14	28.364469	20	No	4	16.5	4.509	0	No	non-	0.05	Param.
Lead (ug/L)	MW46	10.43714827	1	No	4	n/a	n/a	100	n/a	n/a	1.00E-02	Poisson
Manganese (ug/L)	MW13	727.509434	604	No	4	647.75	30.314	0	No	non-	0.05	Param.
Manganese (ug/L)	MW14	1235.188923	290	No	4	383	323.886	0	No	non-	0.05	Param.
Manganese (ug/L)	MW46	1592.290745	1390	No	4	1410	69.282	0	No	non-	0.05	Param.

Statistical Background Data
VOCs in the South Area of Concern

Well	Date	Analyte	Concentration	Units
MW06	11/7/96	Benzene	320	ug/L
MW06	4/3/97	Benzene	35	ug/L
MW06	7/1/97	Benzene	39	ug/L
MW06	9/23/97	Benzene	140	ug/L
MW06	11/7/96	Chloroethane	720	ug/L
MW06	4/3/97	Chloroethane	67	ug/L
MW06	7/1/97	Chloroethane	140	ug/L
MW06	9/23/97	Chloroethane	140	ug/L
MW15	11/7/96	Benzene	3	ug/L
MW15	4/3/97	Benzene	3	ug/L
MW15	6/25/97	Benzene	3	ug/L
MW15	9/23/97	Benzene	4	ug/L
MW15	11/7/96	Chloroethane	<10	ug/L
MW15	4/3/97	Chloroethane	<10	ug/L
MW15	6/25/97	Chloroethane	<10	ug/L
MW15	9/23/97	Chloroethane	<10	ug/L
MW18	11/5/96	Benzene	<10	ug/L
MW18	3/27/97	Benzene	<10	ug/L
MW18	6/25/97	Benzene	<10	ug/L
MW18	9/29/97	Benzene	<10	ug/L
MW18	11/5/96	Chloroethane	<10	ug/L
MW18	3/27/97	Chloroethane	<10	ug/L
MW18	6/25/97	Chloroethane	<10	ug/L
MW18	9/29/97	Chloroethane	<10	ug/L
MW19	11/5/96	Benzene	<10	ug/L
MW19	3/27/97	Benzene	5	ug/L
MW19	6/30/97	Benzene	3	ug/L
MW19	9/29/97	Benzene	1	ug/L
MW19	11/5/96	Chloroethane	20	ug/L
MW19	3/27/97	Chloroethane	14	ug/L
MW19	6/30/97	Chloroethane	13	ug/L
MW19	9/29/97	Chloroethane	18	ug/L
MW41	8/1/96	Benzene	<10	ug/L
MW41	3/25/97	Benzene	<10	ug/L
MW41	6/25/97	Benzene	<10	ug/L
MW41	9/29/97	Benzene	<10	ug/L
MW41	8/1/96	Chloroethane	<10	ug/L
MW41	3/25/97	Chloroethane	<10	ug/L
MW41	6/25/97	Chloroethane	<10	ug/L
MW41	9/29/97	Chloroethane	<10	ug/L
MW42	8/1/96	Benzene	<10	ug/L
MW42	3/25/97	Benzene	<10	ug/L
MW42	6/26/97	Benzene	<10	ug/L
MW42	9/26/97	Benzene	<10	ug/L
MW42	8/1/96	Chloroethane	<10	ug/L
MW42	3/25/97	Chloroethane	<10	ug/L
MW42	6/26/97	Chloroethane	<10	ug/L
MW42	9/26/97	Chloroethane	<10	ug/L
MW43	8/1/96	Benzene	<10	ug/L

Statistical Background Data
VOCs in the South Area of Concern

Well	Date	Analyte	Concentration	Units
MW43	3/26/97	Benzene	<10	ug/L
MW43	6/26/97	Benzene	<10	ug/L
MW43	9/26/97	Benzene	<10	ug/L
MW43	8/1/96	Chloroethane	<10	ug/L
MW43	3/26/97	Chloroethane	<10	ug/L
MW43	6/26/97	Chloroethane	<10	ug/L
MW43	9/26/97	Chloroethane	<10	ug/L
MW44	8/1/96	Benzene	<10	ug/L
MW44	3/26/97	Benzene	<10	ug/L
MW44	6/26/97	Benzene	<10	ug/L
MW44	9/29/97	Benzene	<10	ug/L
MW44	8/1/96	Chloroethane	<10	ug/L
MW44	3/26/97	Chloroethane	<10	ug/L
MW44	6/26/97	Chloroethane	<10	ug/L
MW44	9/29/97	Chloroethane	<10	ug/L
MW45	8/1/96	Benzene	530	ug/L
MW45	4/2/97	Benzene	1100	ug/L
MW45	6/26/97	Benzene	940	ug/L
MW45	9/29/97	Benzene	860	ug/L
MW45	8/1/96	Chloroethane	82	ug/L
MW45	4/2/97	Chloroethane	230	ug/L
MW45	6/26/97	Chloroethane	120	ug/L
MW45	9/29/97	Chloroethane	120	ug/L
MW47	8/1/96	Benzene	<10	ug/L
MW47	3/27/97	Benzene	<10	ug/L
MW47	6/26/97	Benzene	<10	ug/L
MW47	10/1/97	Benzene	<10	ug/L
MW47	8/1/96	Chloroethane	<10	ug/L
MW47	3/27/97	Chloroethane	<10	ug/L
MW47	6/26/97	Chloroethane	<10	ug/L
MW47	10/1/97	Chloroethane	<10	ug/L

Statistical Background Data
VOCs in the North Area of Concern

Well	Date	Analyte	Concentration	Units
MW37	08/01/96	Benzene	<10	ug/L
MW37	03/25/97	Benzene	<10	ug/L
MW37	06/25/97	Benzene	<10	ug/L
MW37	09/26/97	Benzene	<10	ug/L
MW37	08/01/96	Chloroethane	<10	ug/L
MW37	03/25/97	Chloroethane	<10	ug/L
MW37	06/25/97	Chloroethane	<10	ug/L
MW37	09/26/97	Chloroethane	<10	ug/L
MW38	08/01/96	Benzene	<10	ug/L
MW38	03/25/97	Benzene	<10	ug/L
MW38	06/25/97	Benzene	<10	ug/L
MW38	09/25/97	Benzene	<10	ug/L
MW38	08/01/96	Chloroethane	<10	ug/L
MW38	03/25/97	Chloroethane	<10	ug/L
MW38	06/25/97	Chloroethane	<10	ug/L
MW38	09/25/97	Chloroethane	<10	ug/L
MW39	08/01/96	Benzene	12	ug/L
MW39	03/25/97	Benzene	4	ug/L
MW39	06/25/97	Benzene	5	ug/L
MW39	09/25/97	Benzene	4	ug/L
MW39	08/01/96	Chloroethane	5	ug/L
MW39	03/25/97	Chloroethane	<10	ug/L
MW39	06/25/97	Chloroethane	3	ug/L
MW39	09/25/97	Chloroethane	2	ug/L
MW40	08/01/96	Benzene	<10	ug/L
MW40	03/25/97	Benzene	<10	ug/L
MW40	06/26/97	Benzene	<10	ug/L
MW40	09/29/97	Benzene	<10	ug/L
MW40	08/01/96	Chloroethane	<10	ug/L
MW40	03/25/97	Chloroethane	<10	ug/L
MW40	06/26/97	Chloroethane	<10	ug/L
MW40	09/29/97	Chloroethane	<10	ug/L
MW48	08/01/96	Benzene	9100	ug/L
MW48	03/27/97	Benzene	5200	ug/L
MW48	06/26/97	Benzene	7700	ug/L
MW48	09/29/97	Benzene	9500	ug/L
MW48	08/01/96	Chloroethane	1000	ug/L
MW48	03/27/97	Chloroethane	620	ug/L
MW48	06/26/97	Chloroethane	670	ug/L
MW48	09/29/97	Chloroethane	980	ug/L
MW49	08/01/96	Benzene	5000	ug/L
MW49	04/03/97	Benzene	1600	ug/L
MW49	06/25/97	Benzene	4800	ug/L
MW49	09/24/97	Benzene	8200	ug/L
MW49	08/01/96	Chloroethane	480	ug/L
MW49	04/03/97	Chloroethane	310	ug/L
MW49	06/25/97	Chloroethane	540	ug/L
MW49	09/24/97	Chloroethane	810	ug/L

Statistical Background Data
VOCs in the West Area of Concern

Well	Date	Analyte	Concentration	Units
MW13	11/07/96	Benzene	6	ug/L
MW13	03/25/97	Benzene	170	ug/L
MW13	06/27/97	Benzene	610	ug/L
MW13	10/01/97	Benzene	33	ug/L
MW13	11/07/96	Chloroethane	97	ug/L
MW13	03/25/97	Chloroethane	330	ug/L
MW13	06/27/97	Chloroethane	570	ug/L
MW13	10/01/97	Chloroethane	160	ug/L
MW14	11/06/96	Benzene	41	ug/L
MW14	03/27/97	Benzene	<10	ug/L
MW14	06/30/97	Benzene	1	ug/L
MW14	09/29/97	Benzene	<10	ug/L
MW14	11/06/96	Chloroethane	1000	ug/L
MW14	03/27/97	Chloroethane	<10	ug/L
MW14	06/30/97	Chloroethane	<10	ug/L
MW14	09/29/97	Chloroethane	<10	ug/L
MW46	08/01/96	Benzene	1	ug/L
MW46	03/25/97	Benzene	1	ug/L
MW46	06/24/97	Benzene	2	ug/L
MW46	09/25/97	Benzene	2	ug/L
MW46	08/01/96	Chloroethane	<10	ug/L
MW46	03/25/97	Chloroethane	<10	ug/L
MW46	06/24/97	Chloroethane	<10	ug/L
MW46	09/25/97	Chloroethane	<10	ug/L

Statistical Background Data
Metals in the South Area of Concern

Well	Date	Analyte	Concentration	Units
MW06	11/7/96	Aluminum	150	ug/L
MW06	4/3/97	Aluminum	<87	ug/L
MW06	7/1/97	Aluminum	106	ug/L
MW06	9/23/97	Aluminum	180	ug/L
MW06	11/7/96	Iron	16500	ug/L
MW06	4/3/97	Iron	1590	ug/L
MW06	7/1/97	Iron	3230	ug/L
MW06	9/23/97	Iron	14300	ug/L
MW06	11/7/96	Lead	8	ug/L
MW06	4/3/97	Lead	1	ug/L
MW06	7/1/97	Lead	10	ug/L
MW06	9/23/97	Lead	9	ug/L
MW06	11/7/96	Manganese	2900	ug/L
MW06	4/3/97	Manganese	486	ug/L
MW06	7/1/97	Manganese	1580	ug/L
MW06	9/23/97	Manganese	2170	ug/L
MW15	11/7/96	Aluminum	<135	ug/L
MW15	4/3/97	Aluminum	472	ug/L
MW15	6/25/97	Aluminum	308	ug/L
MW15	9/23/97	Aluminum	487	ug/L
MW15	11/7/96	Iron	7900	ug/L
MW15	4/3/97	Iron	5550	ug/L
MW15	6/25/97	Iron	5510	ug/L
MW15	9/23/97	Iron	7010	ug/L
MW15	11/7/96	Lead	<2	ug/L
MW15	4/3/97	Lead	<1	ug/L
MW15	6/25/97	Lead	<5	ug/L
MW15	9/23/97	Lead	1	ug/L
MW15	11/7/96	Manganese	534	ug/L
MW15	4/3/97	Manganese	276	ug/L
MW15	6/25/97	Manganese	167	ug/L
MW15	9/23/97	Manganese	141	ug/L
MW18	11/5/96	Aluminum	<16	ug/L
MW18	3/27/97	Aluminum	<56	ug/L
MW18	6/25/97	Aluminum	<56	ug/L
MW18	9/29/97	Aluminum	<36	ug/L
MW18	11/5/96	Iron	288	ug/L
MW18	3/27/97	Iron	165	ug/L
MW18	6/25/97	Iron	<54	ug/L
MW18	9/29/97	Iron	<208	ug/L
MW18	11/5/96	Lead	2	ug/L
MW18	3/27/97	Lead	2	ug/L
MW18	6/25/97	Lead	6	ug/L
MW18	9/29/97	Lead	14	ug/L
MW18	11/5/96	Manganese	609	ug/L
MW18	3/27/97	Manganese	83	ug/L
MW18	6/25/97	Manganese	24	ug/L
MW18	9/29/97	Manganese	85	ug/L
MW19	11/5/96	Aluminum	283	ug/L

Statistical Background Data
Metals in the South Area of Concern

Well	Date	Analyte	Concentration	Units
MW19	3/27/97	Aluminum	322	ug/L
MW19	6/30/97	Aluminum	421	ug/L
MW19	9/29/97	Aluminum	402	ug/L
MW19	11/5/96	Iron	4810	ug/L
MW19	3/27/97	Iron	4630	ug/L
MW19	6/30/97	Iron	4370	ug/L
MW19	9/29/97	Iron	4660	ug/L
MW19	11/5/96	Lead	2	ug/L
MW19	3/27/97	Lead	<1	ug/L
MW19	6/30/97	Lead	4	ug/L
MW19	9/29/97	Lead	2	ug/L
MW19	11/5/96	Manganese	268	ug/L
MW19	3/27/97	Manganese	165	ug/L
MW19	6/30/97	Manganese	243	ug/L
MW19	9/29/97	Manganese	243	ug/L
MW41	8/7/96	Aluminum	<90	ug/L
MW41	3/25/97	Aluminum	1040	ug/L
MW41	6/25/97	Aluminum	289	ug/L
MW41	9/29/97	Aluminum	486	ug/L
MW41	8/7/96	Iron	<1670	ug/L
MW41	3/25/97	Iron	1170	ug/L
MW41	6/25/97	Iron	302	ug/L
MW41	8/7/96	Lead	<2	ug/L
MW41	3/25/97	Lead	13	ug/L
MW41	6/25/97	Lead	10	ug/L
MW41	9/29/97	Lead	3	ug/L
MW41	8/7/96	Manganese	414	ug/L
MW41	3/25/97	Manganese	324	ug/L
MW41	6/25/97	Manganese	73	ug/L
MW41	9/29/97	Manganese	280	ug/L
MW42	8/7/96	Aluminum	808	ug/L
MW42	3/25/97	Aluminum	752	ug/L
MW42	6/26/97	Aluminum	725	ug/L
MW42	9/26/97	Aluminum	1880	ug/L
MW42	8/7/96	Iron	<3340	ug/L
MW42	3/25/97	Iron	9920	ug/L
MW42	6/26/97	Iron	6300	ug/L
MW42	9/26/97	Iron	11100	ug/L
MW42	8/7/96	Lead	<6	ug/L
MW42	3/25/97	Lead	3	ug/L
MW42	6/26/97	Lead	<2	ug/L
MW42	9/26/97	Lead	<6	ug/L
MW42	8/7/96	Manganese	928	ug/L
MW42	3/25/97	Manganese	796	ug/L
MW42	6/26/97	Manganese	597	ug/L
MW42	9/26/97	Manganese	697	ug/L
MW43	8/8/96	Aluminum	2920	ug/L
MW43	3/26/97	Aluminum	10100	ug/L
MW43	6/26/97	Aluminum	4270	ug/L

Statistical Background Data
Metals in the South Area of Concern

Well	Date	Analyte	Concentration	Units
MW43	9/26/97	Aluminum	12700	ug/L
MW43	8/8/96	Iron	13900	ug/L
MW43	3/26/97	Iron	29200	ug/L
MW43	6/26/97	Iron	22200	ug/L
MW43	9/26/97	Iron	47500	ug/L
MW43	8/8/96	Lead	<8	ug/L
MW43	3/26/97	Lead	21	ug/L
MW43	6/26/97	Lead	16	ug/L
MW43	9/26/97	Lead	33	ug/L
MW43	8/8/96	Manganese	374	ug/L
MW43	3/26/97	Manganese	666	ug/L
MW43	6/26/97	Manganese	586	ug/L
MW43	9/26/97	Manganese	857	ug/L
MW44	8/8/96	Aluminum	<175	ug/L
MW44	3/26/97	Aluminum	394	ug/L
MW44	6/26/97	Aluminum	1710	ug/L
MW44	9/29/97	Aluminum	457	ug/L
MW44	8/8/96	Iron	<1480	ug/L
MW44	3/26/97	Iron	2170	ug/L
MW44	6/26/97	Iron	14700	ug/L
MW44	9/29/97	Iron	2510	ug/L
MW44	8/8/96	Lead	<2	ug/L
MW44	3/26/97	Lead	1	ug/L
MW44	6/26/97	Lead	<1	ug/L
MW44	9/29/97	Lead	<1	ug/L
MW44	8/8/96	Manganese	38	ug/L
MW44	3/26/97	Manganese	46	ug/L
MW44	6/26/97	Manganese	108	ug/L
MW44	9/29/97	Manganese	44	ug/L
MW45	8/8/96	Aluminum	776	ug/L
MW45	4/2/97	Aluminum	148	ug/L
MW45	6/26/97	Aluminum	<183	ug/L
MW45	9/29/97	Aluminum	<100	ug/L
MW45	8/8/96	Iron	9570	ug/L
MW45	4/2/97	Iron	11400	ug/L
MW45	6/26/97	Iron	10100	ug/L
MW45	9/29/97	Iron	15900	ug/L
MW45	8/8/96	Lead	38	ug/L
MW45	4/2/97	Lead	<1	ug/L
MW45	6/26/97	Lead	12	ug/L
MW45	9/29/97	Lead	9	ug/L
MW45	8/8/96	Manganese	641	ug/L
MW45	4/2/97	Manganese	688	ug/L
MW45	6/26/97	Manganese	416	ug/L
MW45	9/29/97	Manganese	480	ug/L
MW47	8/7/96	Aluminum	<383	ug/L
MW47	3/27/97	Aluminum	533	ug/L
MW47	6/26/97	Aluminum	1630	ug/L
MW47	10/1/97	Aluminum	724	ug/L

Statistical Background Data
Metals in the South Area of Concern

Well	Date	Analyte	Concentration	Units
MW47	8/7/96	Iron	<254	ug/L
MW47	3/27/97	Iron	405	ug/L
MW47	6/26/97	Iron	1130	ug/L
MW47	10/1/97	Iron	569	ug/L
MW47	8/7/96	Lead	23	ug/L
MW47	3/27/97	Lead	2	ug/L
MW47	6/26/97	Lead	12	ug/L
MW47	10/1/97	Lead	8	ug/L
MW47	8/7/96	Manganese	27	ug/L
MW47	3/27/97	Manganese	8	ug/L
MW47	6/26/97	Manganese	16	ug/L
MW47	10/1/97	Manganese	17	ug/L

Statistical Background Data
Metals in the North Area of Concern

Well	Date	Analyte	Concentration	Units
MW37	8/7/96	Aluminum	1410	ug/L
MW37	3/25/97	Aluminum	<633	ug/L
MW37	6/25/97	Aluminum	664	ug/L
MW37	9/26/97	Aluminum	1310	ug/L
MW37	8/7/96	Iron	<1240	ug/L
MW37	3/25/97	Iron	1850	ug/L
MW37	6/25/97	Iron	2140	ug/L
MW37	9/26/97	Iron	9440	ug/L
MW37	8/7/96	Lead	<9	ug/L
MW37	3/25/97	Lead	4	ug/L
MW37	6/25/97	Lead	<4	ug/L
MW37	9/26/97	Lead	<4	ug/L
MW37	8/7/96	Manganese	273	ug/L
MW37	3/25/97	Manganese	165	ug/L
MW37	6/25/97	Manganese	154	ug/L
MW37	9/26/97	Manganese	682	ug/L
MW38	8/7/96	Aluminum	<118	ug/L
MW38	3/25/97	Aluminum	791	ug/L
MW38	6/25/97	Aluminum	134	ug/L
MW38	9/25/97	Aluminum	1280	ug/L
MW38	8/7/96	Iron	6440	ug/L
MW38	3/25/97	Iron	12800	ug/L
MW38	6/25/97	Iron	1940	ug/L
MW38	9/25/97	Iron	16200	ug/L
MW38	8/7/96	Lead	<2	ug/L
MW38	3/25/97	Lead	8	ug/L
MW38	6/25/97	Lead	<1	ug/L
MW38	9/25/97	Lead	<10	ug/L
MW38	8/7/96	Manganese	511	ug/L
MW38	3/25/97	Manganese	250	ug/L
MW38	6/25/97	Manganese	1270	ug/L
MW38	9/25/97	Manganese	594	ug/L
MW39	8/6/96	Aluminum	<273	ug/L
MW39	3/25/97	Aluminum	520	ug/L
MW39	6/25/97	Aluminum	153	ug/L
MW39	9/25/97	Aluminum	366	ug/L
MW39	8/6/96	Iron	9710	ug/L
MW39	3/25/97	Iron	17300	ug/L
MW39	6/25/97	Iron	6730	ug/L
MW39	9/25/97	Iron	7300	ug/L
MW39	8/6/96	Lead	<2	ug/L
MW39	3/25/97	Lead	4	ug/L
MW39	6/25/97	Lead	<1	ug/L
MW39	9/25/97	Lead	<2	ug/L
MW39	8/6/96	Manganese	1060	ug/L
MW39	3/25/97	Manganese	876	ug/L
MW39	6/25/97	Manganese	779	ug/L
MW39	9/25/97	Manganese	802	ug/L
MW40	8/7/96	Aluminum	406	ug/L

Statistical Background Data
Metals in the North Area of Concern

Well	Date	Analyte	Concentration	Units
MW40	3/25/97	Aluminum	2040	ug/L
MW40	6/26/97	Aluminum	941	ug/L
MW40	9/29/97	Aluminum	2140	ug/L
MW40	8/7/96	Iron	<1190	ug/L
MW40	3/25/97	Iron	3470	ug/L
MW40	6/26/97	Iron	3060	ug/L
MW40	9/29/97	Iron	6430	ug/L
MW40	8/7/96	Lead	<11	ug/L
MW40	3/25/97	Lead	7	ug/L
MW40	6/26/97	Lead	<5	ug/L
MW40	9/29/97	Lead	<8	ug/L
MW40	8/7/96	Manganese	852	ug/L
MW40	3/25/97	Manganese	296	ug/L
MW40	6/26/97	Manganese	365	ug/L
MW40	9/29/97	Manganese	198	ug/L
MW48	8/6/96	Aluminum	<254	ug/L
MW48	3/27/97	Aluminum	<46	ug/L
MW48	6/26/97	Aluminum	<146	ug/L
MW48	9/29/97	Aluminum	330	ug/L
MW48	8/6/96	Iron	30800	ug/L
MW48	3/27/97	Iron	24900	ug/L
MW48	6/26/97	Iron	23300	ug/L
MW48	9/29/97	Iron	24500	ug/L
MW48	8/6/96	Lead	<3	ug/L
MW48	3/27/97	Lead	<1	ug/L
MW48	6/26/97	Lead	<2	ug/L
MW48	9/29/97	Lead	8	ug/L
MW48	8/6/96	Manganese	688	ug/L
MW48	3/27/97	Manganese	618	ug/L
MW48	6/26/97	Manganese	504	ug/L
MW48	9/29/97	Manganese	504	ug/L
MW49	8/6/96	Aluminum	<110	ug/L
MW49	4/3/97	Aluminum	258	ug/L
MW49	6/25/97	Aluminum	273	ug/L
MW49	9/24/97	Aluminum	1130	ug/L
MW49	8/6/96	Iron	20100	ug/L
MW49	4/3/97	Iron	9050	ug/L
MW49	6/25/97	Iron	26700	ug/L
MW49	9/24/97	Iron	28200	ug/L
MW49	8/6/96	Lead	<2	ug/L
MW49	4/3/97	Lead	1	ug/L
MW49	6/25/97	Lead	6	ug/L
MW49	9/24/97	Lead	3	ug/L
MW49	8/6/96	Manganese	1950	ug/L
MW49	4/3/97	Manganese	810	ug/L
MW49	6/25/97	Manganese	2150	ug/L
MW49	9/24/97	Manganese	2210	ug/L

Statistical Background Data
Metals in the West Area of Concern

Well	Date	Analyte	Concentration	Units
MW13	11/7/96	Aluminum	232	ug/L
MW13	3/25/97	Aluminum	96	ug/L
MW13	6/27/97	Aluminum	427	ug/L
MW13	10/1/97	Aluminum	<172	ug/L
MW13	11/7/96	Iron	5240	ug/L
MW13	3/25/97	Iron	6090	ug/L
MW13	6/27/97	Iron	5780	ug/L
MW13	10/1/97	Iron	4420	ug/L
MW13	11/7/96	Lead	<2	ug/L
MW13	3/25/97	Lead	<1	ug/L
MW13	6/27/97	Lead	<2	ug/L
MW13	10/1/97	Lead	<1	ug/L
MW13	11/7/96	Manganese	674	ug/L
MW13	3/25/97	Manganese	657	ug/L
MW13	6/27/97	Manganese	656	ug/L
MW13	10/1/97	Manganese	604	ug/L
MW14	11/6/96	Aluminum	780	ug/L
MW14	3/27/97	Aluminum	2550	ug/L
MW14	6/30/97	Aluminum	13800	ug/L
MW14	9/29/97	Aluminum	7180	ug/L
MW14	11/6/96	Iron	1650	ug/L
MW14	3/27/97	Iron	5610	ug/L
MW14	6/30/97	Iron	33000	ug/L
MW14	9/29/97	Iron	25900	ug/L
MW14	11/6/96	Lead	10	ug/L
MW14	3/27/97	Lead	17	ug/L
MW14	6/30/97	Lead	19	ug/L
MW14	9/29/97	Lead	20	ug/L
MW14	11/6/96	Manganese	831	ug/L
MW14	3/27/97	Manganese	60	ug/L
MW14	6/30/97	Manganese	351	ug/L
MW14	9/29/97	Manganese	290	ug/L
MW46	8/5/96	Aluminum	821	ug/L
MW46	3/25/97	Aluminum	<441	ug/L
MW46	6/24/97	Aluminum	544	ug/L
MW46	9/25/97	Aluminum	<186	ug/L
MW46	8/5/96	Iron	21700	ug/L
MW46	3/25/97	Iron	17800	ug/L
MW46	6/24/97	Iron	21000	ug/L
MW46	9/25/97	Iron	19000	ug/L
MW46	8/5/96	Lead	<5	ug/L
MW46	3/25/97	Lead	<1	ug/L
MW46	6/24/97	Lead	<3	ug/L
MW46	9/25/97	Lead	<2	ug/L
MW46	8/5/96	Manganese	1510	ug/L
MW46	3/25/97	Manganese	1350	ug/L
MW46	6/24/97	Manganese	1390	ug/L
MW46	9/25/97	Manganese	1390	ug/L

Statistical Summary
VOCs in the Lower Aquifer

Intra-Well Prediction Interval
VOCs in the Lower Aquifer

Constituent Name	Well	Upper Limit	Background	Background Mean	Standard Deviation	% Non-detects	Cohens	Transformation	Alpha	Method
Acetone (UG/L)	MW53	21.693696	4	10.25	4.349	0	No	none	0.05	Param.
Benzene (UG/L)	MW09	336.967104	4	297.5	15	0	No	none	0.05	Param.
Benzene (UG/L)	MW53	8.674235	4	3.25	2.062	0	No	none	0.05	Param.
Bis[2-Chloroethyl]Ether (UG/L)	MW09	48.844825	4	39	3.742	0	No	none	0.05	Param.
Bis[2-Ethylhexyl]Phthalate (UG/L)	MW22	80.731141	4	26.75	20.516	0	No	none	0.05	Param.
Bis[2-Ethylhexyl]Phthalate (UG/L)	MW30	171.3690279	4	2.19	1.279	0	No	cube root(x)	0.05	Param.
Bis[2-Ethylhexyl]Phthalate (UG/L)	MW31	11.683913	4	6	2.16	0	No	none	0.05	Param.
Bis[2-Ethylhexyl]Phthalate (UG/L)	MW32	43.816833	4	12.5	11.902	0	No	none	0.05	Param.
Bis[2-Ethylhexyl]Phthalate (UG/L)	MW36	106.610643	4	3.871	2.453	0	No	square root(x)	0.05	Param.
Bis[2-Ethylhexyl]Phthalate (UG/L)	MW55	68.36940	4	20.5	18.193	0	No	none	0.05	Param.
Chloroethane (UG/L)	MW09	3583.10620	4	2150	544.671	0	No	none	0.05	Param.
Chloroethane (UG/L)	MW10	736.738465	4	280	173.59	0	No	none	0.05	Param.
Isophorone (UG/L)	MW09	25	4	n/a	n/a	0	n/a	failed	0.2	NP (normality)
Isophorone (UG/L)	MW10	5	4	n/a	n/a	0	n/a	failed	0.2	NP (normality)
Isophorone (UG/L)	MW33	5	4	n/a	n/a	0	n/a	failed	0.2	NP (normality)
Isophorone (UG/L)	MW53	8.674235	4	3.25	2.062	0	No	none	0.05	Param.
Phenol (UG/L)	MW07	70	3	n/a	n/a	0	n/a	none	0.2	NP (sample number)
Phenol (UG/L)	MW08	218.527409	4	51	63.671	0	No	none	0.05	Param.
Phenol (UG/L)	MW09	62.875914	4	19.25	16.581	0	No	none	0.05	Param.
Phenol (UG/L)	MW10	32.77219	4	14.75	6.85	0	No	none	0.05	Param.
Phenol (UG/L)	MW21	32	3	n/a	n/a	0	n/a	none	0.2	NP (sample number)
Phenol (UG/L)	MW22	514.918235	4	109	154.275	0	No	none	0.05	Param.
Phenol (UG/L)	MW23	54.483191	4	17.25	14.151	0	No	none	0.05	Param.
Phenol (UG/L)	MW24	23.462009	4	7.625	6.019	0	No	none	0.05	Param.
Phenol (UG/L)	MW28	131.501171	4	46.5	32.306	0	No	none	0.05	Param.
Phenol (UG/L)	MW29	73.037362	4	20.75	19.873	0	No	none	0.05	Param.
Phenol (UG/L)	MW30	58.961972	4	20.75	14.523	0	No	none	0.05	Param.
Phenol (UG/L)	MW31	230.178713	4	60	64.679	0	No	none	0.05	Param.
Phenol (UG/L)	MW32	183.738962	4	50.5	50.639	0	No	none	0.05	Param.
Phenol (UG/L)	MW33	137.548118	4	51	32.894	0	No	none	0.05	Param.
Phenol (UG/L)	MW34	751.5655568	4	7.164	7.697	0	No	square root(x)	0.05	Param.
Phenol (UG/L)	MW36	400.102997	4	136.25	100.281	0	No	none	0.05	Param.
Phenol (UG/L)	MW50	528.44021	4	120.75	154.948	0	No	none	0.05	Param.
Phenol (UG/L)	MW51	38.907367	4	16.75	8.421	0	No	none	0.05	Param.
Phenol (UG/L)	MW52	37.284056	4	12.875	9.277	0	No	none	0.05	Param.
Phenol (UG/L)	MW53	130.692562	4	49	31.048	0	No	none	0.05	Param.
Phenol (UG/L)	MW54	252.344885	4	66.75	70.538	0	No	none	0.05	Param.
Phenol (UG/L)	MW55	39	4	n/a	n/a	0	n/a	failed	0.2	NP (normality)
Toluene (UG/L)	MW53	5	4	n/a	n/a	0	n/a	failed	0.2	NP (normality)

Statistical Background Data
VOCs in the Lower Aquifer

Well	Analtye	Date	Concentration	RDL	DVQ	LQ	Unit
MW07	Phenol	03/25/97	70	10			ug/L
MW07	Phenol	06/24/97	31	10			ug/L
MW07	Phenol	09/24/97	48	10			ug/L
MW07	Toluene	11/05/96	0	10		U	ug/L
MW07	Toluene	03/25/97	0	10		U	ug/L
MW07	Toluene	06/24/97	0	10		U	ug/L
MW07	Toluene	09/24/97	1	10		J	ug/L
MW08	Phenol	11/05/96	0	10		U	ug/L
MW08	Phenol	03/25/97	54	10			ug/L
MW08	Phenol	06/24/97	0	10		U	ug/L
MW08	Phenol	09/24/97	140	20			ug/L
MW09	Benzene	11/06/96	310	200			ug/L
MW09	Benzene	04/02/97	310	200			ug/L
MW09	Benzene	06/30/97	280	160			ug/L
MW09	Benzene	09/29/97	290	160			ug/L
MW09	Bis(2-Chloroethyl)Ether	11/06/96	44	10			ug/L
MW09	Bis(2-Chloroethyl)Ether	04/02/97	38	50		J	ug/L
MW09	Bis(2-Chloroethyl)Ether	06/30/97	39	10			ug/L
MW09	Bis(2-Chloroethyl)Ether	09/29/97	35	10			ug/L
MW09	Chloroethane	11/06/96	2200	200			ug/L
MW09	Chloroethane	04/02/97	2900	200			ug/L
MW09	Chloroethane	06/30/97	1700	160	J		ug/L
MW09	Chloroethane	09/29/97	1800	160			ug/L
MW09	Isophorone	11/06/96	1	10		J	ug/L
MW09	Isophorone	04/02/97	0	50		U	ug/L
MW09	Isophorone	06/30/97	1	10		J	ug/L
MW09	Isophorone	09/29/97	1	10	J	J	ug/L
MW09	Phenol	11/06/96	0	10		U	ug/L
MW09	Phenol	04/02/97	36	50		J	ug/L
MW09	Phenol	06/30/97	31	10			ug/L
MW09	Phenol	09/29/97	0	10		U	ug/L
MW10	Chloroethane	11/06/96	120	100			ug/L
MW10	Chloroethane	03/27/97	140	10			ug/L
MW10	Chloroethane	06/26/97	440	250	J		ug/L
MW10	Chloroethane	09/24/97	420	50			ug/L
MW10	Isophorone	11/06/96	0	10		U	ug/L
MW10	Isophorone	03/27/97	1	10		J	ug/L
MW10	Isophorone	06/26/97	0	10		U	ug/L
MW10	Isophorone	09/24/97	1	10		J	ug/L
MW10	Methylene Chloride	11/06/96	0	100		U	ug/L
MW10	Methylene Chloride	03/27/97	1	10		J	ug/L
MW10	Methylene Chloride	06/26/97	0	250		U	ug/L
MW10	Methylene Chloride	09/24/97	0	50		U	ug/L
MW10	Phenol	11/06/96	0	10		U	ug/L
MW10	Phenol	03/27/97	15	10			ug/L
MW10	Phenol	06/26/97	19	10			ug/L
MW10	Phenol	09/24/97	20	10			ug/L

Statistical Background Data
VOCs in the Lower Aquifer

Well	Analtye	Date	Concentration	RDL	DVQ	LQ	Unit
MW21	Phenol	03/25/97	32	10	J		ug/L
MW21	Phenol	06/25/97	9	10		J	ug/L
MW21	Phenol	10/01/97	20	10			ug/L
MW22	Bis(2-Ethylhexyl)Phthalate	11/05/96	48	10			ug/L
MW22	Bis(2-Ethylhexyl)Phthalate	03/27/97	0	10		U	ug/L
MW22	Bis(2-Ethylhexyl)Phthalate	07/01/97	14	20		J	ug/L
MW22	Bis(2-Ethylhexyl)Phthalate	09/29/97	0	80		U	ug/L
MW22	Chloroform	11/05/96	0	10		U	ug/L
MW22	Chloroform	03/27/97	0	10		U	ug/L
MW22	Chloroform	07/01/97	3	10		J	ug/L
MW22	Chloroform	09/29/97	0	10		U	ug/L
MW22	Phenol	11/05/96	0	10		U	ug/L
MW22	Phenol	03/27/97	1	10		J	ug/L
MW22	Phenol	07/01/97	100	20			ug/L
MW22	Phenol	09/29/97	330	80			ug/L
MW23	Bis(2-Ethylhexyl)Phthalate	11/06/96	0	10		U	ug/L
MW23	Bis(2-Ethylhexyl)Phthalate	03/25/97	0	10		U	ug/L
MW23	Bis(2-Ethylhexyl)Phthalate	06/24/97	4	10	J	J	ug/L
MW23	Bis(2-Ethylhexyl)Phthalate	09/25/97	0	10		U	ug/L
MW23	Phenol	11/06/96	0	10		U	ug/L
MW23	Phenol	03/25/97	30	10			ug/L
MW23	Phenol	06/24/97	29	10	J		ug/L
MW23	Phenol	09/25/97	0	10		U	ug/L
MW24	Bis(2-Ethylhexyl)Phthalate	11/06/96	0	10		U	ug/L
MW24	Bis(2-Ethylhexyl)Phthalate	03/25/97	0	10		U	ug/L
MW24	Bis(2-Ethylhexyl)Phthalate	06/24/97	4	10		J	ug/L
MW24	Bis(2-Ethylhexyl)Phthalate	09/25/97	0	10	U	J	ug/L
MW24	Phenol	11/06/96	0	10		U	ug/L
MW24	Phenol	03/25/97	16	10			ug/L
MW24	Phenol	06/24/97	2	10	J	J	ug/L
MW24	Phenol	09/25/97	0	15	U		ug/L
MW28	Bis(2-Ethylhexyl)Phthalate	03/12/96		10	U	U	ug/L
MW28	Bis(2-Ethylhexyl)Phthalate	03/25/97	0	10	U	J	ug/L
MW28	Bis(2-Ethylhexyl)Phthalate	06/24/97	6	10		J	ug/L
MW28	Bis(2-Ethylhexyl)Phthalate	09/23/97	0	10	U	JB	ug/L
MW28	Phenol	03/12/96		10	U	U	ug/L
MW28	Phenol	03/25/97	75	10			ug/L
MW28	Phenol	06/24/97	69	10			ug/L
MW28	Phenol	09/23/97	37	10	J		ug/L
MW29	Benzene	03/13/96		10	U	U	ug/L
MW29	Benzene	03/25/97	0	10		U	ug/L
MW29	Benzene	06/30/97	3	10		J	ug/L
MW29	Benzene	09/29/97	0	10		U	ug/L
MW29	Bis(2-Ethylhexyl)Phthalate	03/13/96	27	10			ug/L
MW29	Bis(2-Ethylhexyl)Phthalate	03/25/97	18	10			ug/L
MW29	Bis(2-Ethylhexyl)Phthalate	06/30/97	0	24	U		ug/L
MW29	Bis(2-Ethylhexyl)Phthalate	09/29/97	6	10	J	J	ug/L

Statistical Background Data
VOCs in the Lower Aquifer

Well	Analtye	Date	Concentration	RDL	DVQ	LQ	Unit
MW29	Chloroethane	03/13/96	2	10		J	ug/L
MW29	Chloroethane	03/25/97	0	10		U	ug/L
MW29	Chloroethane	06/30/97	0	10	UJ	U	ug/L
MW29	Chloroethane	09/29/97	0	10		U	ug/L
MW29	Phenol	03/13/96		10	U	U	ug/L
MW29	Phenol	03/25/97	3	10		J	ug/L
MW29	Phenol	06/30/97	32	10			ug/L
MW29	Phenol	09/29/97	43	10			ug/L
MW30	Anthracene	03/13/96	1	10		J	ug/L
MW30	Anthracene	03/25/97	0	10		U	ug/L
MW30	Anthracene	06/26/97	0	10		U	ug/L
MW30	Anthracene	10/01/97	0	10		U	ug/L
MW30	Bis(2-Ethylhexyl)Phthalate	03/13/96	68	10			ug/L
MW30	Bis(2-Ethylhexyl)Phthalate	03/25/97	2	10		J	ug/L
MW30	Bis(2-Ethylhexyl)Phthalate	06/26/97	0	10	UJ	J	ug/L
MW30	Bis(2-Ethylhexyl)Phthalate	10/01/97	0	10	U	J	ug/L
MW30	Chloroform	03/13/96		10	U	U	ug/L
MW30	Chloroform	03/25/97	1	10		J	ug/L
MW30	Chloroform	06/26/97	0	10		U	ug/L
MW30	Chloroform	10/01/97	0	10		U	ug/L
MW30	Phenol	03/13/96		10	U	U	ug/L
MW30	Phenol	03/25/97	21	10			ug/L
MW30	Phenol	06/26/97	40	10			ug/L
MW30	Phenol	10/01/97	17	10			ug/L
MW31	Bis(2-Ethylhexyl)Phthalate	03/14/96		10	U	U	ug/L
MW31	Bis(2-Ethylhexyl)Phthalate	03/25/97	9	20	J	J	ug/L
MW31	Bis(2-Ethylhexyl)Phthalate	06/25/97	4	10		J	ug/L
MW31	Bis(2-Ethylhexyl)Phthalate	09/24/97	6	20		J	ug/L
MW31	Phenol	03/14/96		10	U	U	ug/L
MW31	Phenol	03/25/97	100	20			ug/L
MW31	Phenol	06/25/97	0	10		U	ug/L
MW31	Phenol	09/24/97	130	20			ug/L
MW32	Acetone	03/14/96		10	U	U	ug/L
MW32	Acetone	03/25/97	5	10	J	J	ug/L
MW32	Acetone	06/24/97	0	10	U	J	ug/L
MW32	Acetone	09/24/97	0	10		U	ug/L
MW32	Bis(2-Chloroethyl)Ether	03/14/96		10	U	U	ug/L
MW32	Bis(2-Chloroethyl)Ether	03/25/97	0	10		U	ug/L
MW32	Bis(2-Chloroethyl)Ether	06/24/97	0	10		U	ug/L
MW32	Bis(2-Chloroethyl)Ether	09/24/97	2	20		J	ug/L
MW32	Bis(2-Ethylhexyl)Phthalate	03/14/96	30	10			ug/L
MW32	Bis(2-Ethylhexyl)Phthalate	03/25/97	0	10		U	ug/L
MW32	Bis(2-Ethylhexyl)Phthalate	06/24/97	0	10		U	ug/L
MW32	Bis(2-Ethylhexyl)Phthalate	09/24/97	10	20		J	ug/L
MW32	Phenol	03/14/96		10	U	U	ug/L
MW32	Phenol	03/25/97	75	10			ug/L
MW32	Phenol	06/24/97	12	10	J		ug/L

Statistical Background Data
VOCs in the Lower Aquifer

Well	Analtye	Date	Concentration	RDL	DVQ	LQ	Unit
MW32	Phenol	09/24/97	110	20			ug/L
MW32	Toluene	03/14/96		10	U	U	ug/L
MW32	Toluene	03/25/97	3	10	J	J	ug/L
MW32	Toluene	06/24/97	0	10		U	ug/L
MW32	Toluene	09/24/97	0	10		U	ug/L
MW33	Acetone	03/13/96		10	U	U	ug/L
MW33	Acetone	03/26/97	8	10		J	ug/L
MW33	Acetone	06/26/97	0	10	U	J	ug/L
MW33	Acetone	10/01/97	0	10		U	ug/L
MW33	Benzene	03/13/96		10	U	U	ug/L
MW33	Benzene	03/26/97	0	10		U	ug/L
MW33	Benzene	06/26/97	0	10		U	ug/L
MW33	Benzene	10/01/97	1	10	J	J	ug/L
MW33	Bis(2-Ethylhexyl)Phthalate	03/13/96		10	U	U	ug/L
MW33	Bis(2-Ethylhexyl)Phthalate	03/26/97	0	20		U	ug/L
MW33	Bis(2-Ethylhexyl)Phthalate	06/26/97	0	31	U		ug/L
MW33	Bis(2-Ethylhexyl)Phthalate	10/01/97	76	20			ug/L
MW33	Isophorone	03/13/96		10	U	U	ug/L
MW33	Isophorone	03/26/97	1	20		J	ug/L
MW33	Isophorone	06/26/97	0	10		U	ug/L
MW33	Isophorone	10/01/97	1	20	J	J	ug/L
MW33	Phenol	03/13/96	6	10		J	ug/L
MW33	Phenol	03/26/97	83	20			ug/L
MW33	Phenol	06/26/97	50	10			ug/L
MW33	Phenol	10/01/97	65	20			ug/L
MW34	Acetone	03/13/96		10	U	U	ug/L
MW34	Acetone	03/26/97	7	10		J	ug/L
MW34	Acetone	06/30/97	0	10		U	ug/L
MW34	Acetone	09/29/97	0	10		U	ug/L
MW34	Bis(2-Ethylhexyl)Phthalate	03/13/96		10	U	U	ug/L
MW34	Bis(2-Ethylhexyl)Phthalate	03/26/97	5	10		J	ug/L
MW34	Bis(2-Ethylhexyl)Phthalate	06/30/97	0	14	U		ug/L
MW34	Bis(2-Ethylhexyl)Phthalate	09/29/97	0	80		J	ug/L
MW34	Phenol	03/13/96		10	U	U	ug/L
MW34	Phenol	03/26/97	0	10		U	ug/L
MW34	Phenol	06/30/97	33	10			ug/L
MW34	Phenol	09/29/97	340	80			ug/L
MW34	Toluene	03/13/96		10	U	U	ug/L
MW34	Toluene	03/26/97	0	10		U	ug/L
MW34	Toluene	06/30/97	0	10		U	ug/L
MW34	Toluene	09/29/97	1	10	J	J	ug/L
MW36	Bis(2-Ethylhexyl)Phthalate	03/12/96		10	U	U	ug/L
MW36	Bis(2-Ethylhexyl)Phthalate	03/25/97	56	30			ug/L
MW36	Bis(2-Ethylhexyl)Phthalate	06/25/97	11	20		J	ug/L
MW36	Bis(2-Ethylhexyl)Phthalate	09/24/97	6	30		J	ug/L
MW36	Phenol	03/12/96		10	U	U	ug/L
MW36	Phenol	03/25/97	180	30			ug/L

Statistical Background Data
VOCs in the Lower Aquifer

Well	Analtye	Date	Concentration	RDL	DVQ	LQ	Unit
MW36	Phenol	06/25/97	120	20			ug/L
MW36	Phenol	09/24/97	240	30			ug/L
MW36	Toluene	03/12/96		10	U	U	ug/L
MW36	Toluene	03/25/97	1	10	J	J	ug/L
MW36	Toluene	06/25/97	0	10		U	ug/L
MW36	Toluene	09/24/97	0	10		U	ug/L
MW50	Bis(2-Ethylhexyl)Phthalate	11/06/96	0	10	U	J	ug/L
MW50	Bis(2-Ethylhexyl)Phthalate	03/25/97	0	20		U	ug/L
MW50	Bis(2-Ethylhexyl)Phthalate	06/24/97	2	10		J	ug/L
MW50	Bis(2-Ethylhexyl)Phthalate	10/01/97	0	60		U	ug/L
MW50	Dimethylphthalate	11/06/96	0	10		U	ug/L
MW50	Dimethylphthalate	03/25/97	8	20		J	ug/L
MW50	Dimethylphthalate	06/24/97	0	10		U	ug/L
MW50	Dimethylphthalate	10/01/97	0	60		U	ug/L
MW50	Phenol	11/06/96	0	10		U	ug/L
MW50	Phenol	03/25/97	120	20			ug/L
MW50	Phenol	06/24/97	18	10			ug/L
MW50	Phenol	10/01/97	340	60			ug/L
MW51	4-Methyl-2-Pentanone	11/06/96	0	100		U	ug/L
MW51	4-Methyl-2-Pentanone	03/25/97	0	50		U	ug/L
MW51	4-Methyl-2-Pentanone	06/25/97	4	10		J	ug/L
MW51	4-Methyl-2-Pentanone	10/01/97	0	100		U	ug/L
MW51	Anthracene	11/06/96	0	10		U	ug/L
MW51	Anthracene	03/25/97	1	10		J	ug/L
MW51	Anthracene	06/25/97	0	10		U	ug/L
MW51	Anthracene	10/01/97	0	10		U	ug/L
MW51	Isophorone	11/06/96	0	10		U	ug/L
MW51	Isophorone	03/25/97	1	10		J	ug/L
MW51	Isophorone	06/25/97	0	10		U	ug/L
MW51	Isophorone	10/01/97	0	10		U	ug/L
MW51	Phenol	11/06/96	0	10		U	ug/L
MW51	Phenol	03/25/97	19	10			ug/L
MW51	Phenol	06/25/97	25	10	J		ug/L
MW51	Phenol	10/01/97	18	10			ug/L
MW52	Acetone	12/26/96	22	10			ug/L
MW52	Acetone	03/25/97	0	50		U	ug/L
MW52	Acetone	06/25/97	0	10		U	ug/L
MW52	Acetone	09/25/97	0	100		U	ug/L
MW52	Phenol	12/26/96	3	10	J	J	ug/L
MW52	Phenol	03/25/97	24	10			ug/L
MW52	Phenol	06/25/97	0	16	U		ug/L
MW52	Phenol	09/25/97	0	33	U		ug/L
MW52	Toluene	12/26/96	3	10	J	J	ug/L
MW52	Toluene	03/25/97	0	50		U	ug/L
MW52	Toluene	06/25/97	0	10		U	ug/L
MW52	Toluene	09/25/97	0	100		U	ug/L
MW53	4-Methyl-2-Pentanone	12/26/96	0	10		U	ug/L

Statistical Background Data
VOCs in the Lower Aquifer

Well	Analtye	Date	Concentration	RDL	DVQ	LQ	Unit
MW53	4-Methyl-2-Pentanone	03/25/97	0	10		U	ug/L
MW53	4-Methyl-2-Pentanone	06/25/97	0	10		U	ug/L
MW53	4-Methyl-2-Pentanone	09/25/97	5	10	J	J	ug/L
MW53	Acetone	12/26/96	11	10			ug/L
MW53	Acetone	03/25/97	8	10	J	J	ug/L
MW53	Acetone	06/25/97	16	10			ug/L
MW53	Acetone	09/25/97	0	12	U		ug/L
MW53	Benzene	12/26/96	0	10		U	ug/L
MW53	Benzene	03/25/97	0	10		U	ug/L
MW53	Benzene	06/25/97	1	10		J	ug/L
MW53	Benzene	09/25/97	2	10		J	ug/L
MW53	Bis(2-Ethylhexyl)Phthalate	12/26/96	0	21	U		ug/L
MW53	Bis(2-Ethylhexyl)Phthalate	03/25/97	0	20		U	ug/L
MW53	Bis(2-Ethylhexyl)Phthalate	06/25/97	17	10			ug/L
MW53	Bis(2-Ethylhexyl)Phthalate	09/25/97	0	12	U		ug/L
MW53	Isophorone	12/26/96	1	10	J	J	ug/L
MW53	Isophorone	03/25/97	2	20	J	J	ug/L
MW53	Isophorone	06/25/97	0	10		U	ug/L
MW53	Isophorone	09/25/97	5	10		J	ug/L
MW53	Phenol	12/26/96	10	10			ug/L
MW53	Phenol	03/25/97	86	20	J		ug/L
MW53	Phenol	06/25/97	50	10			ug/L
MW53	Phenol	09/25/97	50	10	J		ug/L
MW53	Toluene	12/26/96	1	10	J	J	ug/L
MW53	Toluene	03/25/97	0	10		U	ug/L
MW53	Toluene	06/25/97	0	10		U	ug/L
MW53	Toluene	09/25/97	1	10		J	ug/L
MW54	Phenol	12/26/96	0	10		U	ug/L
MW54	Phenol	03/25/97	20	10			ug/L
MW54	Phenol	06/25/97	82	20	J		ug/L
MW54	Phenol	09/24/97	160	30			ug/L
MW55	2-Nitrophenol	12/26/96	0	10		U	ug/L
MW55	2-Nitrophenol	03/25/97	2	10	J	J	ug/L
MW55	2-Nitrophenol	06/25/97	0	10		U	ug/L
MW55	2-Nitrophenol	09/24/97	0	10		U	ug/L
MW55	4-Chloro-3-Methylphenol	12/26/96	0	10		U	ug/L
MW55	4-Chloro-3-Methylphenol	03/25/97	4	10	J	J	ug/L
MW55	4-Chloro-3-Methylphenol	06/25/97	0	10		U	ug/L
MW55	4-Chloro-3-Methylphenol	09/24/97	0	10	UJ	U	ug/L
MW55	4-Nitrophenol	12/26/96	0	25		U	ug/L
MW55	4-Nitrophenol	03/25/97	19	25	J	J	ug/L
MW55	4-Nitrophenol	06/25/97	0	25		U	ug/L
MW55	4-Nitrophenol	09/24/97	0	25	UJ	U	ug/L
MW55	Bis(2-Ethylhexyl)Phthalate	12/26/96	0	10	U	J	ug/L
MW55	Bis(2-Ethylhexyl)Phthalate	03/25/97	0	10	UJ	U	ug/L
MW55	Bis(2-Ethylhexyl)Phthalate	06/25/97	40	10			ug/L
MW55	Bis(2-Ethylhexyl)Phthalate	09/24/97	32	10			ug/L

Statistical Background Data
VOCs in the Lower Aquifer

Well	Analtye	Date	Concentration	RDL	DVQ	LQ	Unit
MW55	Chloroform	12/26/96	0	10		U	ug/L
MW55	Chloroform	03/25/97	1	10		J	ug/L
MW55	Chloroform	06/25/97	0	10		U	ug/L
MW55	Chloroform	09/24/97	0	10		U	ug/L
MW55	Phenol	12/26/96	0	10		U	ug/L
MW55	Phenol	03/25/97	39	10	J		ug/L
MW55	Phenol	06/25/97	0	10		U	ug/L
MW55	Phenol	09/24/97	7	10		J	ug/L
MW55	Toluene	12/26/96	0	10		U	ug/L
MW55	Toluene	03/25/97	0	10		U	ug/L
MW55	Toluene	06/25/97	0	10		U	ug/L
MW55	Toluene	09/24/97	1	10		J	ug/L

Statistical Summary
VOCs in the Upper Aquifer

Intra-Well Prediction Interval
VOCs in the Upper Aquifer

Constituent	Well	Upper Limit	Observation	Exceeds	Background	Background Mean	Standard Deviation	% Non-detects	Cohens	Transformation	Alpha	Method
1,1-Dichloroethane (ug/L)	MW06	21	5	No	4	n/a	n/a	50	n/a	n/a	0.2	NP (cohens)
1,1-Dichloroethene (ug/L)	MW06	28.83323611	5	No	4	n/a	n/a	100	n/a	n/a	1.00E-02	Poisson
1,2-Dichloroethene [total] (ug/L)	MW06	49.19946458	2	No	4	2.687	1.644	0	No	square root(x)	0.05	Param.
1,2-Dichloroethene [total] (ug/L)	MW39	4	4	No	3	n/a	n/a	0	n/a	failed	0.25	NP (normality)
1,4-Dichlorobenzene (ug/L)	MW45	4.360498	3	No	4	2.5	0.707	50	Yes	non-	0.05	Param.
2,2'-Oxybis[1-Chloropropane] (ug/L)	MW12	183.398362	87	No	4	105.75	29.511	0	No	non-	0.05	Param.
2,2'-oxybis[1-Chloropropane] (ug/L)	MW45	14.081488	7	No	4	8.5	2.121	50	Yes	non-	0.05	Param.
2,2'-oxybis[1-Chloropropane] (ug/L)	MW49	48.340181	30	No	4	16.026	12.281	25	Yes	non-	0.05	Param.
2-Methylnaphthalene (ug/L)	MW45	8.560779	5	No	4	5.25	1.258	0	No	non-	0.05	Param.
Acetone (ug/L)	MW19	12	5	No	4	n/a	n/a	50	n/a	failed	0.2	NP (normality)
Benzene (ug/L)	MW06	484.725197	140	No	4	133.5	133.488	0	No	non-	0.05	Param.
Benzene (ug/L)	MW13	940.269797	33	No	4	204.75	279.544	0	No	non-	0.05	Param.
Benzene (ug/L)	MW14	41	5	No	4	n/a	n/a	50	n/a	n/a	0.2	NP (cohens)
Benzene (ug/L)	MW15	4	4	No	4	n/a	n/a	0	n/a	failed	0.2	NP (normality)
Benzene (ug/L)	MW19	8.259043	1	No	4	2.999	1.999	25	Yes	non-	0.05	Param.
Benzene (ug/L)	MW39	19.17465429	4	No	4	1.794	0.336	0	No	cube root(x)	0.05	Param.
Benzene (ug/L)	MW45	1489.110687	860	No	4	857.5	240.052	0	No	non-	0.05	Param.
Benzene (ug/L)	MW46	2	2	No	4	n/a	n/a	0	n/a	failed	0.2	NP (normality)
Benzene (ug/L)	MW48	12987.70116	9500	No	4	7875	1943.15	0	No	non-	0.05	Param.
Benzene (ug/L)	MW49	11992.70048	8200	No	4	4900	2695.676	0	No	non-	0.05	Param.
Bis[2-Chloroethyl]Ether (ug/L)	MW06	83.666639	31	No	4	31	20.017	0	No	non-	0.05	Param.
Bis[2-Chloroethyl]Ether (ug/L)	MW19	14.720994	12	No	4	11	1.414	0	No	non-	0.05	Param.
Bis[2-Chloroethyl]Ether (ug/L)	MW39	3.360498	2	No	4	1.5	0.707	50	Yes	non-	0.05	Param.
Bis[2-Chloroethyl]Ether (ug/L)	MW45	19.740261	13	No	4	10.5	3.512	0	No	non-	0.05	Param.
Bis[2-Chloroethyl]Ether (ug/L)	MW46	6.896787	5	No	4	3.5	1.291	0	No	non-	0.05	Param.
Bis[2-Chloroethyl]Ether (ug/L)	MW48	28.229302	5	No	4	10.001	6.928	50	Yes	non-	0.05	Param.
Bis[2-Chloroethyl]Ether (ug/L)	MW49	27.965461	13	No	4	7.5	7.778	50	Yes	non-	0.05	Param.
Chlorobenzene (ug/L)	MW12	7.148317	5	No	4	5	0.816	0	No	non-	0.05	Param.
Chlorobenzene (ug/L)	MW45	55.797503	26	No	4	27.5	10.755	0	No	non-	0.05	Param.
Chloroethane (ug/L)	MW06	1330.680597	140	No	4	14.671	8.288	0	No	square root(x)	0.05	Param.
Chloroethane (ug/L)	MW13	845.632486	160	No	4	289.25	211.461	0	No	non-	0.05	Param.
Chloroethane (ug/L)	MW19	24.943387	18	No	4	16.25	3.304	0	No	non-	0.05	Param.
Chloroethane (ug/L)	MW39	7.352366	2	No	4	3.333	1.527	25	Yes	non-	0.05	Param.
Chloroethane (ug/L)	MW45	306.118676	120	No	4	138	63.896	0	No	non-	0.05	Param.
Chloroethane (ug/L)	MW48	1344.768517	980	No	4	817.5	200.395	0	No	non-	0.05	Param.
Chloroethane (ug/L)	MW49	1081.238914	810	No	4	535	207.605	0	No	non-	0.05	Param.
Ethylbenzene (ug/L)	MW06	22.994398	13	No	4	10.444	4.77	50	Yes	non-	0.05	Param.
Isophorone (ug/L)	MW06	25.496838	2	No	4	6.162	7.348	25	Yes	non-	0.05	Param.
Isophorone (ug/L)	MW49	12.173759	6	No	4	3.75	3.202	0	No	non-	0.05	Param.
Methylene Chloride (ug/L)	MW06	37.938447	5	No	4	10	10.618	50	Yes	non-	0.05	Param.
Naphthalene (ug/L)	MW45	174.946272	100	No	4	111	24.304	0	No	non-	0.05	Param.
Phenol (ug/L)	MW06	112.815344	60	No	4	29	31.855	50	Yes	non-	0.05	Param.
Phenol (ug/L)	MW11	9.720995	11.5	Yes	4	6	1.414	50	Yes	non-	0.05	Param.
Phenol (ug/L)	MW12	46.846801	24	No	4	20	10.203	25	Yes	non-	0.05	Param.
Phenol (ug/L)	MW13	34.72618	7	No	4	10.195	9.323	25	Yes	non-	0.05	Param.
Phenol (ug/L)	MW18	36.92905	21	No	4	10	10.235	50	Yes	non-	0.05	Param.
Phenol (ug/L)	MW19	55.349382	31	No	4	11.415	16.698	50	Yes	non-	0.05	Param.
Phenol (ug/L)	MW37	49.620289	5	No	4	10	15.058	50	Yes	non-	0.05	Param.

Statistical Summary
VOCs in the Upper Aquifer

Intra-Well Prediction Interval
VOCs in the Upper Aquifer

Constituent	Well	Upper Limit	Observation	Exceeds	Background	Background Mean	Standard Deviation	% Non-detects	Cohens	Transformation	Alpha	Method
Phenol (ug/L)	MW40	6.360498	10	Yes	4	4.5	0.707	50	Yes	non-	0.05	Param.
Phenol (ug/L)	MW41	61.588276	34	No	4	10.485	19.423	50	Yes	non-	0.05	Param.
Phenol (ug/L)	MW42	41	41	No	4	n/a	n/a	50	n/a	failed	0.2	NP (normality)
Phenol (ug/L)	MW43	75	75	No	4	n/a	n/a	25	n/a	n/a	0.2	NP (cohens)
Phenol (ug/L)	MW44	15.879424	11	No	4	6.324	3.632	25	Yes	non-	0.05	Param.
Phenol (ug/L)	MW45	70.581088	50	No	4	36.25	13.048	0	No	non-	0.05	Param.
Phenol (ug/L)	MW47	61.577599	39	No	4	15.753	17.416	25	Yes	non-	0.05	Param.
Phenol (ug/L)	MW48	195.825659	8	No	4	61.5	51.052	0	No	non-	0.05	Param.
Phenol (ug/L)	MW49	224.235823	130	No	4	56.722	63.666	50	Yes	non-	0.05	Param.
Vinyl Chloride (ug/L)	MW06	25	4	No	4	n/a	n/a	50	n/a	n/a	0.2	NP (cohens)
Xylene [total] (ug/L)	MW06	76.682363	29	No	4	13.236	24.114	50	Yes	non-	0.05	Param.
Xylene [total] (ug/L)	MW45	503.1073673	33	No	4	9.508	4.911	0	No	square root(x)	0.05	Param.

Statistical Background Data
VOCs in the Upper Aquifer

Well	Date	Analyte	Concentration	Units
MW06	11/07/96	1,1-Dichloroethane	21	ug/L
MW06	04/03/97	1,1-Dichloroethane	3	ug/L
MW06	07/01/97	1,1-Dichloroethane	<10	ug/L
MW06	09/23/97	1,1-Dichloroethane	<10	ug/L
MW06	11/07/96	1,1-Dichloroethene	<50	ug/L
MW06	04/03/97	1,1-Dichloroethene	<10	ug/L
MW06	07/01/97	1,1-Dichloroethene	<10	ug/L
MW06	09/23/97	1,1-Dichloroethene	<10	ug/L
MW06	11/07/96	1,2-Dichloroethane	<50	ug/L
MW06	04/03/97	1,2-Dichloroethane	<10	ug/L
MW06	07/01/97	1,2-Dichloroethane	<10	ug/L
MW06	09/23/97	1,2-Dichloroethane	3	ug/L
MW06	11/07/96	1,2-Dichloroethene (total)	26	ug/L
MW06	04/03/97	1,2-Dichloroethene (total)	4	ug/L
MW06	07/01/97	1,2-Dichloroethene (total)	5	ug/L
MW06	09/23/97	1,2-Dichloroethene (total)	2	ug/L
MW06	11/07/96	2,4-Dimethylphenol	<10	ug/L
MW06	04/03/97	2,4-Dimethylphenol	<10	ug/L
MW06	07/01/97	2,4-Dimethylphenol	<20	ug/L
MW06	09/23/97	2,4-Dimethylphenol	3	ug/L
MW06	11/07/96	Benzene	320	ug/L
MW06	04/03/97	Benzene	35	ug/L
MW06	07/01/97	Benzene	39	ug/L
MW06	09/23/97	Benzene	140	ug/L
MW06	11/07/96	Bis(2-Chloroethyl)Ether	56	ug/L
MW06	04/03/97	Bis(2-Chloroethyl)Ether	7	ug/L
MW06	07/01/97	Bis(2-Chloroethyl)Ether	30	ug/L
MW06	09/23/97	Bis(2-Chloroethyl)Ether	31	ug/L
MW06	11/07/96	Bis(2-Ethylhexyl)Phthalate	<10	ug/L
MW06	04/03/97	Bis(2-Ethylhexyl)Phthalate	<10	ug/L
MW06	07/01/97	Bis(2-Ethylhexyl)Phthalate	16	ug/L
MW06	09/23/97	Bis(2-Ethylhexyl)Phthalate	<10	ug/L
MW06	11/07/96	Chloroethane	720	ug/L
MW06	04/03/97	Chloroethane	67	ug/L
MW06	07/01/97	Chloroethane	140	ug/L
MW06	09/23/97	Chloroethane	140	ug/L
MW06	11/07/96	Diethylphthalate	2	ug/L
MW06	04/03/97	Diethylphthalate	<10	ug/L
MW06	07/01/97	Diethylphthalate	<20	ug/L
MW06	09/23/97	Diethylphthalate	<10	ug/L
MW06	11/07/96	Ethylbenzene	16	ug/L
MW06	04/03/97	Ethylbenzene	<10	ug/L
MW06	07/01/97	Ethylbenzene	<10	ug/L
MW06	09/23/97	Ethylbenzene	13	ug/L
MW06	11/07/96	Isophorone	15	ug/L
MW06	04/03/97	Isophorone	2	ug/L
MW06	07/01/97	Isophorone	<20	ug/L

Statistical Background Data
VOCs in the Upper Aquifer

Well	Date	Analyte	Concentration	Units
MW06	09/23/97	Isophorone	2	ug/L
MW06	11/07/96	Methylene Chloride	17	ug/L
MW06	04/03/97	Methylene Chloride	<10	ug/L
MW06	07/01/97	Methylene Chloride	2	ug/L
MW06	09/23/97	Methylene Chloride	<10	ug/L
MW06	11/07/96	Phenol	<10	ug/L
MW06	04/03/97	Phenol	<29	ug/L
MW06	07/01/97	Phenol	17	ug/L
MW06	09/23/97	Phenol	60	ug/L
MW06	11/07/96	Vinyl Chloride	<50	ug/L
MW06	04/03/97	Vinyl Chloride	<10	ug/L
MW06	07/01/97	Vinyl Chloride	3	ug/L
MW06	09/23/97	Vinyl Chloride	4	ug/L
MW06	11/07/96	Xylene (total)	40	ug/L
MW06	04/03/97	Xylene (total)	<10	ug/L
MW06	07/01/97	Xylene (total)	<10	ug/L
MW06	09/23/97	Xylene (total)	29	ug/L
MW11	11/05/96	Bis(2-Ethylhexyl)Phthalate	<10	ug/L
MW11	03/25/97	Bis(2-Ethylhexyl)Phthalate	<10	ug/L
MW11	06/24/97	Bis(2-Ethylhexyl)Phthalate	7	ug/L
MW11	09/29/97	Bis(2-Ethylhexyl)Phthalate	<10	ug/L
MW11	11/05/96	Phenol	<10	ug/L
MW11	03/25/97	Phenol	7	ug/L
MW11	06/24/97	Phenol	5	ug/L
MW11	09/29/97	Phenol	<23	ug/L
MW11	11/05/96	Tetrachloroethene	<10	ug/L
MW11	03/25/97	Tetrachloroethene	<10	ug/L
MW11	06/24/97	Tetrachloroethene	1	ug/L
MW11	09/29/97	Tetrachloroethene	<10	ug/L
MW12	11/05/96	2,2'-Oxybis(1-Chloropropane)	120	ug/L
MW12	03/25/97	2,2'-Oxybis(1-Chloropropane)	140	ug/L
MW12	06/24/97	2,2'-Oxybis(1-Chloropropane)	76	ug/L
MW12	10/01/97	2,2'-Oxybis(1-Chloropropane)	87	ug/L
MW12	11/05/96	Benzene	<10	ug/L
MW12	03/25/97	Benzene	<10	ug/L
MW12	06/24/97	Benzene	2	ug/L
MW12	10/01/97	Benzene	<10	ug/L
MW12	11/05/96	Chlorobenzene	5	ug/L
MW12	03/25/97	Chlorobenzene	4	ug/L
MW12	06/24/97	Chlorobenzene	6	ug/L
MW12	10/01/97	Chlorobenzene	5	ug/L
MW12	11/05/96	Dimethylphthalate	<20	ug/L
MW12	03/25/97	Dimethylphthalate	<20	ug/L
MW12	06/24/97	Dimethylphthalate	<20	ug/L
MW12	10/01/97	Dimethylphthalate	3	ug/L
MW12	11/05/96	Phenol	<20	ug/L
MW12	03/25/97	Phenol	25	ug/L

Statistical Background Data
VOCs in the Upper Aquifer

Well	Date	Analyte	Concentration	Units
MW12	06/24/97	Phenol	7	ug/L
MW12	10/01/97	Phenol	24	ug/L
MW13	11/07/96	Benzene	6	ug/L
MW13	03/25/97	Benzene	170	ug/L
MW13	06/27/97	Benzene	610	ug/L
MW13	10/01/97	Benzene	33	ug/L
MW13	11/07/96	Bis(2-Chloroethyl)Ether	<10	ug/L
MW13	03/25/97	Bis(2-Chloroethyl)Ether	<10	ug/L
MW13	06/27/97	Bis(2-Chloroethyl)Ether	2	ug/L
MW13	10/01/97	Bis(2-Chloroethyl)Ether	<10	ug/L
MW13	11/07/96	Bis(2-Ethylhexyl)Phthalate	<10	ug/L
MW13	03/25/97	Bis(2-Ethylhexyl)Phthalate	<10	ug/L
MW13	06/27/97	Bis(2-Ethylhexyl)Phthalate	<17	ug/L
MW13	10/01/97	Bis(2-Ethylhexyl)Phthalate	2	ug/L
MW13	11/07/96	Chloroethane	97	ug/L
MW13	03/25/97	Chloroethane	330	ug/L
MW13	06/27/97	Chloroethane	570	ug/L
MW13	10/01/97	Chloroethane	160	ug/L
MW13	11/07/96	Methylene Chloride	<10	ug/L
MW13	03/25/97	Methylene Chloride	<20	ug/L
MW13	06/27/97	Methylene Chloride	<50	ug/L
MW13	10/01/97	Methylene Chloride	1	ug/L
MW13	11/07/96	Phenol	<10	ug/L
MW13	03/25/97	Phenol	8	ug/L
MW13	06/27/97	Phenol	23	ug/L
MW13	10/01/97	Phenol	7	ug/L
MW14	11/06/96	Benzene	41	ug/L
MW14	03/27/97	Benzene	<10	ug/L
MW14	06/30/97	Benzene	1	ug/L
MW14	09/29/97	Benzene	<10	ug/L
MW14	11/06/96	Bis(2-Chloroethyl)Ether	12	ug/L
MW14	03/27/97	Bis(2-Chloroethyl)Ether	<10	ug/L
MW14	06/30/97	Bis(2-Chloroethyl)Ether	<10	ug/L
MW14	09/29/97	Bis(2-Chloroethyl)Ether	<10	ug/L
MW14	11/06/96	Bis(2-Ethylhexyl)Phthalate	<10	ug/L
MW14	03/27/97	Bis(2-Ethylhexyl)Phthalate	<10	ug/L
MW14	06/30/97	Bis(2-Ethylhexyl)Phthalate	<11	ug/L
MW14	09/29/97	Bis(2-Ethylhexyl)Phthalate	3	ug/L
MW14	11/06/96	Chloroethane	1000	ug/L
MW14	03/27/97	Chloroethane	<10	ug/L
MW14	06/30/97	Chloroethane	<10	ug/L
MW14	09/29/97	Chloroethane	<10	ug/L
MW14	11/06/96	Chloromethane	<100	ug/L
MW14	03/27/97	Chloromethane	<10	ug/L
MW14	06/30/97	Chloromethane	2	ug/L
MW14	09/29/97	Chloromethane	<10	ug/L
MW14	11/06/96	Isophorone	1	ug/L

Statistical Background Data
VOCs in the Upper Aquifer

Well	Date	Analyte	Concentration	Units
MW14	03/27/97	Isophorone	<10	ug/L
MW14	06/30/97	Isophorone	<10	ug/L
MW14	09/29/97	Isophorone	<10	ug/L
MW14	11/06/96	Methylene Chloride	14	ug/L
MW14	03/27/97	Methylene Chloride	<10	ug/L
MW14	06/30/97	Methylene Chloride	<10	ug/L
MW14	09/29/97	Methylene Chloride	<10	ug/L
MW14	11/06/96	Phenol	<10	ug/L
MW14	03/27/97	Phenol	<10	ug/L
MW14	06/30/97	Phenol	<10	ug/L
MW14	09/29/97	Phenol	18	ug/L
MW14	11/06/96	Toluene	<100	ug/L
MW14	03/27/97	Toluene	<10	ug/L
MW14	06/30/97	Toluene	<10	ug/L
MW14	09/29/97	Toluene	1	ug/L
MW15	11/07/96	Benzene	3	ug/L
MW15	04/03/97	Benzene	3	ug/L
MW15	06/25/97	Benzene	3	ug/L
MW15	09/23/97	Benzene	4	ug/L
MW15	11/07/96	Phenol	<10	ug/L
MW15	04/03/97	Phenol	<10	ug/L
MW15	06/25/97	Phenol	<11	ug/L
MW15	09/23/97	Phenol	26	ug/L
MW15	11/07/96	Toluene	<10	ug/L
MW15	04/03/97	Toluene	<10	ug/L
MW15	06/25/97	Toluene	1	ug/L
MW15	09/23/97	Toluene	<10	ug/L
MW18	11/05/96	Phenol	<10	ug/L
MW18	03/27/97	Phenol	8	ug/L
MW18	06/25/97	Phenol	<10	ug/L
MW18	09/29/97	Phenol	21	ug/L
MW19	11/05/96	4-Methyl-2-Pentanone	<10	ug/L
MW19	03/27/97	4-Methyl-2-Pentanone	<10	ug/L
MW19	06/30/97	4-Methyl-2-Pentanone	5	ug/L
MW19	09/29/97	4-Methyl-2-Pentanone	<10	ug/L
MW19	11/05/96	Acetone	<10	ug/L
MW19	03/27/97	Acetone	5	ug/L
MW19	06/30/97	Acetone	12	ug/L
MW19	09/29/97	Acetone	<10	ug/L
MW19	11/05/96	Benzene	<10	ug/L
MW19	03/27/97	Benzene	5	ug/L
MW19	06/30/97	Benzene	3	ug/L
MW19	09/29/97	Benzene	1	ug/L
MW19	11/05/96	Bis(2-Chloroethyl)Ether	11	ug/L
MW19	03/27/97	Bis(2-Chloroethyl)Ether	12	ug/L
MW19	06/30/97	Bis(2-Chloroethyl)Ether	9	ug/L
MW19	09/29/97	Bis(2-Chloroethyl)Ether	12	ug/L

Statistical Background Data
VOCs in the Upper Aquifer

Well	Date	Analyte	Concentration	Units
MW19	11/05/96	Bis(2-Ethylhexyl)Phthalate	<10	ug/L
MW19	03/27/97	Bis(2-Ethylhexyl)Phthalate	<10	ug/L
MW19	06/30/97	Bis(2-Ethylhexyl)Phthalate	14	ug/L
MW19	09/29/97	Bis(2-Ethylhexyl)Phthalate	<10	ug/L
MW19	11/05/96	Chloroethane	20	ug/L
MW19	03/27/97	Chloroethane	14	ug/L
MW19	06/30/97	Chloroethane	13	ug/L
MW19	09/29/97	Chloroethane	18	ug/L
MW19	11/05/96	Diethylphthalate	<10	ug/L
MW19	03/27/97	Diethylphthalate	4	ug/L
MW19	06/30/97	Diethylphthalate	<10	ug/L
MW19	09/29/97	Diethylphthalate	<10	ug/L
MW19	11/05/96	Phenol	<10	ug/L
MW19	03/27/97	Phenol	20	ug/L
MW19	06/30/97	Phenol	<10	ug/L
MW19	09/29/97	Phenol	31	ug/L
MW37	08/01/96	Bis(2-Ethylhexyl)Phthalate	<10	ug/L
MW37	03/25/97	Bis(2-Ethylhexyl)Phthalate	<10	ug/L
MW37	06/25/97	Bis(2-Ethylhexyl)Phthalate	34	ug/L
MW37	09/26/97	Bis(2-Ethylhexyl)Phthalate	<10	ug/L
MW37	08/01/96	Phenol	<10	ug/L
MW37	03/25/97	Phenol	2	ug/L
MW37	06/25/97	Phenol	23	ug/L
MW37	09/26/97	Phenol	<10	ug/L
MW38	08/01/96	Phenol	<10	ug/L
MW38	03/25/97	Phenol	13	ug/L
MW38	06/25/97	Phenol	<10	ug/L
MW38	09/25/97	Phenol	<10	ug/L
MW39	03/25/97	1,2-Dichloroethene (total)	3	ug/L
MW39	06/25/97	1,2-Dichloroethene (total)	4	ug/L
MW39	09/25/97	1,2-Dichloroethene (total)	4	ug/L
MW39	08/01/96	Benzene	12	ug/L
MW39	03/25/97	Benzene	4	ug/L
MW39	06/25/97	Benzene	5	ug/L
MW39	09/25/97	Benzene	4	ug/L
MW39	08/01/96	Bis(2-Chloroethyl)Ether	<10	ug/L
MW39	03/25/97	Bis(2-Chloroethyl)Ether	<10	ug/L
MW39	06/25/97	Bis(2-Chloroethyl)Ether	1	ug/L
MW39	09/25/97	Bis(2-Chloroethyl)Ether	2	ug/L
MW39	08/01/96	Bis(2-Ethylhexyl)Phthalate	4	ug/L
MW39	03/25/97	Bis(2-Ethylhexyl)Phthalate	<10	ug/L
MW39	06/25/97	Bis(2-Ethylhexyl)Phthalate	<18	ug/L
MW39	09/25/97	Bis(2-Ethylhexyl)Phthalate	<10	ug/L
MW39	08/01/96	Chloroethane	5	ug/L
MW39	03/25/97	Chloroethane	<10	ug/L
MW39	06/25/97	Chloroethane	3	ug/L
MW39	09/25/97	Chloroethane	2	ug/L

Statistical Background Data
VOCs in the Upper Aquifer

Well	Date	Analyte	Concentration	Units
MW39	08/01/96	Phenol	<10	ug/L
MW39	03/25/97	Phenol	10	ug/L
MW39	06/25/97	Phenol	<10	ug/L
MW39	09/25/97	Phenol	<33	ug/L
MW39	08/01/96	Vinyl Chloride	1	ug/L
MW39	03/25/97	Vinyl Chloride	<10	ug/L
MW39	06/25/97	Vinyl Chloride	<10	ug/L
MW39	09/25/97	Vinyl Chloride	<10	ug/L
MW40	08/01/96	Phenol	<10	ug/L
MW40	03/25/97	Phenol	5	ug/L
MW40	06/26/97	Phenol	4	ug/L
MW40	09/29/97	Phenol	<20	ug/L
MW41	08/01/96	Phenol	<10	ug/L
MW41	03/25/97	Phenol	17	ug/L
MW41	06/25/97	Phenol	<10	ug/L
MW41	09/29/97	Phenol	34	ug/L
MW42	08/01/96	Bis(2-Ethylhexyl)Phthalate	4	ug/L
MW42	03/25/97	Bis(2-Ethylhexyl)Phthalate	<10	ug/L
MW42	06/26/97	Bis(2-Ethylhexyl)Phthalate	<10	ug/L
MW42	09/26/97	Bis(2-Ethylhexyl)Phthalate	<10	ug/L
MW42	08/01/96	Phenol	<10	ug/L
MW42	03/25/97	Phenol	5	ug/L
MW42	06/26/97	Phenol	<10	ug/L
MW42	09/26/97	Phenol	41	ug/L
MW43	08/01/96	Bis(2-Ethylhexyl)Phthalate	<10	ug/L
MW43	03/26/97	Bis(2-Ethylhexyl)Phthalate	3	ug/L
MW43	06/26/97	Bis(2-Ethylhexyl)Phthalate	<13	ug/L
MW43	09/26/97	Bis(2-Ethylhexyl)Phthalate	<20	ug/L
MW43	08/01/96	Phenol	<10	ug/L
MW43	03/26/97	Phenol	10	ug/L
MW43	06/26/97	Phenol	<12	ug/L
MW43	09/26/97	Phenol	75	ug/L
MW44	08/01/96	Bis(2-Ethylhexyl)Phthalate	<10	ug/L
MW44	03/26/97	Bis(2-Ethylhexyl)Phthalate	<10	ug/L
MW44	06/26/97	Bis(2-Ethylhexyl)Phthalate	<10	ug/L
MW44	09/29/97	Bis(2-Ethylhexyl)Phthalate	15	ug/L
MW44	03/26/97	Dimethylphthalate	<10	ug/L
MW44	06/26/97	Dimethylphthalate	<10	ug/L
MW44	09/29/97	Dimethylphthalate	9	ug/L
MW44	08/01/96	Phenol	<10	ug/L
MW44	03/26/97	Phenol	4	ug/L
MW44	06/26/97	Phenol	<10	ug/L
MW44	09/29/97	Phenol	11	ug/L
MW45	04/02/97	1,2-Dichlorobenzene	4	ug/L
MW45	06/26/97	1,2-Dichlorobenzene	2	ug/L
MW45	09/29/97	1,2-Dichlorobenzene	5	ug/L
MW45	08/01/96	1,2-Dichloroethane	25	ug/L

Statistical Background Data
VOCs in the Upper Aquifer

Well	Date	Analyte	Concentration	Units
MW45	04/02/97	1,2-Dichloroethane	<80	ug/L
MW45	06/26/97	1,2-Dichloroethane	<80	ug/L
MW45	09/29/97	1,2-Dichloroethane	<80	ug/L
MW45	09/29/97	1,3-Dichlorobenzene	<20	ug/L
MW45	08/01/96	1,4-Dichlorobenzene	<10	ug/L
MW45	04/02/97	1,4-Dichlorobenzene	2	ug/L
MW45	06/26/97	1,4-Dichlorobenzene	<20	ug/L
MW45	09/29/97	1,4-Dichlorobenzene	3	ug/L
MW45	08/01/96	2,2'-Oxybis(1-Chloropropane)	<10	ug/L
MW45	04/02/97	2,2'-Oxybis(1-Chloropropane)	10	ug/L
MW45	06/26/97	2,2'-Oxybis(1-Chloropropane)	<20	ug/L
MW45	09/29/97	2,2'-Oxybis(1-Chloropropane)	7	ug/L
MW45	08/01/96	2-Methylnaphthalene	4	ug/L
MW45	04/02/97	2-Methylnaphthalene	5	ug/L
MW45	06/26/97	2-Methylnaphthalene	7	ug/L
MW45	09/29/97	2-Methylnaphthalene	5	ug/L
MW45	08/01/96	Benzene	530	ug/L
MW45	04/02/97	Benzene	1100	ug/L
MW45	06/26/97	Benzene	940	ug/L
MW45	09/29/97	Benzene	860	ug/L
MW45	08/01/96	Bis(2-Chloroethyl)Ether	7	ug/L
MW45	04/02/97	Bis(2-Chloroethyl)Ether	14	ug/L
MW45	06/26/97	Bis(2-Chloroethyl)Ether	8	ug/L
MW45	09/29/97	Bis(2-Chloroethyl)Ether	13	ug/L
MW45	08/01/96	Chlorobenzene	16	ug/L
MW45	04/02/97	Chlorobenzene	26	ug/L
MW45	06/26/97	Chlorobenzene	42	ug/L
MW45	09/29/97	Chlorobenzene	26	ug/L
MW45	08/01/96	Chloroethane	82	ug/L
MW45	04/02/97	Chloroethane	230	ug/L
MW45	06/26/97	Chloroethane	120	ug/L
MW45	09/29/97	Chloroethane	120	ug/L
MW45	08/01/96	Ethylbenzene	10	ug/L
MW45	04/02/97	Ethylbenzene	<80	ug/L
MW45	06/26/97	Ethylbenzene	<80	ug/L
MW45	09/29/97	Ethylbenzene	<80	ug/L
MW45	08/01/96	Naphthalene	84	ug/L
MW45	04/02/97	Naphthalene	120	ug/L
MW45	06/26/97	Naphthalene	140	ug/L
MW45	09/29/97	Naphthalene	100	ug/L
MW45	08/01/96	Phenol	41	ug/L
MW45	04/02/97	Phenol	35	ug/L
MW45	06/26/97	Phenol	19	ug/L
MW45	09/29/97	Phenol	50	ug/L
MW45	08/01/96	Xylene (total)	60	ug/L
MW45	04/02/97	Xylene (total)	61	ug/L
MW45	06/26/97	Xylene (total)	280	ug/L

Statistical Background Data
VOCs in the Upper Aquifer

Well	Date	Analyte	Concentration	Units
MW45	09/29/97	Xylene (total)	33	ug/L
MW46	08/01/96	4-Methyl-2-Pentanone	3	ug/L
MW46	03/25/97	4-Methyl-2-Pentanone	<10	ug/L
MW46	06/24/97	4-Methyl-2-Pentanone	<10	ug/L
MW46	09/25/97	4-Methyl-2-Pentanone	<10	ug/L
MW46	08/01/96	4-Methylphenol	3	ug/L
MW46	03/25/97	4-Methylphenol	<10	ug/L
MW46	06/24/97	4-Methylphenol	<10	ug/L
MW46	09/25/97	4-Methylphenol	<10	ug/L
MW46	08/01/96	Benzene	1	ug/L
MW46	03/25/97	Benzene	1	ug/L
MW46	06/24/97	Benzene	2	ug/L
MW46	09/25/97	Benzene	2	ug/L
MW46	08/01/96	Bis(2-Chloroethyl)Ether	3	ug/L
MW46	03/25/97	Bis(2-Chloroethyl)Ether	2	ug/L
MW46	06/24/97	Bis(2-Chloroethyl)Ether	4	ug/L
MW46	09/25/97	Bis(2-Chloroethyl)Ether	5	ug/L
MW46	08/01/96	Bis(2-Ethylhexyl)Phthalate	3	ug/L
MW46	03/25/97	Bis(2-Ethylhexyl)Phthalate	<10	ug/L
MW46	06/24/97	Bis(2-Ethylhexyl)Phthalate	<10	ug/L
MW46	09/25/97	Bis(2-Ethylhexyl)Phthalate	<10	ug/L
MW46	08/01/96	Phenol	<10	ug/L
MW46	03/25/97	Phenol	8	ug/L
MW46	06/24/97	Phenol	<10	ug/L
MW46	09/25/97	Phenol	<10	ug/L
MW47	08/01/96	Phenol	<10	ug/L
MW47	03/27/97	Phenol	10	ug/L
MW47	06/26/97	Phenol	16	ug/L
MW47	10/01/97	Phenol	39	ug/L
MW48	08/01/96	2,6-Dinitrotoluene	1	ug/L
MW48	03/27/97	2,6-Dinitrotoluene	<10	ug/L
MW48	06/26/97	2,6-Dinitrotoluene	<20	ug/L
MW48	09/29/97	2,6-Dinitrotoluene	<10	ug/L
MW48	08/01/96	Benzene	9100	ug/L
MW48	03/27/97	Benzene	5200	ug/L
MW48	06/26/97	Benzene	7700	ug/L
MW48	09/29/97	Benzene	9500	ug/L
MW48	08/01/96	Bis(2-Chloroethyl)Ether	<10	ug/L
MW48	03/27/97	Bis(2-Chloroethyl)Ether	10	ug/L
MW48	06/26/97	Bis(2-Chloroethyl)Ether	18	ug/L
MW48	09/29/97	Bis(2-Chloroethyl)Ether	<10	ug/L
MW48	08/01/96	Chloroethane	1000	ug/L
MW48	03/27/97	Chloroethane	620	ug/L
MW48	06/26/97	Chloroethane	670	ug/L
MW48	09/29/97	Chloroethane	980	ug/L
MW48	08/01/96	Isophorone	<10	ug/L
MW48	03/27/97	Isophorone	1	ug/L

Statistical Background Data
VOCs in the Upper Aquifer

Well	Date	Analyte	Concentration	Units
MW48	06/26/97	Isophorone	<20	ug/L
MW48	09/29/97	Isophorone	<10	ug/L
MW48	08/01/96	Methylene Chloride	70	ug/L
MW48	03/27/97	Methylene Chloride	<500	ug/L
MW48	06/26/97	Methylene Chloride	<500	ug/L
MW48	09/29/97	Methylene Chloride	<500	ug/L
MW48	08/01/96	Phenol	110	ug/L
MW48	03/27/97	Phenol	28	ug/L
MW48	06/26/97	Phenol	100	ug/L
MW48	09/29/97	Phenol	8	ug/L
MW49	08/01/96	2,2'-Oxybis(1-Chloropropane)	<10	ug/L
MW49	04/03/97	2,2'-Oxybis(1-Chloropropane)	10	ug/L
MW49	06/25/97	2,2'-Oxybis(1-Chloropropane)	22	ug/L
MW49	09/24/97	2,2'-Oxybis(1-Chloropropane)	30	ug/L
MW49	08/01/96	Benzene	5000	ug/L
MW49	04/03/97	Benzene	1600	ug/L
MW49	06/25/97	Benzene	4800	ug/L
MW49	09/24/97	Benzene	8200	ug/L
MW49	08/01/96	Bis(2-Chloroethyl)Ether	<10	ug/L
MW49	04/03/97	Bis(2-Chloroethyl)Ether	2	ug/L
MW49	06/25/97	Bis(2-Chloroethyl)Ether	<50	ug/L
MW49	09/24/97	Bis(2-Chloroethyl)Ether	13	ug/L
MW49	08/01/96	Bis(2-Ethylhexyl)Phthalate	<10	ug/L
MW49	04/03/97	Bis(2-Ethylhexyl)Phthalate	<10	ug/L
MW49	06/25/97	Bis(2-Ethylhexyl)Phthalate	<50	ug/L
MW49	09/24/97	Bis(2-Ethylhexyl)Phthalate	11	ug/L
MW49	08/01/96	Chloroethane	480	ug/L
MW49	04/03/97	Chloroethane	310	ug/L
MW49	06/25/97	Chloroethane	540	ug/L
MW49	09/24/97	Chloroethane	810	ug/L
MW49	08/01/96	Isophorone	1	ug/L
MW49	04/03/97	Isophorone	1	ug/L
MW49	06/25/97	Isophorone	7	ug/L
MW49	09/24/97	Isophorone	6	ug/L
MW49	08/01/96	Methylene Chloride	70	ug/L
MW49	04/03/97	Methylene Chloride	<100	ug/L
MW49	06/25/97	Methylene Chloride	<250	ug/L
MW49	09/24/97	Methylene Chloride	<400	ug/L
MW49	08/01/96	Phenol	93	ug/L
MW49	04/03/97	Phenol	<30	ug/L
MW49	06/25/97	Phenol	<50	ug/L
MW49	09/24/97	Phenol	130	ug/L

C

APPENDIX C

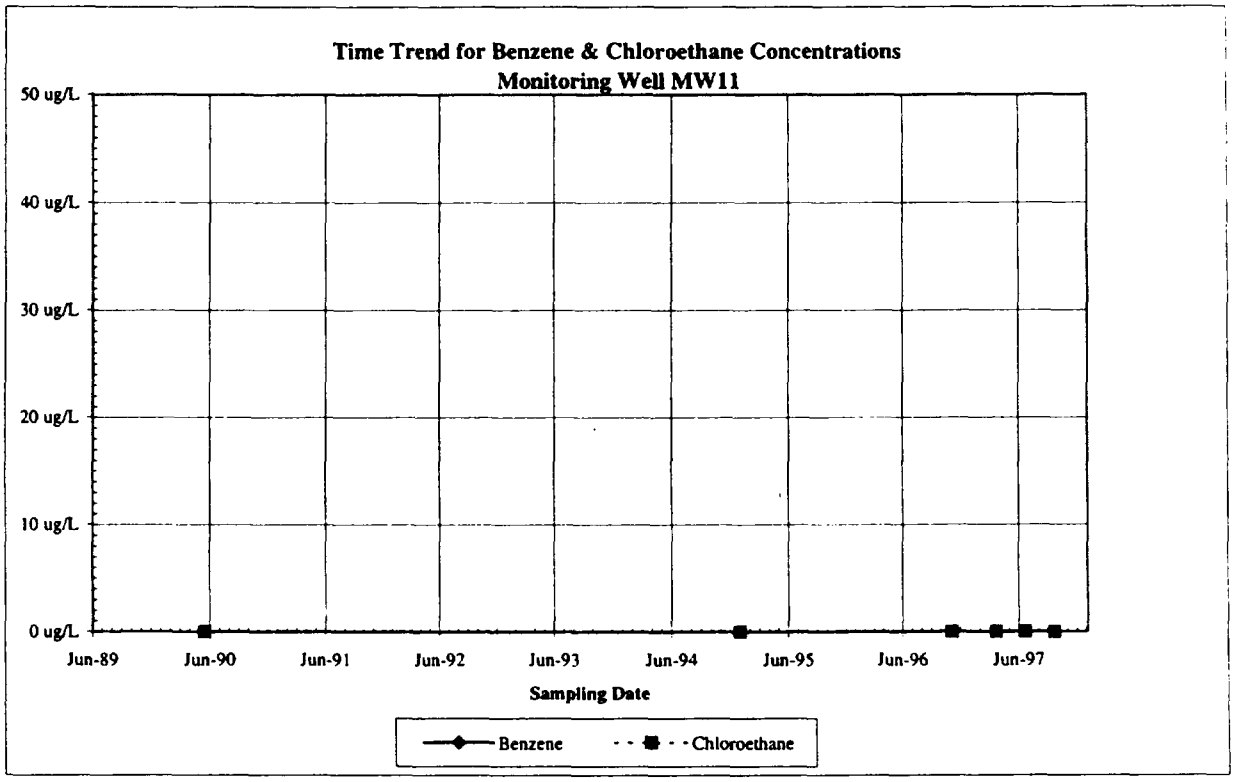
TIME TREND PLOTS

Upper Aquifer Monitoring Well: MW11

Baseline Groundwater Monitoring
ACS NPL Site

Monitoring Well	Sampling Dates							
MW11	Aug-89	May-90	Jan-95	Nov-96	Mar-97	Jun-97	Sep-97	Dec-97
Benzene		BDL	BDL	BDL	BDL	BDL	BDL	
Chloroethane		BDL	BDL	BDL	BDL	BDL	BDL	

BDL = Below the Detection Limit

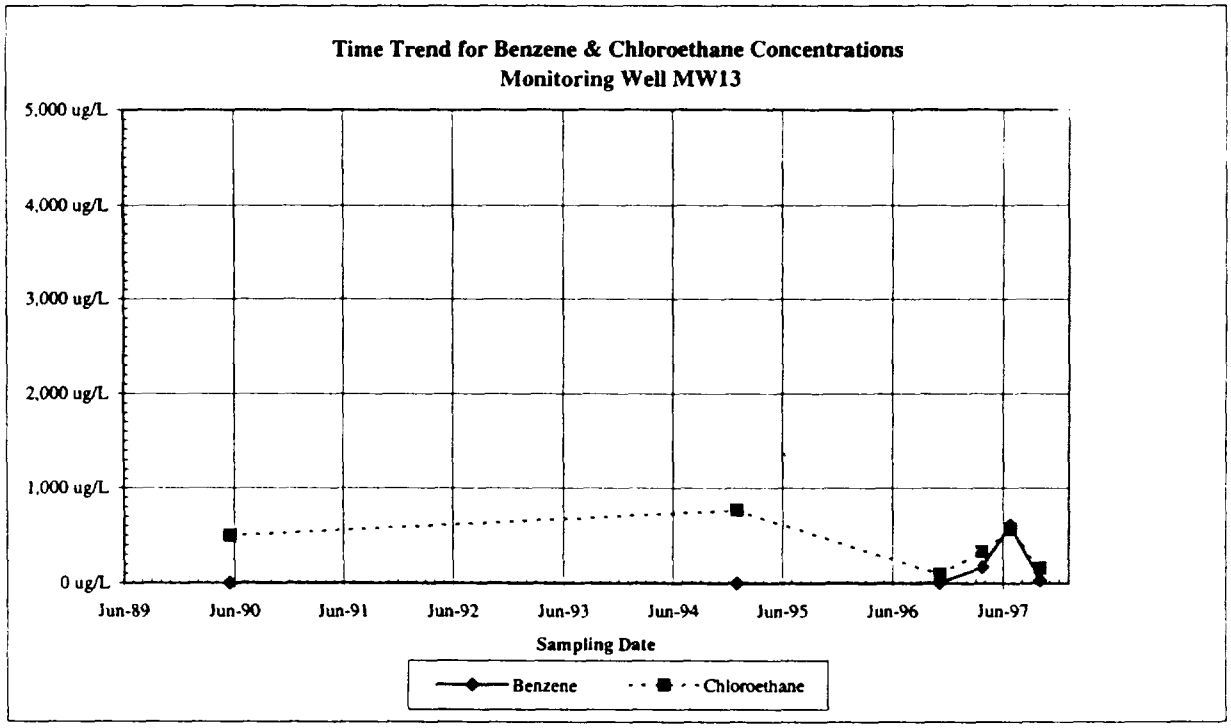


Upper Aquifer Monitoring Well: MW13

Baseline Groundwater Monitoring
ACS NPL Site

Monitoring Well	Sampling Dates							
MW13	Aug-89	May-90	Jan-95	Nov-96	Mar-97	Jun-97	Oct-97	Dec-97
Benzene		2 ug/L	BDL	6 ug/L	170 ug/L	610 ug/L	33 ug/L	
Chloroethane		500 ug/L	770 ug/L	97 ug/L	330 ug/L	570 ug/L	160 ug/L	

BDL = Below the Detection Limit

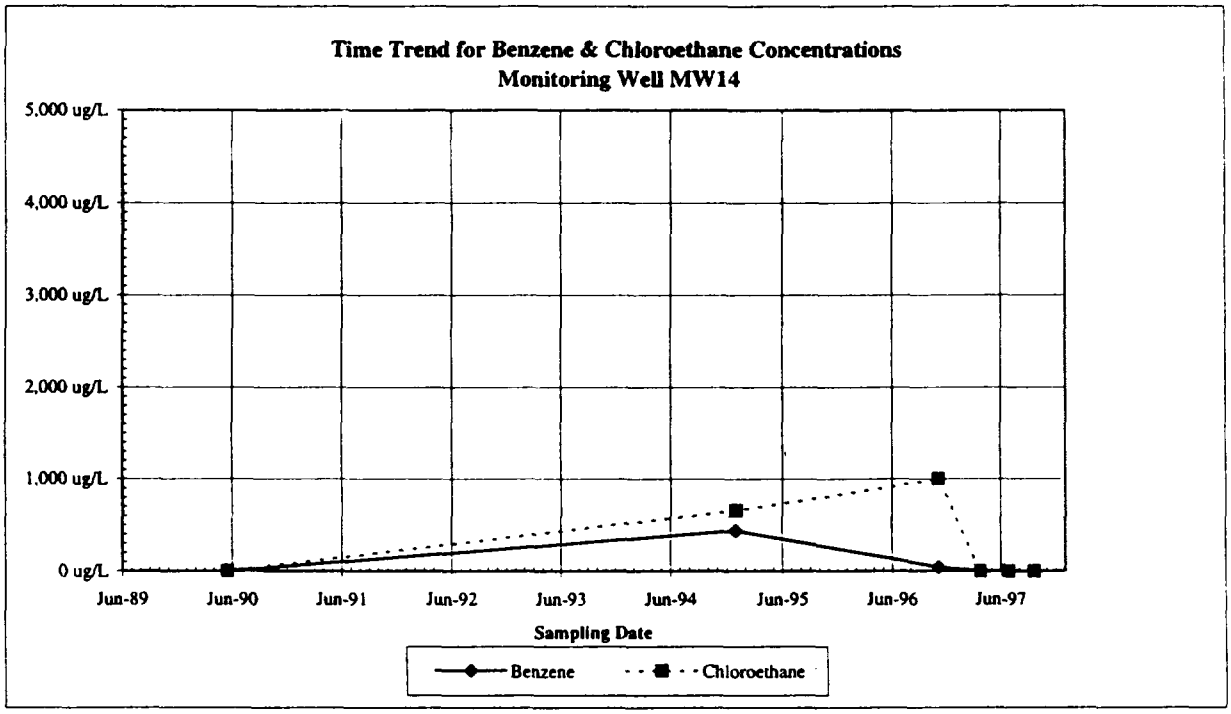


Upper Aquifer Monitoring Well: MW14

Baseline Groundwater Monitoring
ACS NPL Site

Monitoring Well	Sampling Dates							
MW14	Aug-89	May-90	Jan-95	Nov-96	Mar-97	Jun-97	Sep-97	Dec-97
Benzene		2 ug/L	440 ug/L	41 ug/L	BDL	1 ug/L	BDL	
Chloroethane		3 ug/L	660 ug/L	1,000 ug/L	BDL	BDL	BDL	

BDL = Below the Detection Limit



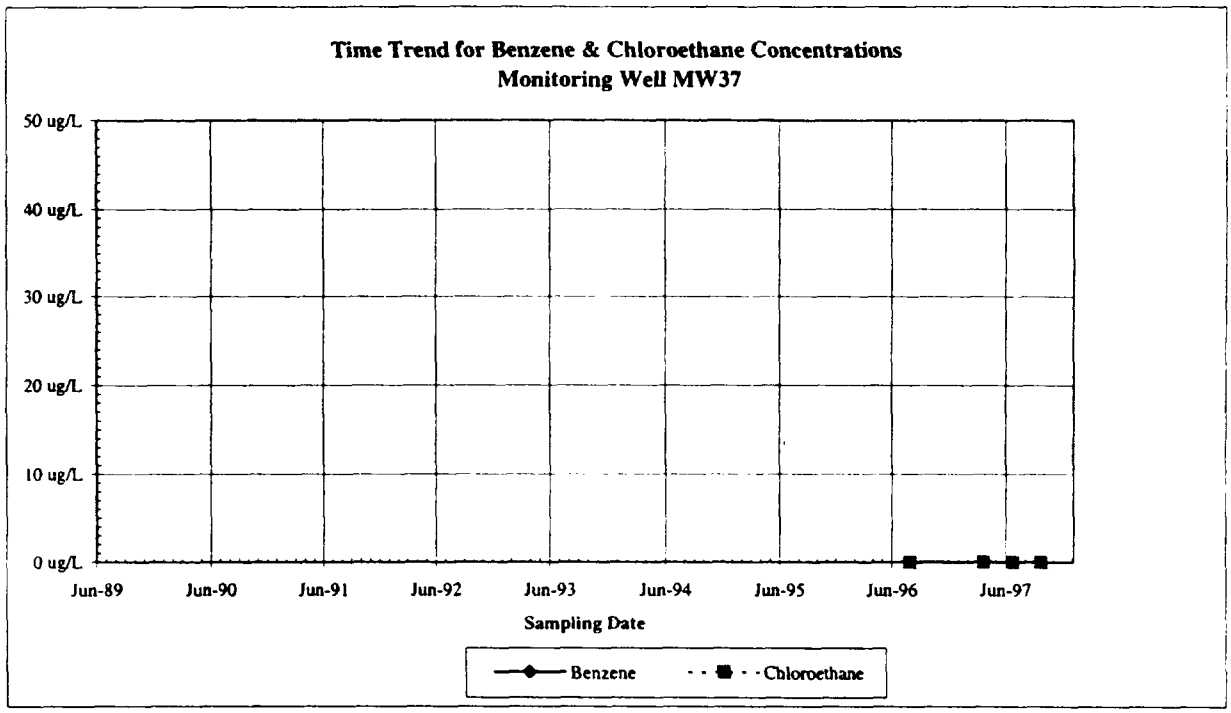
Upper Aquifer Monitoring Well: MW37

Baseline Groundwater Monitoring

ACS NPL Site

Monitoring Well	Sampling Dates							
MW37	Aug-89	May-90	Dec-94	Aug-96	Mar-97	Jun-97	Sep-97	Dec-97
Benzene				BDL	BDL	BDL	BDL	
Chloroethane				BDL	BDL	BDL	BDL	

BDL = Below the Detection Limit



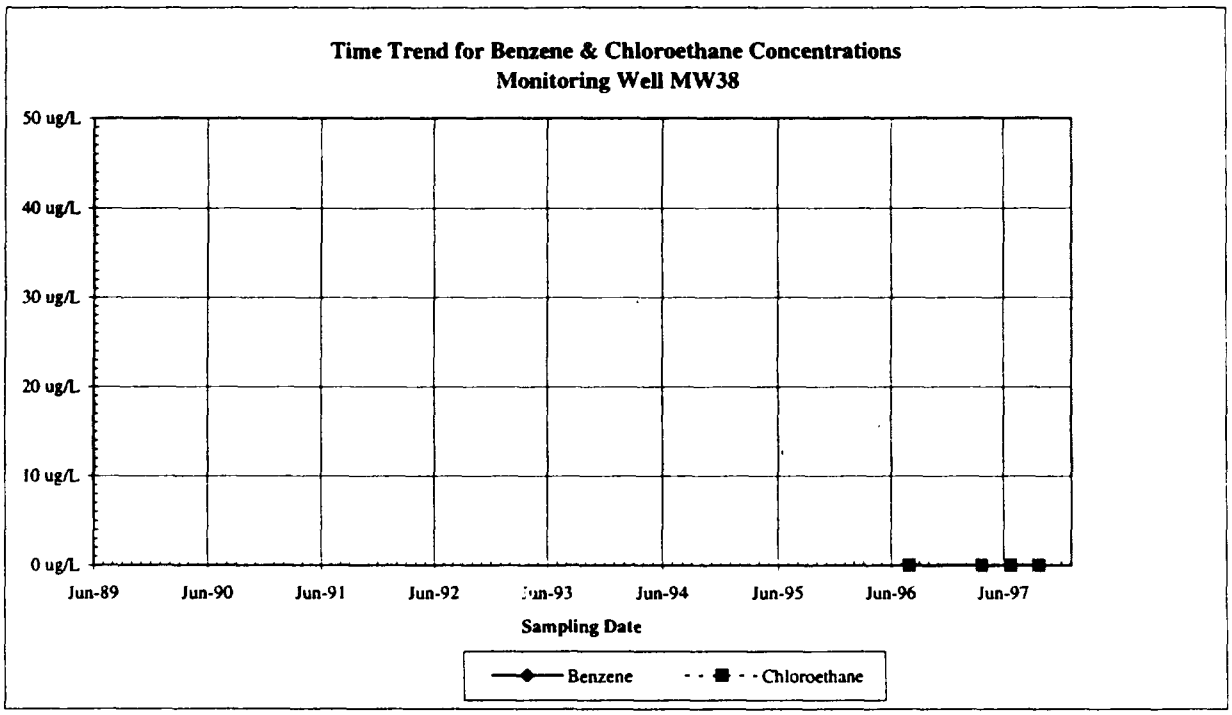
Upper Aquifer Monitoring Well: MW38

Baseline Groundwater Monitoring

ACS NPL Site

Monitoring Well	Sampling Dates							
MW38	Aug-89	May-90	Dec-94	Aug-96	Mar-97	Jun-97	Sep-97	Dec-97
Benzene				BDL	BDL	BDL	BDL	
Chloroethane				BDL	BDL	BDL	BDL	

BDL = Below the Detection Limit



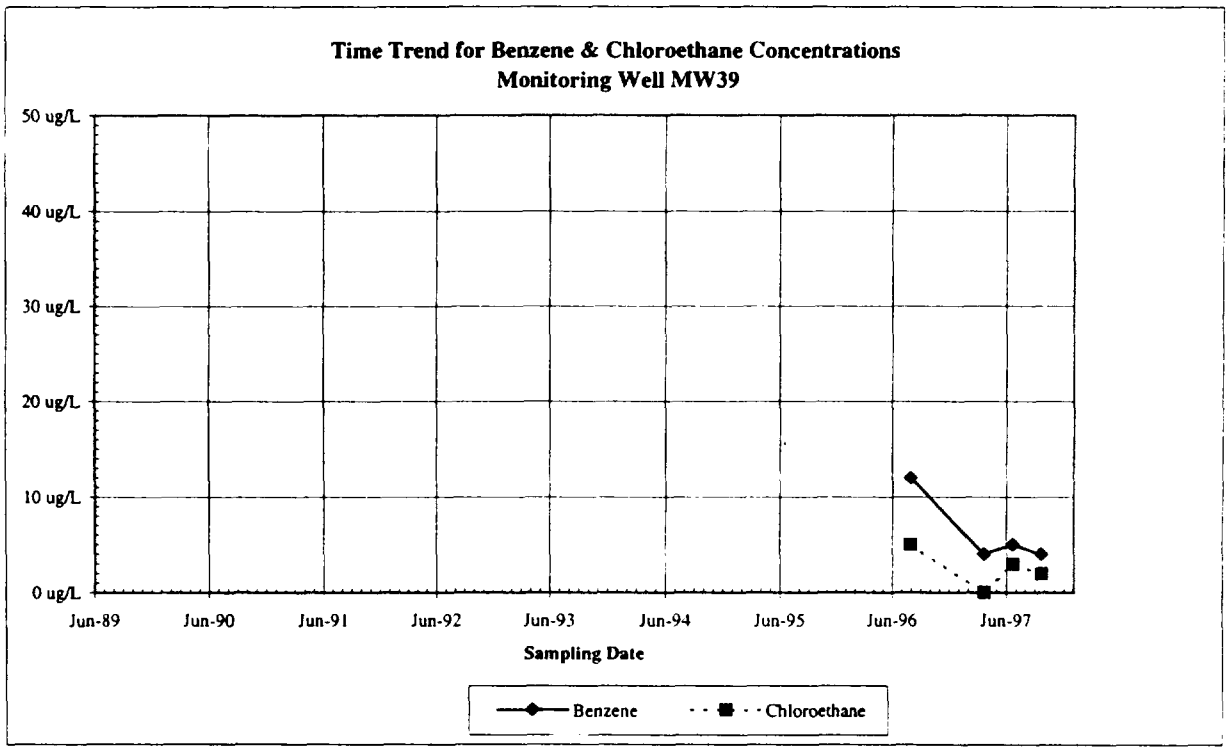
Upper Aquifer Monitoring Well: MW39

Baseline Groundwater Monitoring

ACS NPL Site

Monitoring Well	Sampling Dates							
MW39	Aug-89	May-90	Dec-94	Aug-96	Mar-97	Jun-97	Sep-97	Dec-97
Benzene				12 ug/L	4 ug/L	5 ug/L	4 ug/L	
Chloroethane				5 ug/L	BDL	3 ug/L	2 ug/L	

BDL = Below the Detection Limit

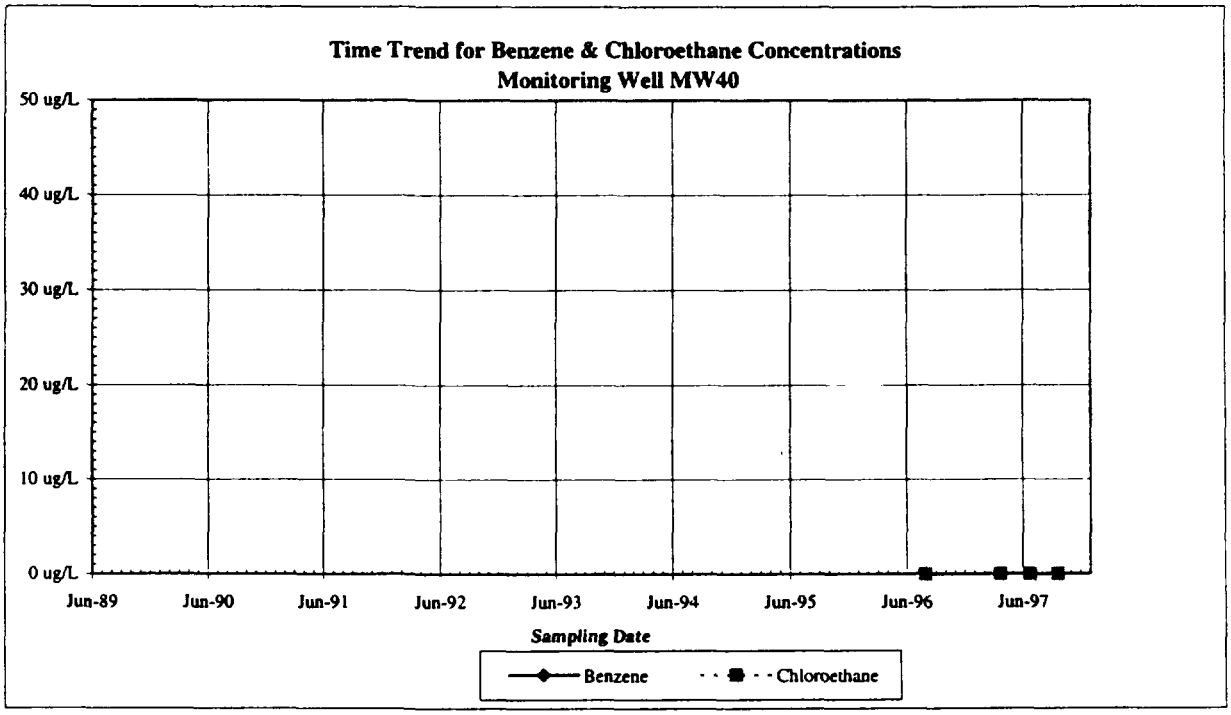


Upper Aquifer Monitoring Well: MW40

Baseline Groundwater Monitoring
ACS NPL Site

Monitoring Well	Sampling Dates							
MW40	Aug-89	May-90	Dec-94	Aug-96	Mar-97	Jun-97	Sep-97	Dec-97
Benzene				BDL	BDL	BDL	BDL	
Chloroethane				BDL	BDL	BDL	BDL	

BDL = Below the Detection Limit

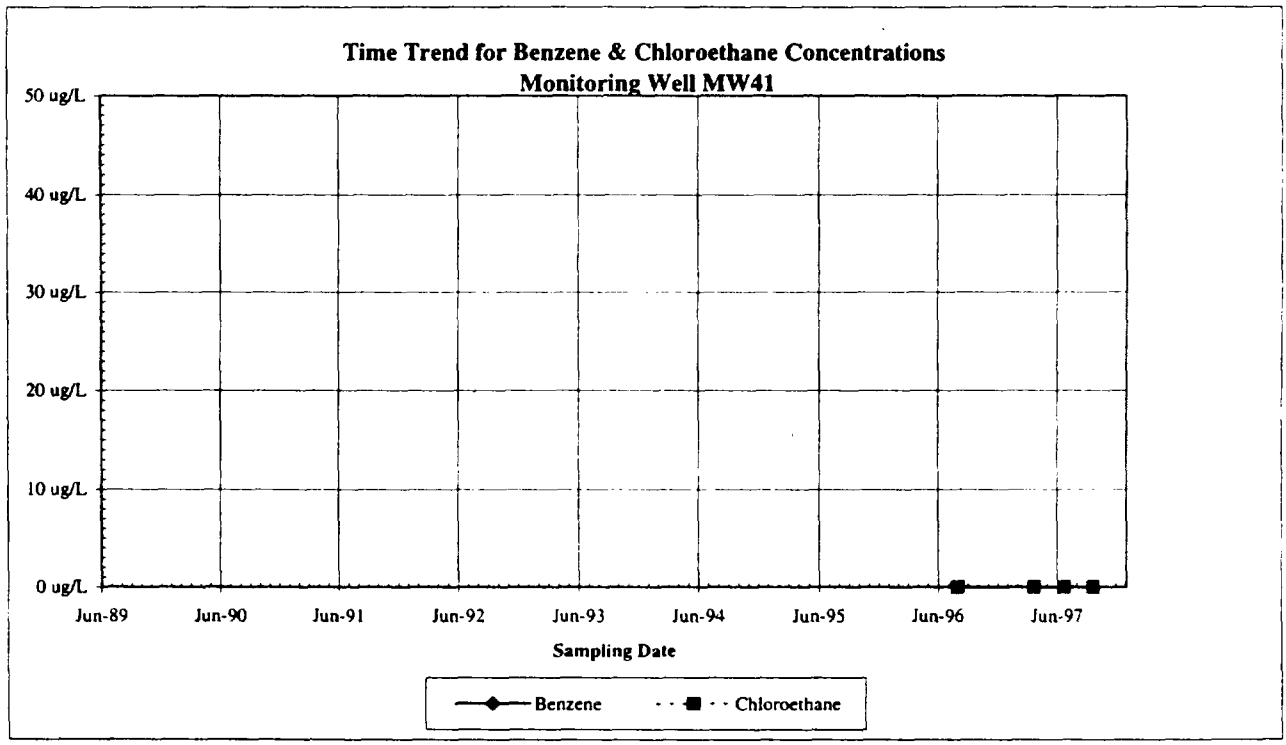


Upper Aquifer Monitoring Well: MW41

Baseline Groundwater Monitoring
ACS NPL Site

Monitoring Well	Sampling Dates							
MW41	Aug-89	May-90	Dec-94	Aug-96	Mar-97	Jun-97	Sep-97	Dec-97
Benzene				BDL	BDL	BDL	BDL	
Chloroethane				BDL	BDL	BDL	BDL	

BDL = Below the Detection Limit

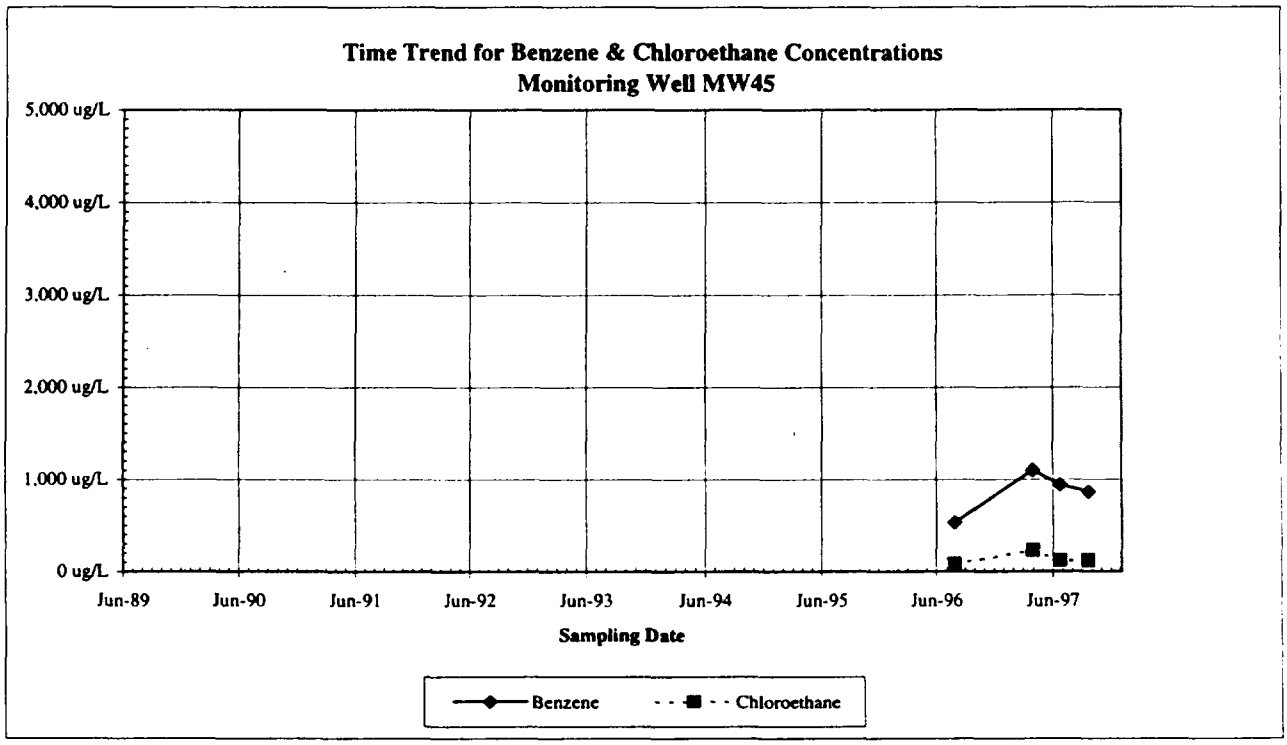


Upper Aquifer Monitoring Well: MW45

Baseline Groundwater Monitoring
ACS NPL Site

Monitoring Well	Sampling Dates							
MW45	Aug-89	May-90	Dec-94	Aug-96	Apr-97	Jun-97	Sep-97	Dec-97
Benzene				530 ug/L	1,100 ug/L	940 ug/L	860 ug/L	
Chloroethane				82 ug/L	230 ug/L	120 ug/L	120 ug/L	

BDL = Below the Detection Limit



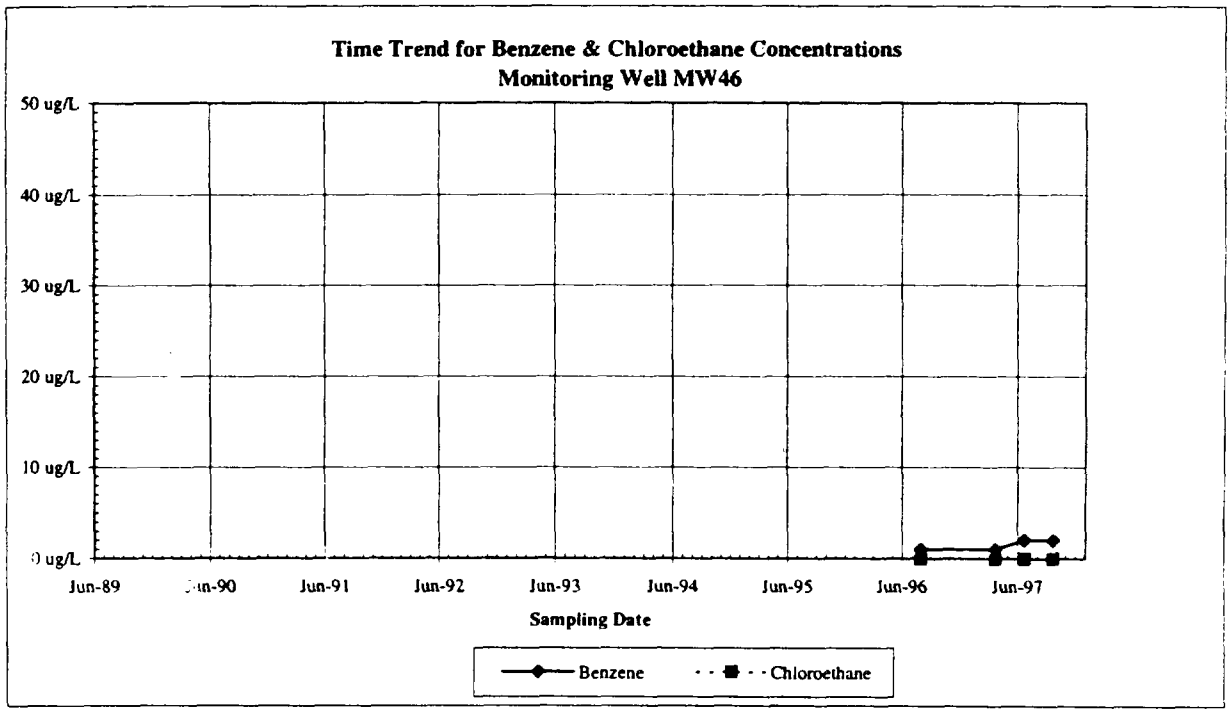
Upper Aquifer Monitoring Well: MW46

Baseline Groundwater Monitoring

ACS NPL Site

Monitoring Well	Sampling Dates							
MW46	Aug-89	May-90	Dec-94	Aug-96	Mar-97	Jun-97	Sep-97	Dec-97
Benzene				1 ug/L	1 ug/L	2 ug/L	2 ug/L	
Chloroethane				BDL	BDL	BDL	BDL	

BDL = Below the Detection Limit

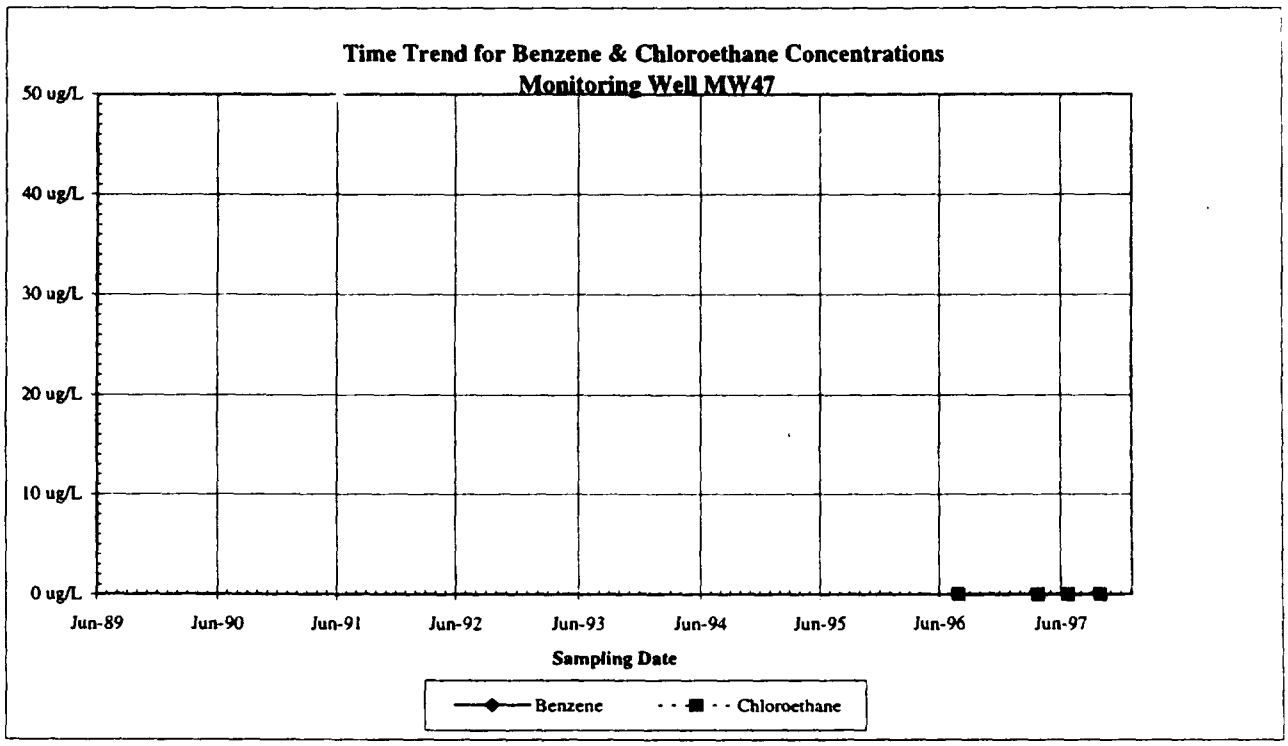


Upper Aquifer Monitoring Well: MW47

Baseline Groundwater Monitoring
ACS NPL Site

Monitoring Well	Sampling Dates							
MW47	Aug-89	May-90	Dec-94	Aug-96	Mar-97	Jun-97	Oct-97	Dec-97
Benzene				BDL	BDL	BDL	BDL	
Chloroethane				BDL	BDL	BDL	BDL	

BDL = Below the Detection Limit



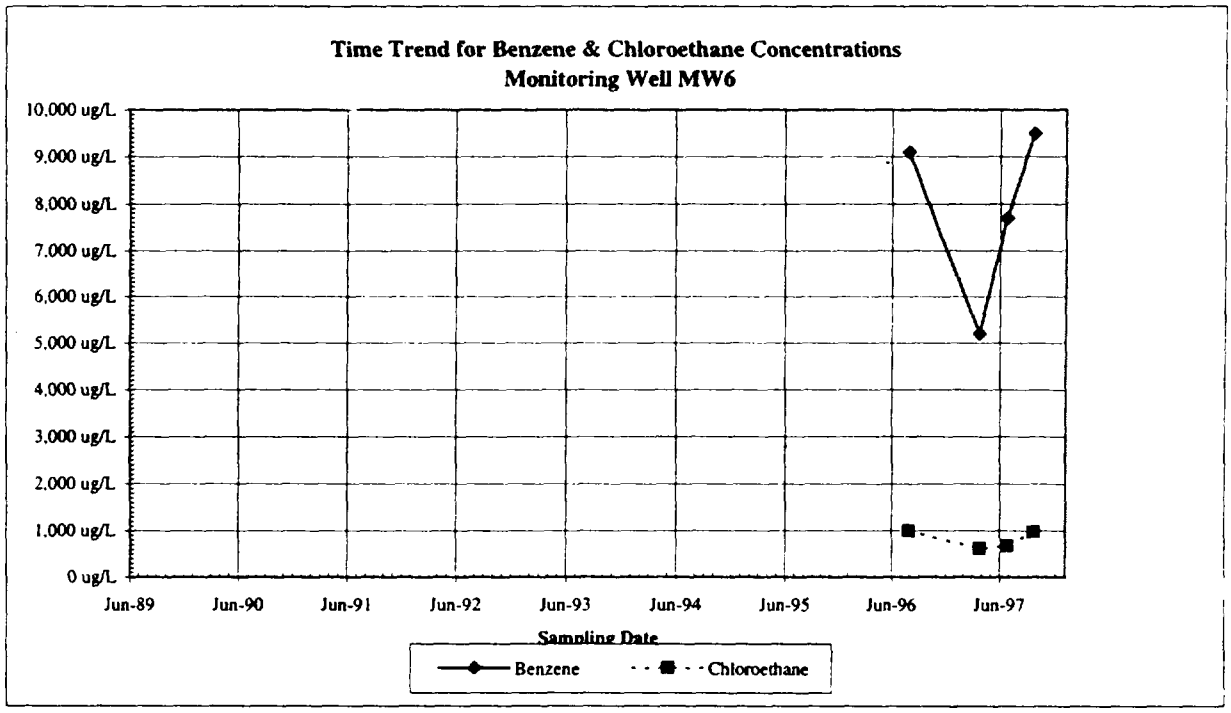
Upper Aquifer Monitoring Well: MW48

Baseline Groundwater Monitoring

ACS NPL Site

Monitoring Well	Sampling Dates							
MW48	Aug-89	May-90	Dec-94	Aug-96	Mar-97	Jun-97	Sep-97	Dec-97
Benzene				9,100 ug/L	5,200 ug/L	7,700 ug/L	9,500 ug/L	
Chloroethane				1,000 ug/L	620 ug/L	670 ug/L	980 ug/L	

BDL = Below the Detection Limit

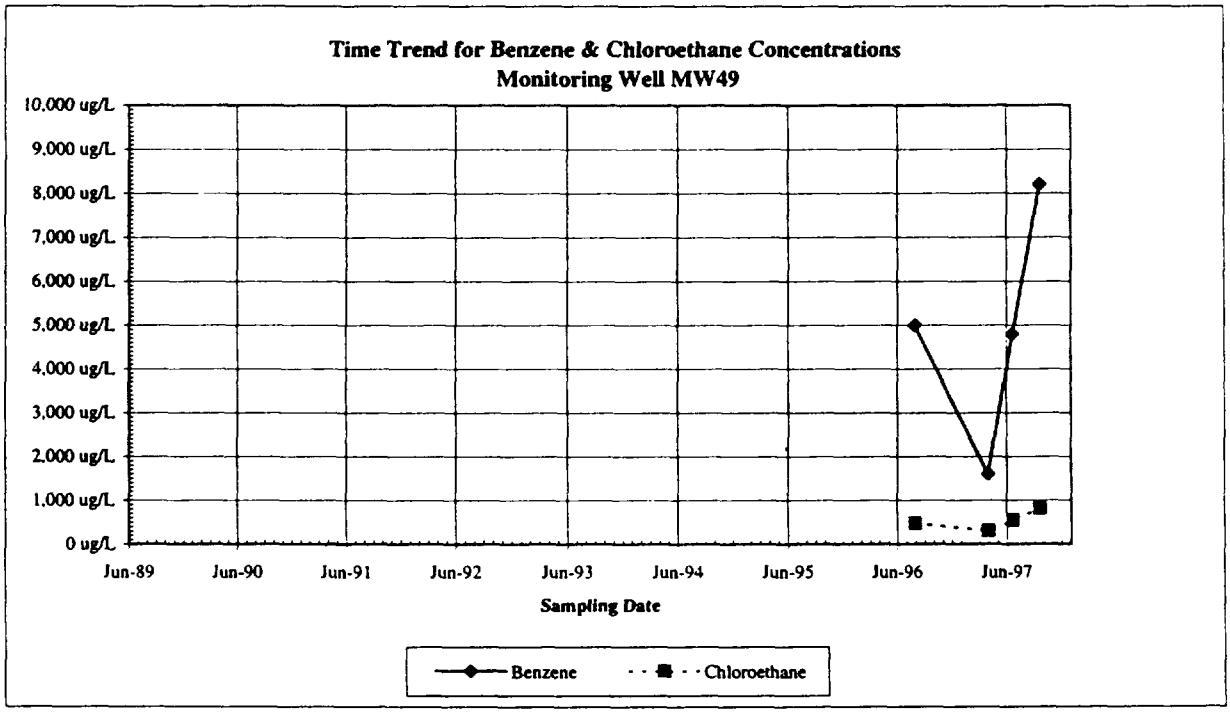


Upper Aquifer Monitoring Well: MW49

Baseline Groundwater Monitoring
ACS NPL Site

Monitoring Well	Sampling Dates							
MW49	Aug-89	May-90	Dec-94	Aug-96	Apr-97	Jun-97	Sep-97	Dec-97
Benzene				5,000 ug/L	1,600 ug/L	4,800 ug/L	8,200 ug/L	
Chloroethane				480 ug/L	310 ug/L	540 ug/L	810 ug/L	

BDL = Below the Detection Limit

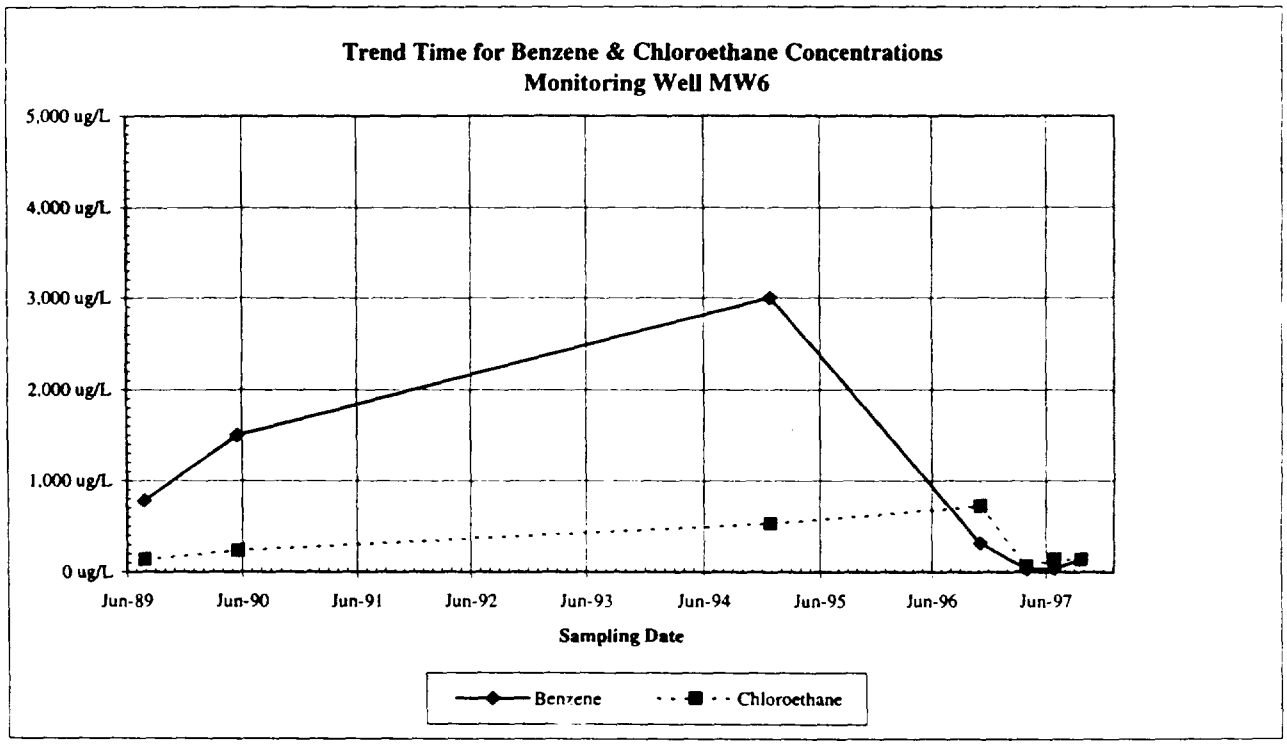


Upper Aquifer Monitoring Well: MW6

Baseline Groundwater Monitoring

ACS NPL Site

Monitoring Well	Sampling Dates							
MW6	Aug-89	May-90	Dec-94	Nov-96	Apr-97	Jul-97	Sep-97	Dec-97
Benzene	780 ug/L	1,500 ug/L	3,000 ug/L	320 ug/L	35 ug/L	39 ug/L	140 ug/L	
Chloroethane	140 ug/L	240 ug/L	530 ug/L	720 ug/L	67 ug/L	140 ug/L	140 ug/L	

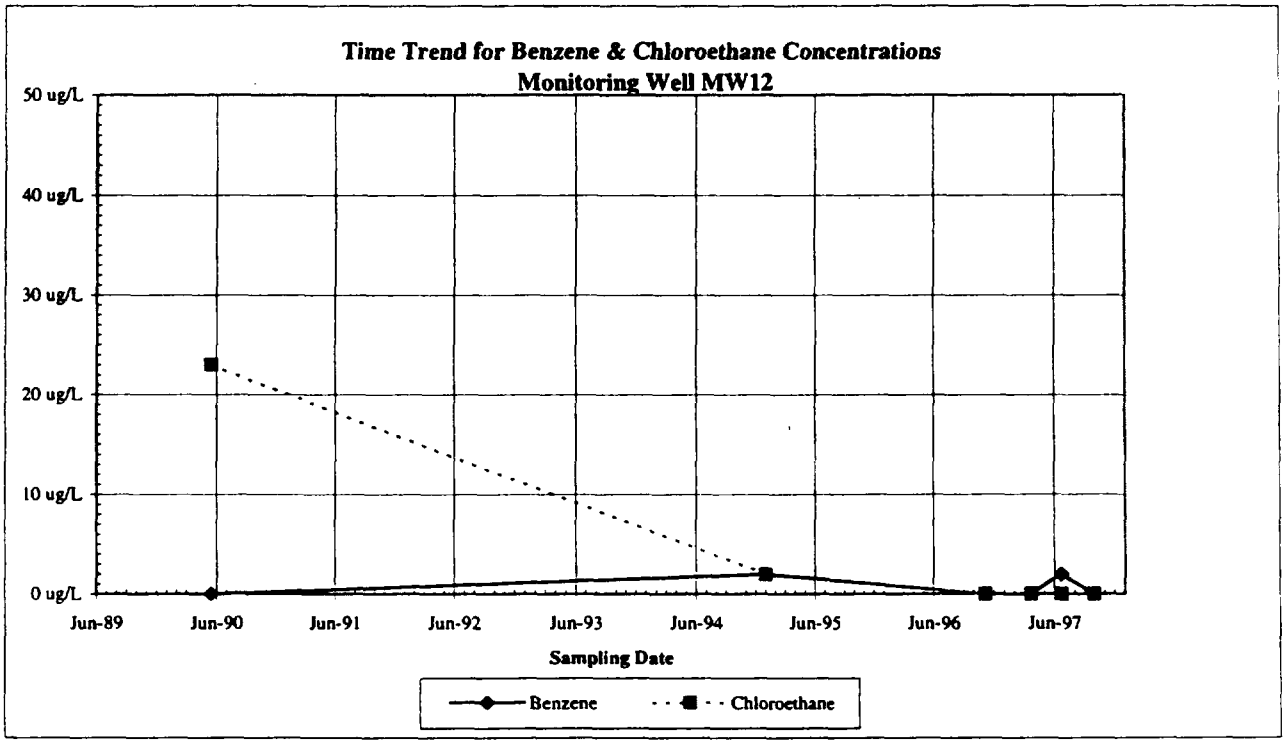


Upper Aquifer Monitoring Well: MW12

Baseline Groundwater Monitoring
ACS NPL Site

Monitoring Well	Sampling Dates							
MW12	Aug-89	May-90	Jan-95	Nov-96	Mar-97	Jun-97	Oct-97	Dec-97
Benzene		BDL	2 ug/L	BDL	BDL	2 ug/L	BDL	
Chloroethane		23 ug/L	2 ug/L	BDL	BDL	BDL	BDL	

BDL = Below the Detection Limit

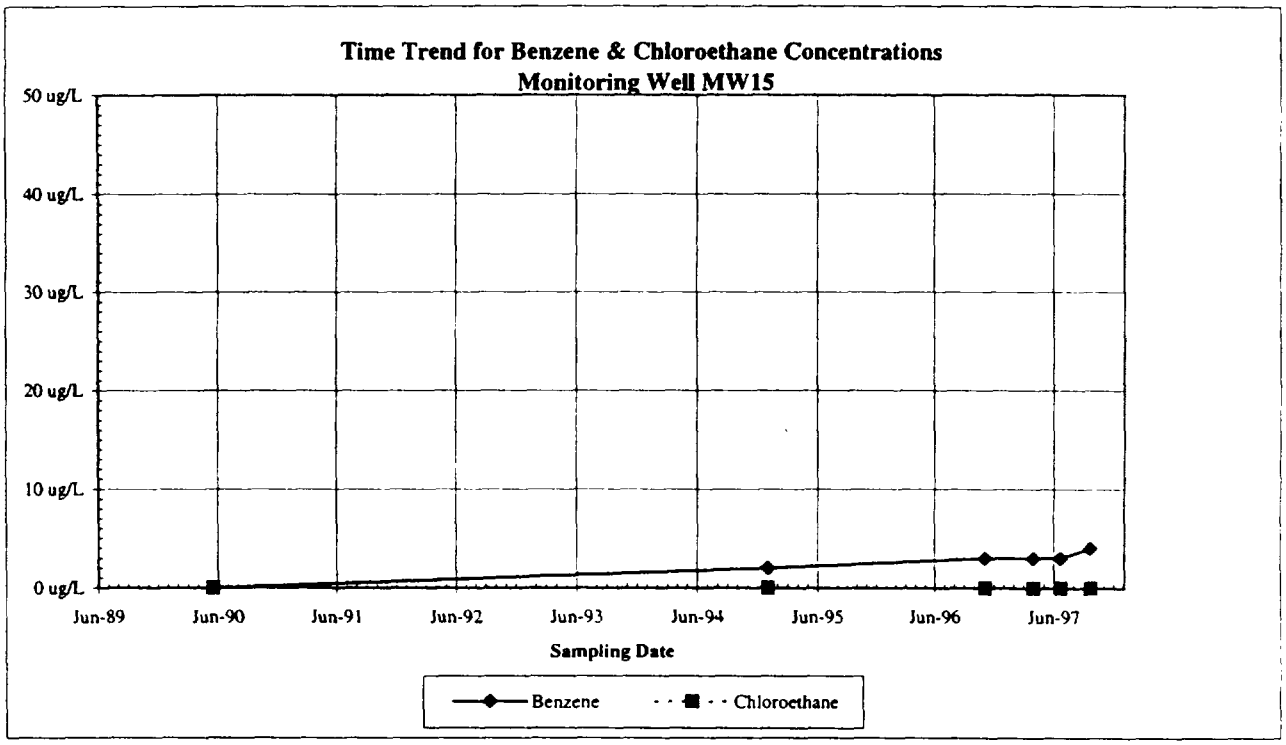


Upper Aquifer Monitoring Well: MW15

Baseline Groundwater Monitoring
ACS NPL Site

Monitoring Well	Sampling Dates							
MW15	Aug-89	May-90	Jan-95	Nov-96	Apr-97	Jun-97	Sep-97	Dec-97
Benzene		BDL	2 ug/L	3 ug/L	3 ug/L	3 ug/L	4 ug/L	
Chloroethane		BDL	BDL	BDL	BDL	BDL	BDL	

BDL = Below the Detection Limit

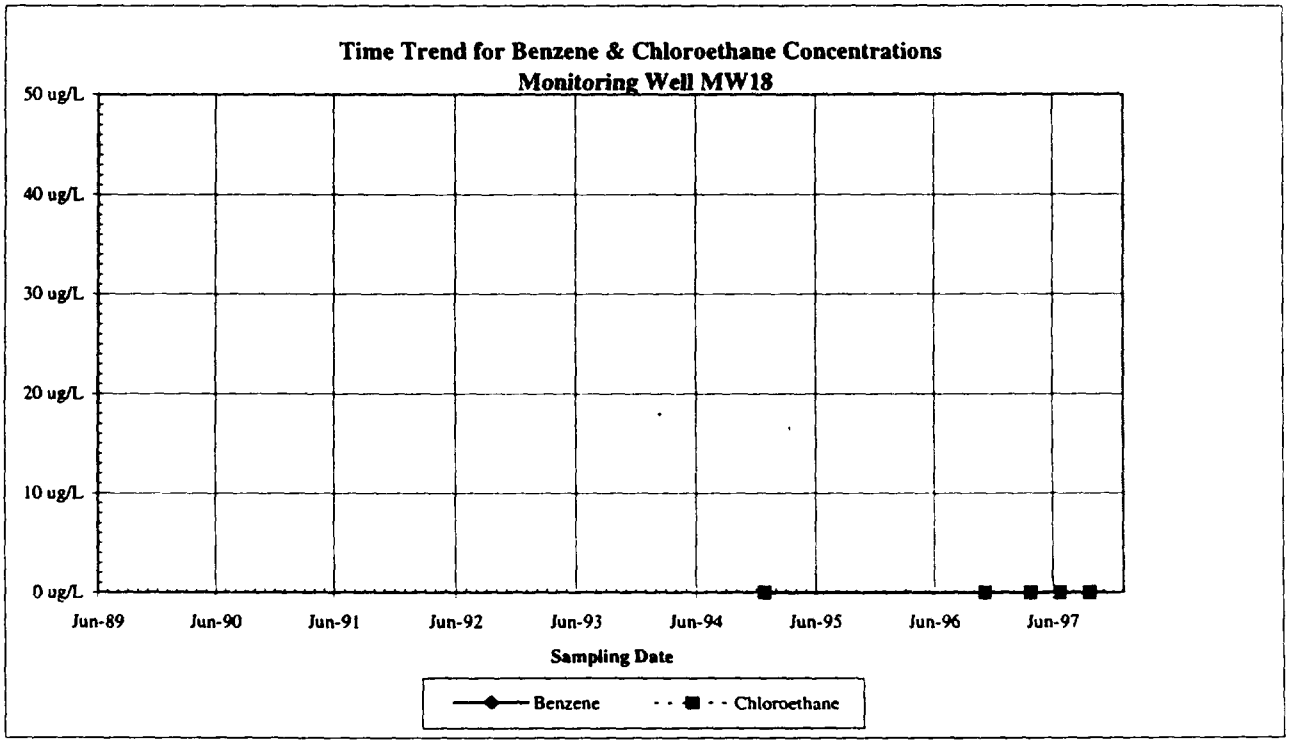


Upper Aquifer Monitoring Well: MW18

Baseline Groundwater Monitoring
ACS NPL Site

Monitoring Well	Sampling Dates							
MW18	Aug-89	May-90	Dec-94	Nov-96	Mar-97	Jun-97	Sep-97	Dec-97
Benzene			BDL	BDL	BDL	BDL	BDL	
Chloroethane			BDL	BDL	BDL	BDL	BDL	

BDL = Below the Detection Limit

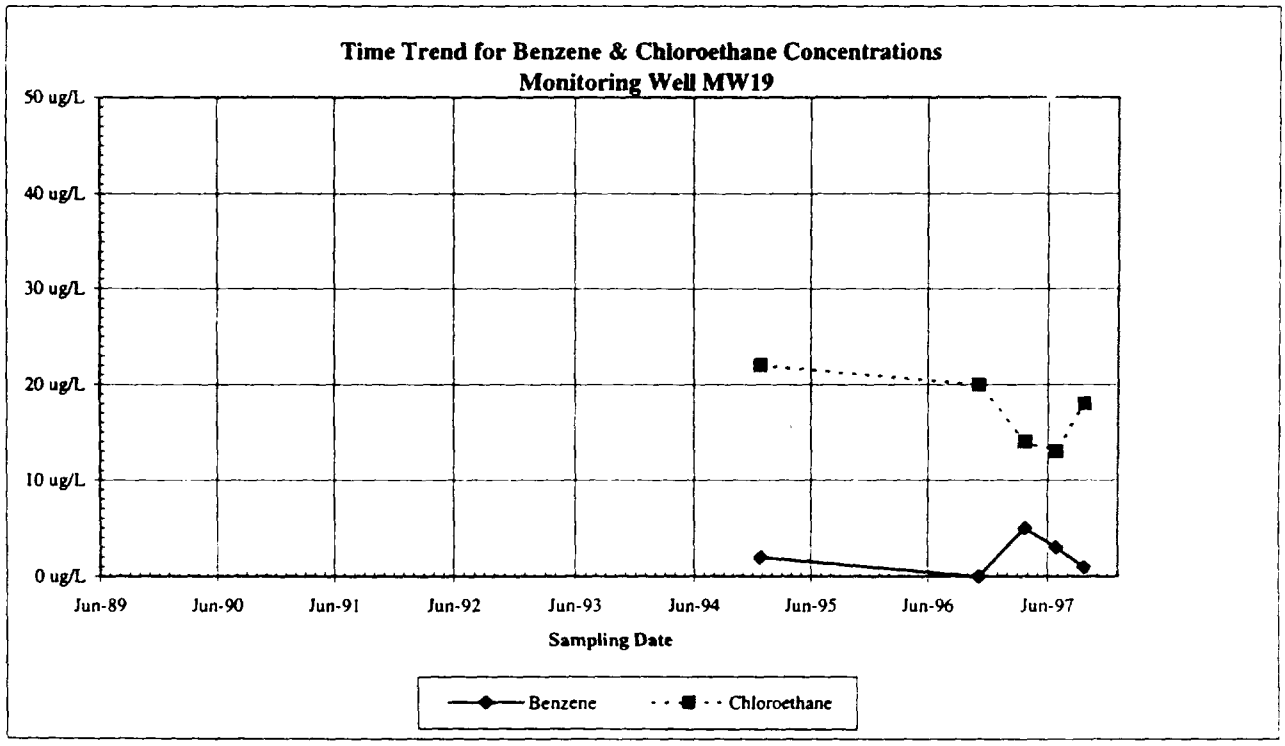


Upper Aquifer Monitoring Well: MW19

Baseline Groundwater Monitoring
ACS NPL Site

Monitoring Well	Sampling Dates							
MW19	Aug-89	May-90	Dec-94	Nov-96	Mar-97	Jun-97	Sep-97	Dec-97
Benzene			2 ug/L	BDL	5 ug/L	3 ug/L	1 ug/L	
Chloroethane			22 ug/L	20 ug/L	14 ug/L	13 ug/L	18 ug/L	

BDL = Below the Detection Limit

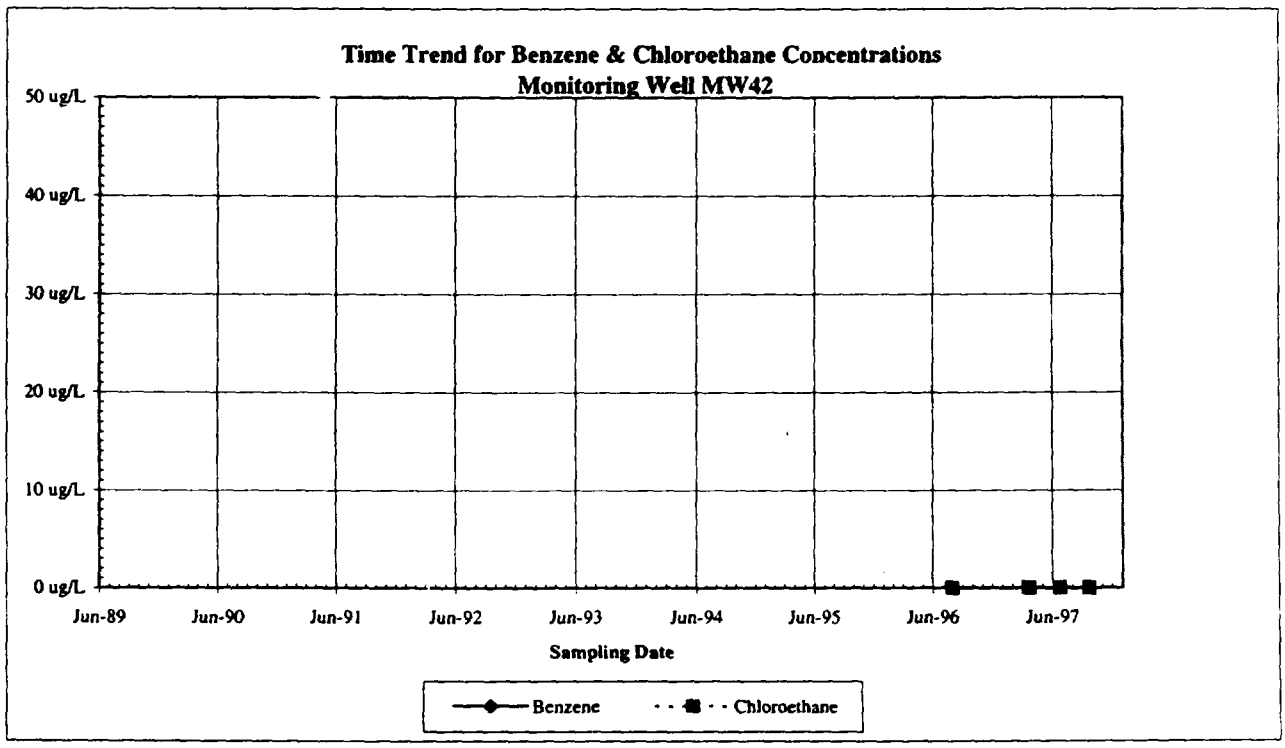


Upper Aquifer Monitoring Well: MW42

Baseline Groundwater Monitoring
ACS NPL Site

Monitoring Well	Sampling Dates							
MW42	Aug-89	May-90	Dec-94	Aug-96	Mar-97	Jun-97	Sep-97	Dec-97
Benzene				BDL	BDL	BDL	BDL	
Chloroethane				BDL	BDL	BDL	BDL	

BDL = Below the Detection Limit

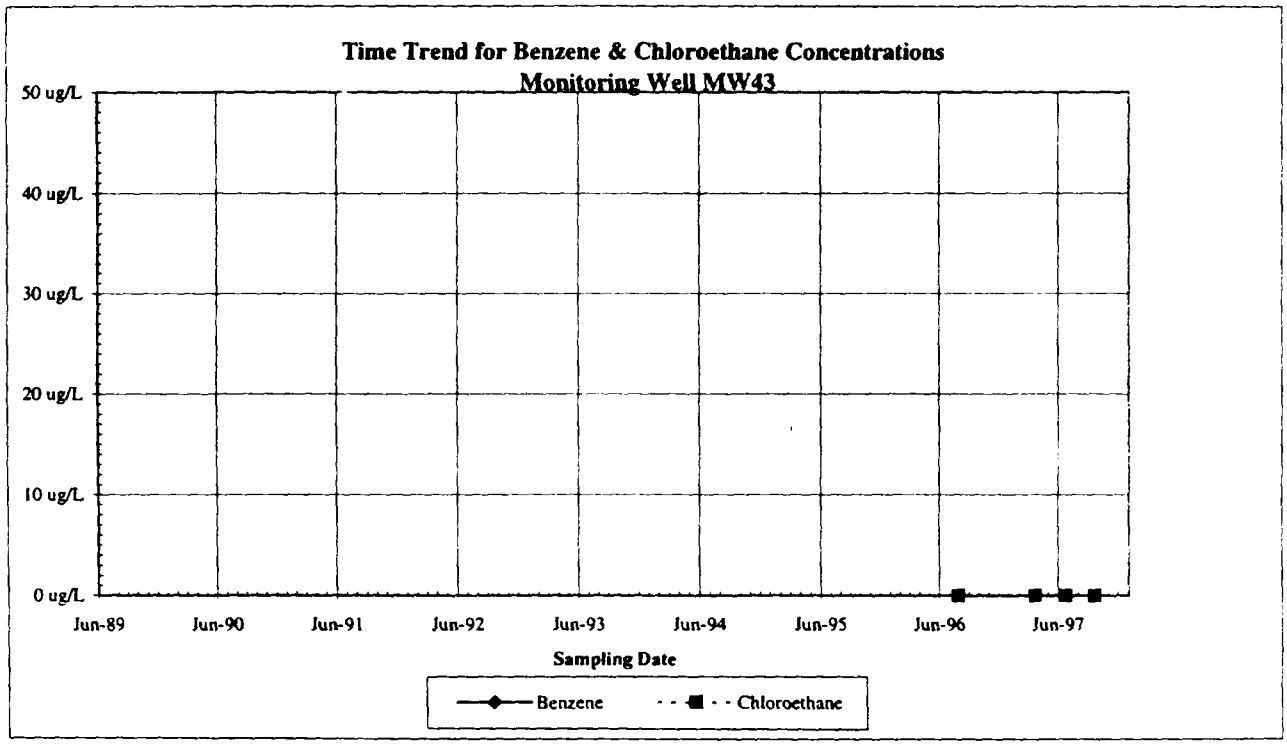


Upper Aquifer Monitoring Well: MW43

Baseline Groundwater Monitoring
ACS NPL Site

Monitoring Well	Sampling Dates							
MW43	Aug-89	May-90	Dec-94	Aug-96	Mar-97	Jun-97	Sep-97	Dec-97
Benzene				BDL	BDL	BDL	BDL	
Chloroethane				BDL	BDL	BDL	BDL	

BDL = Below the Detection Limit

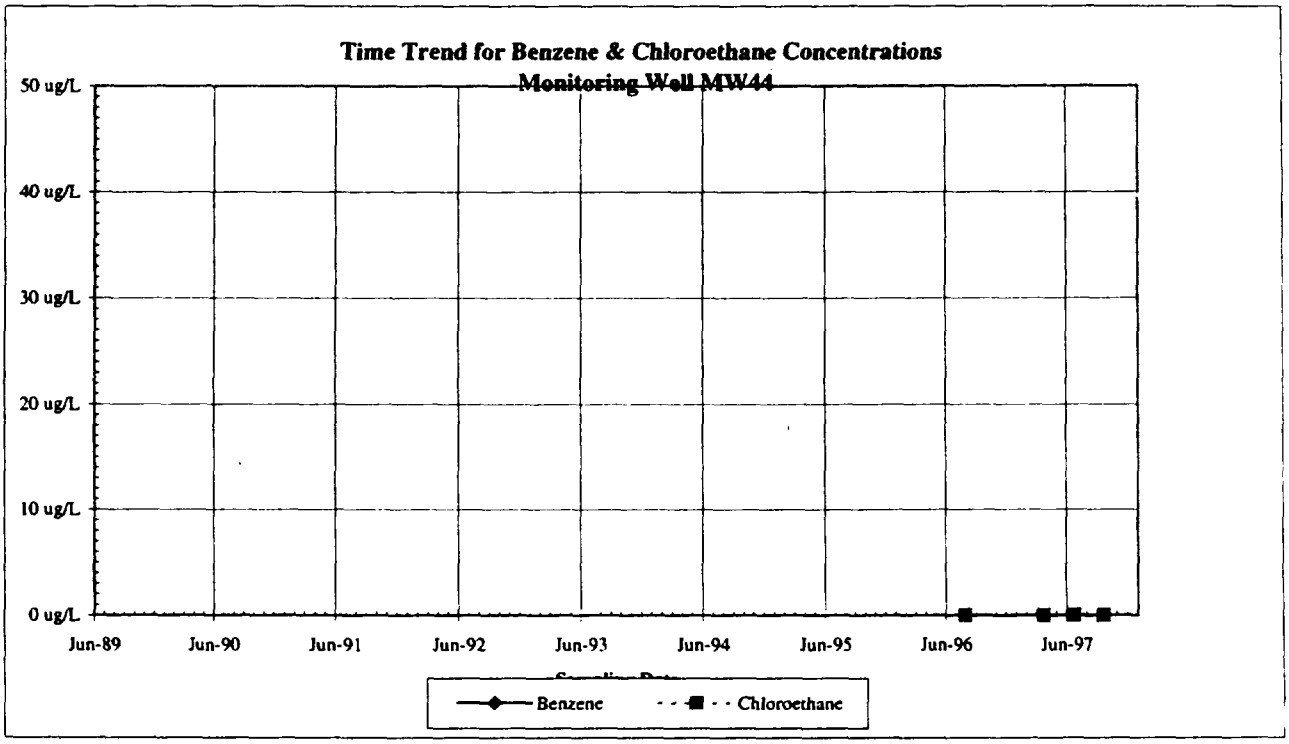


Upper Aquifer Monitoring Well: MW44

Baseline Groundwater Monitoring
ACS NPL Site

Monitoring Well	Sampling Dates							
MW44	Aug-89	May-90	Dec-94	Aug-96	Mar-97	Jun-97	Sep-97	Dec-97
Benzene				BDL	BDL	BDL	BDL	
Chloroethane				BDL	BDL	BDL	BDL	

BDL = Below the Detection Limit

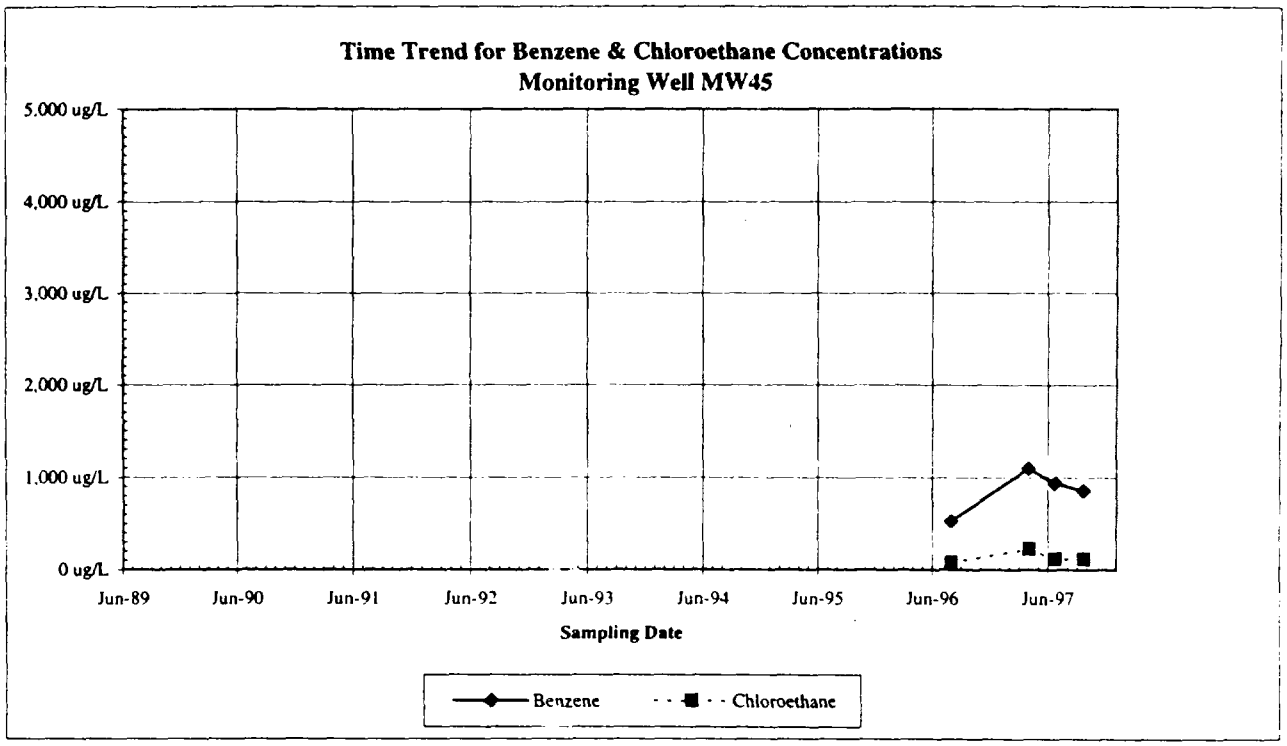


Upper Aquifer Monitoring Well: MW45

Baseline Groundwater Monitoring
ACS NPL Site

Monitoring Well	Sampling Dates							
MW45	Aug-89	May-90	Dec-94	Aug-96	Apr-97	Jun-97	Sep-97	Dec-97
Benzene				530 ug/L	1,100 ug/L	940 ug/L	860 ug/L	
Chloroethane				82 ug/L	230 ug/L	120 ug/L	120 ug/L	

BDL = Below the Detection Limit



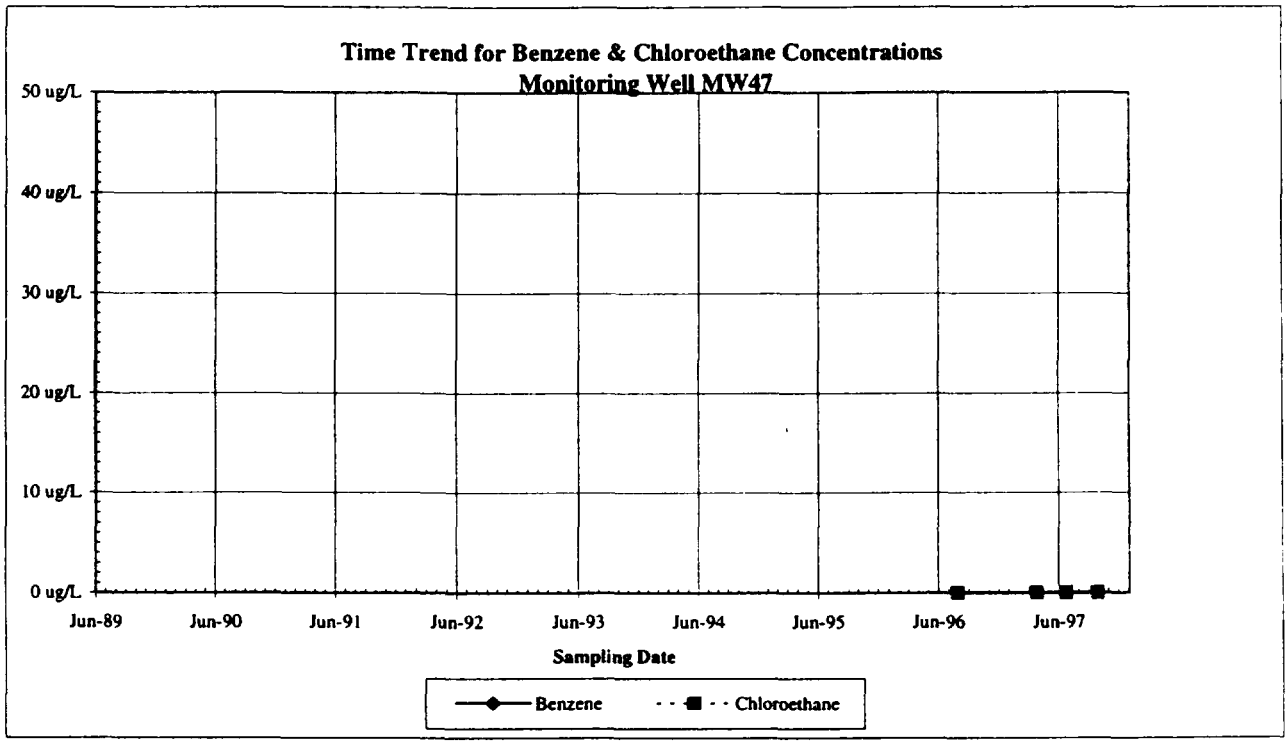
Upper Aquifer Monitoring Well: MW47

Baseline Groundwater Monitoring

ACS NPL Site

Monitoring Well	Sampling Dates							
MW47	Aug-89	May-90	Dec-94	Aug-96	Mar-97	Jun-97	Oct-97	Dec-97
Benzene				BDL	BDL	BDL	BDL	
Chloroethane				BDL	BDL	BDL	BDL	

BDL = Below the Detection Limit



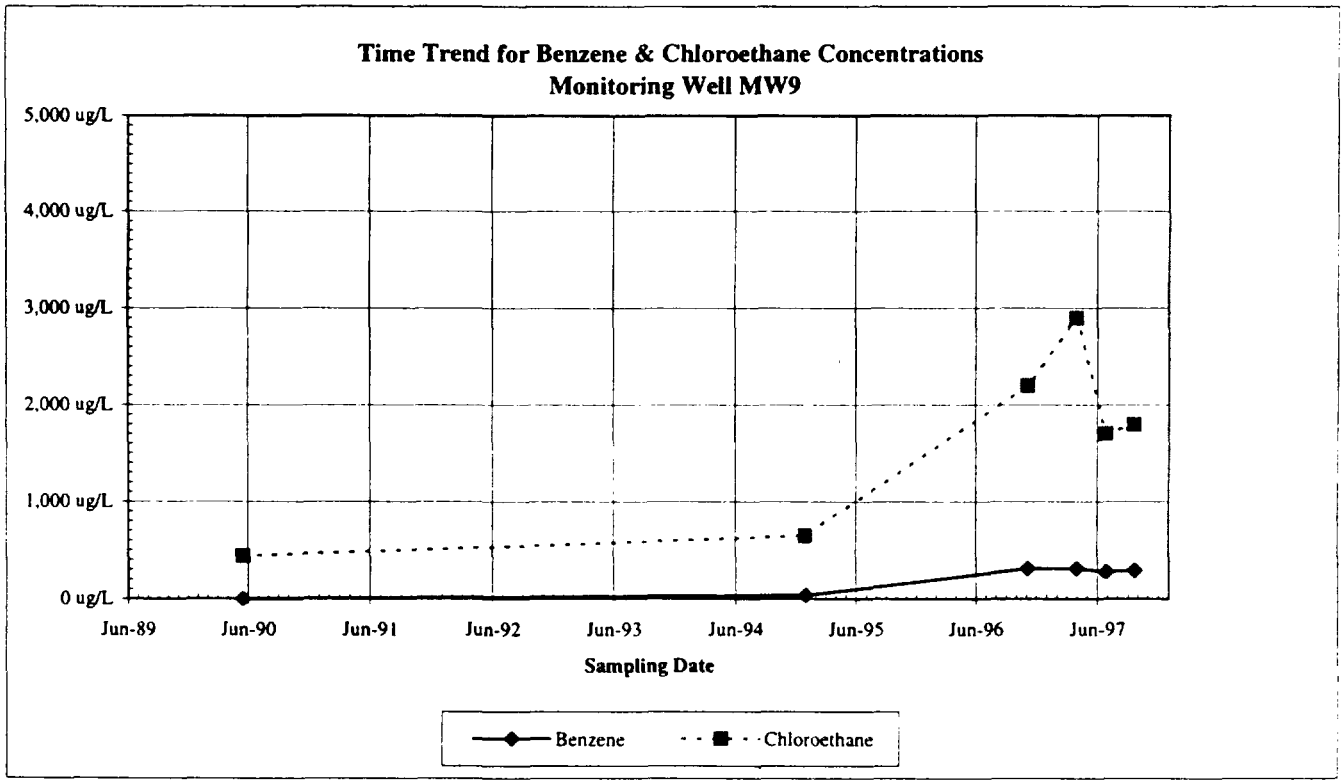
Lower Aquifer Monitoring Well: MW9

Baseline Groundwater Monitoring

ACS NPL Site

Monitoring Well	Sampling Dates							
MW9	Aug-89	May-90	Jan-95	Nov-96	Apr-97	Jun-97	Sep-97	Dec-97
Benzene		BDL	40 ug/L	310 ug/L	310 ug/L	280 ug/L	290 ug/L	
Chloroethane		440 ug/L	650 ug/L	2,200 ug/L	2,900 ug/L	1,700 ug/L	1,800 ug/L	

BDL = Below the Detection Limit

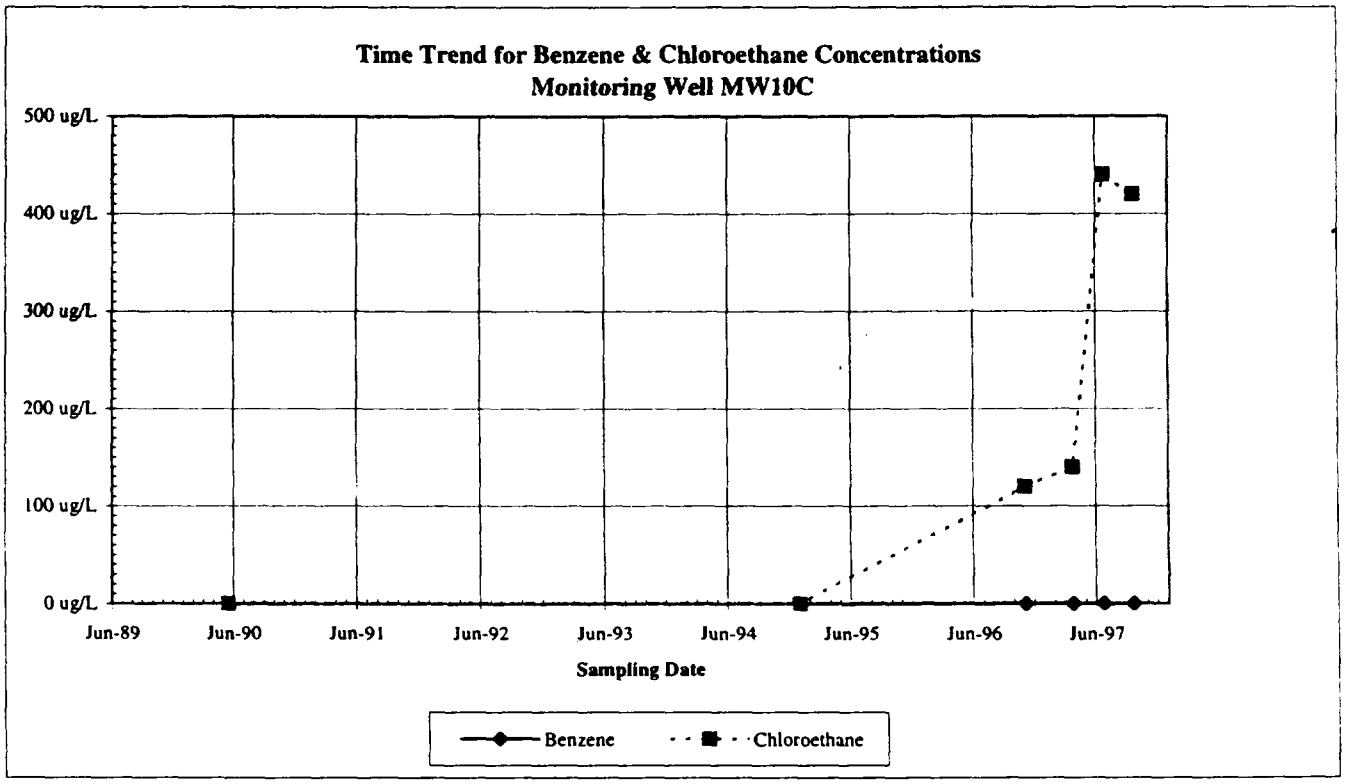


Lower Aquifer Monitoring Well: MW10C

Baseline Groundwater Monitoring
ACS NPL Site

Monitoring Well	Sampling Dates							
MW10C	Aug-89	May-90	Jan-95	Nov-96	Mar-97	Jun-97	Sep-97	Dec-97
Benzene		BDL	BDL	BDL	BDL	BDL	BDL	
Chloroethane		BDL	BDL	120 ug/L	140 ug/L	440 ug/L	420 ug/L	

BDL = Below the Detection Limit



Historical Detections in the Upper Aquifer Wells

Well	Analyte	Date	Result	DVQ	LQ	Unit
Inorganics						
MW02	Aluminum	8/2/89	280			ug/L
MW02	Ammonia	8/2/89	4000			ug/L
MW02	Ammonia	5/21/90	4000			ug/L
MW02	Arsenic	8/2/89	13		N	ug/L
MW02	Arsenic	5/21/90	4		K	ug/L
MW02	Barium	8/2/89	250			ug/L
MW02	Calcium	8/2/89	168000		*	ug/L
MW02	Calcium	5/21/90	193000			ug/L
MW02	Chloride	5/21/90	30000			ug/L
MW02	Iron	8/2/89	261		*	ug/L
MW02	Iron	5/21/90	9460			ug/L
MW02	Magnesium	5/21/90	28600			ug/L
MW02	Manganese	8/2/89	1120			ug/L
MW02	Manganese	5/21/90	889			ug/L
MW02	Potassium	8/2/89	6110	J	N	ug/L
MW02	Potassium	5/21/90	4940		K	ug/L
MW02	Sodium	5/21/90	12700			ug/L
MW02	Vanadium	5/21/90	2	J	KN	ug/L
MW02	Zinc	5/21/90	21			ug/L
MW03	Ammonia	8/2/89	11000			ug/L
MW03	Ammonia	5/21/90	9000			ug/L
MW03	Arsenic	8/2/89	31		N	ug/L
MW03	Arsenic	5/21/90	43			ug/L
MW03	Arsenic	12/30/94	46			ug/L
MW03	Barium	8/2/89	520			ug/L
MW03	Barium	5/21/90	270			ug/L
MW03	Calcium	8/2/89	218000		*	ug/L
MW03	Calcium	5/21/90	208000			ug/L
MW03	Chloride	8/2/89	200000			ug/L
MW03	Chloride	5/21/90	187000			ug/L
MW03	Iron	8/2/89	10800		*	ug/L
MW03	Iron	5/21/90	51000			ug/L
MW03	Magnesium	5/21/90	17600		K	ug/L
MW03	Manganese	8/2/89	4050			ug/L
MW03	Manganese	5/21/90	472			ug/L
MW03	Manganese	12/30/94	598			ug/L
MW03	Nickel	8/2/89	53			ug/L
MW03	Potassium	8/2/89	14600	J	N	ug/L
MW03	Potassium	5/21/90	12300			ug/L
MW03	Sodium	5/21/90	58400			ug/L
MW03	Vanadium	8/2/89	20	J	KNS	ug/L
MW03	Vanadium	5/21/90	6	J	KNS	ug/L
MW03	Zinc	8/2/89	343			ug/L
MW03	Zinc	5/21/90	16		K	ug/L
MW04	Aluminum	8/3/89	250			ug/L
MW04	Ammonia	8/3/89	6000			ug/L
MW04	Ammonia	5/21/90	4000			ug/L
MW04	Arsenic	8/3/89	4		KN	ug/L
MW04	Arsenic	12/30/94	16			ug/L
MW04	Barium	8/3/89	350			ug/L
MW04	Barium	5/21/90	280			ug/L
MW04	Cadmium	8/3/89	3		K	ug/L
MW04	Calcium	8/3/89	183000		*	ug/L
MW04	Calcium	5/21/90	172000			ug/L
MW04	Chloride	8/3/89	346000			ug/L

Historical Detections in the Upper Aquifer Wells

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW04	Chloride	5/21/90	517000			ug/L
MW04	Cyanide (total)	8/3/89	10	J	N*	ug/L
MW04	Iron	8/3/89	11800		*	ug/L
MW04	Iron	5/21/90	39000			ug/L
MW04	Magnesium	8/3/89	31500	J	K	ug/L
MW04	Magnesium	5/21/90	28600			ug/L
MW04	Manganese	8/3/89	4250			ug/L
MW04	Manganese	5/21/90	4040			ug/L
MW04	Manganese	12/30/94	3890			ug/L
MW04	Nickel	8/3/89	48			ug/L
MW04	Potassium	8/3/89	6360	J	N	ug/L
MW04	Potassium	5/21/90	4900		K	ug/L
MW04	Selenium	8/3/89	6	J	N+	ug/L
MW04	Sodium	8/3/89	154000			ug/L
MW04	Sodium	5/21/90	252000			ug/L
MW04	Thallium	12/30/94	4		BS	ug/L
MW04	Vanadium	5/21/90	4	J	KN	ug/L
MW04	Zinc	8/3/89	510			ug/L
MW04	Zinc	5/21/90	24			ug/L
MW05	Ammonia	8/3/89	6000			ug/L
MW05	Ammonia	5/21/90	4000			ug/L
MW05	Arsenic	8/3/89	14		N	ug/L
MW05	Arsenic	5/21/90	16			ug/L
MW05	Arsenic	12/30/94	57		S	ug/L
MW05	Barium	8/3/89	480			ug/L
MW05	Barium	5/21/90	790			ug/L
MW05	Calcium	8/3/89	202000		*	ug/L
MW05	Calcium	5/21/90	219000			ug/L
MW05	Chloride	8/3/89	169000			ug/L
MW05	Chloride	5/21/90	694000			ug/L
MW05	Iron	8/3/89	438		*	ug/L
MW05	Iron	5/21/90	40000			ug/L
MW05	Magnesium	5/21/90	27100			ug/L
MW05	Manganese	8/3/89	2720			ug/L
MW05	Manganese	5/21/90	3240			ug/L
MW05	Manganese	12/30/94	3250			ug/L
MW05	Potassium	8/3/89	8700	J	N	ug/L
MW05	Potassium	5/21/90	8260			ug/L
MW05	Sodium	8/3/89	174000			ug/L
MW05	Sodium	5/21/90	444000			ug/L
MW05	Thallium	12/30/94	1		B	ug/L
MW05	Vanadium	5/21/90	2	J	KN	ug/L
MW05	Zinc	8/3/89	174			ug/L
MW05	Zinc	5/21/90	11		K	ug/L
MW06	Aluminum	11/7/96	150		B	ug/L
MW06	Aluminum	7/1/97	106		B	ug/L
MW06	Aluminum	9/23/97	180	J	BN	ug/L
MW06	Ammonia	8/1/89	4000			ug/L
MW06	Ammonia	5/21/90	2000			ug/L
MW06	Arsenic	8/1/89	18		N	ug/L
MW06	Arsenic	5/21/90	8		K	ug/L
MW06	Arsenic	12/30/94	105		S	ug/L
MW06	Arsenic	11/7/96	72			ug/L
MW06	Arsenic	4/3/97	11			ug/L
MW06	Arsenic	7/1/97	16			ug/L
MW06	Arsenic	9/23/97	42			ug/L

Historical Detections in the Upper Aquifer Wells

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW06	Barium	8/1/89	380			ug/L
MW06	Barium	5/21/90	260			ug/L
MW06	Barium	11/7/96	281			ug/L
MW06	Barium	4/3/97	182		B	ug/L
MW06	Barium	7/1/97	168		B	ug/L
MW06	Barium	9/23/97	369			ug/L
MW06	Cadmium	5/21/90	0		K	ug/L
MW06	Calcium	8/1/89	185000		*	ug/L
MW06	Calcium	5/21/90	211000			ug/L
MW06	Calcium	11/7/96	216000			ug/L
MW06	Calcium	4/3/97	177000			ug/L
MW06	Calcium	7/1/97	174000			ug/L
MW06	Calcium	9/23/97	174000	J		ug/L
MW06	Chloride	8/1/89	144000			ug/L
MW06	Chloride	5/21/90	350000			ug/L
MW06	Chromium	11/7/96	24			ug/L
MW06	Chromium	4/3/97	20			ug/L
MW06	Chromium	7/1/97	11			ug/L
MW06	Chromium	9/23/97	33			ug/L
MW06	Cobalt	11/7/96	4		B	ug/L
MW06	Cobalt	4/3/97	4		B	ug/L
MW06	Cobalt	7/1/97	3		B	ug/L
MW06	Cobalt	9/23/97	2		B	ug/L
MW06	Copper	11/7/96	8		B	ug/L
MW06	Copper	4/3/97	52			ug/L
MW06	Copper	7/1/97	15		B	ug/L
MW06	Cyanide	4/3/97	17			ug/L
MW06	Cyanide	7/1/97	15			ug/L
MW06	Iron	8/1/89	1480		*	ug/L
MW06	Iron	5/21/90	2540			ug/L
MW06	Iron	11/7/96	16500			ug/L
MW06	Iron	4/3/97	1590			ug/L
MW06	Iron	7/1/97	3230			ug/L
MW06	Iron	9/23/97	14300			ug/L
MW06	Lead	11/7/96	8			ug/L
MW06	Lead	4/3/97	1		B	ug/L
MW06	Lead	7/1/97	10			ug/L
MW06	Lead	9/23/97	9			ug/L
MW06	Magnesium	5/21/90	36800			ug/L
MW06	Magnesium	11/7/96	37600			ug/L
MW06	Magnesium	4/3/97	32200			ug/L
MW06	Magnesium	7/1/97	34400			ug/L
MW06	Magnesium	9/23/97	34200	J		ug/L
MW06	Manganese	8/1/89	3870			ug/L
MW06	Manganese	5/21/90	3990			ug/L
MW06	Manganese	12/30/94	889			ug/L
MW06	Manganese	11/7/96	2900			ug/L
MW06	Manganese	4/3/97	486			ug/L
MW06	Manganese	7/1/97	1580			ug/L
MW06	Manganese	9/23/97	2170			ug/L
MW06	Nickel	8/1/89	48			ug/L
MW06	Nickel	11/7/96	39		B	ug/L
MW06	Nickel	4/3/97	33		B	ug/L
MW06	Nickel	7/1/97	17		B	ug/L
MW06	Nickel	9/23/97	25		B	ug/L
MW06	Potassium	8/1/89	7800	J	N	ug/L

Historical Detections in the Upper Aquifer Wells

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW06	Potassium	5/21/90	7610			ug/L
MW06	Potassium	11/7/96	27400	J	E	ug/L
MW06	Potassium	4/3/97	24100	J	E	ug/L
MW06	Potassium	7/1/97	19000			ug/L
MW06	Potassium	9/23/97	16900	J	E	ug/L
MW06	Selenium	8/1/89	2	J	KNS	ug/L
MW06	Sodium	8/1/89	143000			ug/L
MW06	Sodium	5/21/90	312000			ug/L
MW06	Sodium	11/7/96	121000			ug/L
MW06	Sodium	4/3/97	449000	J	E	ug/L
MW06	Sodium	7/1/97	134000			ug/L
MW06	Sodium	9/23/97	79300	J	E	ug/L
MW06	Vanadium	8/1/89	26	J	KNS	ug/L
MW06	Vanadium	11/7/96	4		B	ug/L
MW06	Zinc	8/1/89	886			ug/L
MW06	Zinc	5/21/90	51			ug/L
MW11	Aluminum	5/16/90	270			ug/L
MW11	Aluminum	11/5/96	1460			ug/L
MW11	Aluminum	3/25/97	1470	J	EN	ug/L
MW11	Aluminum	6/24/97	633			ug/L
MW11	Aluminum	9/29/97	421			ug/L
MW11	Ammonia	5/16/90	0			ug/L
MW11	Arsenic	1/3/95	11			ug/L
MW11	Barium	11/5/96	24		B	ug/L
MW11	Barium	3/25/97	21		B	ug/L
MW11	Barium	6/24/97	17		B	ug/L
MW11	Barium	9/29/97	27		B	ug/L
MW11	Cadmium	7/11/90	0		K	ug/L
MW11	Calcium	5/16/90	63200			ug/L
MW11	Calcium	7/11/90	39200			ug/L
MW11	Calcium	11/5/96	44300			ug/L
MW11	Calcium	3/25/97	38300			ug/L
MW11	Calcium	6/24/97	33400	J	E	ug/L
MW11	Calcium	9/29/97	35700			ug/L
MW11	Chloride	5/16/90	17000			ug/L
MW11	Chloride	7/11/90	33000			ug/L
MW11	Chromium	3/25/97	3		B	ug/L
MW11	Chromium	6/24/97	5		B	ug/L
MW11	Chromium	9/29/97	3		B	ug/L
MW11	Cobalt	11/5/96	2		B	ug/L
MW11	Cobalt	3/25/97	2		B	ug/L
MW11	Cobalt	6/24/97	2		B	ug/L
MW11	Cobalt	9/29/97	1		B	ug/L
MW11	Copper	11/5/96	11		B	ug/L
MW11	Copper	6/24/97	8		B	ug/L
MW11	Iron	5/16/90	581			ug/L
MW11	Iron	7/11/90	522			ug/L
MW11	Iron	11/5/96	2910			ug/L
MW11	Iron	3/25/97	2010			ug/L
MW11	Iron	6/24/97	2280			ug/L
MW11	Iron	9/29/97	1600			ug/L
MW11	Lead	3/25/97	5			ug/L
MW11	Magnesium	5/16/90	19000		K	ug/L
MW11	Magnesium	7/11/90	17000	J	N	ug/L
MW11	Magnesium	11/5/96	18200			ug/L
MW11	Magnesium	3/25/97	16300			ug/L

Historical Detections in the Upper Aquifer Wells

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW11	Magnesium	6/24/97	13400			ug/L
MW11	Magnesium	9/29/97	11400			ug/L
MW11	Manganese	5/16/90	359			ug/L
MW11	Manganese	7/11/90	265			ug/L
MW11	Manganese	1/3/95	253			ug/L
MW11	Manganese	11/5/96	145			ug/L
MW11	Manganese	3/25/97	139			ug/L
MW11	Manganese	6/24/97	128			ug/L
MW11	Manganese	9/29/97	525			ug/L
MW11	Nickel	11/5/96	9		B	ug/L
MW11	Nickel	3/25/97	7		B	ug/L
MW11	Nickel	6/24/97	8		B	ug/L
MW11	Nickel	9/29/97	4		B	ug/L
MW11	Potassium	5/16/90	1200		KN	ug/L
MW11	Potassium	7/11/90	1220		KN	ug/L
MW11	Potassium	11/5/96	2450		B	ug/L
MW11	Potassium	3/25/97	1880	J	BE	ug/L
MW11	Potassium	6/24/97	1590		B	ug/L
MW11	Potassium	9/29/97	1150	J	BE	ug/L
MW11	Sodium	5/16/90	5200			ug/L
MW11	Sodium	7/11/90	4400		KN	ug/L
MW11	Sodium	11/5/96	4460		B	ug/L
MW11	Sodium	6/24/97	4410		B	ug/L
MW11	Vanadium	5/16/90	2		K	ug/L
MW11	Vanadium	11/5/96	6		B	ug/L
MW11	Vanadium	3/25/97	4		B	ug/L
MW11	Vanadium	6/24/97	4		B	ug/L
MW11	Vanadium	9/29/97	1		B	ug/L
MW11	Zinc	5/16/90	33			ug/L
MW11	Zinc	7/11/90	51			ug/L
MW11	Zinc	11/5/96	91			ug/L
MW11	Zinc	6/24/97	23			ug/L
MW12	Aluminum	11/5/96	361			ug/L
MW12	Aluminum	3/25/97	2020	J	EN	ug/L
MW12	Aluminum	6/24/97	786			ug/L
MW12	Aluminum	10/1/97	1690			ug/L
MW12	Ammonia	5/16/90	0			ug/L
MW12	Ammonia	7/11/90	4000			ug/L
MW12	Arsenic	7/11/90	2		K	ug/L
MW12	Arsenic	1/3/95	4		B	ug/L
MW12	Arsenic	11/5/96	6		B	ug/L
MW12	Arsenic	3/25/97	8		B	ug/L
MW12	Arsenic	10/1/97	8	J	B	ug/L
MW12	Barium	11/5/96	86		B	ug/L
MW12	Barium	3/25/97	83		B	ug/L
MW12	Barium	6/24/97	48		B	ug/L
MW12	Barium	10/1/97	72		B	ug/L
MW12	Cadmium	5/16/90	0		K	ug/L
MW12	Cadmium	3/25/97	2		B	ug/L
MW12	Calcium	5/16/90	62800			ug/L
MW12	Calcium	7/11/90	58600			ug/L
MW12	Calcium	11/5/96	54100			ug/L
MW12	Calcium	3/25/97	45900			ug/L
MW12	Calcium	6/24/97	43900	J	E	ug/L
MW12	Calcium	10/1/97	47400			ug/L
MW12	Chloride	5/16/90	46000			ug/L

Historical Detections in the Upper Aquifer Wells

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW12	Chloride	7/11/90	58000			ug/L
MW12	Chromium	3/25/97	12			ug/L
MW12	Chromium	6/24/97	5		B	ug/L
MW12	Chromium	10/1/97	9	J	B	ug/L
MW12	Chromium (total)	7/11/90	1		K	ug/L
MW12	Cobalt	3/25/97	2		B	ug/L
MW12	Cobalt	6/24/97	1		B	ug/L
MW12	Cobalt	10/1/97	2	J	B	ug/L
MW12	Copper	11/5/96	9	J	B	ug/L
MW12	Copper	3/25/97	17		B	ug/L
MW12	Copper	6/24/97	6		B	ug/L
MW12	Copper	10/1/97	15	J	B	ug/L
MW12	Iron	5/16/90	955			ug/L
MW12	Iron	7/11/90	2720			ug/L
MW12	Iron	11/5/96	22500			ug/L
MW12	Iron	3/25/97	30100			ug/L
MW12	Iron	6/24/97	10800			ug/L
MW12	Iron	10/1/97	24400			ug/L
MW12	Lead	11/5/96	14	J		ug/L
MW12	Lead	3/25/97	11			ug/L
MW12	Lead	10/1/97	12			ug/L
MW12	Magnesium	5/16/90	15400		K	ug/L
MW12	Magnesium	7/11/90	17700	J	N	ug/L
MW12	Magnesium	11/5/96	18400			ug/L
MW12	Magnesium	3/25/97	17500			ug/L
MW12	Magnesium	6/24/97	15700			ug/L
MW12	Magnesium	10/1/97	17300			ug/L
MW12	Manganese	5/16/90	1490			ug/L
MW12	Manganese	7/11/90	1450			ug/L
MW12	Manganese	1/3/95	1430			ug/L
MW12	Manganese	11/5/96	1310			ug/L
MW12	Manganese	3/25/97	1050			ug/L
MW12	Manganese	6/24/97	1070			ug/L
MW12	Manganese	10/1/97	1210			ug/L
MW12	Mercury	7/11/90	2			ug/L
MW12	Nickel	11/5/96	6	J	B	ug/L
MW12	Nickel	3/25/97	13		B	ug/L
MW12	Nickel	6/24/97	4		B	ug/L
MW12	Nickel	10/1/97	7		B	ug/L
MW12	Potassium	5/16/90	3380		KN	ug/L
MW12	Potassium	7/11/90	3510		KN	ug/L
MW12	Potassium	11/5/96	4660		B	ug/L
MW12	Potassium	3/25/97	2860	J	BE	ug/L
MW12	Potassium	6/24/97	2610		B	ug/L
MW12	Potassium	10/1/97	2930	J	BE	ug/L
MW12	Selenium	11/5/96	2		B	ug/L
MW12	Sodium	5/16/90	19800			ug/L
MW12	Sodium	7/11/90	23100		N	ug/L
MW12	Sodium	11/5/96	19300			ug/L
MW12	Sodium	6/24/97	8690			ug/L
MW12	Vanadium	5/16/90	2		K	ug/L
MW12	Vanadium	11/5/96	19	J	B	ug/L
MW12	Vanadium	3/25/97	24		B	ug/L
MW12	Vanadium	6/24/97	8		B	ug/L
MW12	Vanadium	10/1/97	20		B	ug/L
MW12	Zinc	7/11/90	15		K	ug/L

Historical Detections in the Upper Aquifer Wells

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW13	Aluminum	11/7/96	232			ug/L
MW13	Aluminum	3/25/97	96		B	ug/L
MW13	Aluminum	6/27/97	427			ug/L
MW13	Ammonia	5/16/90	1000			ug/L
MW13	Arsenic	7/11/90	2		K	ug/L
MW13	Arsenic	1/4/95	2		B	ug/L
MW13	Barium	5/16/90	230			ug/L
MW13	Barium	11/7/96	66		B	ug/L
MW13	Barium	3/25/97	55		B	ug/L
MW13	Barium	6/27/97	68		B	ug/L
MW13	Barium	10/1/97	68		B	ug/L
MW13	Cadmium	5/16/90	0		K	ug/L
MW13	Calcium	5/16/90	166000			ug/L
MW13	Calcium	7/11/90	112000			ug/L
MW13	Calcium	11/7/96	118000			ug/L
MW13	Calcium	3/25/97	103000			ug/L
MW13	Calcium	6/27/97	107000			ug/L
MW13	Calcium	10/1/97	130000			ug/L
MW13	Chloride	5/16/90	139000			ug/L
MW13	Chloride	7/11/90	47000			ug/L
MW13	Cobalt	11/7/96	2		B	ug/L
MW13	Cobalt	6/27/97	2		B	ug/L
MW13	Iron	5/16/90	393			ug/L
MW13	Iron	7/11/90	504			ug/L
MW13	Iron	11/7/96	5240			ug/L
MW13	Iron	3/25/97	6090			ug/L
MW13	Iron	6/27/97	5780			ug/L
MW13	Iron	10/1/97	4420			ug/L
MW13	Magnesium	5/16/90	41500		K	ug/L
MW13	Magnesium	7/11/90	29100	J	N	ug/L
MW13	Magnesium	11/7/96	32000			ug/L
MW13	Magnesium	3/25/97	27800			ug/L
MW13	Magnesium	6/27/97	30000			ug/L
MW13	Magnesium	10/1/97	37000			ug/L
MW13	Manganese	5/16/90	1100			ug/L
MW13	Manganese	7/11/90	852			ug/L
MW13	Manganese	1/4/95	996			ug/L
MW13	Manganese	11/7/96	674			ug/L
MW13	Manganese	3/25/97	657			ug/L
MW13	Manganese	6/27/97	656			ug/L
MW13	Manganese	10/1/97	604			ug/L
MW13	Nickel	11/7/96	3		B	ug/L
MW13	Potassium	5/16/90	2170		KN	ug/L
MW13	Potassium	7/11/90	1480		KN	ug/L
MW13	Potassium	11/7/96	2940	J	BE	ug/L
MW13	Potassium	3/25/97	1900	J	BE	ug/L
MW13	Potassium	10/1/97	2020	J	BE	ug/L
MW13	Sodium	5/16/90	46500			ug/L
MW13	Sodium	7/11/90	21200		N	ug/L
MW13	Sodium	11/7/96	27800			ug/L
MW13	Sodium	3/25/97	30700			ug/L
MW13	Sodium	6/27/97	35700			ug/L
MW13	Sodium	10/1/97	24600	J	E	ug/L
MW13	Vanadium	11/7/96	2		B	ug/L
MW13	Vanadium	6/27/97	2		B	ug/L
MW13	Zinc	5/16/90	14		K	ug/L

Historical Detections in the Upper Aquifer Wells

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW13	Zinc	7/11/90	11		K	ug/L
MW14	Aluminum	11/6/96	780			ug/L
MW14	Aluminum	3/27/97	2550			ug/L
MW14	Aluminum	6/30/97	13800			ug/L
MW14	Aluminum	9/29/97	7180			ug/L
MW14	Ammonia	5/17/90	1000			ug/L
MW14	Ammonia	7/11/90	1000			ug/L
MW14	Antimony	6/30/97	2		B	ug/L
MW14	Arsenic	7/11/90	3		KS	ug/L
MW14	Arsenic	1/4/95	25		S	ug/L
MW14	Arsenic	6/30/97	11			ug/L
MW14	Arsenic	9/29/97	9		B	ug/L
MW14	Barium	7/11/90	230			ug/L
MW14	Barium	11/6/96	122		B	ug/L
MW14	Barium	3/27/97	33		B	ug/L
MW14	Barium	6/30/97	112		B	ug/L
MW14	Barium	9/29/97	88		B	ug/L
MW14	Calcium	5/17/90	32100			ug/L
MW14	Calcium	7/11/90	124000			ug/L
MW14	Calcium	11/6/96	142000			ug/L
MW14	Calcium	3/27/97	26100			ug/L
MW14	Calcium	6/30/97	104000			ug/L
MW14	Calcium	9/29/97	96400			ug/L
MW14	Chloride	5/17/90	18000			ug/L
MW14	Chloride	7/11/90	61000			ug/L
MW14	Chromium	3/27/97	12			ug/L
MW14	Chromium	6/30/97	36			ug/L
MW14	Chromium	9/29/97	26			ug/L
MW14	Chromium (total)	7/11/90	2		K	ug/L
MW14	Cobalt	11/6/96	9		B	ug/L
MW14	Cobalt	3/27/97	2		B	ug/L
MW14	Cobalt	6/30/97	12		B	ug/L
MW14	Cobalt	9/29/97	8		B	ug/L
MW14	Copper	11/6/96	11		B	ug/L
MW14	Copper	6/30/97	26			ug/L
MW14	Copper	9/29/97	32			ug/L
MW14	Iron	5/17/90	289			ug/L
MW14	Iron	7/11/90	1020			ug/L
MW14	Iron	11/6/96	1650			ug/L
MW14	Iron	3/27/97	5610			ug/L
MW14	Iron	6/30/97	33000			ug/L
MW14	Iron	9/29/97	25900			ug/L
MW14	Lead	11/6/96	10	J		ug/L
MW14	Lead	3/27/97	17			ug/L
MW14	Lead	6/30/97	19			ug/L
MW14	Lead	9/29/97	20			ug/L
MW14	Magnesium	5/17/90	7270			ug/L
MW14	Magnesium	7/11/90	18200	J	N	ug/L
MW14	Magnesium	11/6/96	26200			ug/L
MW14	Magnesium	3/27/97	6830			ug/L
MW14	Magnesium	6/30/97	25600			ug/L
MW14	Magnesium	9/29/97	22000			ug/L
MW14	Manganese	5/17/90	281			ug/L
MW14	Manganese	7/11/90	1130			ug/L
MW14	Manganese	1/4/95	1400			ug/L
MW14	Manganese	11/6/96	831			ug/L

Historical Detections in the Upper Aquifer Wells

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW14	Manganese	3/27/97	60			ug/L
MW14	Manganese	6/30/97	351			ug/L
MW14	Manganese	9/29/97	290			ug/L
MW14	Nickel	11/6/96	17		B	ug/L
MW14	Nickel	3/27/97	9		B	ug/L
MW14	Nickel	9/29/97	22		B	ug/L
MW14	Potassium	5/17/90	3980		KN	ug/L
MW14	Potassium	7/11/90	3350		KN	ug/L
MW14	Potassium	11/6/96	12500			ug/L
MW14	Potassium	3/27/97	2770	J	BE	ug/L
MW14	Potassium	9/29/97	6440	J	E	ug/L
MW14	Selenium	6/30/97	2		B	ug/L
MW14	Sodium	5/17/90	17600			ug/L
MW14	Sodium	7/11/90	18500		N	ug/L
MW14	Sodium	11/6/96	37900			ug/L
MW14	Sodium	3/27/97	3610		B	ug/L
MW14	Sodium	6/30/97	9460			ug/L
MW14	Vanadium	5/17/90	2		K	ug/L
MW14	Vanadium	11/6/96	4		B	ug/L
MW14	Vanadium	3/27/97	6		B	ug/L
MW14	Vanadium	6/30/97	34		B	ug/L
MW14	Vanadium	9/29/97	21		B	ug/L
MW14	Zinc	5/17/90	10		K	ug/L
MW14	Zinc	7/11/90	23			ug/L
MW14	Zinc	6/30/97	63			ug/L
MW14	Zinc	9/29/97	59			ug/L
MW15	Aluminum	4/3/97	472			ug/L
MW15	Aluminum	6/25/97	308			ug/L
MW15	Aluminum	9/23/97	487	J	N	ug/L
MW15	Ammonia	5/17/90	53000			ug/L
MW15	Ammonia	7/11/90	52000			ug/L
MW15	Antimony	4/3/97	1		B	ug/L
MW15	Arsenic	5/17/90	10		K	ug/L
MW15	Arsenic	7/11/90	22			ug/L
MW15	Arsenic	1/5/95	40		S	ug/L
MW15	Arsenic	11/7/96	59			ug/L
MW15	Arsenic	4/3/97	37			ug/L
MW15	Arsenic	6/25/97	41			ug/L
MW15	Arsenic	9/23/97	58			ug/L
MW15	Barium	5/17/90	590			ug/L
MW15	Barium	7/11/90	1130			ug/L
MW15	Barium	11/7/96	1470			ug/L
MW15	Barium	4/3/97	1240			ug/L
MW15	Barium	6/25/97	1070	J	E	ug/L
MW15	Barium	9/23/97	1360			ug/L
MW15	Calcium	5/17/90	35900			ug/L
MW15	Calcium	7/11/90	37900			ug/L
MW15	Calcium	11/7/96	94100			ug/L
MW15	Calcium	4/3/97	78800			ug/L
MW15	Calcium	6/25/97	67900	J	E	ug/L
MW15	Calcium	9/23/97	73000	J		ug/L
MW15	Chloride	5/17/90	347000			ug/L
MW15	Chloride	7/11/90	554000			ug/L
MW15	Chromium	4/3/97	5		B	ug/L
MW15	Chromium	9/23/97	13			ug/L
MW15	Cobalt	11/7/96	5		B	ug/L

Historical Detections in the Upper Aquifer Wells

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW15	Cobalt	4/3/97	4		B	ug/L
MW15	Cobalt	6/25/97	4		B	ug/L
MW15	Cobalt	9/23/97	5		B	ug/L
MW15	Copper	4/3/97	26			ug/L
MW15	Copper	9/23/97	13	J	B	ug/L
MW15	Iron	5/17/90	487			ug/L
MW15	Iron	7/11/90	2460			ug/L
MW15	Iron	11/7/96	7900			ug/L
MW15	Iron	4/3/97	5550			ug/L
MW15	Iron	6/25/97	5510	J	E	ug/L
MW15	Iron	9/23/97	7010			ug/L
MW15	Lead	5/17/90	5		S	ug/L
MW15	Lead	9/23/97	1		B	ug/L
MW15	Magnesium	5/17/90	57400			ug/L
MW15	Magnesium	7/11/90	78800	J	N	ug/L
MW15	Magnesium	11/7/96	93100			ug/L
MW15	Magnesium	4/3/97	73600			ug/L
MW15	Magnesium	6/25/97	66800	J	E	ug/L
MW15	Magnesium	9/23/97	74300	J		ug/L
MW15	Manganese	5/17/90	962			ug/L
MW15	Manganese	7/11/90	521			ug/L
MW15	Manganese	1/5/95	1000			ug/L
MW15	Manganese	11/7/96	534			ug/L
MW15	Manganese	4/3/97	276			ug/L
MW15	Manganese	6/25/97	167	J	E	ug/L
MW15	Manganese	9/23/97	141			ug/L
MW15	Nickel	11/7/96	23		B	ug/L
MW15	Nickel	4/3/97	19		B	ug/L
MW15	Nickel	6/25/97	19		B	ug/L
MW15	Nickel	9/23/97	24		B	ug/L
MW15	Potassium	5/17/90	86400		N	ug/L
MW15	Potassium	7/11/90	95800		N	ug/L
MW15	Potassium	11/7/96	122000	J	E	ug/L
MW15	Potassium	4/3/97	102000	J	E	ug/L
MW15	Potassium	6/25/97	96500	J	E	ug/L
MW15	Potassium	9/23/97	118000	J	E	ug/L
MW15	Sodium	5/17/90	230000			ug/L
MW15	Sodium	7/11/90	370000	J	N	ug/L
MW15	Sodium	11/7/96	459000			ug/L
MW15	Sodium	4/3/97	311000	J	E	ug/L
MW15	Sodium	6/25/97	347000	J	E	ug/L
MW15	Sodium	9/23/97	415000	J	E	ug/L
MW15	Vanadium	11/7/96	2		B	ug/L
MW15	Vanadium	9/23/97	1		B	ug/L
MW15	Zinc	5/17/90	35			ug/L
MW15	Zinc	7/11/90	10		K	ug/L
MW16	Ammonia	5/17/90	36000			ug/L
MW16	Ammonia	7/11/90	51000			ug/L
MW16	Arsenic	5/17/90	14			ug/L
MW16	Arsenic	7/11/90	19			ug/L
MW16	Arsenic	1/4/95	16			ug/L
MW16	Barium	5/17/90	1710			ug/L
MW16	Barium	7/11/90	1840			ug/L
MW16	Calcium	5/17/90	159000			ug/L
MW16	Calcium	7/11/90	1040000			ug/L
MW16	Chloride	5/17/90	1800000			ug/L

Historical Detections in the Upper Aquifer Wells

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW16	Chloride	7/11/90	1610000			ug/L
MW16	Chromium (total)	5/17/90	4		KS	ug/L
MW16	Chromium (total)	7/11/90	3		KS	ug/L
MW16	Iron	5/17/90	157000			ug/L
MW16	Iron	7/11/90	218000			ug/L
MW16	Lead	5/17/90	3		S	ug/L
MW16	Magnesium	5/17/90	73200			ug/L
MW16	Magnesium	7/11/90	64600	J	N	ug/L
MW16	Manganese	5/17/90	4180			ug/L
MW16	Manganese	7/11/90	3500			ug/L
MW16	Manganese	1/4/95	1010			ug/L
MW16	Potassium	5/17/90	15300		N	ug/L
MW16	Potassium	7/11/90	18200		N	ug/L
MW16	Sodium	5/17/90	352000			ug/L
MW16	Sodium	7/11/90	298000	J	N	ug/L
MW16	Thallium	5/17/90	3		KS	ug/L
MW16	Thallium	7/11/90	4		KS	ug/L
MW16	Zinc	5/17/90	62			ug/L
MW16	Zinc	7/11/90	23			ug/L
MW17	Ammonia	5/16/90	1000			ug/L
MW17	Arsenic	12/30/94	3		B	ug/L
MW17	Calcium	5/16/90	107000			ug/L
MW17	Calcium	7/12/90	98700			ug/L
MW17	Chloride	5/16/90	40000			ug/L
MW17	Chloride	7/12/90	71000			ug/L
MW17	Iron	5/16/90	170			ug/L
MW17	Iron	7/12/90	384			ug/L
MW17	Magnesium	5/16/90	25500		K	ug/L
MW17	Magnesium	7/12/90	30200	J	N	ug/L
MW17	Manganese	5/16/90	1600			ug/L
MW17	Manganese	7/12/90	1050			ug/L
MW17	Manganese	12/30/94	640			ug/L
MW17	Potassium	5/16/90	6180		N	ug/L
MW17	Potassium	7/12/90	6260		N	ug/L
MW17	Sodium	5/16/90	25500			ug/L
MW17	Sodium	7/12/90	29000		N	ug/L
MW17	Zinc	7/12/90	10		K	ug/L
MW18	Barium	11/5/96	35		B	ug/L
MW18	Barium	3/27/97	34		B	ug/L
MW18	Barium	6/25/97	25	J	BE	ug/L
MW18	Barium	9/29/97	32		B	ug/L
MW18	Calcium	7/12/90	36600			ug/L
MW18	Calcium	11/5/96	81600			ug/L
MW18	Calcium	3/27/97	88500			ug/L
MW18	Calcium	6/25/97	63700	J	E	ug/L
MW18	Calcium	9/29/97	64200			ug/L
MW18	Chloride	7/12/90	59000			ug/L
MW18	Chromium	11/5/96	17			ug/L
MW18	Chromium	3/27/97	30			ug/L
MW18	Chromium	9/29/97	71			ug/L
MW18	Cobalt	11/5/96	1		B	ug/L
MW18	Copper	3/27/97	3		B	ug/L
MW18	Copper	9/29/97	13		B	ug/L
MW18	Iron	11/5/96	288			ug/L
MW18	Iron	3/27/97	165	J	N	ug/L
MW18	Lead	11/5/96	2	J	B	ug/L

Historical Detections in the Upper Aquifer Wells

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW18	Lead	3/27/97	2		B	ug/L
MW18	Lead	6/25/97	6			ug/L
MW18	Lead	9/29/97	14			ug/L
MW18	Magnesium	7/12/90	11200	J	N	ug/L
MW18	Magnesium	11/5/96	28500			ug/L
MW18	Magnesium	3/27/97	27300			ug/L
MW18	Magnesium	6/25/97	19600	J	E	ug/L
MW18	Magnesium	9/29/97	18900			ug/L
MW18	Manganese	12/30/95	441			ug/L
MW18	Manganese	11/5/96	609			ug/L
MW18	Manganese	3/27/97	83			ug/L
MW18	Manganese	6/25/97	24	J	E	ug/L
MW18	Manganese	9/29/97	85			ug/L
MW18	Nickel	3/27/97	3		B	ug/L
MW18	Nickel	9/29/97	6		B	ug/L
MW18	Nitrate	9/30/97	5000			ug/L
MW18	Potassium	7/12/90	1700		KN	ug/L
MW18	Potassium	11/5/96	3850		B	ug/L
MW18	Potassium	3/27/97	2420		B	ug/L
MW18	Potassium	6/25/97	2720	J	BE	ug/L
MW18	Potassium	9/29/97	3220	J	BE	ug/L
MW18	Selenium	11/5/96	3		B	ug/L
MW18	Selenium	6/25/97	3		B	ug/L
MW18	Selenium	9/29/97	4		B	ug/L
MW18	Sodium	7/12/90	52600		N	ug/L
MW18	Sodium	11/5/96	34400			ug/L
MW18	Sodium	3/27/97	64600	J	E	ug/L
MW18	Sodium	6/25/97	67700	J	E	ug/L
MW18	Sodium	9/29/97	67500	J	E	ug/L
MW18	Sulfate	6/25/97	50000			ug/L
MW18	Vanadium	11/5/96	1		B	ug/L
MW18	Vanadium	9/29/97	2		B	ug/L
MW18	Zinc	7/12/90	14		K	ug/L
MW19	Aluminum	11/5/96	283			ug/L
MW19	Aluminum	3/27/97	322			ug/L
MW19	Aluminum	6/30/97	421			ug/L
MW19	Aluminum	9/29/97	402			ug/L
MW19	Arsenic	12/30/94	17			ug/L
MW19	Arsenic	11/5/96	27			ug/L
MW19	Arsenic	6/30/97	21			ug/L
MW19	Arsenic	9/29/97	27			ug/L
MW19	Barium	11/5/96	673			ug/L
MW19	Barium	3/27/97	666			ug/L
MW19	Barium	6/30/97	587			ug/L
MW19	Barium	9/29/97	648			ug/L
MW19	Calcium	11/5/96	79400			ug/L
MW19	Calcium	3/27/97	72700			ug/L
MW19	Calcium	6/30/97	73400			ug/L
MW19	Calcium	9/29/97	85300			ug/L
MW19	Chromium	3/27/97	6		B	ug/L
MW19	Chromium	6/30/97	10			ug/L
MW19	Chromium	9/29/97	8		B	ug/L
MW19	Cobalt	11/5/96	1		B	ug/L
MW19	Cobalt	3/27/97	2		B	ug/L
MW19	Cobalt	6/30/97	2		B	ug/L
MW19	Cobalt	9/29/97	2		B	ug/L

Historical Detections in the Upper Aquifer Wells

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW19	Copper	3/27/97	5		B	ug/L
MW19	Copper	9/29/97	184			ug/L
MW19	Iron	11/5/96	4810			ug/L
MW19	Iron	3/27/97	4630	J	N	ug/L
MW19	Iron	6/30/97	4370			ug/L
MW19	Iron	9/29/97	4660			ug/L
MW19	Lead	11/5/96	2	J	B	ug/L
MW19	Lead	6/30/97	4			ug/L
MW19	Lead	9/29/97	2		B	ug/L
MW19	Magnesium	11/5/96	67700			ug/L
MW19	Magnesium	3/27/97	65000			ug/L
MW19	Magnesium	6/30/97	56200			ug/L
MW19	Magnesium	9/29/97	63900			ug/L
MW19	Manganese	12/30/94	317			ug/L
MW19	Manganese	11/5/96	268			ug/L
MW19	Manganese	3/27/97	165			ug/L
MW19	Manganese	6/30/97	243			ug/L
MW19	Manganese	9/29/97	243			ug/L
MW19	Nickel	11/5/96	18		B	ug/L
MW19	Nickel	3/27/97	19		B	ug/L
MW19	Nickel	6/30/97	16		B	ug/L
MW19	Nickel	9/29/97	17		B	ug/L
MW19	Potassium	11/5/96	113000			ug/L
MW19	Potassium	3/27/97	114000			ug/L
MW19	Potassium	6/30/97	86800			ug/L
MW19	Potassium	9/29/97	98000	J	E	ug/L
MW19	Sodium	11/5/96	772000			ug/L
MW19	Sodium	3/27/97	975000	J	E	ug/L
MW19	Sodium	6/30/97	663000			ug/L
MW19	Sodium	9/29/97	719000	J	E	ug/L
MW19	Thallium	12/30/94	2		BS	ug/L
MW19	Thallium	11/5/96	2		B	ug/L
MW19	Thallium	6/30/97	4		B	ug/L
MW19	Vanadium	6/30/97	2		B	ug/L
MW20	Arsenic	12/30/94	5		B	ug/L
MW20	Manganese	12/30/94	1170			ug/L
MW20	Thallium	12/30/94	2		BS	ug/L
MW37	Aluminum	8/7/96	1410			ug/L
MW37	Aluminum	6/25/97	664			ug/L
MW37	Aluminum	9/26/97	1310			ug/L
MW37	Arsenic	9/26/97	2		B	ug/L
MW37	Barium	8/7/96	24		B	ug/L
MW37	Barium	3/25/97	17		B	ug/L
MW37	Barium	6/25/97	22		B	ug/L
MW37	Barium	9/26/97	34		B	ug/L
MW37	Beryllium	8/7/96	0		B	ug/L
MW37	Beryllium	9/26/97	1		B	ug/L
MW37	Cadmium	8/7/96	0		B	ug/L
MW37	Calcium	8/7/96	34300			ug/L
MW37	Calcium	3/25/97	32700			ug/L
MW37	Calcium	6/25/97	27400	J	E	ug/L
MW37	Calcium	9/26/97	84200			ug/L
MW37	Chromium	3/25/97	2		B	ug/L
MW37	Chromium	6/25/97	4		B	ug/L
MW37	Chromium	9/26/97	7		B	ug/L
MW37	Cobalt	3/25/97	4		B	ug/L

Historical Detections in the Upper Aquifer Wells

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW37	Cobalt	6/25/97	5		B	ug/L
MW37	Cobalt	9/26/97	6		B	ug/L
MW37	Copper	6/25/97	7		B	ug/L
MW37	Copper	9/26/97	12		B	ug/L
MW37	Iron	3/25/97	1850			ug/L
MW37	Iron	6/25/97	2140			ug/L
MW37	Iron	9/26/97	9440			ug/L
MW37	Lead	3/25/97	4			ug/L
MW37	Magnesium	8/7/96	9160			ug/L
MW37	Magnesium	3/25/97	10800			ug/L
MW37	Magnesium	6/25/97	9490			ug/L
MW37	Magnesium	9/26/97	26600			ug/L
MW37	Manganese	8/7/96	273	J	E*	ug/L
MW37	Manganese	3/25/97	165			ug/L
MW37	Manganese	6/25/97	154			ug/L
MW37	Manganese	9/26/97	682			ug/L
MW37	Nickel	3/25/97	5		B	ug/L
MW37	Nickel	6/25/97	9		B	ug/L
MW37	Nickel	9/26/97	14		B	ug/L
MW37	Potassium	8/7/96	1500		B	ug/L
MW37	Potassium	3/25/97	1300	J	BE	ug/L
MW37	Potassium	6/25/97	1050		B	ug/L
MW37	Potassium	9/26/97	2060	J	BE	ug/L
MW37	Selenium	3/25/97	0			ug/L
MW37	Sodium	8/7/96	5460			ug/L
MW37	Sodium	6/25/97	5620			ug/L
MW37	Sodium	9/26/97	17300			ug/L
MW37	Vanadium	3/25/97	1		B	ug/L
MW37	Vanadium	6/25/97	2		B	ug/L
MW37	Vanadium	9/26/97	3		B	ug/L
MW38	Aluminum	3/25/97	791			ug/L
MW38	Aluminum	6/25/97	134		B	ug/L
MW38	Aluminum	9/25/97	1280			ug/L
MW38	Arsenic	8/7/96	4		B	ug/L
MW38	Arsenic	9/25/97	5		B	ug/L
MW38	Barium	8/7/96	36		B	ug/L
MW38	Barium	3/25/97	28		B	ug/L
MW38	Barium	6/25/97	33	J	BE	ug/L
MW38	Barium	9/25/97	54		B	ug/L
MW38	Calcium	8/7/96	63500			ug/L
MW38	Calcium	3/25/97	30600			ug/L
MW38	Calcium	6/25/97	54900	J	E	ug/L
MW38	Calcium	9/25/97	57800			ug/L
MW38	Chromium	9/25/97	9		B	ug/L
MW38	Cobalt	3/25/97	2		B	ug/L
MW38	Cobalt	6/25/97	7		B	ug/L
MW38	Cobalt	9/25/97	2		B	ug/L
MW38	Copper	9/25/97	14		B	ug/L
MW38	Iron	8/7/96	6440	J	*	ug/L
MW38	Iron	3/25/97	12800			ug/L
MW38	Iron	6/25/97	1940	J	E	ug/L
MW38	Iron	9/25/97	16200			ug/L
MW38	Lead	3/25/97	8			ug/L
MW38	Magnesium	8/7/96	22000			ug/L
MW38	Magnesium	3/25/97	10100			ug/L
MW38	Magnesium	6/25/97	19400	J	E	ug/L

Historical Detections in the Upper Aquifer Wells

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW38	Magnesium	9/25/97	20500			ug/L
MW38	Manganese	8/7/96	511	J	E*	ug/L
MW38	Manganese	3/25/97	250			ug/L
MW38	Manganese	6/25/97	1270	J	E	ug/L
MW38	Manganese	9/25/97	594			ug/L
MW38	Nickel	6/25/97	22		B	ug/L
MW38	Nickel	9/25/97	12		B	ug/L
MW38	Potassium	8/7/96	494		B	ug/L
MW38	Potassium	6/25/97	593	J	BE	ug/L
MW38	Potassium	9/25/97	959	J	BE	ug/L
MW38	Sodium	8/7/96	5130			ug/L
MW38	Sodium	3/25/97	4190		B	ug/L
MW38	Sodium	6/25/97	5400	J	E	ug/L
MW38	Vanadium	3/25/97	10		B	ug/L
MW38	Vanadium	6/25/97	3		B	ug/L
MW38	Vanadium	9/25/97	14		B	ug/L
MW38	Zinc	9/25/97	56			ug/L
MW39	Aluminum	3/25/97	520			ug/L
MW39	Aluminum	6/25/97	153		B	ug/L
MW39	Aluminum	9/25/97	366			ug/L
MW39	Arsenic	8/6/96	2		B	ug/L
MW39	Barium	8/6/96	81		B	ug/L
MW39	Barium	3/25/97	95		B	ug/L
MW39	Barium	6/25/97	68	J	BE	ug/L
MW39	Barium	9/25/97	78		B	ug/L
MW39	Calcium	8/6/96	125000			ug/L
MW39	Calcium	3/25/97	118000			ug/L
MW39	Calcium	6/25/97	101000	J	E	ug/L
MW39	Calcium	9/25/97	110000			ug/L
MW39	Chromium	3/25/97	6		B	ug/L
MW39	Chromium	9/25/97	7		B	ug/L
MW39	Cobalt	3/25/97	1		B	ug/L
MW39	Iron	8/6/96	9710	J	*	ug/L
MW39	Iron	3/25/97	17300			ug/L
MW39	Iron	6/25/97	6730	J	E	ug/L
MW39	Iron	9/25/97	7300			ug/L
MW39	Lead	3/25/97	4			ug/L
MW39	Magnesium	8/6/96	22300			ug/L
MW39	Magnesium	3/25/97	20600			ug/L
MW39	Magnesium	6/25/97	17500	J	E	ug/L
MW39	Magnesium	9/25/97	19200			ug/L
MW39	Manganese	8/6/96	1060	J	E*	ug/L
MW39	Manganese	3/25/97	876			ug/L
MW39	Manganese	6/25/97	779	J	E	ug/L
MW39	Manganese	9/25/97	802			ug/L
MW39	Nickel	8/6/96	712	J	*	ug/L
MW39	Nickel	9/25/97	7		B	ug/L
MW39	Potassium	8/6/96	5180			ug/L
MW39	Potassium	3/25/97	6610	J	E	ug/L
MW39	Potassium	6/25/97	7290	J	E	ug/L
MW39	Potassium	9/25/97	8190	J	E	ug/L
MW39	Sodium	8/6/96	117000			ug/L
MW39	Sodium	3/25/97	118000			ug/L
MW39	Sodium	6/25/97	110000	J	E	ug/L
MW39	Sodium	9/25/97	123000			ug/L
MW39	Sulfate	6/25/97	13000			ug/L

Historical Detections in the Upper Aquifer Wells

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW39	Thallium	8/6/96	1		B	ug/L
MW39	Vanadium	3/25/97	2		B	ug/L
MW40	Aluminum	8/7/96	406			ug/L
MW40	Aluminum	3/25/97	2040			ug/L
MW40	Aluminum	6/26/97	941			ug/L
MW40	Aluminum	9/29/97	2140			ug/L
MW40	Arsenic	8/7/96	1		B	ug/L
MW40	Barium	8/7/96	26		B	ug/L
MW40	Barium	3/25/97	27		B	ug/L
MW40	Barium	6/26/97	24		B	ug/L
MW40	Barium	9/29/97	24		B	ug/L
MW40	Beryllium	8/7/96	0	J	BN	ug/L
MW40	Calcium	8/7/96	30000			ug/L
MW40	Calcium	3/25/97	14700			ug/L
MW40	Calcium	6/26/97	17200			ug/L
MW40	Calcium	9/29/97	34100			ug/L
MW40	Chromium	3/25/97	4		B	ug/L
MW40	Chromium	9/29/97	5		B	ug/L
MW40	Cobalt	3/25/97	3		B	ug/L
MW40	Cobalt	6/26/97	3		B	ug/L
MW40	Cobalt	9/29/97	3		B	ug/L
MW40	Copper	9/29/97	21		B	ug/L
MW40	Iron	3/25/97	3470			ug/L
MW40	Iron	6/26/97	3060			ug/L
MW40	Iron	9/29/97	6430			ug/L
MW40	Lead	3/25/97	7			ug/L
MW40	Magnesium	8/7/96	9540			ug/L
MW40	Magnesium	3/25/97	6160			ug/L
MW40	Magnesium	9/29/97	14100			ug/L
MW40	Manganese	8/7/96	852	J	E*	ug/L
MW40	Manganese	3/25/97	296			ug/L
MW40	Manganese	6/26/97	365			ug/L
MW40	Manganese	9/29/97	198			ug/L
MW40	Nickel	9/29/97	10		B	ug/L
MW40	Potassium	8/7/96	1280		B	ug/L
MW40	Potassium	3/25/97	1270	J	BE	ug/L
MW40	Potassium	9/29/97	2220	J	BE	ug/L
MW40	Sodium	8/7/96	4120		B	ug/L
MW40	Sodium	3/25/97	7800			ug/L
MW40	Sodium	6/26/97	3320		B	ug/L
MW40	Vanadium	3/25/97	4		B	ug/L
MW40	Vanadium	6/26/97	3		B	ug/L
MW40	Vanadium	9/29/97	12		B	ug/L
MW41	Aluminum	3/25/97	1040			ug/L
MW41	Aluminum	6/25/97	289	J		ug/L
MW41	Aluminum	9/29/97	486			ug/L
MW41	Barium	8/7/96	19		B	ug/L
MW41	Barium	3/25/97	31		B	ug/L
MW41	Barium	6/25/97	17	J	BE	ug/L
MW41	Barium	9/29/97	28		B	ug/L
MW41	Calcium	8/7/96	44000			ug/L
MW41	Calcium	3/25/97	36200			ug/L
MW41	Calcium	6/25/97	33300	J	E	ug/L
MW41	Calcium	9/29/97	55200			ug/L
MW41	Chromium	3/25/97	7		B	ug/L
MW41	Chromium	9/29/97	7		B	ug/L

Historical Detections in the Upper Aquifer Wells

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW41	Cobalt	9/29/97	1		B	ug/L
MW41	Copper	3/25/97	16		B	ug/L
MW41	Copper	9/29/97	12		B	ug/L
MW41	Iron	3/25/97	1170			ug/L
MW41	Iron	6/25/97	302	J	E	ug/L
MW41	Lead	3/25/97	13			ug/L
MW41	Lead	6/25/97	10	J		ug/L
MW41	Lead	9/29/97	3			ug/L
MW41	Magnesium	8/7/96	13300			ug/L
MW41	Magnesium	3/25/97	11300			ug/L
MW41	Magnesium	6/25/97	10900	J	E	ug/L
MW41	Magnesium	9/29/97	18500			ug/L
MW41	Manganese	8/7/96	414	J	E*	ug/L
MW41	Manganese	3/25/97	324			ug/L
MW41	Manganese	6/25/97	73	J	E	ug/L
MW41	Manganese	9/29/97	280			ug/L
MW41	Nickel	9/29/97	8		B	ug/L
MW41	Potassium	8/7/96	331		B	ug/L
MW41	Potassium	3/25/97	597	J	BE	ug/L
MW41	Potassium	6/25/97	359	J	BE	ug/L
MW41	Potassium	9/29/97	964	J	BE	ug/L
MW41	Sodium	8/7/96	3480		B	ug/L
MW41	Sodium	3/25/97	5950			ug/L
MW41	Sodium	6/25/97	2900	J	BE	ug/L
MW41	Vanadium	3/25/97	3		B	ug/L
MW41	Vanadium	6/25/97	1		B	ug/L
MW41	Vanadium	9/29/97	1		B	ug/L
MW42	Aluminum	8/7/96	808			ug/L
MW42	Aluminum	3/25/97	752			ug/L
MW42	Aluminum	6/26/97	725			ug/L
MW42	Aluminum	9/26/97	1880			ug/L
MW42	Arsenic	8/7/96	2		B	ug/L
MW42	Arsenic	3/25/97	14			ug/L
MW42	Arsenic	6/26/97	8		B	ug/L
MW42	Arsenic	9/26/97	13			ug/L
MW42	Barium	8/7/96	90		B	ug/L
MW42	Barium	3/25/97	83		B	ug/L
MW42	Barium	6/26/97	71	J	BE	ug/L
MW42	Barium	9/26/97	97		B	ug/L
MW42	Calcium	8/7/96	139000			ug/L
MW42	Calcium	3/25/97	133000			ug/L
MW42	Calcium	6/26/97	105000	J	E	ug/L
MW42	Calcium	9/26/97	118000			ug/L
MW42	Chromium	3/25/97	5		B	ug/L
MW42	Chromium	9/26/97	14			ug/L
MW42	Cobalt	3/25/97	2		B	ug/L
MW42	Cobalt	6/26/97	2		B	ug/L
MW42	Cobalt	9/26/97	2		B	ug/L
MW42	Copper	3/25/97	19		B	ug/L
MW42	Copper	9/26/97	22		B	ug/L
MW42	Iron	3/25/97	9920	J	N	ug/L
MW42	Iron	6/26/97	6300	J	E	ug/L
MW42	Iron	9/26/97	11100			ug/L
MW42	Lead	3/25/97	3		B	ug/L
MW42	Magnesium	8/7/96	49800			ug/L
MW42	Magnesium	3/25/97	49000			ug/L

Historical Detections in the Upper Aquifer Wells

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW42	Magnesium	6/26/97	38700	J	E	ug/L
MW42	Magnesium	9/26/97	44400			ug/L
MW42	Manganese	8/7/96	928	J	E*	ug/L
MW42	Manganese	3/25/97	796			ug/L
MW42	Manganese	6/26/97	597	J	E	ug/L
MW42	Manganese	9/26/97	697			ug/L
MW42	Nickel	3/25/97	7		B	ug/L
MW42	Nickel	9/26/97	12		B	ug/L
MW42	Potassium	8/7/96	1700		B	ug/L
MW42	Potassium	3/25/97	1380		B	ug/L
MW42	Potassium	6/26/97	1540	J	EB	ug/L
MW42	Potassium	9/26/97	2350	J	BE	ug/L
MW42	Sodium	8/7/96	12700			ug/L
MW42	Sodium	3/25/97	14700	J	E	ug/L
MW42	Sodium	6/26/97	11400	J	E	ug/L
MW42	Sodium	9/26/97	18000			ug/L
MW42	Vanadium	3/25/97	2		B	ug/L
MW42	Vanadium	6/26/97	2		B	ug/L
MW42	Vanadium	9/26/97	4		B	ug/L
MW43	Aluminum	8/8/96	2920			ug/L
MW43	Aluminum	3/26/97	10100			ug/L
MW43	Aluminum	6/26/97	4270			ug/L
MW43	Aluminum	9/26/97	12700			ug/L
MW43	Arsenic	8/8/96	18		S	ug/L
MW43	Arsenic	3/26/97	35			ug/L
MW43	Arsenic	6/26/97	31			ug/L
MW43	Arsenic	9/26/97	81			ug/L
MW43	Barium	8/8/96	63		B	ug/L
MW43	Barium	3/26/97	88		B	ug/L
MW43	Barium	6/26/97	81	J	BE	ug/L
MW43	Barium	9/26/97	128		B	ug/L
MW43	Beryllium	9/26/97	2		B	ug/L
MW43	Cadmium	9/26/97	1		B	ug/L
MW43	Calcium	8/8/96	115000			ug/L
MW43	Calcium	3/26/97	128000			ug/L
MW43	Calcium	6/26/97	123000	J	E	ug/L
MW43	Calcium	9/26/97	134000			ug/L
MW43	Chromium	3/26/97	26			ug/L
MW43	Chromium	6/26/97	26			ug/L
MW43	Chromium	9/26/97	95			ug/L
MW43	Chromium (total)	8/8/96	36			ug/L
MW43	Cobalt	3/26/97	13		B	ug/L
MW43	Cobalt	6/26/97	8		B	ug/L
MW43	Cobalt	9/26/97	20		B	ug/L
MW43	Copper	3/26/97	45			ug/L
MW43	Copper	6/26/97	39			ug/L
MW43	Copper	9/26/97	75			ug/L
MW43	Iron	8/8/96	13900	J	*	ug/L
MW43	Iron	3/26/97	29200	J	N	ug/L
MW43	Iron	6/26/97	22200	J	E	ug/L
MW43	Iron	9/26/97	47500			ug/L
MW43	Lead	3/26/97	21			ug/L
MW43	Lead	6/26/97	16			ug/L
MW43	Lead	9/26/97	33			ug/L
MW43	Magnesium	8/8/96	48100			ug/L
MW43	Magnesium	3/26/97	55000			ug/L

Historical Detections in the Upper Aquifer Wells

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW43	Magnesium	6/26/97	55400	J	E	ug/L
MW43	Magnesium	9/26/97	63600			ug/L
MW43	Manganese	8/8/96	374	J	E*	ug/L
MW43	Manganese	3/26/97	666			ug/L
MW43	Manganese	6/26/97	586	J	E	ug/L
MW43	Manganese	9/26/97	857			ug/L
MW43	Nickel	3/26/97	29		B	ug/L
MW43	Nickel	6/26/97	23		B	ug/L
MW43	Nickel	9/26/97	82			ug/L
MW43	Potassium	8/8/96	1800		B	ug/L
MW43	Potassium	3/26/97	4230		B	ug/L
MW43	Potassium	6/26/97	2770	J	BE	ug/L
MW43	Potassium	9/26/97	5610	J	E	ug/L
MW43	Selenium	9/26/97	2		B	ug/L
MW43	Sodium	8/8/96	10100			ug/L
MW43	Sodium	3/26/97	9210	J	E	ug/L
MW43	Sodium	6/26/97	10300	J	E	ug/L
MW43	Vanadium	3/26/97	25		B	ug/L
MW43	Vanadium	6/26/97	13		B	ug/L
MW43	Vanadium	9/26/97	31		B	ug/L
MW43	Zinc	9/26/97	104			ug/L
MW44	Aluminum	3/26/97	394			ug/L
MW44	Aluminum	6/26/97	1710			ug/L
MW44	Aluminum	9/29/97	457			ug/L
MW44	Arsenic	8/8/96	6		BS	ug/L
MW44	Arsenic	6/26/97	41			ug/L
MW44	Arsenic	9/29/97	11			ug/L
MW44	Barium	8/8/96	106		B	ug/L
MW44	Barium	3/26/97	115		B	ug/L
MW44	Barium	6/26/97	150	J	BE	ug/L
MW44	Barium	9/29/97	112		B	ug/L
MW44	Calcium	8/8/96	90500			ug/L
MW44	Calcium	3/26/97	90900			ug/L
MW44	Calcium	6/26/97	85700	J	E	ug/L
MW44	Calcium	9/29/97	83300			ug/L
MW44	Chromium	3/26/97	2		B	ug/L
MW44	Chromium	6/26/97	31			ug/L
MW44	Cobalt	6/26/97	2		B	ug/L
MW44	Copper	3/26/97	4		B	ug/L
MW44	Copper	6/26/97	27			ug/L
MW44	Copper	9/29/97	4		B	ug/L
MW44	Iron	3/26/97	2170	J	N	ug/L
MW44	Iron	6/26/97	14700	J	E	ug/L
MW44	Iron	9/29/97	2510			ug/L
MW44	Lead	3/26/97	1		B	ug/L
MW44	Magnesium	8/8/96	37200			ug/L
MW44	Magnesium	3/26/97	37100			ug/L
MW44	Magnesium	6/26/97	36100	J	E	ug/L
MW44	Magnesium	9/29/97	34500			ug/L
MW44	Manganese	8/8/96	38	J	E*	ug/L
MW44	Manganese	3/26/97	46			ug/L
MW44	Manganese	6/26/97	108	J	E	ug/L
MW44	Manganese	9/29/97	44			ug/L
MW44	Nickel	3/26/97	4		B	ug/L
MW44	Nickel	6/26/97	18		B	ug/L
MW44	Potassium	8/8/96	990		B	ug/L

Historical Detections in the Upper Aquifer Wells

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW44	Potassium	3/26/97	1260		B	ug/L
MW44	Potassium	6/26/97	2040	J	BE	ug/L
MW44	Potassium	9/29/97	1370	J	BE	ug/L
MW44	Sodium	8/8/96	19700			ug/L
MW44	Sodium	3/26/97	20200	J	E	ug/L
MW44	Sodium	6/26/97	17400	J	E	ug/L
MW44	Sodium	9/29/97	18900	J	E	ug/L
MW44	Vanadium	6/26/97	4		B	ug/L
MW45	Aluminum	8/8/96	776			ug/L
MW45	Aluminum	4/2/97	148		B	ug/L
MW45	Antimony	4/2/97	1		B	ug/L
MW45	Arsenic	8/8/96	22			ug/L
MW45	Arsenic	4/2/97	17			ug/L
MW45	Arsenic	6/26/97	24			ug/L
MW45	Arsenic	9/29/97	44			ug/L
MW45	Barium	8/8/96	84		B	ug/L
MW45	Barium	4/2/97	117		B	ug/L
MW45	Barium	6/26/97	84		B	ug/L
MW45	Barium	9/29/97	110		B	ug/L
MW45	Calcium	8/8/96	97100			ug/L
MW45	Calcium	4/2/97	120000			ug/L
MW45	Calcium	6/26/97	89100			ug/L
MW45	Calcium	9/29/97	112000			ug/L
MW45	Chromium	4/2/97	12			ug/L
MW45	Chromium (total)	8/8/96	29			ug/L
MW45	Cobalt	4/2/97	4		B	ug/L
MW45	Cobalt	6/26/97	3		B	ug/L
MW45	Cobalt	9/29/97	3		B	ug/L
MW45	Copper	4/2/97	48			ug/L
MW45	Copper	9/29/97	9		B	ug/L
MW45	Iron	8/8/96	9570	J	*	ug/L
MW45	Iron	4/2/97	11400			ug/L
MW45	Iron	6/26/97	10100			ug/L
MW45	Iron	9/29/97	15900			ug/L
MW45	Lead	8/8/96	38		S	ug/L
MW45	Lead	6/26/97	12			ug/L
MW45	Lead	9/29/97	9			ug/L
MW45	Magnesium	8/8/96	27500			ug/L
MW45	Magnesium	4/2/97	32200			ug/L
MW45	Magnesium	6/26/97	23200			ug/L
MW45	Magnesium	9/29/97	28400			ug/L
MW45	Manganese	8/8/96	641	J	E*	ug/L
MW45	Manganese	4/2/97	688			ug/L
MW45	Manganese	6/26/97	416			ug/L
MW45	Manganese	9/29/97	480			ug/L
MW45	Nickel	4/2/97	16		B	ug/L
MW45	Nickel	9/29/97	10		B	ug/L
MW45	Potassium	8/8/96	5350			ug/L
MW45	Potassium	4/2/97	7230	J	E	ug/L
MW45	Potassium	9/29/97	8350	J	E	ug/L
MW45	Sodium	8/8/96	70900			ug/L
MW45	Sodium	4/2/97	101000	J	E	ug/L
MW45	Sodium	6/26/97	79000			ug/L
MW45	Sodium	9/29/97	101000	J	E	ug/L
MW46	Aluminum	8/5/96	821			ug/L
MW46	Aluminum	6/24/97	544			ug/L

Historical Detections in the Upper Aquifer Wells

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW46	Arsenic	8/5/96	4		B	ug/L
MW46	Arsenic	3/25/97	2		B	ug/L
MW46	Arsenic	6/24/97	4		B	ug/L
MW46	Arsenic	9/25/97	3		B	ug/L
MW46	Barium	8/5/96	132		B	ug/L
MW46	Barium	3/25/97	129		B	ug/L
MW46	Barium	6/24/97	110		B	ug/L
MW46	Barium	9/25/97	126		B	ug/L
MW46	Cadmium	3/25/97	1		B	ug/L
MW46	Calcium	8/5/96	115000			ug/L
MW46	Calcium	3/25/97	114000			ug/L
MW46	Calcium	6/24/97	112000	J	E	ug/L
MW46	Calcium	9/25/97	115000			ug/L
MW46	Chromium	3/25/97	5		B	ug/L
MW46	Chromium	6/24/97	4		B	ug/L
MW46	Chromium	9/25/97	2		B	ug/L
MW46	Cobalt	3/25/97	2		B	ug/L
MW46	Cobalt	6/24/97	2		B	ug/L
MW46	Copper	6/24/97	5		B	ug/L
MW46	Iron	8/5/96	21700	J	*	ug/L
MW46	Iron	3/25/97	17800			ug/L
MW46	Iron	6/24/97	21000			ug/L
MW46	Iron	9/25/97	19000			ug/L
MW46	Magnesium	8/5/96	30500			ug/L
MW46	Magnesium	3/25/97	32400			ug/L
MW46	Magnesium	6/24/97	29700			ug/L
MW46	Magnesium	9/25/97	30900			ug/L
MW46	Manganese	8/5/96	1510	J	E*	ug/L
MW46	Manganese	3/25/97	1350			ug/L
MW46	Manganese	6/24/97	1390			ug/L
MW46	Manganese	9/25/97	1390			ug/L
MW46	Nickel	3/25/97	5		B	ug/L
MW46	Nickel	6/24/97	5		B	ug/L
MW46	Nickel	9/25/97	4		B	ug/L
MW46	Potassium	8/5/96	1450		B	ug/L
MW46	Potassium	3/25/97	1280	J	BE	ug/L
MW46	Potassium	6/24/97	1300		B	ug/L
MW46	Potassium	9/25/97	1190	J	BE	ug/L
MW46	Sodium	8/5/96	62200			ug/L
MW46	Sodium	3/25/97	74900			ug/L
MW46	Sodium	6/24/97	58600			ug/L
MW46	Sodium	9/25/97	70000			ug/L
MW46	Vanadium	3/25/97	2		B	ug/L
MW46	Vanadium	6/24/97	3		B	ug/L
MW47	Aluminum	3/27/97	533			ug/L
MW47	Aluminum	6/26/97	1630			ug/L
MW47	Aluminum	10/1/97	724	J	N	ug/L
MW47	Barium	3/27/97	8		B	ug/L
MW47	Barium	6/26/97	12		B	ug/L
MW47	Barium	10/1/97	13		B	ug/L
MW47	Cadmium	8/7/96	0		B	ug/L
MW47	Calcium	8/7/96	8530			ug/L
MW47	Calcium	3/27/97	7330			ug/L
MW47	Calcium	6/26/97	6130			ug/L
MW47	Calcium	10/1/97	13700			ug/L
MW47	Chromium	3/27/97	2		B	ug/L

Historical Detections in the Upper Aquifer Wells

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW47	Cobalt	6/26/97	1		B	ug/L
MW47	Cobalt	10/1/97	2		B	ug/L
MW47	Copper	10/1/97	6		B	ug/L
MW47	Iron	3/27/97	405			ug/L
MW47	Iron	6/26/97	1130			ug/L
MW47	Iron	10/1/97	569			ug/L
MW47	Lead	8/7/96	23		S	ug/L
MW47	Lead	3/27/97	2		B	ug/L
MW47	Lead	6/26/97	12			ug/L
MW47	Lead	10/1/97	8			ug/L
MW47	Magnesium	8/7/96	2630		B	ug/L
MW47	Magnesium	3/27/97	2070		B	ug/L
MW47	Magnesium	10/1/97	3990		B	ug/L
MW47	Manganese	8/7/96	27	J	*E	ug/L
MW47	Manganese	3/27/97	8		B	ug/L
MW47	Manganese	6/26/97	16			ug/L
MW47	Manganese	10/1/97	17			ug/L
MW47	Nickel	3/27/97	1		B	ug/L
MW47	Nickel	10/1/97	3		B	ug/L
MW47	Potassium	8/7/96	1090		B	ug/L
MW47	Potassium	3/27/97	590	J	BE	ug/L
MW47	Potassium	10/1/97	959	J	BE	ug/L
MW47	Sodium	8/7/96	3020		B	ug/L
MW47	Sodium	3/27/97	2120		B	ug/L
MW47	Sodium	6/26/97	1780		B	ug/L
MW47	Vanadium	6/26/97	4		B	ug/L
MW47	Vanadium	10/1/97	2		B	ug/L
MW48	Aluminum	9/29/97	330			ug/L
MW48	Antimony	3/27/97	2		B	ug/L
MW48	Arsenic	8/6/96	11			ug/L
MW48	Arsenic	3/27/97	6		B	ug/L
MW48	Arsenic	6/26/97	9		B	ug/L
MW48	Arsenic	9/29/97	12			ug/L
MW48	Barium	8/6/96	160		B	ug/L
MW48	Barium	3/27/97	125		B	ug/L
MW48	Barium	6/26/97	125		B	ug/L
MW48	Barium	9/29/97	141		B	ug/L
MW48	Calcium	8/6/96	142000			ug/L
MW48	Calcium	3/27/97	133000			ug/L
MW48	Calcium	6/26/97	107000			ug/L
MW48	Calcium	9/29/97	107000			ug/L
MW48	Chromium	3/27/97	2		B	ug/L
MW48	Chromium	9/29/97	8		B	ug/L
MW48	Cobalt	3/27/97	3		B	ug/L
MW48	Cobalt	6/26/97	3		B	ug/L
MW48	Cobalt	9/29/97	4		B	ug/L
MW48	Copper	9/29/97	13		B	ug/L
MW48	Iron	8/6/96	30800	J	*	ug/L
MW48	Iron	3/27/97	24900			ug/L
MW48	Iron	6/26/97	23300			ug/L
MW48	Iron	9/29/97	24500			ug/L
MW48	Lead	9/29/97	8			ug/L
MW48	Magnesium	8/6/96	20100			ug/L
MW48	Magnesium	3/27/97	19600			ug/L
MW48	Magnesium	6/26/97	14300			ug/L
MW48	Magnesium	9/29/97	15100			ug/L

Historical Detections in the Upper Aquifer Wells

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW48	Manganese	8/6/96	688	J	E*	ug/L
MW48	Manganese	3/27/97	618			ug/L
MW48	Manganese	6/26/97	504			ug/L
MW48	Manganese	9/29/97	504			ug/L
MW48	Nickel	3/27/97	14		B	ug/L
MW48	Nickel	9/29/97	19		B	ug/L
MW48	Potassium	8/6/96	7560		B	ug/L
MW48	Potassium	3/27/97	6860	J	E	ug/L
MW48	Potassium	9/29/97	8270	J	E	ug/L
MW48	Sodium	8/6/96	52100			ug/L
MW48	Sodium	3/27/97	46300			ug/L
MW48	Sodium	6/26/97	43600			ug/L
MW48	Sodium	9/29/97	42700	J	E	ug/L
MW48	Thallium	8/6/96	1		B	ug/L
MW48	Thallium	3/27/97	4		B	ug/L
MW48	Vanadium	3/27/97	2		B	ug/L
MW48	Vanadium	6/26/97	2		B	ug/L
MW48	Vanadium	9/29/97	2		B	ug/L
MW49	Aluminum	4/3/97	258			ug/L
MW49	Aluminum	6/25/97	273			ug/L
MW49	Aluminum	9/24/97	1130	J	N	ug/L
MW49	Antimony	4/3/97	2		B	ug/L
MW49	Arsenic	8/6/96	24			ug/L
MW49	Arsenic	4/3/97	11			ug/L
MW49	Arsenic	6/25/97	26			ug/L
MW49	Arsenic	9/24/97	37			ug/L
MW49	Barium	8/6/96	96		B	ug/L
MW49	Barium	4/3/97	56		B	ug/L
MW49	Barium	6/25/97	127	J	BE	ug/L
MW49	Barium	9/24/97	120		B	ug/L
MW49	Calcium	8/6/96	81200			ug/L
MW49	Calcium	4/3/97	50700			ug/L
MW49	Calcium	6/25/97	94200	J	E	ug/L
MW49	Calcium	9/24/97	80300	J		ug/L
MW49	Chromium	4/3/97	2		B	ug/L
MW49	Chromium	9/24/97	10		B	ug/L
MW49	Cobalt	4/3/97	2		B	ug/L
MW49	Cobalt	6/25/97	2		B	ug/L
MW49	Cobalt	9/24/97	2		B	ug/L
MW49	Copper	9/24/97	6	J	B	ug/L
MW49	Iron	8/6/96	20100	J	*	ug/L
MW49	Iron	4/3/97	9050			ug/L
MW49	Iron	6/25/97	26700	J	E	ug/L
MW49	Iron	9/24/97	28200			ug/L
MW49	Lead	4/3/97	1		B	ug/L
MW49	Lead	6/25/97	6			ug/L
MW49	Lead	9/24/97	3			ug/L
MW49	Magnesium	8/6/96	10700			ug/L
MW49	Magnesium	4/3/97	7200			ug/L
MW49	Magnesium	6/25/97	11800	J	E	ug/L
MW49	Magnesium	9/24/97	9980	J		ug/L
MW49	Manganese	8/6/96	1950	J	E*	ug/L
MW49	Manganese	4/3/97	810			ug/L
MW49	Manganese	6/25/97	2150	J	E	ug/L
MW49	Manganese	9/24/97	2210			ug/L
MW49	Nickel	4/3/97	10		B	ug/L

Historical Detections in the Upper Aquifer Wells

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW49	Nickel	6/25/97	14		B	ug/L
MW49	Nickel	9/24/97	12		B	ug/L
MW49	Potassium	8/6/96	3760		B	ug/L
MW49	Potassium	4/3/97	1600	J	BE	ug/L
MW49	Potassium	6/25/97	5340	J	E	ug/L
MW49	Potassium	9/24/97	5480	J	E	ug/L
MW49	Sodium	8/6/96	21300			ug/L
MW49	Sodium	4/3/97	12300	J	E	ug/L
MW49	Sodium	6/25/97	29700	J	E	ug/L
MW49	Sodium	9/24/97	25800	J	E	ug/L
MW49	Vanadium	9/24/97	2		B	ug/L
Indicator Parameters						
MW02	Chemical Oxygen Demand	8/2/89	1870000			ug/L
MW02	Chemical Oxygen Demand	5/21/90	223000		N	ug/L
MW02	Dissolved Solids (total)	8/2/89	580000			ug/L
MW02	Dissolved Solids (total)	5/21/90	582000			ug/L
MW02	Nitrate/Nitrite	5/21/90	2000	J		ug/L
MW02	Sulfate	8/2/89	96000			ug/L
MW02	Sulfate	5/21/90	77000			ug/L
MW02	Suspended Solids (total)	8/2/89	20900000	J	*	ug/L
MW02	Suspended Solids (total)	5/21/90	2090000			ug/L
MW02	Total Alkalinity	8/2/89	383000			ug/L
MW02	Total Alkalinity	5/21/90	430000			ug/L
MW02	Total Organic Carbon	8/2/89	66000		*	ug/L
MW02	Total Organic Carbon	5/21/90	16000	J	N	ug/L
MW03	Chemical Oxygen Demand	8/2/89	1540000			ug/L
MW03	Chemical Oxygen Demand	5/21/90	600000		N	ug/L
MW03	Dissolved Solids (total)	8/2/89	956000			ug/L
MW03	Dissolved Solids (total)	5/21/90	904000			ug/L
MW03	Nitrate/Nitrite	5/21/90	1000	J		ug/L
MW03	Sulfate	8/2/89	6000			ug/L
MW03	Sulfate	5/21/90	16000			ug/L
MW03	Suspended Solids (total)	8/2/89	10400000	J	*	ug/L
MW03	Suspended Solids (total)	5/21/90	2720000			ug/L
MW03	Total Alkalinity	8/2/89	470000			ug/L
MW03	Total Alkalinity	5/21/90	661000			ug/L
MW03	Total Organic Carbon	8/2/89	100000		*	ug/L
MW03	Total Organic Carbon	5/21/90	93000	J	N	ug/L
MW04	Chemical Oxygen Demand	8/3/89	1030000			ug/L
MW04	Chemical Oxygen Demand	5/21/90	202000		N	ug/L
MW04	Dissolved Solids (total)	8/3/89	1000000			ug/L
MW04	Dissolved Solids (total)	5/21/90	1260000			ug/L
MW04	Nitrate/Nitrite	5/21/90	1000	J		ug/L
MW04	Sulfate	8/3/89	29000			ug/L
MW04	Sulfate	5/21/90	20000			ug/L
MW04	Suspended Solids (total)	8/3/89	10000000	J	*	ug/L
MW04	Suspended Solids (total)	5/21/90	1180000			ug/L
MW04	Total Alkalinity	8/3/89	357000			ug/L
MW04	Total Alkalinity	5/21/90	323000			ug/L
MW04	Total Organic Carbon	8/3/89	41000		*	ug/L
MW04	Total Organic Carbon	5/21/90	19000	J	N	ug/L
MW05	Chemical Oxygen Demand	8/3/89	2300000			ug/L
MW05	Dissolved Solids (total)	8/3/89	1040000			ug/L
MW05	Dissolved Solids (total)	5/21/90	1730000			ug/L
MW05	Nitrate/Nitrite	5/21/90	1000	J		ug/L
MW05	Sulfate	8/3/89	19000			ug/L

Historical Detections in the Upper Aquifer Wells

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW05	Sulfate	5/21/90	115000			ug/L
MW05	Suspended Solids (total)	8/3/89	15500000	J	*	ug/L
MW05	Suspended Solids (total)	5/21/90	2660000			ug/L
MW05	Total Alkalinity	8/3/89	461000			ug/L
MW05	Total Alkalinity	5/21/90	358000			ug/L
MW05	Total Organic Carbon	8/3/89	55000		*	ug/L
MW05	Total Organic Carbon	5/21/90	19000	J	N	ug/L
MW06	Chemical Oxygen Demand	8/1/89	775000			ug/L
MW06	Chemical Oxygen Demand	5/21/90	227000		N	ug/L
MW06	Dissolved Solids (total)	8/1/89	836000			ug/L
MW06	Dissolved Solids (total)	5/21/90	1110000			ug/L
MW06	Nitrate/Nitrite	5/21/90	2000	J		ug/L
MW06	Sulfate	8/1/89	26000			ug/L
MW06	Sulfate	5/21/90	44000			ug/L
MW06	Suspended Solids (total)	8/1/89	14600000	J	*	ug/L
MW06	Suspended Solids (total)	5/21/90	4170000			ug/L
MW06	Total Alkalinity	8/1/89	591000			ug/L
MW06	Total Alkalinity	5/21/90	492000			ug/L
MW06	Total Organic Carbon	8/1/89	47000		*	ug/L
MW06	Total Organic Carbon	5/21/90	18000	J	N	ug/L
MW11	Chemical Oxygen Demand	5/16/90	78000			ug/L
MW11	Dissolved Solids (total)	5/16/90	280000			ug/L
MW11	Dissolved Solids (total)	7/11/90	300000	J		ug/L
MW11	Sulfate	5/16/90	84000			ug/L
MW11	Sulfate	7/11/90	86000			ug/L
MW11	Suspended Solids (total)	5/16/90	526000			ug/L
MW11	Suspended Solids (total)	7/11/90	2770000			ug/L
MW11	Total Alkalinity	5/16/90	128000			ug/L
MW11	Total Alkalinity	7/11/90	419000			ug/L
MW11	Total Organic Carbon	5/16/90	4000			ug/L
MW11	Total Organic Carbon	7/11/90	8000			ug/L
MW12	Chemical Oxygen Demand	5/16/90	577000			ug/L
MW12	Chemical Oxygen Demand	7/11/90	443000			ug/L
MW12	Dissolved Solids (total)	5/16/90	394000			ug/L
MW12	Dissolved Solids (total)	7/11/90	408000	J		ug/L
MW12	Sulfate	5/16/90	58000			ug/L
MW12	Sulfate	7/11/90	45000			ug/L
MW12	Suspended Solids (total)	5/16/90	9850000			ug/L
MW12	Suspended Solids (total)	7/11/90	15300000			ug/L
MW12	Total Alkalinity	5/16/90	160000			ug/L
MW12	Total Alkalinity	7/11/90	196000			ug/L
MW12	Total Organic Carbon	5/16/90	50000			ug/L
MW12	Total Organic Carbon	7/11/90	57000			ug/L
MW13	Chemical Oxygen Demand	5/16/90	279000			ug/L
MW13	Chemical Oxygen Demand	7/11/90	264000			ug/L
MW13	Dissolved Solids (total)	5/16/90	724000			ug/L
MW13	Dissolved Solids (total)	7/11/90	542000	J		ug/L
MW13	Sulfate	5/16/90	12000			ug/L
MW13	Sulfate	7/11/90	73000			ug/L
MW13	Suspended Solids (total)	5/16/90	1830000			ug/L
MW13	Suspended Solids (total)	7/11/90	7600000			ug/L
MW13	Total Alkalinity	5/16/90	414000			ug/L
MW13	Total Alkalinity	7/11/90	340000			ug/L
MW13	Total Organic Carbon	5/16/90	28000			ug/L
MW13	Total Organic Carbon	7/11/90	30000			ug/L
MW14	Chemical Oxygen Demand	5/17/90	179000			ug/L

Historical Detections in the Upper Aquifer Wells

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW14	Chemical Oxygen Demand	7/11/90	236000			ug/L
MW14	Dissolved Solids (total)	5/17/90	292000			ug/L
MW14	Dissolved Solids (total)	7/11/90	576000	J		ug/L
MW14	Nitrate/Nitrite	5/17/90	4000	J		ug/L
MW14	Sulfate	5/17/90	85000			ug/L
MW14	Sulfate	7/11/90	157000			ug/L
MW14	Suspended Solids (total)	5/17/90	2500000			ug/L
MW14	Suspended Solids (total)	7/11/90	1180000			ug/L
MW14	Total Alkalinity	5/17/90	120000			ug/L
MW14	Total Alkalinity	7/11/90	353000			ug/L
MW14	Total Organic Carbon	5/17/90	29000			ug/L
MW14	Total Organic Carbon	7/11/90	48000			ug/L
MW15	Chemical Oxygen Demand	5/17/90	164000			ug/L
MW15	Chemical Oxygen Demand	7/11/90	194000			ug/L
MW15	Dissolved Solids (total)	5/17/90	1020000			ug/L
MW15	Dissolved Solids (total)	7/11/90	1520000	J		ug/L
MW15	Nitrate/Nitrite	5/17/90	2000	J		ug/L
MW15	Sulfate	5/17/90	42000			ug/L
MW15	Sulfate	7/11/90	16000			ug/L
MW15	Suspended Solids (total)	5/17/90	1060000			ug/L
MW15	Suspended Solids (total)	7/11/90	2910000			ug/L
MW15	Total Alkalinity	5/17/90	584000			ug/L
MW15	Total Alkalinity	7/11/90	687000			ug/L
MW15	Total Organic Carbon	7/11/90	32000			ug/L
MW16	Chemical Oxygen Demand	5/17/90	3080000			ug/L
MW16	Chemical Oxygen Demand	7/11/90	3730000			ug/L
MW16	Dissolved Solids (total)	5/17/90	4760000			ug/L
MW16	Dissolved Solids (total)	7/11/90	5080000	J		ug/L
MW16	Nitrate/Nitrite	5/17/90	4000	J		ug/L
MW16	Sulfate	5/17/90	11000			ug/L
MW16	Suspended Solids (total)	5/17/90	6650000			ug/L
MW16	Suspended Solids (total)	7/11/90	3560000			ug/L
MW16	Total Alkalinity	5/17/90	1370000			ug/L
MW16	Total Alkalinity	7/11/90	1310000			ug/L
MW16	Total Organic Carbon	5/17/90	620000			ug/L
MW16	Total Organic Carbon	7/11/90	900000			ug/L
MW17	Chemical Oxygen Demand	5/16/90	358000			ug/L
MW17	Chemical Oxygen Demand	7/12/90	243000			ug/L
MW17	Dissolved Solids (total)	5/16/90	576000			ug/L
MW17	Dissolved Solids (total)	7/12/90	538000	J		ug/L
MW17	Nitrate/Nitrite	5/16/90	5000	J		ug/L
MW17	Nitrate/Nitrite	7/12/90	1000			ug/L
MW17	Sulfate	5/16/90	141000			ug/L
MW17	Sulfate	7/12/90	96000			ug/L
MW17	Suspended Solids (total)	5/16/90	9740000			ug/L
MW17	Suspended Solids (total)	7/12/90	7120000			ug/L
MW17	Total Alkalinity	5/16/90	214000			ug/L
MW17	Total Alkalinity	7/12/90	244000			ug/L
MW17	Total Organic Carbon	5/16/90	52000			ug/L
MW17	Total Organic Carbon	7/12/90	38000			ug/L
MW18	Chemical Oxygen Demand	7/12/90	46000			ug/L
MW18	Dissolved Solids (total)	7/12/90	340000	J		ug/L
MW18	Nitrate/Nitrite	6/25/97	3000			ug/L
MW18	Nitrate/Nitrite	7/12/90	3000			ug/L
MW18	Sulfate	9/30/97	103000			ug/L
MW18	Sulfate	7/12/90	39000			ug/L

Historical Detections in the Upper Aquifer Wells

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW18	Suspended Solids (total)	7/12/90	147000			ug/L
MW18	TKN	6/25/97	0	J		ug/L
MW18	TKN	9/30/97	0	J		ug/L
MW18	Total Alkalinity	7/12/90	144000			ug/L
MW18	Total Organic Carbon	7/12/90	6000			ug/L
MW18	Total Organic Carbon	6/25/97	4000			ug/L
MW18	Total Organic Carbon	9/30/97	2000			ug/L
MW19	Ammonia-N	6/30/97	48000	J		ug/L
MW19	Ammonia-N	9/30/97	38000			ug/L
MW19	Biochemical Oxygen Demand	6/30/97	21000			ug/L
MW19	Biochemical Oxygen Demand	9/30/97	3000			ug/L
MW19	Sulfate	6/30/97	16000			ug/L
MW19	Sulfate	9/30/97	12000			ug/L
MW19	TKN	6/30/97	45000	J		ug/L
MW19	TKN	9/30/97	40000			ug/L
MW19	Total Organic Carbon	6/30/97	16000			ug/L
MW19	Total Organic Carbon	9/30/97	12000			ug/L
MW38	Ammonia-N	6/25/97	0	J		ug/L
MW38	Ammonia-N	9/25/97	0			ug/L
MW38	Biochemical Oxygen Demand	9/25/97	0			ug/L
MW38	Nitrate	9/25/97	0			ug/L
MW38	Orthophosphate	9/25/97	0			ug/L
MW38	Sulfate	6/25/97	29000			ug/L
MW38	Sulfate	9/25/97	22000			ug/L
MW38	TKN	6/25/97	1000	J		ug/L
MW38	TKN	9/25/97	1000			ug/L
MW38	Total Organic Carbon	6/25/97	10000			ug/L
MW38	Total Organic Carbon	9/25/97	7000			ug/L
MW39	Ammonia-N	6/25/97	4000	J		ug/L
MW39	Ammonia-N	9/25/97	4000			ug/L
MW39	Biochemical Oxygen Demand	9/25/97	0			ug/L
MW39	Nitrate	9/25/97	0			ug/L
MW39	Orthophosphate	9/25/97	0			ug/L
MW39	Sulfate	9/25/97	7000			ug/L
MW39	TKN	6/25/97	4000	J		ug/L
MW39	TKN	9/25/97	4000			ug/L
MW39	Total Organic Carbon	6/25/97	7000			ug/L
MW39	Total Organic Carbon	9/25/97	5000			ug/L
MW40	Ammonia-N	9/29/97	0			ug/L
MW40	Biochemical Oxygen Demand	9/29/97	0			ug/L
MW40	Nitrate	9/29/97	0			ug/L
MW40	Nitrite	9/29/97	0			ug/L
MW40	Orthophosphate	9/29/97	0			ug/L
MW40	Sulfate	6/26/97	12000			ug/L
MW40	Sulfate	9/29/97	51000			ug/L
MW40	TKN	6/26/97	1000	J		ug/L
MW40	TKN	9/29/97	0			ug/L
MW40	Total Organic Carbon	6/26/97	11000			ug/L
MW40	Total Organic Carbon	9/29/97	3000			ug/L
MW41	Nitrate	9/30/97	0			ug/L
MW41	Nitrate/Nitrite	6/25/97	2000			ug/L
MW41	Sulfate	6/25/97	32000			ug/L
MW41	Sulfate	9/30/97	30000			ug/L
MW41	TKN	6/25/97	0	J		ug/L
MW41	TKN	9/30/97	0			ug/L
MW41	Total Organic Carbon	6/25/97	2000			ug/L

Historical Detections in the Upper Aquifer Wells

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW41	Total Organic Carbon	9/30/97	2000			ug/L
MW45	Ammonia-N	6/26/97	1000	J		ug/L
MW45	Ammonia-N	9/30/97	1000			ug/L
MW45	Biochemical Oxygen Demand	6/26/97	3000			ug/L
MW45	Biochemical Oxygen Demand	9/30/97	4000			ug/L
MW45	Nitrate/Nitrite	6/26/97	1000			ug/L
MW45	Sulfate	6/26/97	9000			ug/L
MW45	TKN	6/26/97	1000	J		ug/L
MW45	TKN	9/30/97	2000			ug/L
MW45	Total Organic Carbon	6/26/97	6000			ug/L
MW45	Total Organic Carbon	9/30/97	5000			ug/L
MW48	Ammonia-N	6/26/97	10000	J		ug/L
MW48	Ammonia-N	9/30/97	7000			ug/L
MW48	Biochemical Oxygen Demand	6/26/97	12000			ug/L
MW48	Biochemical Oxygen Demand	9/30/97	16000			ug/L
MW48	Nitrate	9/30/97	0			ug/L
MW48	TKN	6/26/97	9000	J		ug/L
MW48	TKN	9/30/97	8000			ug/L
MW48	Total Organic Carbon	6/26/97	16000			ug/L
MW48	Total Organic Carbon	9/30/97	12000			ug/L
Pesticide/PCB						
MW04	Aroclor-1248	8/3/89	3			ug/L
MW04	Aroclor-1248	12/30/94	1			ug/L
MW06	beta-BHC	4/3/97	0	J	P	ug/L
MW06	gamma-Chlordane	4/3/97	0	J	J	ug/L
MW17	Aroclor-1260	5/16/90	27			ug/L
MW19	4,4'-DDT	3/27/97	0		J	ug/L
MW44	4,4'-DDT	3/26/97	0	J	J	ug/L
SVOCs						
MW02	Bis(2-Chloroethyl)Ether	8/2/89	6		J	ug/L
MW02	Bis(2-Ethylhexyl)Phthalate	8/2/89	2		J	ug/L
MW03	1,2-Dichlorobenzene	8/2/89	23	J		ug/L
MW03	1,2-Dichlorobenzene	12/30/94	51			ug/L
MW03	1,4-Dichlorobenzene	8/2/89	3		J	ug/L
MW03	1,4-Dichlorobenzene	5/21/90	3		J	ug/L
MW03	2,2'-Oxybis(1-Chloropropane)	8/2/89	300			ug/L
MW03	2,4-Dimethylphenol	8/2/89	8	J	J	ug/L
MW03	2,4-Dimethylphenol	5/21/90	110			ug/L
MW03	2,4-Dimethylphenol	12/30/94	5		J	ug/L
MW03	2-Methylphenol	8/2/89	13	J		ug/L
MW03	4-Chloro-3-Methylphenol	12/30/94	9		J	ug/L
MW03	4-Methylphenol	8/2/89	45	J		ug/L
MW03	4-Methylphenol	5/21/90	78			ug/L
MW03	Bis(2-Chloroethyl)Ether	8/2/89	160		J	ug/L
MW03	Bis(2-Chloroethyl)Ether	5/21/90	120			ug/L
MW03	Bis(2-Chloroethyl)Ether	12/30/94	120			ug/L
MW03	Bis(2-Ethylhexyl)Phthalate	8/2/89	5		J	ug/L
MW03	Diethylphthalate	8/2/89	3	J	J	ug/L
MW03	Diethylphthalate	5/21/90	9		J	ug/L
MW03	Diethylphthalate	12/30/94	6		J	ug/L
MW03	Naphthalene	5/21/90	3		J	ug/L
MW03	Naphthalene	12/30/94	2		J	ug/L
MW03	Phenol	8/2/89	5	J	J	ug/L
MW03	Phenol	5/21/90	240			ug/L
MW04	Bis(2-Chloroethyl)Ether	8/3/89	8		J	ug/L
MW04	Bis(2-Chloroethyl)Ether	5/21/90	4		J	ug/L

Historical Detections in the Upper Aquifer Wells

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW04	Phenol	8/3/89	10			ug/L
MW04	Phenol	5/21/90	3		J	ug/L
MW05	1,2-Dichlorobenzene	8/3/89	15			ug/L
MW05	1,2-Dichlorobenzene	5/21/90	33			ug/L
MW05	1,2-Dichlorobenzene	12/30/94	18			ug/L
MW05	1,3-Dichlorobenzene	5/21/90	3		J	ug/L
MW05	1,3-Dichlorobenzene	12/30/94	2		J	ug/L
MW05	1,4-Dichlorobenzene	8/3/89	6		J	ug/L
MW05	1,4-Dichlorobenzene	5/21/90	10			ug/L
MW05	1,4-Dichlorobenzene	12/30/94	7		J	ug/L
MW05	2,2'-Oxybis(1-Chloropropane)	8/3/89	59	J		ug/L
MW05	2,2'-Oxybis(1-Chloropropane)	5/21/90	67		J	ug/L
MW05	2,2'-Oxybis(1-Chloropropane)	12/30/94	34			ug/L
MW05	2,4-Dimethylphenol	8/3/89	6		J	ug/L
MW05	2-Methylnaphthalene	8/3/89	9		J	ug/L
MW05	2-Methylnaphthalene	5/21/90	27			ug/L
MW05	4-Chloro-3-Methylphenol	8/3/89	2		J	ug/L
MW05	4-Methylphenol	12/30/94	2		J	ug/L
MW05	Benzoic Acid	8/3/89	13	J	J	ug/L
MW05	Bis(2-Chloroethyl)Ether	8/3/89	8		J	ug/L
MW05	Bis(2-Ethylhexyl)Phthalate	8/3/89	3	J	J	ug/L
MW05	Di-n-octylphthalate	12/30/94	21	J		ug/L
MW05	Naphthalene	8/3/89	71			ug/L
MW05	Naphthalene	5/21/90	64			ug/L
MW05	Naphthalene	12/30/94	2		J	ug/L
MW05	Phenol	8/3/89	21			ug/L
MW06	2,4-Dimethylphenol	12/30/94	58			ug/L
MW06	2,4-Dimethylphenol	9/23/97	3		J	ug/L
MW06	Benzoic Acid	8/1/89	11	J		ug/L
MW06	Benzoic Acid	5/21/90	9		J	ug/L
MW06	Bis(2-Chloroethyl)Ether	8/1/89	13		J	ug/L
MW06	Bis(2-Chloroethyl)Ether	5/21/90	22			ug/L
MW06	Bis(2-Chloroethyl)Ether	12/30/94	43			ug/L
MW06	Bis(2-Chloroethyl)Ether	11/7/96	56			ug/L
MW06	Bis(2-Chloroethyl)Ether	4/3/97	7		J	ug/L
MW06	Bis(2-Chloroethyl)Ether	7/1/97	30			ug/L
MW06	Bis(2-Chloroethyl)Ether	9/23/97	31			ug/L
MW06	Bis(2-Ethylhexyl)Phthalate	5/21/90	29			ug/L
MW06	Bis(2-Ethylhexyl)Phthalate	7/1/97	16		J	ug/L
MW06	Di-n-octylphthalate	12/30/94	47	J		ug/L
MW06	Diethylphthalate	11/7/96	2		J	ug/L
MW06	Isophorone	8/1/89	35			ug/L
MW06	Isophorone	5/21/90	25			ug/L
MW06	Isophorone	12/30/94	7		J	ug/L
MW06	Isophorone	11/7/96	15			ug/L
MW06	Isophorone	4/3/97	2		J	ug/L
MW06	Isophorone	9/23/97	2		J	ug/L
MW06	Naphthalene	5/21/90	7		J	ug/L
MW06	Pentachlorophenol	5/21/90	3		J	ug/L
MW06	Phenol	8/1/89	4		J	ug/L
MW06	Phenol	5/21/90	3		J	ug/L
MW06	Phenol	12/30/94	64			ug/L
MW06	Phenol	7/1/97	17		J	ug/L
MW06	Phenol	9/23/97	60			ug/L
MW11	Bis(2-Ethylhexyl)Phthalate	5/16/90	2		J	ug/L
MW11	Bis(2-Ethylhexyl)Phthalate	6/24/97	7		J	ug/L

Historical Detections in the Upper Aquifer Wells

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW11	Phenol	3/25/97	7	J	J	ug/L
MW11	Phenol	6/24/97	5		J	ug/L
MW12	2,2'-Oxybis(1-Chloropropane)	5/16/90	150			ug/L
MW12	2,2'-Oxybis(1-Chloropropane)	7/11/90	140			ug/L
MW12	2,2'-Oxybis(1-Chloropropane)	1/3/95	150			ug/L
MW12	2,2'-Oxybis(1-Chloropropane)	11/5/96	120	J		ug/L
MW12	2,2'-Oxybis(1-Chloropropane)	3/25/97	140	J		ug/L
MW12	2,2'-Oxybis(1-Chloropropane)	6/24/97	76			ug/L
MW12	2,2'-Oxybis(1-Chloropropane)	10/1/97	87			ug/L
MW12	Dimethylphthalate	10/1/97	3	J	J	ug/L
MW12	Phenol	3/25/97	25	J	J	ug/L
MW12	Phenol	6/24/97	7		J	ug/L
MW12	Phenol	10/1/97	24			ug/L
MW13	Bis(2-Chloroethyl)Ether	6/27/97	2		J	ug/L
MW13	Bis(2-Ethylhexyl)Phthalate	10/1/97	2	J	J	ug/L
MW13	Phenol	3/25/97	8	J	J	ug/L
MW13	Phenol	6/27/97	23			ug/L
MW13	Phenol	10/1/97	7	J	J	ug/L
MW14	2-Methylphenol	5/17/90	5		J	ug/L
MW14	4-Methylphenol	5/17/90	12			ug/L
MW14	Bis(2-Chloroethyl)Ether	1/4/95	20			ug/L
MW14	Bis(2-Chloroethyl)Ether	11/6/96	12			ug/L
MW14	Bis(2-Ethylhexyl)Phthalate	9/29/97	3	J	J	ug/L
MW14	Isophorone	11/6/96	1		J	ug/L
MW14	Phenol	5/17/90	14			ug/L
MW14	Phenol	9/29/97	18			ug/L
MW15	2-Methylphenol	5/17/90	2		J	ug/L
MW15	4-Methylphenol	5/17/90	5		J	ug/L
MW15	Benzoic Acid	7/11/90	3		J	ug/L
MW15	Bis(2-Ethylhexyl)Phthalate	7/11/90	9		J	ug/L
MW15	Phenol	5/17/90	5		J	ug/L
MW15	Phenol	9/23/97	26			ug/L
MW16	2,4-Dimethylphenol	1/4/95	45		J	ug/L
MW16	2-Methylphenol	5/17/90	38			ug/L
MW16	4-Methylphenol	5/17/90	2200		D	ug/L
MW16	4-Methylphenol	1/4/95	560			ug/L
MW16	Benzoic Acid	5/17/90	1900		D	ug/L
MW16	Benzoic Acid	7/11/90	2		J	ug/L
MW16	Bis(2-Chloroethyl)Ether	5/17/90	250			ug/L
MW16	Bis(2-Chloroethyl)Ether	1/4/95	160			ug/L
MW16	Isophorone	5/17/90	19	J		ug/L
MW16	Phenol	5/17/90	37			ug/L
MW17	1,2-Dichlorobenzene	5/16/90	7		J	ug/L
MW17	1,2-Dichlorobenzene	12/30/94	3		J	ug/L
MW17	2-Methylnaphthalene	5/16/90	15			ug/L
MW17	2-Methylnaphthalene	12/30/94	24			ug/L
MW17	Bis(2-Ethylhexyl)Phthalate	5/16/90	50			ug/L
MW17	Di-n-butylphthalate	5/16/90	2		J	ug/L
MW17	Di-n-butylphthalate	12/30/94	2		J	ug/L
MW17	Naphthalene	5/16/90	48			ug/L
MW17	Naphthalene	12/30/94	2		J	ug/L
MW17	Pentachlorophenol	5/16/90	2		J	ug/L
MW18	Phenol	3/27/97	8		J	ug/L
MW18	Phenol	9/29/97	21			ug/L
MW19	2,2'-Oxybis(1-Chloropropane)	12/30/94	2		J	ug/L
MW19	Bis(2-Chloroethyl)Ether	12/30/94	12			ug/L

Historical Detections in the Upper Aquifer Wells

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW19	Bis(2-Chloroethyl)Ether	11/5/96	11			ug/L
MW19	Bis(2-Chloroethyl)Ether	3/27/97	12			ug/L
MW19	Bis(2-Chloroethyl)Ether	6/30/97	9		J	ug/L
MW19	Bis(2-Chloroethyl)Ether	9/29/97	12			ug/L
MW19	Bis(2-Ethylhexyl)Phthalate	6/30/97	14			ug/L
MW19	Di-n-butylphthalate	12/30/94	1		J	ug/L
MW19	Diethylphthalate	3/27/97	4		J	ug/L
MW19	Phenol	3/27/97	20			ug/L
MW19	Phenol	9/29/97	31			ug/L
MW20	Bis(2-Chloroethyl)Ether	12/30/94	18			ug/L
MW37	Bis(2-Ethylhexyl)Phthalate	6/25/97	34			ug/L
MW37	Phenol	3/25/97	2	J	J	ug/L
MW37	Phenol	6/25/97	23			ug/L
MW38	Phenol	3/25/97	13			ug/L
MW39	Bis(2-Chloroethyl)Ether	6/25/97	1		J	ug/L
MW39	Bis(2-Chloroethyl)Ether	9/25/97	2		J	ug/L
MW39	Bis(2-Ethylhexyl)Phthalate	8/1/96	4	J		ug/L
MW39	Phenol	3/25/97	10			ug/L
MW40	Phenol	3/25/97	5	J	J	ug/L
MW40	Phenol	6/26/97	4		J	ug/L
MW41	Bis(2-Ethylhexyl)Phthalate	8/1/96	8	J		ug/L
MW41	Phenol	3/25/97	17			ug/L
MW41	Phenol	9/29/97	34			ug/L
MW42	Bis(2-Ethylhexyl)Phthalate	8/1/96	4	J		ug/L
MW42	Phenol	3/25/97	5		J	ug/L
MW42	Phenol	9/26/97	41	J		ug/L
MW43	Bis(2-Ethylhexyl)Phthalate	3/26/97	3		J	ug/L
MW43	Phenol	3/26/97	10		J	ug/L
MW43	Phenol	9/26/97	75	J		ug/L
MW44	Bis(2-Ethylhexyl)Phthalate	9/29/97	15			ug/L
MW44	Dimethylphthalate	9/29/97	9	J	J	ug/L
MW44	Phenol	3/26/97	4		J	ug/L
MW44	Phenol	9/29/97	11		J	ug/L
MW45	1,2-Dichlorobenzene	4/2/97	4		J	ug/L
MW45	1,2-Dichlorobenzene	6/26/97	2		J	ug/L
MW45	1,2-Dichlorobenzene	9/29/97	5	J	J	ug/L
MW45	1,4-Dichlorobenzene	4/2/97	2		J	ug/L
MW45	1,4-Dichlorobenzene	9/29/97	3	J	J	ug/L
MW45	2,2'-Oxybis(1-Chloropropane)	4/2/97	10		J	ug/L
MW45	2,2'-Oxybis(1-Chloropropane)	9/29/97	7	J	J	ug/L
MW45	2-Methylnaphthalene	8/1/96	4	J		ug/L
MW45	2-Methylnaphthalene	4/2/97	5		J	ug/L
MW45	2-Methylnaphthalene	6/26/97	7		J	ug/L
MW45	2-Methylnaphthalene	9/29/97	5	J	J	ug/L
MW45	Bis(2-Chloroethyl)Ether	8/1/96	7	J		ug/L
MW45	Bis(2-Chloroethyl)Ether	4/2/97	14		J	ug/L
MW45	Bis(2-Chloroethyl)Ether	6/26/97	8		J	ug/L
MW45	Bis(2-Chloroethyl)Ether	9/29/97	13	J	J	ug/L
MW45	Naphthalene	8/1/96	84			ug/L
MW45	Naphthalene	4/2/97	120			ug/L
MW45	Naphthalene	6/26/97	140			ug/L
MW45	Naphthalene	9/29/97	100			ug/L
MW45	Phenol	8/1/96	41			ug/L
MW45	Phenol	4/2/97	35			ug/L
MW45	Phenol	6/26/97	19		J	ug/L
MW45	Phenol	9/29/97	50			ug/L

Historical Detections in the Upper Aquifer Wells

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW46	4-Methylphenol	8/1/96	3	J		ug/L
MW46	Bis(2-Chloroethyl)Ether	8/1/96	3	J		ug/L
MW46	Bis(2-Chloroethyl)Ether	3/25/97	2	J	J	ug/L
MW46	Bis(2-Chloroethyl)Ether	6/24/97	4		J	ug/L
MW46	Bis(2-Chloroethyl)Ether	9/25/97	5		J	ug/L
MW46	Bis(2-Ethylhexyl)Phthalate	8/1/96	3	J		ug/L
MW46	Phenol	3/25/97	8	J	J	ug/L
MW47	Phenol	3/27/97	10		J	ug/L
MW47	Phenol	6/26/97	16			ug/L
MW47	Phenol	10/1/97	39			ug/L
MW48	2,6-Dinitrotoluene	8/1/96	1	J		ug/L
MW48	Bis(2-Chloroethyl)Ether	3/27/97	10		J	ug/L
MW48	Bis(2-Chloroethyl)Ether	6/26/97	18		J	ug/L
MW48	Isophorone	3/27/97	1		J	ug/L
MW48	Phenol	8/1/96	110			ug/L
MW48	Phenol	3/27/97	28			ug/L
MW48	Phenol	6/26/97	100			ug/L
MW48	Phenol	9/29/97	8	J	J	ug/L
MW49	2,2'-Oxybis(1-Chloropropane)	4/3/97	10			ug/L
MW49	2,2'-Oxybis(1-Chloropropane)	6/25/97	22		J	ug/L
MW49	2,2'-Oxybis(1-Chloropropane)	9/24/97	30			ug/L
MW49	Anthracene	9/24/97	1		J	ug/L
MW49	Bis(2-Chloroethyl)Ether	4/3/97	2		J	ug/L
MW49	Bis(2-Chloroethyl)Ether	9/24/97	13		J	ug/L
MW49	Bis(2-Ethylhexyl)Phthalate	9/24/97	11		J	ug/L
MW49	Isophorone	8/1/96	1	J		ug/L
MW49	Isophorone	4/3/97	1		J	ug/L
MW49	Isophorone	6/25/97	7		J	ug/L
MW49	Isophorone	9/24/97	6		J	ug/L
MW49	Phenol	8/1/96	93			ug/L
MW49	Phenol	9/24/97	130			ug/L
VOCs						
MW02	1,2-Dichloroethene (total)	5/21/90	3		J	ug/L
MW02	Benzene	5/21/90	25	J		ug/L
MW02	Chlorobenzene	5/21/90	2		J	ug/L
MW02	Chloroethane	5/21/90	130			ug/L
MW02	Methylene Chloride	5/21/90	1	J	J	ug/L
MW03	Benzene	8/2/89	1		J	ug/L
MW03	Benzene	5/21/90	100000	J		ug/L
MW03	Benzene	12/30/94	27000			ug/L
MW03	Chloroethane	5/21/90	1900		J	ug/L
MW03	Chloroethane	12/30/94	970		J	ug/L
MW03	Chloromethane	5/21/90	68	J		ug/L
MW03	Ethylbenzene	5/21/90	780		J	ug/L
MW03	Ethylbenzene	12/30/94	690		J	ug/L
MW03	Toluene	5/21/90	2300		J	ug/L
MW03	Xylene (total)	5/21/90	3000		J	ug/L
MW03	Xylene (total)	12/30/94	750		J	ug/L
MW04	1,1-Dichloroethane	5/21/90	6		J	ug/L
MW04	Benzene	8/3/89	520			ug/L
MW04	Benzene	5/21/90	640	J		ug/L
MW04	Benzene	12/30/94	120			ug/L
MW04	Chloroethane	8/3/89	380			ug/L
MW04	Chloroethane	5/21/90	250			ug/L
MW04	Chloroethane	12/30/94	66			ug/L
MW05	1,1-Dichloroethane	5/21/90	19		J	ug/L

Historical Detections in the Upper Aquifer Wells

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW05	1,1-Dichloroethane	12/30/94	26			ug/L
MW05	1,2-Dichloroethene (total)	12/30/94	14		J	ug/L
MW05	4-Methyl-2-Pentanone	12/30/94	6		J	ug/L
MW05	Benzene	8/3/89	1800			ug/L
MW05	Benzene	5/21/90	490	J		ug/L
MW05	Benzene	12/30/94	350			ug/L
MW05	Chlorobenzene	8/3/89	96			ug/L
MW05	Chlorobenzene	5/21/90	60			ug/L
MW05	Chlorobenzene	12/30/94	34			ug/L
MW05	Chloroethane	8/3/89	160			ug/L
MW05	Chloroethane	5/21/90	25		J	ug/L
MW05	Chloroethane	12/30/94	26			ug/L
MW05	Ethylbenzene	8/3/89	830			ug/L
MW05	Ethylbenzene	5/21/90	1100			ug/L
MW05	Ethylbenzene	12/30/94	3		J	ug/L
MW05	Toluene	8/3/89	21		J	ug/L
MW05	Toluene	12/30/94	6		J	ug/L
MW05	Vinyl Chloride	12/30/94	16		J	ug/l
MW05	Xylene (total)	8/3/89	670			ug/L
MW05	Xylene (total)	5/21/90	210			ug/L
MW05	Xylene (total)	12/30/94	83			ug/L
MW06	1,1-Dichloroethane	11/7/96	21		J	ug/L
MW06	1,1-Dichloroethane	4/3/97	3		J	ug/L
MW06	1,2-Dichloroethane	9/23/97	3		J	ug/L
MW06	1,2-Dichloroethene (total)	11/7/96	26		J	ug/L
MW06	1,2-Dichloroethene (total)	4/3/97	4		J	ug/L
MW06	1,2-Dichloroethene (total)	7/1/97	5		J	ug/L
MW06	1,2-Dichloroethene (total)	9/23/97	2		J	ug/L
MW06	Benzene	8/1/89	780	J		ug/L
MW06	Benzene	5/21/90	1500	J		ug/L
MW06	Benzene	12/30/94	3000			ug/L
MW06	Benzene	11/7/96	320			ug/L
MW06	Benzene	4/3/97	35			ug/L
MW06	Benzene	7/1/97	39			ug/L
MW06	Benzene	9/23/97	140			ug/L
MW06	Chlorobenzene	9/23/97	1		J	ug/L
MW06	Chloroethane	8/1/89	140			ug/L
MW06	Chloroethane	5/21/90	240			ug/L
MW06	Chloroethane	12/30/94	530			ug/L
MW06	Chloroethane	11/7/96	720			ug/L
MW06	Chloroethane	4/3/97	67			ug/L
MW06	Chloroethane	7/1/97	140	J		ug/L
MW06	Chloroethane	9/23/97	140	J		ug/L
MW06	Ethylbenzene	8/1/89	52			ug/L
MW06	Ethylbenzene	5/21/90	90			ug/L
MW06	Ethylbenzene	12/30/94	770			ug/L
MW06	Ethylbenzene	11/7/96	16		J	ug/L
MW06	Ethylbenzene	9/23/97	13			ug/L
MW06	Methylene Chloride	11/7/96	17		J	ug/L
MW06	Methylene Chloride	7/1/97	2		J	ug/L
MW06	Vinyl Chloride	7/1/97	3		J	ug/L
MW06	Vinyl Chloride	9/23/97	4		J	ug/L
MW06	Xylene (total)	8/1/89	170			ug/L
MW06	Xylene (total)	5/21/90	210			ug/L
MW06	Xylene (total)	12/30/94	3900			ug/L
MW06	Xylene (total)	11/7/96	40		J	ug/L

Historical Detections in the Upper Aquifer Wells

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW06	Xylene (total)	9/23/97	29			ug/L
MW11	1,2-Dichloroethane	7/11/90	2		J	ug/L
MW11	1,2-Dichloroethene (total)	8/22/91	2		J	ug/L
MW11	Tetrachloroethene	6/24/97	1		J	ug/L
MW12	1,2-Dichloroethene (total)	7/11/90	1		J	ug/L
MW12	1,2-Dichloroethene (total)	1/17/91	1		J	ug/L
MW12	Benzene	7/11/90	12			ug/L
MW12	Benzene	1/17/91	6			ug/L
MW12	Benzene	8/22/91	1		J	ug/L
MW12	Benzene	1/3/95	2		J	ug/L
MW12	Benzene	6/24/97	2		J	ug/L
MW12	Chlorobenzene	5/16/90	4		J	ug/L
MW12	Chlorobenzene	7/11/90	6			ug/L
MW12	Chlorobenzene	1/17/91	6			ug/L
MW12	Chlorobenzene	8/22/91	4		J	ug/L
MW12	Chlorobenzene	1/3/95	4		J	ug/L
MW12	Chlorobenzene	11/5/96	5		J	ug/L
MW12	Chlorobenzene	3/25/97	4		J	ug/L
MW12	Chlorobenzene	6/24/97	6		J	ug/L
MW12	Chlorobenzene	10/1/97	5	J	J	ug/L
MW12	Chloroethane	5/16/90	23	J		ug/L
MW12	Chloroethane	7/11/90	24	J		ug/L
MW12	Chloroethane	1/17/91	19			ug/L
MW12	Chloroethane	8/22/91	10			ug/L
MW12	Chloroethane	1/3/95	2		J	ug/L
MW13	Benzene	5/16/90	2		J	ug/L
MW13	Benzene	11/7/96	6		J	ug/L
MW13	Benzene	3/25/97	170			ug/L
MW13	Benzene	6/27/97	610			ug/L
MW13	Benzene	10/1/97	33			ug/L
MW13	Chloroethane	5/16/90	500	J	D	ug/L
MW13	Chloroethane	7/11/90	140	J		ug/L
MW13	Chloroethane	1/17/91	37			ug/L
MW13	Chloroethane	8/22/91	15			ug/L
MW13	Chloroethane	1/4/95	770			ug/L
MW13	Chloroethane	11/7/96	97			ug/L
MW13	Chloroethane	3/25/97	330			ug/L
MW13	Chloroethane	6/27/97	570	J		ug/L
MW13	Chloroethane	10/1/97	160			ug/L
MW13	Methylene Chloride	5/16/90	7			ug/L
MW13	Methylene Chloride	10/1/97	1	J	J	ug/L
MW14	1,2-Dichloroethene (total)	8/22/91	2		J	ug/L
MW14	1,2-Dichloroethene (total)	1/4/95	24		J	ug/L
MW14	4-Methyl-2-Pentanone	8/22/91	2		J	ug/L
MW14	Acetone	1/4/95	47			ug/L
MW14	Benzene	5/17/90	2		J	ug/L
MW14	Benzene	7/11/90	6			ug/L
MW14	Benzene	1/17/91	3		J	ug/L
MW14	Benzene	8/22/91	24			ug/L
MW14	Benzene	1/4/95	440			ug/L
MW14	Benzene	11/6/96	41		J	ug/L
MW14	Benzene	6/30/97	1		J	ug/L
MW14	Chloroethane	5/17/90	3	J	J	ug/L
MW14	Chloroethane	7/11/90	7		J	ug/L
MW14	Chloroethane	1/17/91	17			ug/L
MW14	Chloroethane	8/22/91	130			ug/L

Historical Detections in the Upper Aquifer Wells

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW14	Chloroethane	1/4/95	660			ug/L
MW14	Chloroethane	11/6/96	1000			ug/L
MW14	Chloromethane	6/30/97	2		J	ug/L
MW14	Methylene Chloride	11/6/96	14		J	ug/L
MW14	Toluene	9/29/97	1	J	J	ug/L
MW15	Benzene	1/17/91	3		J	ug/L
MW15	Benzene	8/22/91	6		J	ug/L
MW15	Benzene	1/5/95	2		J	ug/L
MW15	Benzene	11/7/96	3		J	ug/L
MW15	Benzene	4/3/97	3		J	ug/L
MW15	Benzene	6/25/97	3		J	ug/L
MW15	Benzene	9/23/97	4		J	ug/L
MW15	Chloroethane	7/11/90	4		J	ug/L
MW15	Chloroethane	8/22/91	6		J	ug/L
MW15	Toluene	6/25/97	1		J	ug/L
MW16	1,1-Dichloroethane	5/17/90	1500			ug/L
MW16	1,1-Dichloroethane	7/11/90	2400	J		ug/L
MW16	1,2-Dichloroethene (total)	5/17/90	250			ug/L
MW16	1,2-Dichloroethene (total)	7/11/90	400			ug/L
MW16	1,2-Dichloroethene (total)	1/4/95	140		J	ug/L
MW16	2-Butanone	5/17/90	220000	J	D	ug/L
MW16	2-Butanone	7/11/90	150000		D	ug/L
MW16	2-Butanone	1/4/95	15000			ug/L
MW16	2-Hexanone	5/17/90	1200			ug/L
MW16	2-Hexanone	7/11/90	1800			ug/L
MW16	4-Methyl-2-Pentanone	5/17/90	54000	J	D	ug/L
MW16	4-Methyl-2-Pentanone	7/11/90	45000		D	ug/L
MW16	4-Methyl-2-Pentanone	1/4/95	14000			ug/L
MW16	Acetone	5/17/90	84000		D	ug/L
MW16	Acetone	7/11/90	99000	J	D	ug/L
MW16	Acetone	1/4/95	7700			ug/L
MW16	Benzene	5/17/90	1400			ug/L
MW16	Benzene	7/11/90	1800			ug/L
MW16	Benzene	1/4/95	2000			ug/L
MW16	Chloroethane	5/17/90	2000	J		ug/L
MW16	Chloroethane	7/11/90	1600	J		ug/L
MW16	Chloroethane	1/4/95	3100			ug/L
MW16	Toluene	5/17/90	220		J	ug/L
MW16	Toluene	7/11/90	360			ug/L
MW16	Vinyl Chloride	5/17/90	720			ug/L
MW16	Vinyl Chloride	7/11/90	380		J	ug/L
MW17	1,2-Dichloroethene (total)	5/16/90	130			ug/L
MW17	1,2-Dichloroethene (total)	12/30/94	9		J	ug/L
MW17	Ethylbenzene	5/16/90	80			ug/L
MW17	Ethylbenzene	12/30/94	2		J	ug/L
MW17	Tetrachloroethene	5/16/90	200			ug/L
MW17	Tetrachloroethene	12/30/94	4		J	ug/L
MW17	Trichloroethene	5/16/90	45			ug/L
MW17	Trichloroethene	12/30/94	1		J	ug/L
MW17	Vinyl Chloride	12/30/94	2		J	ug/L
MW17	Xylene (total)	5/16/90	47			ug/L
MW19	4-Methyl-2-Pentanone	6/30/97	5		J	ug/L
MW19	Acetone	3/27/97	5		J	ug/L
MW19	Acetone	6/30/97	12			ug/L
MW19	Benzene	1/17/91	3		J	ug/L
MW19	Benzene	8/22/91	2		J	ug/L

Historical Detections in the Upper Aquifer Wells

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW19	Benzene	12/30/94	2		J	ug/L
MW19	Benzene	3/27/97	5		J	ug/L
MW19	Benzene	6/30/97	3		J	ug/L
MW19	Benzene	9/29/97	1	J	J	ug/L
MW19	Chloroethane	1/17/91	15			ug/L
MW19	Chloroethane	8/22/91	20			ug/L
MW19	Chloroethane	12/30/94	22			ug/L
MW19	Chloroethane	11/5/96	20			ug/L
MW19	Chloroethane	3/27/97	14			ug/L
MW19	Chloroethane	6/30/97	13	J		ug/L
MW19	Chloroethane	9/29/97	18			ug/L
MW20	Benzene	8/22/91	2		J	ug/L
MW20	Benzene	12/30/94	14			ug/L
MW20	Chloroethane	8/22/91	11			ug/L
MW20	Chloroethane	12/30/94	79			ug/L
MW37	Benzene	8/1/96	0	J		ug/L
MW39	1,1-Dichloroethane	8/1/96	0	J		ug/L
MW39	1,2-Dichloroethene (total)	3/25/97	3	J	J	ug/L
MW39	1,2-Dichloroethene (total)	6/25/97	4		J	ug/L
MW39	1,2-Dichloroethene (total)	9/25/97	4		J	ug/L
MW39	Benzene	8/1/96	12			ug/L
MW39	Benzene	3/25/97	4	J	J	ug/L
MW39	Benzene	6/25/97	5		J	ug/L
MW39	Benzene	9/25/97	4		J	ug/L
MW39	Chloroethane	8/1/96	5			ug/L
MW39	Chloroethane	6/25/97	3	J	J	ug/L
MW39	Chloroethane	9/25/97	2		J	ug/L
MW39	cis-1,2-Dichloroethene	8/1/96	0	J		ug/L
MW39	trans-1,2-Dichloroethene	8/1/96	4			ug/L
MW39	Vinyl Chloride	8/1/96	1			ug/L
MW45	Benzene	8/1/96	530			ug/L
MW45	Benzene	4/2/97	1100			ug/L
MW45	Benzene	6/26/97	940			ug/L
MW45	Benzene	9/29/97	860			ug/L
MW45	Chlorobenzene	8/1/96	16	J		ug/L
MW45	Chlorobenzene	4/2/97	26		J	ug/L
MW45	Chlorobenzene	6/26/97	42		J	ug/L
MW45	Chlorobenzene	9/29/97	26	J	J	ug/L
MW45	Chloroethane	8/1/96	82	J		ug/L
MW45	Chloroethane	4/2/97	230			ug/L
MW45	Chloroethane	6/26/97	120	J		ug/L
MW45	Chloroethane	9/29/97	120			ug/L
MW45	Ethylbenzene	8/1/96	10	J		ug/L
MW45	Xylene (total)	8/1/96	60			ug/L
MW45	Xylene (total)	4/2/97	61		J	ug/L
MW45	Xylene (total)	6/26/97	280			ug/L
MW45	Xylene (total)	9/29/97	33	J	J	ug/L
MW46	4-Methyl-2-Pentanone	8/1/96	3	J		ug/L
MW46	Benzene	8/1/96	1	J		ug/L
MW46	Benzene	3/25/97	1		J	ug/L
MW46	Benzene	6/24/97	2		J	ug/L
MW46	Benzene	9/25/97	2		J	ug/L
MW46	Vinyl Chloride	8/1/96	0	J		ug/L
MW48	Benzene	8/1/96	9100			ug/L
MW48	Benzene	3/27/97	5200			ug/L
MW48	Benzene	6/26/97	7700			ug/L

Historical Detections in the Upper Aquifer Wells

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW48	Benzene	9/29/97	9500			ug/L
MW48	Chloroethane	8/1/96	1000			ug/L
MW48	Chloroethane	3/27/97	620			ug/L
MW48	Chloroethane	6/26/97	670	J		ug/L
MW48	Chloroethane	9/29/97	980			ug/L
MW48	Methylene Chloride	8/1/96	70	J		ug/L
MW49	Benzene	8/1/96	5000			ug/L
MW49	Benzene	4/3/97	1600			ug/L
MW49	Benzene	6/25/97	4800	J		ug/L
MW49	Benzene	9/24/97	8200		E	ug/L
MW49	Chloroethane	8/1/96	480	J		ug/L
MW49	Chloroethane	4/3/97	310			ug/L
MW49	Chloroethane	6/25/97	540	J		ug/L
MW49	Chloroethane	9/24/97	810			ug/L
MW49	Methylene Chloride	8/1/96	70	J		ug/L

Historical Detections in the Lower Aquifer Wells

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW50	Potassium	11/6/96	17500			ug/L
MW50	Potassium	3/25/97	21200			ug/L
MW50	Potassium	6/24/97	17000			ug/L
MW50	Potassium	10/1/97	21000	J	E	ug/L
MW50	Sodium	11/6/96	353000			ug/L
MW50	Sodium	6/24/97	280000			ug/L
MW50	Sodium	10/1/97	481000			ug/L
MW50	Sodium	3/25/97	368000	J	E	ug/L
MW50	Thallium	11/6/96	2		B	ug/L
MW50	Vanadium	11/6/96	2		B	ug/L
MW50	Vanadium	3/25/97	14		B	ug/L
MW50	Vanadium	6/24/97	5		B	ug/L
MW50	Vanadium	10/1/97	19		B	ug/L
MW50	Zinc	10/1/97	57			ug/L
MW51	Aluminum	11/6/96	684			ug/L
MW51	Aluminum	3/25/97	403			ug/L
MW51	Aluminum	6/25/97	362			ug/L
MW51	Aluminum	10/1/97	1040	J	N	ug/L
MW51	Arsenic	11/6/96	5		B	ug/L
MW51	Barium	11/6/96	400			ug/L
MW51	Barium	3/25/97	455			ug/L
MW51	Barium	10/1/97	397			ug/L
MW51	Barium	6/25/97	386	J	E	ug/L
MW51	Calcium	11/6/96	147000			ug/L
MW51	Calcium	3/25/97	153000			ug/L
MW51	Calcium	10/1/97	138000			ug/L
MW51	Calcium	6/25/97	137000	J	E	ug/L
MW51	Chromium	3/25/97	4		B	ug/L
MW51	Chromium	10/1/97	8		B	ug/L
MW51	Cobalt	11/6/96	2		B	ug/L
MW51	Cobalt	3/25/97	1		B	ug/L
MW51	Cobalt	6/25/97	1		B	ug/L
MW51	Cobalt	10/1/97	2		B	ug/L
MW51	Copper	3/25/97	4		B	ug/L
MW51	Copper	10/1/97	7		B	ug/L
MW51	Iron	11/6/96	8230			ug/L
MW51	Iron	10/1/97	8660			ug/L
MW51	Iron	6/25/97	6590	J	E	ug/L
MW51	Iron	3/25/97	8470	J	N	ug/L
MW51	Lead	11/6/96	3	J		ug/L
MW51	Lead	3/25/97	3		B	ug/L
MW51	Magnesium	11/6/96	66300			ug/L
MW51	Magnesium	3/25/97	67600			ug/L
MW51	Magnesium	10/1/97	61600			ug/L
MW51	Magnesium	6/25/97	61800	J	E	ug/L
MW51	Manganese	11/6/96	193			ug/L

Historical Detections in the Lower Aquifer Wells

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW51	Manganese	3/25/97	118			ug/L
MW51	Manganese	10/1/97	128			ug/L
MW51	Manganese	6/25/97	89	J	E	ug/L
MW51	Nickel	11/6/96	12		B	ug/L
MW51	Nickel	3/25/97	8		B	ug/L
MW51	Nickel	10/1/97	11		B	ug/L
MW51	Potassium	11/6/96	4290		B	ug/L
MW51	Potassium	3/25/97	3450		B	ug/L
MW51	Potassium	6/25/97	3710	J	BE	ug/L
MW51	Potassium	10/1/97	3880	J	BE	ug/L
MW51	Sodium	11/6/96	102000			ug/L
MW51	Sodium	3/25/97	114000	J	E	ug/L
MW51	Sodium	6/25/97	103000	J	E	ug/L
MW51	Sodium	10/1/97	108000	J	E	ug/L
MW51	Vanadium	10/1/97	2		B	ug/L
MW51	Vanadium	11/6/96	2	J	B	ug/L
MW52	Aluminum	3/25/97	1030			ug/L
MW52	Aluminum	6/25/97	1360			ug/L
MW52	Aluminum	9/25/97	750			ug/L
MW52	Aluminum	12/26/96	4190	J	N*	ug/L
MW52	Antimony	12/26/96	7		B	ug/L
MW52	Arsenic	12/26/96	40			ug/L
MW52	Arsenic	3/25/97	125			ug/L
MW52	Arsenic	6/25/97	71			ug/L
MW52	Arsenic	9/25/97	42			ug/L
MW52	Barium	12/26/96	264			ug/L
MW52	Barium	3/25/97	369			ug/L
MW52	Barium	9/25/97	321			ug/L
MW52	Barium	6/25/97	308	J	E	ug/L
MW52	Beryllium	12/26/96	1		B	ug/L
MW52	Beryllium	9/25/97	1		B	ug/L
MW52	Calcium	12/26/96	135000			ug/L
MW52	Calcium	3/25/97	139000			ug/L
MW52	Calcium	9/25/97	114000			ug/L
MW52	Calcium	6/25/97	113000	J	E	ug/L
MW52	Chromium	12/26/96	134			ug/L
MW52	Chromium	3/25/97	248			ug/L
MW52	Chromium	6/25/97	15			ug/L
MW52	Chromium	9/25/97	9		B	ug/L
MW52	Cobalt	12/26/96	13		B	ug/L
MW52	Cobalt	3/25/97	8		B	ug/L
MW52	Cobalt	6/25/97	3		B	ug/L
MW52	Cobalt	9/25/97	2		B	ug/L
MW52	Copper	12/26/96	67			ug/L
MW52	Copper	3/25/97	22		B	ug/L
MW52	Copper	9/25/97	10		B	ug/L

Historical Detections in the Lower Aquifer Wells

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW52	Iron	12/26/96	11600			ug/L
MW52	Iron	3/25/97	9320			ug/L
MW52	Iron	9/25/97	5340			ug/L
MW52	Iron	6/25/97	6820	J	E	ug/L
MW52	Lead	12/26/96	31			ug/L
MW52	Lead	3/25/97	9			ug/L
MW52	Magnesium	12/26/96	49100			ug/L
MW52	Magnesium	3/25/97	52800			ug/L
MW52	Magnesium	9/25/97	44100			ug/L
MW52	Magnesium	6/25/97	43300	J	E	ug/L
MW52	Manganese	12/26/96	673			ug/L
MW52	Manganese	3/25/97	378			ug/L
MW52	Manganese	9/25/97	207			ug/L
MW52	Manganese	6/25/97	222	J	E	ug/L
MW52	Nickel	12/26/96	201			ug/L
MW52	Nickel	3/25/97	124			ug/L
MW52	Nickel	6/25/97	17		B	ug/L
MW52	Nickel	9/25/97	12		B	ug/L
MW52	Potassium	3/25/97	4120	J	BE	ug/L
MW52	Potassium	6/25/97	3990	J	BE	ug/L
MW52	Potassium	9/25/97	3640	J	BE	ug/L
MW52	Potassium	12/26/96	7770	J	E	ug/L
MW52	Selenium	9/25/97	2		B	ug/L
MW52	Sodium	12/26/96	87900			ug/L
MW52	Sodium	3/25/97	152000			ug/L
MW52	Sodium	9/25/97	145000			ug/L
MW52	Sodium	6/25/97	138000	J	E	ug/L
MW52	Thallium	12/26/96	4		B	ug/L
MW52	Vanadium	12/26/96	11		B	ug/L
MW52	Vanadium	3/25/97	3		B	ug/L
MW52	Vanadium	6/25/97	3		B	ug/L
MW52	Vanadium	9/25/97	2		B	ug/L
MW52	Zinc	12/26/96	90			ug/L
MW53	Aluminum	3/25/97	265			ug/L
MW53	Aluminum	6/25/97	15000			ug/L
MW53	Aluminum	9/25/97	7490			ug/L
MW53	Aluminum	12/26/96	39200	J	N*	ug/L
MW53	Antimony	6/25/97	3		B	ug/L
MW53	Antimony	9/25/97	2		B	ug/L
MW53	Arsenic	12/26/96	30			ug/L
MW53	Arsenic	9/25/97	10			ug/L
MW53	Arsenic	6/25/97	9		B	ug/L
MW53	Barium	12/26/96	997			ug/L
MW53	Barium	3/25/97	1410			ug/L
MW53	Barium	6/25/97	1620			ug/L
MW53	Barium	9/25/97	1520			ug/L

Historical Detections in the Lower Aquifer Wells

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW53	Beryllium	12/26/96	6			ug/L
MW53	Beryllium	6/25/97	2		B	ug/L
MW53	Beryllium	9/25/97	2		B	ug/L
MW53	Calcium	12/26/96	160000			ug/L
MW53	Calcium	3/25/97	222000			ug/L
MW53	Calcium	9/25/97	230000			ug/L
MW53	Calcium	6/25/97	258000	J	E	ug/L
MW53	Chromium	12/26/96	189			ug/L
MW53	Chromium	6/25/97	102			ug/L
MW53	Chromium	9/25/97	58			ug/L
MW53	Cobalt	12/26/96	25		B	ug/L
MW53	Cobalt	3/25/97	5		B	ug/L
MW53	Cobalt	6/25/97	9		B	ug/L
MW53	Cobalt	9/25/97	7		B	ug/L
MW53	Copper	12/26/96	107			ug/L
MW53	Copper	6/25/97	49			ug/L
MW53	Copper	9/25/97	40			ug/L
MW53	Iron	12/26/96	48800			ug/L
MW53	Iron	3/25/97	21300			ug/L
MW53	Iron	6/25/97	32700			ug/L
MW53	Iron	9/25/97	27400			ug/L
MW53	Lead	12/26/96	138			ug/L
MW53	Lead	6/25/97	24			ug/L
MW53	Lead	9/25/97	17			ug/L
MW53	Lead	3/25/97	1		B	ug/L
MW53	Magnesium	12/26/96	75300			ug/L
MW53	Magnesium	3/25/97	108000			ug/L
MW53	Magnesium	6/25/97	117000			ug/L
MW53	Magnesium	9/25/97	102000			ug/L
MW53	Manganese	12/26/96	1630			ug/L
MW53	Manganese	3/25/97	321			ug/L
MW53	Manganese	6/25/97	521			ug/L
MW53	Manganese	9/25/97	417			ug/L
MW53	Mercury	12/26/96	0			ug/L
MW53	Nickel	12/26/96	139			ug/L
MW53	Nickel	6/25/97	93			ug/L
MW53	Nickel	9/25/97	62			ug/L
MW53	Potassium	6/25/97	33200			ug/L
MW53	Potassium	12/26/96	24400	J	E	ug/L
MW53	Potassium	3/25/97	28800	J	E	ug/L
MW53	Potassium	9/25/97	29000	J	E	ug/L
MW53	Sodium	12/26/96	252000			ug/L
MW53	Sodium	3/25/97	342000			ug/L
MW53	Sodium	6/25/97	404000			ug/L
MW53	Sodium	9/25/97	380000			ug/L
MW53	Thallium	12/26/96	2		B	ug/L

Historical Detections in the Lower Aquifer Wells

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW53	Vanadium	12/26/96	32		B	ug/L
MW53	Vanadium	6/25/97	8		B	ug/L
MW53	Vanadium	9/25/97	4		B	ug/L
MW53	Zinc	12/26/96	443			ug/L
MW53	Zinc	6/25/97	109			ug/L
MW53	Zinc	9/25/97	79			ug/L
MW54	Aluminum	6/25/97	1860			ug/L
MW54	Aluminum	3/25/97	1340	J	EN	ug/L
MW54	Aluminum	9/24/97	1980	J	N	ug/L
MW54	Aluminum	12/26/96	853	J	N*	ug/L
MW54	Arsenic	12/26/96	8		B	ug/L
MW54	Arsenic	3/25/97	10		B	ug/L
MW54	Arsenic	6/25/97	5		B	ug/L
MW54	Arsenic	9/24/97	5		B	ug/L
MW54	Barium	12/26/96	190		B	ug/L
MW54	Barium	3/25/97	145		B	ug/L
MW54	Barium	9/24/97	153		B	ug/L
MW54	Barium	6/25/97	149	J	BE	ug/L
MW54	Calcium	12/26/96	132000			ug/L
MW54	Calcium	3/25/97	113000			ug/L
MW54	Calcium	9/24/97	126000	J		ug/L
MW54	Calcium	6/25/97	123000	J	E	ug/L
MW54	Chromium	12/26/96	82			ug/L
MW54	Chromium	3/25/97	12			ug/L
MW54	Chromium	6/25/97	24			ug/L
MW54	Chromium	9/24/97	46			ug/L
MW54	Cobalt	12/26/96	4		B	ug/L
MW54	Cobalt	3/25/97	2		B	ug/L
MW54	Cobalt	6/25/97	2		B	ug/L
MW54	Cobalt	9/24/97	3		B	ug/L
MW54	Copper	12/26/96	60			ug/L
MW54	Copper	3/25/97	51			ug/L
MW54	Copper	6/25/97	42			ug/L
MW54	Copper	9/24/97	39	J		ug/L
MW54	Iron	12/26/96	1880			ug/L
MW54	Iron	3/25/97	3240			ug/L
MW54	Iron	9/24/97	5480			ug/L
MW54	Iron	6/25/97	4270	J	E	ug/L
MW54	Lead	3/25/97	6			ug/L
MW54	Lead	6/25/97	10			ug/L
MW54	Lead	9/24/97	6			ug/L
MW54	Magnesium	12/26/96	54100			ug/L
MW54	Magnesium	3/25/97	47900			ug/L
MW54	Magnesium	9/24/97	52000	J		ug/L
MW54	Magnesium	6/25/97	51900	J	E	ug/L
MW54	Manganese	12/26/96	202			ug/L

Historical Detections in the Lower Aquifer Wells

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW54	Manganese	3/25/97	130			ug/L
MW54	Manganese	9/24/97	256			ug/L
MW54	Manganese	6/25/97	163	J	E	ug/L
MW54	Nickel	12/26/96	66			ug/L
MW54	Nickel	3/25/97	13		B	ug/L
MW54	Nickel	6/25/97	23		B	ug/L
MW54	Nickel	9/24/97	37		B	ug/L
MW54	Potassium	12/26/96	4540	J	BE	ug/L
MW54	Potassium	3/25/97	2340	J	BE	ug/L
MW54	Potassium	6/25/97	2950	J	BE	ug/L
MW54	Potassium	9/24/97	2750	J	BE	ug/L
MW54	Sodium	12/26/96	20600			ug/L
MW54	Sodium	3/25/97	16700			ug/L
MW54	Sodium	6/25/97	19400	B	E	ug/L
MW54	Sodium	9/24/97	28700	J	E	ug/L
MW54	Vanadium	12/26/96	2		B	ug/L
MW54	Vanadium	3/25/97	2		B	ug/L
MW54	Vanadium	6/25/97	3		B	ug/L
MW54	Vanadium	9/24/97	3		B	ug/L
MW54	Zinc	6/25/97	128			ug/L
MW55	Aluminum	6/25/97	1870			ug/L
MW55	Aluminum	9/24/97	6100	J	N	ug/L
MW55	Aluminum	12/26/96	14900	J	N*	ug/L
MW55	Arsenic	12/26/96	13			ug/L
MW55	Arsenic	3/25/97	4		B	ug/L
MW55	Arsenic	6/25/97	3		B	ug/L
MW55	Arsenic	9/24/97	6		B	ug/L
MW55	Barium	12/26/96	271			ug/L
MW55	Barium	9/24/97	219			ug/L
MW55	Barium	3/25/97	115		B	ug/L
MW55	Barium	6/25/97	178		B	ug/L
MW55	Beryllium	12/26/96	2		B	ug/L
MW55	Beryllium	9/24/97	1		B	ug/L
MW55	Calcium	12/26/96	74200			ug/L
MW55	Calcium	3/25/97	47600			ug/L
MW55	Calcium	9/24/97	78200	J		ug/L
MW55	Calcium	6/25/97	80000	J	E	ug/L
MW55	Chromium	12/26/96	133			ug/L
MW55	Chromium	6/25/97	17			ug/L
MW55	Chromium	9/24/97	60			ug/L
MW55	Chromium	3/25/97	8		B	ug/L
MW55	Cobalt	12/26/96	10		B	ug/L
MW55	Cobalt	3/25/97	2		B	ug/L
MW55	Cobalt	6/25/97	2		B	ug/L
MW55	Cobalt	9/24/97	4		B	ug/L
MW55	Copper	12/26/96	84			ug/L

Historical Detections in the Lower Aquifer Wells

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW55	Copper	3/25/97	105			ug/L
MW55	Copper	9/24/97	54	J		ug/L
MW55	Copper	6/25/97	11		B	ug/L
MW55	Iron	12/26/96	16700			ug/L
MW55	Iron	6/25/97	1580			ug/L
MW55	Iron	9/24/97	5850			ug/L
MW55	Lead	12/26/96	43			ug/L
MW55	Lead	6/25/97	8			ug/L
MW55	Lead	9/24/97	17			ug/L
MW55	Lead	3/25/97	3		B	ug/L
MW55	Magnesium	12/26/96	35800			ug/L
MW55	Magnesium	3/25/97	24200			ug/L
MW55	Magnesium	6/25/97	48500			ug/L
MW55	Magnesium	9/24/97	47700	J		ug/L
MW55	Manganese	12/26/96	546			ug/L
MW55	Manganese	3/25/97	100			ug/L
MW55	Manganese	6/25/97	284			ug/L
MW55	Manganese	9/24/97	388			ug/L
MW55	Mercury	12/26/96	0			ug/L
MW55	Nickel	12/26/96	101			ug/L
MW55	Nickel	9/24/97	61			ug/L
MW55	Nickel	3/25/97	23		B	ug/L
MW55	Nickel	6/25/97	29		B	ug/L
MW55	Potassium	6/25/97	6650			ug/L
MW55	Potassium	12/26/96	10700	J	E	ug/L
MW55	Potassium	3/25/97	7180	J	E	ug/L
MW55	Potassium	9/24/97	6660	J	E	ug/L
MW55	Sodium	12/26/96	122000			ug/L
MW55	Sodium	3/25/97	109000			ug/L
MW55	Sodium	6/25/97	47400			ug/L
MW55	Sodium	9/24/97	49500	J	E	ug/L
MW55	Thallium	12/26/96	2		B	ug/L
MW55	Vanadium	12/26/96	16		B	ug/L
MW55	Vanadium	6/25/97	2		B	ug/L
MW55	Vanadium	9/24/97	5		B	ug/L
MW55	Zinc	12/26/96	105			ug/L
MW55	Zinc	6/25/97	31			ug/L
Indicator Parameters						
MW07	Chemical Oxygen Demand	5/15/90	78000			ug/L
MW07	Chloride	5/15/90	12000			ug/L
MW07	Chloride	7/10/90	11000			ug/L
MW07	Dissolved Solids (total)	5/15/90	252000			ug/L
MW07	Dissolved Solids (total)	7/10/90	288000	J		ug/L
MW07	Nitrate/Nitrite	5/15/90	1000	J		ug/L
MW07	Sulfate	5/15/90	32000			ug/L
MW07	Sulfate	7/10/90	31000			ug/L

Historical Detections in the Lower Aquifer Wells

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW07	Suspended Solids (total)	5/15/90	703000			ug/L
MW07	Suspended Solids (total)	7/10/90	888000			ug/L
MW07	Total Alkalinity	5/15/90	186000			ug/L
MW07	Total Alkalinity	7/10/90	190000			ug/L
MW07	Total Organic Carbon	5/15/90	5000			ug/L
MW07	Total Organic Carbon	7/10/90	3000			ug/L
MW08	Chemical Oxygen Demand	7/10/90	39000			ug/L
MW08	Chloride	5/15/90	11000			ug/L
MW08	Chloride	7/10/90	11000			ug/L
MW08	Dissolved Solids (total)	5/15/90	282000			ug/L
MW08	Dissolved Solids (total)	7/10/90	332000	J		ug/L
MW08	Nitrate/Nitrite	5/15/90	1000	J		ug/L
MW08	Sulfate	5/15/90	64000			ug/L
MW08	Sulfate	7/10/90	60000			ug/L
MW08	Suspended Solids (total)	5/15/90	396000			ug/L
MW08	Suspended Solids (total)	7/10/90	760000			ug/L
MW08	Total Alkalinity	5/15/90	170000			ug/L
MW08	Total Alkalinity	7/10/90	196000			ug/L
MW08	Total Organic Carbon	5/15/90	2000			ug/L
MW08	Total Organic Carbon	7/10/90	4000			ug/L
MW09	Chemical Oxygen Demand	5/15/90	143000			ug/L
MW09	Chloride	5/15/90	178000			ug/L
MW09	Chloride	7/10/90	123000			ug/L
MW09	Dissolved Solids (total)	5/15/90	764000			ug/L
MW09	Dissolved Solids (total)	7/10/90	616000	J		ug/L
MW09	Nitrate/Nitrite	5/15/90	1000	J		ug/L
MW09	Sulfate	5/15/90	20000			ug/L
MW09	Sulfate	7/10/90	25000			ug/L
MW09	Suspended Solids (total)	5/15/90	718000			ug/L
MW09	Suspended Solids (total)	7/10/90	327000			ug/L
MW09	Total Alkalinity	5/15/90	434000			ug/L
MW09	Total Alkalinity	7/10/90	380000			ug/L
MW09	Total Organic Carbon	5/15/90	15000			ug/L
MW09	Total Organic Carbon	7/10/90	8000			ug/L
MW10	Chemical Oxygen Demand	5/15/90	154000			ug/L
MW10	Chloride	5/15/90	191000			ug/L
MW10	Chloride	7/10/90	191000			ug/L
MW10	Dissolved Solids (total)	5/15/90	824000			ug/L
MW10	Dissolved Solids (total)	7/10/90	652000	J		ug/L
MW10	Nitrate/Nitrite	5/15/90	1000	J		ug/L
MW10	Sulfate	5/15/90	25000			ug/L
MW10	Sulfate	7/10/90	19000			ug/L
MW10	Suspended Solids (total)	5/15/90	991000			ug/L
MW10	Suspended Solids (total)	7/10/90	121000			ug/L
MW10	Total Alkalinity	5/15/90	324000			ug/L
MW10	Total Alkalinity	7/10/90	335000			ug/L

Historical Detections in the Lower Aquifer Wells

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW10	Total Organic Carbon	5/15/90	11000			ug/L
MW10	Total Organic Carbon	7/10/90	7000			ug/L
Pesticide/PCBs						
MW33	alpha-BHC	3/26/97	0		J	ug/L
MW50	Heptachlor	3/25/97	0		J	ug/L
SVOCs						
MW07	Ethylhexyl)Phthalate	6/24/97	2		J	ug/L
MW07	Phenol	3/25/97	70			ug/L
MW07	Phenol	6/24/97	31			ug/L
MW07	Phenol	9/24/97	48			ug/L
MW08	Bis(2-Chloroethyl)Ether	9/24/97	4		J	ug/L
MW08	Phenol	3/25/97	54			ug/L
MW08	Phenol	9/24/97	140			ug/L
MW09	Bis(2-Chloroethyl)Ether	5/15/90	12			ug/L
MW09	Bis(2-Chloroethyl)Ether	7/10/90	11			ug/L
MW09	Bis(2-Chloroethyl)Ether	1/4/95	23			ug/L
MW09	Bis(2-Chloroethyl)Ether	11/6/96	44			ug/L
MW09	Bis(2-Chloroethyl)Ether	6/30/97	39			ug/L
MW09	Bis(2-Chloroethyl)Ether	9/29/97	35			ug/L
MW09	Bis(2-Chloroethyl)Ether	4/2/97	38		J	ug/L
MW09	Isophorone	11/6/96	1		J	ug/L
MW09	Isophorone	6/30/97	1		J	ug/L
MW09	Isophorone	9/29/97	1	J	J	ug/L
MW09	Phenol	6/30/97	31			ug/L
MW09	Phenol	4/2/97	36		J	ug/L
MW10	Ethylhexyl)Phthalate	9/24/97	8		J	ug/L
MW10	Isophorone	3/27/97	1		J	ug/L
MW10	Isophorone	9/24/97	1		J	ug/L
MW10	Phenol	3/27/97	15			ug/L
MW10	Phenol	6/26/97	19			ug/L
MW10	Phenol	9/24/97	20			ug/L
MW21	Di-n-octylphthalate	1/4/95	11			ug/L
MW21	Phenol	10/1/97	20			ug/L
MW21	Phenol	3/25/97	32	J		ug/L
MW21	Phenol	6/25/97	9		J	ug/L
MW22	Ethylhexyl)Phthalate	11/5/96	48			ug/L
MW22	Ethylhexyl)Phthalate	7/1/97	14		J	ug/L
MW22	Phenol	7/1/97	100			ug/L
MW22	Phenol	9/29/97	330			ug/L
MW22	Phenol	3/27/97	1		J	ug/L
MW23	Ethylhexyl)Phthalate	6/24/97	4	J	J	ug/L
MW23	Phenol	3/25/97	30			ug/L
MW23	Phenol	6/24/97	29	J		ug/L
MW24	Ethylhexyl)Phthalate	6/24/97	4		J	ug/L
MW24	Di-n-octylphthalate	1/4/95	1		J	ug/L
MW24	Phenol	3/25/97	16			ug/L

Historical Detections in the Lower Aquifer Wells

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW24	Phenol	6/24/97	2	J	J	ug/L
MW28	Ethylhexyl)Phthalate	6/24/97	6		J	ug/L
MW28	Phenol	3/25/97	75			ug/L
MW28	Phenol	6/24/97	69			ug/L
MW28	Phenol	9/23/97	37	J		ug/L
MW29	Ethylhexyl)Phthalate	3/13/96	27			ug/L
MW29	Ethylhexyl)Phthalate	3/25/97	18			ug/L
MW29	Ethylhexyl)Phthalate	9/29/97	6	J	J	ug/L
MW29	Phenol	6/30/97	32			ug/L
MW29	Phenol	9/29/97	43			ug/L
MW29	Phenol	3/25/97	3		J	ug/L
MW30	Anthracene	3/13/96	1		J	ug/L
MW30	Ethylhexyl)Phthalate	3/13/96	68			ug/L
MW30	Ethylhexyl)Phthalate	3/25/97	2		J	ug/L
MW30	Phenol	3/25/97	21			ug/L
MW30	Phenol	6/26/97	40			ug/L
MW30	Phenol	10/1/97	17			ug/L
MW31	Ethylhexyl)Phthalate	6/25/97	4		J	ug/L
MW31	Ethylhexyl)Phthalate	9/24/97	6		J	ug/L
MW31	Ethylhexyl)Phthalate	3/25/97	9	J	J	ug/L
MW31	Phenol	3/25/97	100			ug/L
MW31	Phenol	9/24/97	130			ug/L
MW32	Bis(2-Chloroethyl)Ether	9/24/97	2		J	ug/L
MW32	Ethylhexyl)Phthalate	3/14/96	30			ug/L
MW32	Ethylhexyl)Phthalate	9/24/97	10		J	ug/L
MW32	Phenol	3/25/97	75			ug/L
MW32	Phenol	9/24/97	110			ug/L
MW32	Phenol	6/24/97	12	J		ug/L
MW33	Ethylhexyl)Phthalate	10/1/97	76			ug/L
MW33	Isophorone	3/26/97	1		J	ug/L
MW33	Isophorone	10/1/97	1	J	J	ug/L
MW33	Phenol	3/26/97	83			ug/L
MW33	Phenol	6/26/97	50			ug/L
MW33	Phenol	10/1/97	65			ug/L
MW33	Phenol	3/13/96	6		J	ug/L
MW34	Ethylhexyl)Phthalate	3/26/97	5		J	ug/L
MW34	Ethylhexyl)Phthalate	9/29/97	0		J	ug/L
MW34	Phenol	6/30/97	33			ug/L
MW34	Phenol	9/29/97	340			ug/L
MW35	Ethylhexyl)Phthalate	3/13/96	11			ug/L
MW36	Ethylhexyl)Phthalate	3/25/97	56			ug/L
MW36	Ethylhexyl)Phthalate	6/25/97	11		J	ug/L
MW36	Ethylhexyl)Phthalate	9/24/97	6		J	ug/L
MW36	Phenol	3/25/97	180			ug/L
MW36	Phenol	6/25/97	120			ug/L
MW36	Phenol	9/24/97	240			ug/L

Historical Detections in the Lower Aquifer Wells

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW50	Ethylhexyl)Phthalate	6/24/97	2		J	ug/L
MW50	Dimethylphthalate	3/25/97	8		J	ug/L
MW50	Phenol	3/25/97	120			ug/L
MW50	Phenol	6/24/97	18			ug/L
MW50	Phenol	10/1/97	340			ug/L
MW51	Anthracene	3/25/97	1		J	ug/L
MW51	Isophorone	3/25/97	1		J	ug/L
MW51	Phenol	3/25/97	19			ug/L
MW51	Phenol	10/1/97	18			ug/L
MW51	Phenol	6/25/97	25	J		ug/L
MW52	Phenol	3/25/97	24			ug/L
MW52	Phenol	12/26/96	3	J	J	ug/L
MW53	Ethylhexyl)Phthalate	6/25/97	17			ug/L
MW53	Isophorone	9/25/97	5		J	ug/L
MW53	Isophorone	12/26/96	1	J	J	ug/L
MW53	Isophorone	3/25/97	2	J	J	ug/L
MW53	Phenol	12/26/96	10			ug/L
MW53	Phenol	6/25/97	50			ug/L
MW53	Phenol	3/25/97	86	J		ug/L
MW53	Phenol	9/25/97	50	J		ug/L
MW54	Phenol	3/25/97	20			ug/L
MW54	Phenol	9/24/97	160			ug/L
MW54	Phenol	6/25/97	82	J		ug/L
MW55	2-Nitrophenol	3/25/97	2	J	J	ug/L
MW55	4-Chloro-3-Methylphenol	3/25/97	4	J	J	ug/L
MW55	4-Nitrophenol	3/25/97	19	J	J	ug/L
MW55	Ethylhexyl)Phthalate	6/25/97	40			ug/L
MW55	Ethylhexyl)Phthalate	9/24/97	32			ug/L
MW55	Phenol	3/25/97	39	J		ug/L
MW55	Phenol	9/24/97	7		J	ug/L
VOCs						
MW07	Acetone	3/25/97	20			ug/L
MW07	Toluene	9/24/97	1		J	ug/L
MW09	Benzene	11/6/96	310			ug/L
MW09	Benzene	4/2/97	310			ug/L
MW09	Benzene	6/30/97	280			ug/L
MW09	Benzene	9/29/97	290			ug/L
MW09	Benzene	1/4/95	40		J	ug/L
MW09	Chloroethane	1/16/91	350			ug/L
MW09	Chloroethane	1/4/95	650			ug/L
MW09	Chloroethane	11/6/96	2200			ug/L
MW09	Chloroethane	4/2/97	2900			ug/L
MW09	Chloroethane	9/29/97	1800			ug/L
MW09	Chloroethane	6/30/97	1700	J		ug/L
MW09	Chloroethane	5/15/90	440		D	ug/L
MW09	Chloroethane	7/10/90	200		D	ug/L

Historical Detections in the Lower Aquifer Wells

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW10	4-Methyl-2-Pentanone	1/4/95	9		J	ug/L
MW10C	Chloroethane	11/6/96	120			ug/L
MW10C	Chloroethane	3/27/97	140			ug/L
MW10C	Chloroethane	9/24/97	420			ug/L
MW10C	Chloroethane	6/26/97	440	J		ug/L
MW10C	Methylene Chloride	3/27/97	1		J	ug/L
MW10C	4-Methyl-2-Pentanone	7/25/90	3		J	ug/L
MW10C	Chloroethane	7/25/90	3		J	ug/L
MW21	Acetone	1/17/91	20	J		ug/L
MW22	Chloroform	7/1/97	3		J	ug/L
MW24	4-Methyl-2-Pentanone	1/18/91	2		J	ug/L
MW29	Benzene	6/30/97	3		J	ug/L
MW29	Chloroethane	3/13/96	2		J	ug/L
MW30	Chloroform	3/25/97	1		J	ug/L
MW32	Acetone	3/25/97	5	J	J	ug/L
MW32	Toluene	3/25/97	3	J	J	ug/L
MW33	Acetone	3/26/97	8		J	ug/L
MW33	Benzene	10/1/97	1	J	J	ug/L
MW34	Acetone	3/26/97	7		J	ug/L
MW34	Toluene	9/29/97	1	J	J	ug/L
MW36	Toluene	3/25/97	1	J	J	ug/L
MW51	4-Methyl-2-Pentanone	6/25/97	4		J	ug/L
MW52	Acetone	12/26/96	22			ug/L
MW52	Toluene	12/26/96	3	J	J	ug/L
MW53	4-Methyl-2-Pentanone	9/25/97	5	J	J	ug/L
MW53	Acetone	12/26/96	11			ug/L
MW53	Acetone	6/25/97	16			ug/L
MW53	Acetone	3/25/97	8	J	J	ug/L
MW53	Benzene	6/25/97	1		J	ug/L
MW53	Benzene	9/25/97	2		J	ug/L
MW53	Toluene	9/25/97	1		J	ug/L
MW53	Toluene	12/26/96	1	J	J	ug/L
MW55	Chloroform	3/25/97	1		J	ug/L
MW55	Toluene	9/24/97	1		J	ug/L

D

APPENDIX D

UPPER AQUIFER AND FIELD AND TRIP BLANK LABORATORY DATA

One copy of Appendix D has been provided to U.S. EPA, IDEM, and B&VWS. Additional copies of the appendix are available upon request to Montgomery Watson.

E

APPENDIX E

LOWER AQUIFER LABORATORY DATA

One copy of Appendix E has been provided to U.S. EPA, IDEM, and B&VWS. Additional copies of the appendix are available upon request to Montgomery Watson.

F

APPENDIX F

RESIDENTIAL WELL LABORATORY DATA

One copy of Appendix F has been provided to U.S. EPA, IDEM, and B&VWS. Additional copies of the appendix are available upon request to Montgomery Watson.

G

APPENDIX G

DATA VALIDATION SUMMARIES

VALIDATION NARRATIVE

Project: ACS
Number: 12520421.221602

Analysis: VOCs, SVOCs, PCBs
Matrix: Groundwater
SDG: 9367

Validated By: Steve Wiskes Date: 11/16/97

This narrative covers the validation of 21 samples from ACS for CLP organic analysis by IEA laboratories using CLP methodologies. Validation was performed using the *USEPA Contract Laboratory Program National Functional Guidelines for Organic Analysis Review* (2/94) and the Region 5 SOP for validation of organics. The data is validated as acceptable for use in site evaluation with the following comments:

Hold Times All hold times were met.

Instrument Performance All VOC instrument BFB tuning criteria was acceptable. All SVOC instrument DFTPP tuning criteria was acceptable. All pesticide/PCB resolution check mixture, PEM DDT and endrin breakdown, florisil cartridge check and GPC calibration check QC criteria was acceptable.

Calibration Several VOCs in continuing calibration (vinyl chloride, methylene chloride, chloroethane, carbon disulfide, 1,1,1-TCA, carbon tetrachloride, bromoform, and 2-hexanone) exceeded %D criteria. If detected the compounds are qualified (J), estimated. If not detected the compounds are qualified (UJ), estimated quantitation limit. Several SVOCs in continuing calibration exceeded continuing calibration criteria (N-nitroso-di-n-dipropylamine, nitrobenzene, hexachlorobutadiene, 4-chloro-3-methylphenol, 2-nitroanailine, 4-nitrophenol). If detected the compounds are qualified (J) estimated. If not detected the compounds are qualified (UJ) estimated quantitation limit. All pesticide calibration criteria were acceptable.

Blanks VOC method blanks and one trip blank were analyzed. The VOC method blanks contained one TIC. The trip blank did not contain any compounds.

One SVOC method blank contained bis(2-ehtylhexyl)phthalate. Sample results were qualified using the 5x/10x rule as undetected at the sample result or the CRQL, whichever was greater.

Pesticide/PCB method blanks and field blanks were analyzed. No compounds were detected in the SVOC method blank.

Surrogates Two of 84 VOC surrogate recoveries were outside QC limits. BFB in the MS and MSD were low. The unspiked sample surrogate recovery was acceptable. No action.

All SVOC surrogate recoveries were within QC limits.

One pesticide/PCB surrogate recovery was outside advisory QC limits. Matrix interference, no action.

Matrix Spikes VOC matrix spike recoveries and RPDs were within acceptable QC limits.

Four SVOC matrix spike recoveries were slightly high, only phenol detected in unspiked sample, thus phenol is qualified (J) estimated in sample MW28.

Gamma-bhc had a slightly low recovery for the matrix spike. Gamma-bhc is not detetcted, thus qualified (UJ) not detected estimated quantitation limit.

Field Duplicates VOC field duplicate results were within acceptable QC limits. Phenol in the SVOC field duplicate results was outside acceptable QC limits. The sample was not qualified based on field duplicate results. Pesticide/PCB field duplicate results were within acceptable QC limits.

Internal Standards All VOC internal standard results were within acceptable validation limits. All SVOC internal standard results were within acceptable validation limits.

Compound Identification VOC target compound qualitative identification criteria, including RRTs and mass spectra criteria was acceptable. SVOC target compound qualitative identification criteria, including RRTs and mass spectra confirmation criteria was acceptable. Pesticide/PCB target compound qualitative identification criteria, including RRTs, scaling, baseline resolution, and dual column confirmation criteria was acceptable.

System Performance VOC system performance, including RIC baseline, resolution, and peak shape was acceptable. SVOC system performance, including RIC baseline, resolution, and peak shape was acceptable. Pesticide florisil and GPC cleanup check results were within acceptable QC limits.

Sample Results Overall data quality by the laboratory was good, with no significant instrument related problems observed.

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VALIDATION NARRATIVE

Project: ACS
Number: 1252042

Analysis: VOCs, SVOCs, PCBs
Matrix: GW/PW Rd 4
SDG 10047

Validated By: JAH Date: 11-16-97

This narrative covers the validation of groundwater and private well water samples from ACS for CLP inorganic analysis by IEA laboratories using CLP methodologies. Validation was performed using the *USEPA Contract Laboratory Program National Functional Guidelines for Organic Analysis Review* (2/94). The data is validated as acceptable for use in site evaluation with the following comments:

Hold Times All hold times were met.

Instrument Performance All VOC instrument BFB tuning criteria was acceptable. All SVOC instrument DFTPP tuning criteria was acceptable. All pesticide/PCB resolution check mixture, PEM DDT and endrin breakdown, florisil cartridge check and GPC calibration check QC criteria was acceptable.

Calibration All VOC calibration criteria was acceptable, with the following exceptions. Chloromethane, acetone, and 2-butanone RF values were < 0.05 for the PW sample calibration. All sample results for these undetected compounds are unusable "R".

All SVOC calibration criteria was acceptable, with the following exceptions. Percent difference criteria was exceeded for bis(2-choroisopropyl)ether, n-nitrosodi-n-propylamine, hexachloroethane, hexachlorocyclopentadiene, 2-nitroanaline, 4-nitrophenol, and hexachlorobutadiene. Associated samples have been qualified as estimated.

All pesticide calibration criteria were acceptable.

Blanks VOC method blanks and one trip blank were analyzed. The VOC method blanks contained a TIC. The trip blank contained acetone. Sample results were qualified using the 5x/10x rule as undetected at the sample result or the CRQL, whichever was greater. Note that the trip blank was designated for the private wells (PWTB01-03), but was analyzed as a groundwater at the higher detection limit.

SVOC method blanks were analyzed. No field blank was associated with this SDG. Bis(2-ethylhexyl)phthalate was detected at low concentration (1.7 and 0.88 ug/L) and was not reported on the Form I's. Sample results were qualified using the 5x/10x rule as undetected at the sample result or the CRQL, whichever was greater.

Pesticide/PCB method blanks and field blanks were analyzed. No pesticides or PCBs were detected in the blanks.

Surrogates All VOC surrogate recoveries were within QC limits.
All SVOC surrogate recoveries were within acceptable QC limits.
All pesticide/PCB surrogate recoveries were within acceptable QC limits.

Matrix Spikes All matrix spike recoveries and RPDs were within acceptable QC limits, although the pesticide spike indicated some matrix interferences.

Field Duplicates VOC field duplicate results were within acceptable QC limits. SVOC field duplicate results were within acceptable QC limits. Pesticide/PCB field duplicate results were within acceptable QC limits.

Internal Standards All VOC internal standard results were within acceptable validation limits. All SVOC internal standard results were within acceptable validation limits.

Compound Identification VOC target compound qualitative identification criteria, including RRTs and mass spectra criteria was acceptable. SVOC target compound qualitative identification criteria, including RRTs and mass spectra confirmation criteria was acceptable. Pesticide/PCB target compound qualitative identification criteria, including RRTs, scaling, baseline resolution, and dual column confirmation criteria was acceptable.

System Performance VOC system performance, including RIC baseline, resolution, and peak shape was acceptable. SVOC system performance, including RIC baseline, resolution, and peak shape was acceptable. Pesticide florisil and GPC cleanup check results were within acceptable QC limits.

Sample Results Overall data quality by the laboratory was good, with no significant instrument related problems observed. Sample ACS-PWY-03 was reportedly analyzed as a multi-conc. sample instead of a low concentration sample (i.e., routine CRQL method used). No results for this sample were reported, however, this sample was correctly analyzed as a field duplicate (VOCs were not detected)

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DATA VALIDATION NARRATIVE

Project: ACS

Number: 1252042.221602
Validated By: Mark Pauli

Analyses: VOCs, SVOCs, PEST/PCBs, Metals, and Cyanide
SDG#: 09475
Date: 11/21/97

This narrative covers the validation of 20 groundwater samples from ACS for CLP organic analyses by AEN, Inc (IEA) using CLP methodologies. Validation was performed using the *USEPA Contract Laboratory Program National Functional Guidelines for Organic Analysis Review (2/94).* The data is validated as acceptable for use in site evaluation with the following comments:

Hold Times: All hold times were met.

Instrument Performance: All VOC instrument BFB tuning criteria was acceptable. All SVOC instrument DFTPP tuning criteria was acceptable. All pesticide/PCB resolution check mixture, PEM DDT and Endrin breakdown, and florisil cartridge check, QC criteria was acceptable.

Calibration: All VOC calibration criteria was acceptable. All SVOC calibration criteria was acceptable. All Pesticide/PCB calibration criteria was acceptable.

Blanks: VOC method blanks, two field blanks, and two trip blanks were analyzed. VOC blanks contained acetone. Sample ACS-GWMW21-03 with acetone detection qualified as non-detect. Method blanks with TIC Butylated Hydroxytoluene reported in the library search. No VOC sample data was affected by method blank TIC detections.

SVOC method blanks and two field blanks were analyzed. No target compounds were detected in method or field blanks. Seven of eighteen samples with TIC detections qualified as non-detects due to the detection of these TICs in method and field blanks associated with these samples.

Pesticide/PCB method and two field blanks were analyzed. No qualifiers were applied to sample data for blank analyses.

System Monitoring Compound (SMC) Recoveries: All VOC SMC recoveries were within Q.C. Limits.

SVOC sample data indicated three of eighteen samples with one of eight SMCs outside of Q.C. Limits. All recoveries were greater than 10%. No qualifiers applied to sample data for SMC recoveries.

Pesticide/PCB sample data indicated twelve of eighteen samples with surrogate recoveries outside the advisory limits of 60 - 150%. All recoveries were greater than 10%. No qualifiers applied to sample data for surrogate recoveries.

Matrix Spike/Matrix Spike Duplicate Recoveries: VOC data with all MS/MSD recoveries and RPDs within Q.C. Limits.

SVOC data indicated all MS/MSD recoveries within Q.C. Limits. The RPD(%) for phenol was outside the Q.C. Limits due to a low recovery for this compound in the matrix spike. The recovery for phenol in the matrix spike was within the Q.C. Limits for phenol. No qualifiers were applied to sample data for MS/MSD recoveries.

Pesticide/PCB data indicated the matrix spike with gamma-Lindane recovery outside the Q.C. Limits. Matrix spike duplicate with acceptable recovery for gamma-Lindane. The RPD for gamma-Lindane was outside Q.C. Limits for the MS/MSD. All recoveries were greater than 10%. No qualifiers were applied to sample data for MS/MSD data.

Field Duplicates: No field duplicates were included in this SDG.

Internal Standards: All VOC internal standard results were within acceptable validation limits.

All SVOC internal standard results were within acceptable validation limits.

Compound Identification: VOC target compound qualitative identification criteria, including RRTs and mass spectra confirmation criteria, was acceptable.

SVOC target compound qualitative identification criteria, including RRTs and mass spectra confirmation criteria, was acceptable.

Pesticide/PCB target compound qualitative identification criteria, including RRTs, scaling, baseline resolution, and dual column confirmation criteria, was acceptable.

System Performance: VOC system performance, including RIC baseline, resolution, and peak shape, was acceptable.

SVOC system performance, including RIC baseline, resolution, and peak shape, was acceptable.

Pesticide/PCB florisil cleanup check results were within Q.C. Limits.

VALIDATION NARRATIVE

Project:	**ACS**	**Analysis:**	VOCs, SVOCs, PCBs
Number:	1252042	**Matrix:**	Groundwater
		SDG:	9403

Validated By: JAH Date: 11-23-97

This narrative covers the validation of 20 groundwater samples from ACS for CLP organic analysis by IEA laboratories using CLP methodologies. Validation was performed using the *USEPA Contract Laboratory Program National Functional Guidelines for Organic Analysis Review* (2/94). The data is validated as acceptable for use in site evaluation with the following comments:

Hold Times All hold times were met.

Instrument Performance All VOC instrument BFB tuning criteria was acceptable. All SVOC instrument DFTPP tuning criteria was acceptable. All pesticide/PCB resolution check mixture, PEM DDT and endrin breakdown, florisil cartridge check and GPC calibration check QC criteria was acceptable.

Calibration All VOC calibration criteria was acceptable, except some 2-butanone, 4-methyl-2-pentanone and 2-hexanone %D criteria was exceeded; associated samples have been estimated. All SVOC calibration criteria was acceptable, except some bis(2-chloroisopropyl)ether, n-nitrosodimethylamine, hexachloroethane, nitrobenzene, hexachlorobutadiene, 4-chloro-3-methylphenol, 2-nitroaniline, 4-nitrophenol, and hexachlorobenzene %D criteria was exceeded; associated samples have been estimated. All pesticide calibration criteria were acceptable.

Blanks VOC method blanks and three trip blanks and two field blanks were analyzed. The VOC blanks contained methylene chloride and acetone. Sample results were qualified using the 5x/10x rule as undetected at the sample result or the CRQL, whichever was greater.

SVOC method blanks and field blanks were analyzed. Phenol and BEHP and some TICs were detected. Sample results were qualified using the 5x/10x rule as undetected at the sample result or the CRQL, whichever was greater.

Pesticide/PCB method blanks and field blanks were analyzed. No compounds were detected.

Surrogates All VOC surrogate recoveries were within QC limits.
All SVOC surrogate recoveries were within QC limits, although some terphenyl results were low.
For pesticide/PCB surrogate recoveries, 34 surrogates were below advisory QC limits (35-59% recovery). This was attributed to matrix interferences. These samples have not historically contained pesticides, and no qualifier were applied.

Matrix Spikes All matrix spike recoveries and RPDs were within acceptable QC limits, except for the Pesticide MS analysis, where all recoveries were low. The laboratory did not provide any explanation for the problem.

Field Duplicates VOC field duplicate results were within acceptable QC limits. SVOC field duplicate results were within acceptable QC limits. Pesticide/PCB field duplicate results were within acceptable QC limits.

Internal Standards All VOC internal standard results were within acceptable validation limits. All SVOC internal standard results were within acceptable validation limits.

Compound Identification VOC target compound qualitative identification criteria, including RRTs and mass spectra criteria was acceptable. SVOC target compound qualitative identification criteria, including RRTs and mass spectra confirmation criteria was acceptable. Pesticide/PCB target compound qualitative identification criteria, including RRTs, scaling, baseline resolution, and dual column confirmation criteria was acceptable.

System Performance VOC system performance, including RIC baseline, resolution, and peak shape was acceptable. SVOC system performance, including RIC baseline, resolution, and peak shape was acceptable. Pesticide florisil and GPC cleanup check results were within acceptable QC limits.

Sample Results Overall data quality by the laboratory was good, with no significant instrument related problems observed. Pesticide/PCBs contained matrix interferences, however the data was deemed to be acceptable, and was not qualified.

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VALIDATION NARRATIVE

Project: ACS
Number: 1252042

Analysis: INORGANICS
Matrix: GW/PW Rd 4
SDG 10047

Validated By: JAH Date: 11-2-97

This narrative covers the validation of groundwater and private well water samples from ACS for CLP inorganic analysis by IEA laboratories using CLP methodologies. Validation was performed using the *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Analysis Review* (2/94). The data is validated as acceptable for use in site evaluation with the following comments/qualifiers:

Hold Times All hold times (6 months for metals, 28 days for mercury, and 14 days for cyanide) were met.

Calibration All ICP calibration criteria (calibration/ICV/CCV) was acceptable. All cyanide calibration criteria (calibration/ICV/CCV) was acceptable. All mercury CV calibration criteria (calibration/ICV/CCV) were acceptable.

Blanks Initial, continuing, and prep blanks were analyzed. No field blanks were included with this SDG. For blanks with analytes greater than the IDL but less than 5x the CRDL, associated sample results less than 5x the blank level were reported as undetected (U), for sample results greater than 5x the blank level were qualified as estimated (J).

Interference Check Sample All Solution AB recoveries were within ± 20% of the true value.

Laboratory Control Sample All LCS recoveries were within 80-120% recovery.

Lab and Field Duplicates Lab duplicate results were within acceptable QC limits (± 20% RPD). Field duplicate results were acceptable.

Matrix Spikes All matrix spike recoveries and RPDs were within acceptable QC limits (75-125% recovery), except for aluminum, where the recovery was 125.3%; results have been estimated.

Furnace Atomic Absorption QC No graphite furnace runs were performed.

ICP Serial Dilution All ICP serial dilution results were within acceptable QC limits (± 10% Difference if original results greater than 50x IDL).

Sample Result Verification Calculations and transcriptions were review and were acceptable. Overall data quality by the laboratory was good, with no significant instrument related problems observed.

Additional Case Specific Problems No additional problems were observed with this case.

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VALIDATION NARRATIVE

Project: ACS
Number: 1252042.221602

Analysis: INORGANICS
Matrix: Groundwater
SDG: 9367

Validated By: Steve Wiskes Date: 11/17/97

This narrative covers the validation of 18 samples from ACS for CLP inorganic analysis by IEA laboratories using CLP methodologies. Validation was performed using the *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Analysis Review* (2/94) and USEPA Region 5 validation guidelines. The data is validated as acceptable for use in site evaluation with the following comments/qualifiers:

Hold Times All hold times (6 months for metals, 28 days for mercury, and 14 days for cyanide) were met.

Calibration All ICP calibration criteria (calibration/ICV/CCV) was acceptable. All AA calibration criteria (calibration/ICV/CCV) was acceptable. All CV calibration criteria (calibration/ICV/CCV) were acceptable.

Blanks Initial, continuing, and prep blanks were analyzed, together with one field blank. For blanks with analytes greater than the IDL but less than 5x the CRDL, associated sample results less than 5x the blank level were reported as undetected (U), for sample results greater than 5x the blank level were qualified as estimated (J).

Interference Check Sample All Solution AB recoveries were within ± 20% of the true value.

Laboratory Control Sample All LCS recoveries were within 80-120% recovery.

Lab and Field Duplicates Lab duplicate results were within acceptable QC limits (± 20% RPD). Field duplicate results were acceptable.

Matrix Spikes All matrix spike recoveries and RPDs were within acceptable QC limits (75-125% recovery) except aluminum which was high. Aluminum results are qualified (J).

Furnace Atomic Absorption QC No graphite furnace runs were performed.

ICP Serial Dilution All ICP serial dilution results were within acceptable QC limits (± 10% Difference if original results greater than 50x IDL) except sodium and potassium. Sodium and potassium results are qualified (J).

Sample Result Verification Calculations and transcriptions were review and were acceptable. Overall data quality by the laboratory was good, with no significant instrument related problems observed.

Additional Case Specific Problems No additional problems were observed with this case.

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DATA VALIDATION NARRATIVE

ACS
1252042.221602
By: MDP

Metals in Groundwater
SDG#: 09475
Date: 11/21/97

This narrative covers data validation of 18 groundwater samples collected from the ACS Site and analyzed for TAL metals using CLP methodology by AEN, Inc. (IEA) Laboratories. The validation was performed using the *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (2/94).* This data is acceptable for use in site evaluation with the following comments:

Hold Times: All hold times were met.

Calibration: All instrument calibration criteria was validated as acceptable.

Blanks: Method, preparation, and field blanks were analyzed. Aluminum, antimony, barium, calcium, chromium, copper, iron, magnesium, manganese, nickel, potassium, sodium, thallium, and zinc were detected in the blanks. Results less than 5 times the maximum blank concentration have been qualified as undetected (U) at the reported concentration. Sample specific validation includes:

Sample ACS-GWFB04-03 with magnesium, potassium, sodium, and zinc results qualified as non-detects.

Sample ACS-GWFB05-03 with potassium, sodium, thallium, and zinc results qualified as non-detects.

Sample ACS-GWMW09-03 with copper, thallium, and zinc results qualified as non-detects.

Sample ACS-GWMW12-03 with antimony, sodium, thallium, and zinc results qualified as non-detects.

Sample ACS-GWMW13-03 with aluminum, copper, nickel, and zinc results qualified as non-detects.

Sample ACS-GWMW14-03 with antimony and sodium results qualified as non-detects.

Sample ACS-GWMW18-03 with aluminum, iron, thallium, and zinc results qualified as non-detects.

Sample ACS-GWMW19-03 with thallium and zinc results qualified as non-detects.

Sample ACS-GWMW21-03 with aluminum, copper, nickel, and zinc results qualified as non-detects.

Sample ACS-GWMW22-03 with antimony, thallium, and zinc results qualified as non-detects.

Sample ACS-GWMW29-03 with aluminum, chromium, copper, nickel, and zinc results qualified as non-detects.

Sample ACS-GWMW33-03 with aluminum and zinc results qualified as non-detects.

Sample ACS-GWMW34-03 with aluminum and zinc results qualified as non-detects.

Sample ACS-GWMW41-03 with sodium, thallium, and zinc results qualified as non-detects.

Sample ACS-GWMW44-03 with chromium, nickel, and zinc results qualified as non-detects.

Sample ACS-GWMW45-03 with aluminum, chromium, and zinc results qualified as non-detects.

Sample ACS-GWMW48-03 with zinc result qualified as non-detect.

Sample ACS-GWMW51-03 with zinc result qualified as non-detect.

Matrix Spikes: Matrix spike was run ACS-GWMW12-03. All spike recoveries were within Q.C. Limits. No qualifiers applied to sample data for matrix spikes.

Duplicates: No duplicates included in this SDG. Laboratory duplicate on ACS-GWMW12-03. All RPDs(%) were within Q.C. Limits.

LCS: All laboratory control spikes were within Q.C. Limits. No qualifiers were applied to sample data for LCS data.

ICP QC: ICP interference Q.C. check sample acceptable. Serial dilution run on sample ACS-GWMW12-03 with results for arsenic, chromium, cobalt, copper, and potassium outside the Q.C. Limits. Sample data for these compounds were qualified as estimated (J).

Sample Results: All results are acceptable for use in site evaluation. Overall data quality by the laboratory was acceptable, with no significant instrument problems observed. ICP serial dilution Q.C. exceedances were minor.

VALIDATION NARRATIVE

Project: ACS
Number: 1252042

Analysis: INORGANICS
Matrix: Groundwater
SDG: 9403

Validated By: JAH Date: 11/22/97

This narrative covers the validation of 20 Groundwater samples from ACS for CLP inorganic analysis by IEA laboratories using CLP methodologies. Validation was performed using the *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Analysis Review* (2/94). The data is validated as acceptable for use in site evaluation with the following comments/qualifiers:

Hold Times All hold times (6 months for metals, 28 days for mercury, and 14 days for cyanide) were met.

Calibration All ICP calibration criteria (calibration/ICV/CCV) was acceptable. All AA calibration criteria (calibration/ICV/CCV) was acceptable. All CV calibration criteria (calibration/ICV/CCV) were acceptable.

Blanks Initial, continuing, and prep blanks were analyzed, together with 2 field blanks. Aluminum, barium, calcium, copper, iron, lead, magnesium, manganese, potassium, sodium, thallium and zinc were detected in these blanks. For blanks with analytes greater than the IDL but less than 5x the CRDL, associated sample results less than 5x the blank level were reported as undetected (U), for sample results greater than 5x the blank level were qualified as estimated (J).

Interference Check Sample All Solution AB recoveries were within ± 20% of the true value.

Laboratory Control Sample All LCS recoveries were within 80-120% recovery.

Lab and Field Duplicates Lab duplicate results were within acceptable QC limits (± 20% RPD). Field duplicate results were acceptable.

Matrix Spikes All matrix spike recoveries and RPDs were within acceptable QC limits (75-125% recovery).

Furnace Atomic Absorption QC No graphite furnace runs were performed.

ICP Serial Dilution All ICP serial dilution results were within acceptable QC limits (± 10% Difference if original results greater than 50x IDL), except potassium (30.6% with LQ=E) which was qualified as estimated (J).

Sample Result Verification Calculations and transcriptions were review and were acceptable. Overall data quality by the laboratory was good, with no significant instrument related problems observed.

Additional Case Specific Problems No additional problems were observed with this case.

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Summary of Qualified Data
Groundwater Monitoring Round 4
American Chemical Service, Inc.
Griffith, Indiana

Sample ID	Parameter	CONC	DVQ	LQ	RDL	Comment
ACS-GWFB01-03	Methylene Chloride	0	UJ	U	10	Calibration criteria exceeded.
	Bromoform	0	UJ	U	10	Calibration criteria exceeded.
	N-Nitrosodi-N-Propylamine	0	UJ	U	10	Calibration criteria exceeded.
	Nitrobenzene	0	UJ	U	10	Calibration criteria exceeded.
	Hexachlorobutadiene	0	UJ	U	10	Calibration criteria exceeded.
	2-Nitroaniline	0	UJ	U	25	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	25	Calibration criteria exceeded.
	Aluminum	0	U	BN	22.8	Parameter detected in associated blank
	Calcium	152	J	B	8	Parameter detected in associated blank
	Copper	0	U	B	3.2	Parameter detected in associated blank
	Magnesium	0	U	B	34	Parameter detected in associated blank
	Potassium	0	UJ	BE	30.5	Parameter detected in associated blank. ICP Criteria exceeded.
	Sodium	0	UJ	BE	1760	Parameter detected in associated blank. ICP Criteria exceeded.
	Zinc	0	U		45.8	Parameter detected in associated blank.
ACS-GWFB02-03	Bromomethane	0	UJ	U	10	Calibration criteria exceeded.
	Chloroethane	0	UJ	U	10	Calibration criteria exceeded.
	N-Nitrosodi-N-Propylamine	0	UJ	U	10	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	25	Calibration criteria exceeded.
	Potassium	0	J	UE	16	ICP Criteria exceeded.
ACS-GWFB03-03	2,2'-oxybis(1-Chloropropane)	0	UJ	U	10	Calibration criteria exceeded.
	N-Nitrosodi-N-Propylamine	0	UJ	U	10	Calibration criteria exceeded.
	Hexachloroethane	0	UJ	U	10	Calibration criteria exceeded.
	Hexachlorobutadiene	0	UJ	U	10	Calibration criteria exceeded.
	2-Nitroaniline	0	UJ	U	25	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	25	Calibration criteria exceeded.
	Potassium	34.7	J	BE	16	ICP Criteria exceeded.
ACS-GWFB04-03	Aluminum	0	U	B	15.6	Parameter detected in associated blank
	Magnesium	0	U	B	89.3	Parameter detected in associated blank
	Potassium	0	UJ	BE	48.2	Parameter detected in associated blank. ICP Criteria exceeded.
	Sodium	0	UJ	BE	1980	Parameter detected in associated blank. ICP Criteria exceeded.
	Zinc	0	U	B	10.7	Parameter detected in associated blank.
ACS-GWFB05-03	Potassium	0	UJ	BE	38.3	Parameter detected in associated blank. ICP Criteria exceeded.
	Sodium	0	UJ	B	2400	Parameter detected in associated blank. ICP Criteria exceeded.
	Thallium	0	U	B	2	Parameter detected in associated blank.
	Zinc	0	U	B	11.3	Parameter detected in associated blank.
ACS-GWM01S-03	N-Nitrosodi-N-Propylamine	0	UJ	U	10	Calibration criteria exceeded.
	Nitrobenzene	0	UJ	U	10	Calibration criteria exceeded.
	Hexachlorobutadiene	0	UJ	U	10	Calibration criteria exceeded.
	2-Nitroaniline	0	UJ	U	25	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	25	Calibration criteria exceeded.
	Bis(2-Ethylhexyl)Phthalate	0	U	JB	10	Parameter detected in associated blank.
	Aluminum	891	J	N	10	Parameter detected in associated blank
	Calcium	251000	J		8	Parameter detected in associated blank
	Copper	0	UJ	B	8.3	Parameter detected in associated blank
	Magnesium	91100	J		3	Parameter detected in associated blank
	Potassium	38100	J	E	16	ICP Criteria exceeded.
	Sodium	125000	J	E	76	ICP Criteria exceeded.
	Zinc	0	U		21.3	Parameter detected in associated blank.
ACS-GWM03S-03	N-Nitrosodi-N-Propylamine	0	UJ	U	10	Calibration criteria exceeded.
	Nitrobenzene	0	UJ	U	10	Calibration criteria exceeded.
	Hexachlorobutadiene	0	UJ	U	10	Calibration criteria exceeded.
	2-Nitroaniline	0	UJ	U	25	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	25	Calibration criteria exceeded.
	Bis(2-Ethylhexyl)Phthalate	0	U	JB	10	Parameter detected in associated blank.
	Aluminum	257	J	N	10	Parameter detected in associated blank
	Calcium	134000	J		8	Parameter detected in associated blank
	Copper	5	U	B	1	Parameter detected in associated blank
	Magnesium	39000	J		3	Parameter detected in associated blank
	Potassium	13400	J	E	16	ICP Criteria exceeded.
	Sodium	42500	J	E	76	ICP Criteria exceeded.
	Zinc	0	U	B	18.9	Parameter detected in associated blank.
ACS-GWM03S-93	Bromomethane	0	UJ	U	10	Calibration criteria exceeded.
	Chloroethane	0	UJ	U	10	Calibration criteria exceeded.
	N-Nitrosodi-N-Propylamine	0	UJ	U	10	Calibration criteria exceeded.
	Nitrobenzene	0	UJ	U	10	Calibration criteria exceeded.
	Hexachlorobutadiene	0	UJ	U	10	Calibration criteria exceeded.
	2-Nitroaniline	0	UJ	U	25	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	25	Calibration criteria exceeded.
	Bis(2-Ethylhexyl)Phthalate	0	U	JB	10	Parameter detected in associated blank.
	Aluminum	137	J	BN	10	Parameter detected in associated blank
	Calcium	131000	J		8	Parameter detected in associated blank
	Copper	0	U	B	3.9	Parameter detected in associated blank

Summary of Qualified Data
Groundwater Monitoring Round 4
American Chemical Service, Inc.
Griffith, Indiana

Sample ID	Parameter	CONC	DVQ	LQ	RDL	Comment
ACS-GWM03S-93	Magnesium	38100	J		3	Parameter detected in associated blank
	Potassium	13400	J	E	16	ICP Criteria exceeded.
	Sodium	42500	J	E	76	ICP Criteria exceeded.
	Thallium	0	U	B	2	Parameter detected in associated blank.
	Zinc	0	U	B	15.3	Parameter detected in associated blank.
ACS-GWM04D-03	Bromomethane	0	UJ	U	10	Calibration criteria exceeded.
	Chloroethane	0	UJ	U	10	Calibration criteria exceeded.
	N-Nitrosodi-N-Propylamine	0	UJ	U	10	Calibration criteria exceeded.
	Nitrobenzene	0	UJ	U	10	Calibration criteria exceeded.
	Hexachlorobutadiene	0	UJ	U	10	Calibration criteria exceeded.
	4-Chloro-3-Methylphenol	0	UJ	U	10	Calibration criteria exceeded.
	2-Nitroaniline	0	UJ	U	25	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	25	Calibration criteria exceeded.
	Bis(2-Ethylhexyl)Phthalate	0	U	JB	10	Parameter detected in associated blank.
	Aluminum	1140	J	N	10	Parameter detected in associated blank
	Calcium	88000	J		8	Parameter detected in associated blank
	Copper	0	U	B	4.2	Parameter detected in associated blank
	Magnesium	41000	J		3	Parameter detected in associated blank
	Potassium	4640	J	BE	16	ICP Criteria exceeded.
	Sodium	70600	J	E	76	ICP Criteria exceeded.
	Zinc	0	U	B	13.1	Parameter detected in associated blank.
ACS-GWM04S-03	Methylene Chloride	0	UJ	U	80	Calibration criteria exceeded.
	Bromoform	0	UJ	U	80	Calibration criteria exceeded.
	Nitrobenzene	0	UJ	U	10	Calibration criteria exceeded.
	Hexachlorobutadiene	0	UJ	U	10	Calibration criteria exceeded.
	2-Nitroaniline	0	UJ	U	25	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	25	Calibration criteria exceeded.
	Bis(2-Ethylhexyl)Phthalate	0	U	JB	10	Parameter detected in associated blank.
	Aluminum	1120	J	N	10	Parameter detected in associated blank
	Calcium	281000	J		8	Parameter detected in associated blank
	Copper	0	U	B	10.8	Parameter detected in associated blank
	Magnesium	47800	J		3	Parameter detected in associated blank
	Potassium	22800	J	E	16	ICP Criteria exceeded.
	Sodium	72800	J	E	76	ICP Criteria exceeded.
	Zinc	0	U		29.8	Parameter detected in associated blank.
ACS-GWMW06-03	Bromomethane	0	UJ	U	10	Calibration criteria exceeded.
	Chloroethane	140	J		10	Calibration criteria exceeded.
	Hexachlorobutadiene	0	UJ	U	10	Calibration criteria exceeded.
	4-Chloro-3-Methylphenol	0	UJ	U	10	Calibration criteria exceeded.
	2-Nitroaniline	0	UJ	U	25	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	25	Calibration criteria exceeded.
	Bis(2-Ethylhexyl)Phthalate	0	U	JB	10	Parameter detected in associated blank.
	Aluminum	180	J	BN	10	Parameter detected in associated blank
	Calcium	174000	J		8	Parameter detected in associated blank
	Copper	0	U	B	7.5	Parameter detected in associated blank
	Magnesium	34200	J		3	Parameter detected in associated blank
	Potassium	16900	J	E	16	ICP Criteria exceeded.
	Sodium	79300	J	E	76	ICP Criteria exceeded.
	Zinc	0	U		20.4	Parameter detected in associated blank.
ACS-GWMW07-03	Methylene Chloride	0	UJ	U	10	Calibration criteria exceeded.
	Carbon Disulfide	0	UJ	U	10	Calibration criteria exceeded.
	1,1,1-Trichloroethane	0	UJ	U	10	Calibration criteria exceeded.
	Carbon Tetrachloride	0	UJ	U	10	Calibration criteria exceeded.
	2-Hexanone	0	UJ	U	10	Calibration criteria exceeded.
	Hexachlorobutadiene	0	UJ	U	10	Calibration criteria exceeded.
	4-Chloro-3-Methylphenol	0	UJ	U	10	Calibration criteria exceeded.
	2-Nitroaniline	0	UJ	U	25	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	25	Calibration criteria exceeded.
	Aluminum	1280	J	N	10	Parameter detected in associated blank
	Calcium	102000	J		8	Parameter detected in associated blank
	Copper	11.3	J	B	1	Parameter detected in associated blank
	Magnesium	28600	J		3	Parameter detected in associated blank
	Potassium	2190	J	BE	16	ICP Criteria exceeded.
	Sodium	20200	J	E	76	ICP Criteria exceeded.
	Zinc	0	U		29.6	Parameter detected in associated blank.
ACS-GWMW08-03	Methylene Chloride	0	UJ	U	10	Calibration criteria exceeded.
	Carbon Disulfide	0	UJ	U	10	Calibration criteria exceeded.
	1,1,1-Trichloroethane	0	UJ	U	10	Calibration criteria exceeded.
	Carbon Tetrachloride	0	UJ	U	10	Calibration criteria exceeded.
	2-Hexanone	0	UJ	U	10	Calibration criteria exceeded.
	Nitrobenzene	0	UJ	U	20	Calibration criteria exceeded.
	Hexachlorobutadiene	0	UJ	U	20	Calibration criteria exceeded.

Summary of Qualified Data
Groundwater Monitoring Round 4
American Chemical Service, Inc.
Griffith, Indiana

Sample ID	Parameter	CONC	DVQ	LQ	RDL	Comment
ACS-GWMW08-03	2-Nitroaniline	0	UJ	U	50	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	50	Calibration criteria exceeded.
	Aluminum	839	J	N	10	Parameter detected in associated blank
	Calcium	55200	J		8	Parameter detected in associated blank
	Copper	0	U	B	7.3	Parameter detected in associated blank
	Magnesium	17700	J		3	Parameter detected in associated blank
	Potassium	1410	J	BE	16	ICP Criteria exceeded.
	Sodium	13500	J	E	76	ICP Criteria exceeded.
	Zinc	0	U		33.7	Parameter detected in associated blank.
ACS-GWMW09-03	Isophorone	0.7	J	J	10	Compound reported less than CRQL but greater than IDL.
	Copper	0	U	B	6	Parameter detected in associated blank
	Potassium	11000	J	E	16	ICP Criteria exceeded.
	Sodium	66400	J	E	76	ICP Criteria exceeded.
	Thallium	0	U	B	2.1	Parameter detected in associated blank.
	Zinc	0	U		23.4	Parameter detected in associated blank.
ACS-GWMW10C-03	Hexachlorobutadiene	0	UJ	U	10	Calibration criteria exceeded.
	4-Chloro-3-Methylphenol	0	UJ	U	10	Calibration criteria exceeded.
	2-Nitroaniline	0	UJ	U	25	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	25	Calibration criteria exceeded.
	Aluminum	6990	J	N	10	Parameter detected in associated blank
	Calcium	141000	J		8	Parameter detected in associated blank
	Copper	45.5	J		1	Parameter detected in associated blank
	Magnesium	65900	J		3	Parameter detected in associated blank
	Potassium	7460	J	E	16	ICP Criteria exceeded.
	Sodium	158000	J	E	76	ICP Criteria exceeded.
	Zinc	119	J		1	Parameter detected in associated blank.
ACS-GWMW11-03	2-Butanone	0	UJ	U	10	Calibration criteria exceeded.
	4-Methyl-2-Pentanone	0	UJ	U	10	Calibration criteria exceeded.
	2-Hexanone	0	UJ	U	10	Calibration criteria exceeded.
	Phenol	0	U		23	Parameter detected in associated blank.
	N-Nitrosodi-N-Propylamine	0	UJ	U	10	Calibration criteria exceeded.
	Copper	0	U	B	3.9	Parameter detected in associated blank
	Lead	0	U		4.6	Parameter detected in associated blank
	Potassium	1150	J	BE	16	ICP Criteria exceeded.
	Sodium	0	U	B	4890	Parameter detected in associated blank.
	Zinc	0	U	B	14.1	Parameter detected in associated blank.
ACS-GWMW12-03	Chlorobenzene	5	J	J	10	Compound reported less than CRQL but greater than IDL.
	Dimethylphthalate	3	J	J	20	Calibration criteria exceeded.
	Antimony	0	U	B	1.2	Parameter detected in associated blank
	Arsenic	7.8	J	B	2	Parameter detected in associated blank
	Chromium	8.9	J	B	1	Parameter detected in associated blank
	Cobalt	2.4	J	B	1	Parameter detected in associated blank
	Copper	15	J	B	1	Parameter detected in associated blank
	Potassium	2930	J	BE	16	ICP Criteria exceeded.
	Sodium	0	UJ	E	10600	Parameter detected in associated blank. ICP Criteria exceeded.
	Thallium	0	U	B	2.3	Parameter detected in associated blank
	Zinc	0	U		27.1	Parameter detected in associated blank.
ACS-GWMW13-03	Methylene Chloride	1	J	J	10	Compound reported less than CRQL but greater than IDL.
	Phenol	7	J	J	10	Compound reported less than CRQL but greater than IDL.
	Bis(2-Ethylhexyl)Phthalate	2	J	J	10	Parameter detected in associated blank.
	Aluminum	0	U	B	172	Parameter detected in associated blank
	Copper	0	U	B	2.3	Parameter detected in associated blank
	Nickel	0	U	B	1.9	Parameter detected in associated blank
	Potassium	2020	J	BE	16	ICP Criteria exceeded.
	Sodium	24600	J	E	76	ICP Criteria exceeded.
	Zinc	0	U	B	12.1	Parameter detected in associated blank.
ACS-GWMW14-03	Toluene	1	J	J	10	Compound reported less than CRQL but greater than IDL.
	Bis(2-Ethylhexyl)Phthalate	3	J	J	10	Parameter detected in associated blank.
	Antimony	0	U	B	1.3	Parameter detected in associated blank
	Potassium	6440	J	E	16	ICP Criteria exceeded.
	Sodium	0	UJ	E	11600	Parameter detected in associated blank. ICP Criteria exceeded.
ACS-GWMW15-03	Bromomethane	0	UJ	U	10	Calibration criteria exceeded.
	Chloroethane	0	UJ	U	10	Calibration criteria exceeded.
	N-Nitrosodi-N-Propylamine	0	UJ	U	10	Calibration criteria exceeded.
	Nitrobenzene	0	UJ	U	10	Calibration criteria exceeded.
	Hexachlorobutadiene	0	UJ	U	10	Calibration criteria exceeded.
	2-Nitroaniline	0	UJ	U	25	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	25	Calibration criteria exceeded.
	Bis(2-Ethylhexyl)Phthalate	0	U	B	27	Parameter detected in associated blank.
	Aluminum	487	J	N	10	Parameter detected in associated blank
	Calcium	73000	J		8	Parameter detected in associated blank
	Copper	13.2	J	B	1	Parameter detected in associated blank

Summary of Qualified Data
Groundwater Monitoring Round 4
American Chemical Service, Inc.
Griffith, Indiana

Sample ID	Parameter	CONC	DVQ	LQ	RDL	Comment
ACS-GWMW15-03	Magnesium	74300	J		3	Parameter detected in associated blank
	Potassium	118000	J	E	16	ICP Criteria exceeded.
	Sodium	415000	J	E	76	ICP Criteria exceeded.
	Thallium	0	U	B	2.8	Parameter detected in associated blank.
	Zinc	0	U	B	17.9	Parameter detected in associated blank.
ACS-GWMW18-03	Aluminum	0	U	B	35.7	Parameter detected in associated blank
	Iron	0	U		208	Parameter detected in associated blank
	Potassium	3220	J	BE	16	ICP Criteria exceeded.
	Sodium	67500	J	E	76	ICP Criteria exceeded.
	Thallium	0	U	B	2.8	Parameter detected in associated blank.
	Zinc	0	U		20.2	Parameter detected in associated blank.
	TKN	0.499	J		0.1	Duplicate QC criteria exceeded
ACS-GWMW19-03	Benzene	1	J	J	10	Compound reported less than CRQL but greater than IDL.
	Potassium	98000	J	E	16	ICP Criteria exceeded.
	Sodium	719000	J	E	76	ICP Criteria exceeded.
	Thallium	0	U	B	4.7	Parameter detected in associated blank.
	Zinc	0	U	B	16.1	Parameter detected in associated blank.
ACS-GWMW21-03	Acetone	0	U	J	12	Parameter detected in associated blank.
	Aluminum	0	U	B	54.6	Parameter detected in associated blank
	Copper	0	U	B	4.8	Parameter detected in associated blank
	Nickel	0	U	B	4.2	Parameter detected in associated blank
	Potassium	4330	J	BE	16	ICP Criteria exceeded.
	Sodium	38600	J	E	76	ICP Criteria exceeded.
	Zinc	0	U	B	15.8	Parameter detected in associated blank.
ACS-GWMW22-03	Antimony	0	U	B	3.8	Parameter detected in associated blank
	Potassium	24700	J	E	16	ICP Criteria exceeded.
	Sodium	338000	J	E	76	ICP Criteria exceeded.
	Thallium	0	U	B	2.6	Parameter detected in associated blank.
	Zinc	0	U	B	17.6	Parameter detected in associated blank.
ACS-GWMW23-03	2,2'-oxybis(1-Chloropropane)	0	UJ	U	10	Calibration criteria exceeded.
	N-Nitrosodi-N-Propylamine	0	UJ	U	10	Calibration criteria exceeded.
	Hexachloroethane	0	UJ	U	10	Calibration criteria exceeded.
	Hexachlorobutadiene	0	UJ	U	10	Calibration criteria exceeded.
	2-Nitroaniline	0	UJ	U	25	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	25	Calibration criteria exceeded.
	Lead	0	U		7.7	Parameter detected in associated blank
	Potassium	3940	J	BE	16	ICP Criteria exceeded.
	Zinc	0	U		32.9	Parameter detected in associated blank.
ACS-GWMW24-03	Phenol	0	U		15	Parameter detected in associated blank.
	2,2'-oxybis(1-Chloropropane)	0	UJ	U	10	Calibration criteria exceeded.
	N-Nitrosodi-N-Propylamine	0	UJ	U	10	Calibration criteria exceeded.
	Hexachloroethane	0	UJ	U	10	Calibration criteria exceeded.
	Hexachlorobutadiene	0	UJ	U	10	Calibration criteria exceeded.
	2-Nitroaniline	0	UJ	U	25	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	25	Calibration criteria exceeded.
	Bis(2-Ethylhexyl)Phthalate	0	U	J	10	Parameter detected in associated blank.
	Potassium	6240	J	E	16	ICP Criteria exceeded.
ACS-GWMW28-03	Bromomethane	0	UJ	U	10	Calibration criteria exceeded.
	Chloroethane	0	UJ	U	10	Calibration criteria exceeded.
	Phenol	37	J		10	Parameter detected in associated blank.
	N-Nitrosodi-N-Propylamine	0	UJ	U	10	Calibration criteria exceeded.
	Nitrobenzene	0	UJ	U	10	Calibration criteria exceeded.
	Hexachlorobutadiene	0	UJ	U	10	Calibration criteria exceeded.
	2-Nitroaniline	0	UJ	U	25	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	25	Calibration criteria exceeded.
	Bis(2-Ethylhexyl)Phthalate	0	U	JB	10	Parameter detected in associated blank.
	gamma-BHC (Lindane)	0	UJ	U	0.05	MS Criteria exceeded.
	Aluminum	2850	J	N	10	Parameter detected in associated blank
	Calcium	96800	J		8	Parameter detected in associated blank
	Copper	40.5	J		1	Parameter detected in associated blank
	Magnesium	39700	J		3	Parameter detected in associated blank
	Potassium	2980	J	BE	16	ICP Criteria exceeded.
	Sodium	16400	J	E	76	ICP Criteria exceeded.
	Thallium	0	U	B	2.5	Parameter detected in associated blank.
	Zinc	0	U		42.2	Parameter detected in associated blank.
ACS-GWMW29-03	Bis(2-Ethylhexyl)Phthalate	6	J	J	10	Parameter detected in associated blank.
	Aluminum	0	U	B	90.5	Parameter detected in associated blank
	Chromium	0	U	B	1.7	Parameter detected in associated blank
	Copper	0	U	B	2.6	Parameter detected in associated blank
	Nickel	0	U	B	5	Parameter detected in associated blank
	Potassium	2950	J	BE	16	ICP Criteria exceeded.
	Sodium	73900	J	E	76	ICP Criteria exceeded.

Summary of Qualified Data
Groundwater Monitoring Round 4
American Chemical Service, Inc.
Griffith, Indiana

Sample ID	Parameter	CONC	DVQ	LQ	RDL	Comment
ACS-GWMW29-03	Zinc	0	U	B	10.9	Parameter detected in associated blank.
ACS-GWMW30-03	Hexachlorobutadiene	0	UJ	U	10	Calibration criteria exceeded.
	2-Nitroaniline	0	UJ	U	25	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	25	Calibration criteria exceeded.
	Bis(2-Ethylhexyl)Phthalate	0	U	J	10	Parameter detected in associated blank.
	Aluminum	1830	J	N	10	Parameter detected in associated blank
	Antimony	0	U	B	1.1	Parameter detected in associated blank
	Potassium	3260	J	BE	16	ICP Criteria exceeded.
	Zinc	0	U		39.5	Parameter detected in associated blank.
ACS-GWMW31-03	Bromomethane	0	UJ	U	10	Calibration criteria exceeded.
	Chloroethane	0	UJ	U	10	Calibration criteria exceeded.
	Nitrobenzene	0	UJ	U	20	Calibration criteria exceeded.
	Hexachlorobutadiene	0	UJ	U	20	Calibration criteria exceeded.
	2-Nitroaniline	0	UJ	U	50	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	50	Calibration criteria exceeded.
	Aluminum	1890	J	N	10	Parameter detected in associated blank
	Calcium	94900	J		8	Parameter detected in associated blank
	Copper	43.7	J		1	Parameter detected in associated blank
	Magnesium	34100	J		3	Parameter detected in associated blank
	Potassium	2410	J	BE	16	ICP Criteria exceeded.
	Sodium	19800	J	E	76	ICP Criteria exceeded.
	Zinc	0	U		37.6	Parameter detected in associated blank.
ACS-GWMW32-03	Bromomethane	0	UJ	U	10	Calibration criteria exceeded.
	Chloroethane	0	UJ	U	10	Calibration criteria exceeded.
	Nitrobenzene	0	UJ	U	20	Calibration criteria exceeded.
	Hexachlorobutadiene	0	UJ	U	20	Calibration criteria exceeded.
	2-Nitroaniline	0	UJ	U	50	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	50	Calibration criteria exceeded.
	Aluminum	780	J	N	10	Parameter detected in associated blank
	Calcium	75200	J		8	Parameter detected in associated blank
	Copper	13.4	J	B	1	Parameter detected in associated blank
	Magnesium	47500	J		3	Parameter detected in associated blank
	Potassium	4630	J	BE	16	ICP Criteria exceeded.
	Sodium	35400	J	E	76	ICP Criteria exceeded.
	Zinc	0	U		30.8	Parameter detected in associated blank.
ACS-GWMW33-03	Benzene	1	J	J	10	Compound reported less than CRQL but greater than IDL.
	Isophorone	1	J	J	20	Compound reported less than CRQL but greater than IDL.
	Aluminum	0	U	B	195	Parameter detected in associated blank
	Potassium	15500	J	E	16	ICP Criteria exceeded.
	Sodium	178000	J	E	76	ICP Criteria exceeded.
	Zinc	0	U	B	16	Parameter detected in associated blank.
ACS-GWMW34-03	Toluene	1	J	J	10	Compound reported less than CRQL but greater than IDL.
	Aluminum	0	U	B	167	Parameter detected in associated blank
	Potassium	4480	J	BE	16	ICP Criteria exceeded.
	Sodium	37200	J	E	76	ICP Criteria exceeded.
	Zinc	0	U		21.6	Parameter detected in associated blank.
ACS-GWMW36-03	Methylene Chloride	0	UJ	U	10	Calibration criteria exceeded.
	Carbon Disulfide	0	UJ	U	10	Calibration criteria exceeded.
	1,1,1-Trichloroethane	0	UJ	U	10	Calibration criteria exceeded.
	Carbon Tetrachloride	0	UJ	U	10	Calibration criteria exceeded.
	2-Hexanone	0	UJ	U	10	Calibration criteria exceeded.
	Nitrobenzene	0	UJ	U	30	Calibration criteria exceeded.
	Hexachlorobutadiene	0	UJ	U	30	Calibration criteria exceeded.
	2-Nitroaniline	0	UJ	U	75	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	75	Calibration criteria exceeded.
	Aluminum	4770	J	N	10	Parameter detected in associated blank
	Calcium	75400	J		8	Parameter detected in associated blank
	Copper	37.9	J		1	Parameter detected in associated blank
	Magnesium	46600	J		3	Parameter detected in associated blank
	Potassium	4690	J	BE	16	ICP Criteria exceeded.
	Sodium	40600	J	E	76	ICP Criteria exceeded.
	Zinc	0	U		45.7	Parameter detected in associated blank.
ACS-GWMW37-03	2-Butanone	0	UJ	U	10	Calibration criteria exceeded.
	4-Methyl-2-Pentanone	0	UJ	U	10	Calibration criteria exceeded.
	2-Hexanone	0	UJ	U	10	Calibration criteria exceeded.
	N-Nitrosodi-N-Propylamine	0	UJ	U	10	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	25	Calibration criteria exceeded.
	Lead	0	U		4.1	Parameter detected in associated blank
	Potassium	2060	J	BE	16	ICP Criteria exceeded.
	Zinc	0	U		23.7	Parameter detected in associated blank.
ACS-GWMW37-93	2-Butanone	0	UJ	U	10	Calibration criteria exceeded.
	4-Methyl-2-Pentanone	0	UJ	U	10	Calibration criteria exceeded.

Summary of Qualified Data
Groundwater Monitoring Round 4
American Chemical Service, Inc.
Griffith, Indiana

Sample ID	Parameter	CONC	DVQ	LQ	RDL	Comment
ACS-GWMW37-93	2-Hexanone	0	UJ	U	10	Calibration criteria exceeded.
	N-Nitrosodi-N-Propylamine	0	UJ	U	10	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	25	Calibration criteria exceeded.
	Lead	0	U		3.9	Parameter detected in associated blank
	Potassium	1990	J	BE	16	ICP Criteria exceeded.
	Zinc	0	U		22	Parameter detected in associated blank.
ACS-GWMW38-03	Phenol	0	U	J	10	Parameter detected in associated blank.
	2,2'-Oxybis(1-Chloropropane)	0	UJ	U	10	Calibration criteria exceeded.
	N-Nitrosodi-N-Propylamine	0	UJ	U	10	Calibration criteria exceeded.
	Hexachloroethane	0	UJ	U	10	Calibration criteria exceeded.
	Hexachlorobutadiene	0	UJ	U	10	Calibration criteria exceeded.
	2-Nitroaniline	0	UJ	U	25	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	25	Calibration criteria exceeded.
	Lead	0	U		10	Parameter detected in associated blank
	Potassium	959	J	BE	16	ICP Criteria exceeded.
	Sodium	0	U		7380	Parameter detected in associated blank.
	Nitrite	0	UJ		0.02	Holdtime exceeded
ACS-GWMW39-03	Phenol	0	U		33	Parameter detected in associated blank.
	2,2'-Oxybis(1-Chloropropane)	0	UJ	U	10	Calibration criteria exceeded.
	N-Nitrosodi-N-Propylamine	0	UJ	U	10	Calibration criteria exceeded.
	Hexachloroethane	0	UJ	U	10	Calibration criteria exceeded.
	Hexachlorobutadiene	0	UJ	U	10	Calibration criteria exceeded.
	2-Nitroaniline	0	UJ	U	25	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	25	Calibration criteria exceeded.
	Copper	0	U	B	3.6	Parameter detected in associated blank
	Lead	0	U	B	1.6	Parameter detected in associated blank
	Potassium	8190	J	E	16	ICP Criteria exceeded.
	Zinc	0	U	B	12.8	Parameter detected in associated blank.
	Nitrite	0	UJ		0.02	Holdtime exceeded
ACS-GWMW40-03	Phenol	0	U		20	Parameter detected in associated blank.
	N-Nitrosodi-N-Propylamine	0	UJ	U	10	Calibration criteria exceeded.
	Lead	0	U		7.8	Parameter detected in associated blank
	Potassium	2220	J	BE	16	ICP Criteria exceeded.
	Sodium	0	U		5560	Parameter detected in associated blank.
	Zinc	0	U		35.1	Parameter detected in associated blank.
ACS-GWMW40-93	Acetone	0	U		15	Parameter detected in associated blank.
	2-Butanone	0	UJ	U	10	Calibration criteria exceeded.
	4-Methyl-2-Pentanone	0	UJ	U	10	Calibration criteria exceeded.
	2-Hexanone	0	UJ	U	10	Calibration criteria exceeded.
	Phenol	0	U	J	10	Parameter detected in associated blank.
	N-Nitrosodi-N-Propylamine	0	UJ	U	10	Calibration criteria exceeded.
	Copper	0	U	B	3.4	Parameter detected in associated blank
	Lead	0	U		5.4	Parameter detected in associated blank
	Potassium	1180	J	BE	16	ICP Criteria exceeded.
	Sodium	0	U	B	4950	Parameter detected in associated blank.
	Zinc	0	U	B	14.8	Parameter detected in associated blank.
ACS-GWMW41-03	Potassium	964	J	BE	16	ICP Criteria exceeded.
	Sodium	0	UJ	E	9560	Parameter detected in associated blank. ICP Criteria exceeded.
	Thallium	0	U	B	2.4	Parameter detected in associated blank.
	Zinc	0	U		30.3	Parameter detected in associated blank.
ACS-GWMW42-03	2-Butanone	0	UJ	U	10	Calibration criteria exceeded.
	4-Methyl-2-Pentanone	0	UJ	U	10	Calibration criteria exceeded.
	2-Hexanone	0	UJ	U	10	Calibration criteria exceeded.
	Phenol	41	J		10	Parameter detected in associated blank.
	N-Nitrosodi-N-Propylamine	0	UJ	U	10	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	25	Calibration criteria exceeded.
	Lead	0	U		5.7	Parameter detected in associated blank
	Potassium	2350	J	BE	16	ICP Criteria exceeded.
	Zinc	0	U		30.4	Parameter detected in associated blank.
ACS-GWMW43-03	2-Butanone	0	UJ	U	10	Calibration criteria exceeded.
	4-Methyl-2-Pentanone	0	UJ	U	10	Calibration criteria exceeded.
	2-Hexanone	0	UJ	U	10	Calibration criteria exceeded.
	Phenol	75	J		30	Parameter detected in associated blank.
	Hexachlorobutadiene	0	UJ	U	20	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	50	Calibration criteria exceeded.
	Hexachlorobenzene	0	UJ	U	20	Calibration criteria exceeded.
	Potassium	5610	J	E	16	ICP Criteria exceeded.
	Sodium	0	U		13100	Parameter detected in associated blank.
ACS-GWMW44-03	Dimethylphthalate	9	J	J	10	Calibration criteria exceeded.
	Chromium	0	U	B	4	Parameter detected in associated blank
	Nickel	0	U	B	3.6	Parameter detected in associated blank
	Potassium	1370	J	BE	16	ICP Criteria exceeded.

Summary of Qualified Data
Groundwater Monitoring Round 4
American Chemical Service, Inc.
Griffith, Indiana

Sample ID	Parameter	CONC	DVQ	LQ	RDL	Comment
ACS-GWMW44-03	Sodium	18900	J	E	76	ICP Criteria exceeded.
	Zinc	0	U	B	12.1	Parameter detected in associated blank.
ACS-GWMW45-03	Chlorobenzene	26	J	J	80	Compound reported less than CRQL but greater than IDL.
	Xylene (total)	33	J	J	80	Compound reported less than CRQL but greater than IDL.
	Bis(2-Chloroethyl)Ether	13	J	J	20	Calibration criteria exceeded.
	1,4-Dichlorobenzene	3	J	J	20	Compound reported less than CRQL but greater than IDL.
	1,2-Dichlorobenzene	5	J	J	20	Compound reported less than CRQL but greater than IDL.
	2,2'-oxybis(1-Chloropropane)	7	J	J	20	Calibration criteria exceeded.
	2-Methylnaphthalene	5	J	J	20	Calibration criteria exceeded.
	Aluminum	0	U	B	100	Parameter detected in associated blank
	Chromium	0	U	B	3	Parameter detected in associated blank
	Potassium	8350	J	E	16	ICP Criteria exceeded.
	Sodium	101000	J	E	76	ICP Criteria exceeded.
	Zinc	0	U	B	16	Parameter detected in associated blank.
ACS-GWMW46-03	N-Nitrosodi-N-Propylamine	0	UJ	U	10	Calibration criteria exceeded.
	Aluminum	0	U	B	186	Parameter detected in associated blank
	Copper	0	U	B	2.6	Parameter detected in associated blank
	Lead	0	U	B	1.6	Parameter detected in associated blank
	Potassium	1190	J	BE	16	ICP Criteria exceeded.
	Zinc	0	U	B	11.8	Parameter detected in associated blank.
ACS-GWMW47-03	Hexachlorobutadiene	0	UJ	U	10	Calibration criteria exceeded.
	2-Nitroaniline	0	UJ	U	25	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	25	Calibration criteria exceeded.
	Bis(2-Ethylhexyl)Phthalate	0	U	J	10	Parameter detected in associated blank.
	Aluminum	724	J	N	10	Parameter detected in associated blank
	Antimony	0	U	B	1.2	Parameter detected in associated blank
	Chromium	0	U	B	2.1	Parameter detected in associated blank
	Potassium	959	J	BE	16	ICP Criteria exceeded.
	Sodium	0	U		6750	Parameter detected in associated blank.
	Thallium	0	U	B	4.3	Parameter detected in associated blank.
	Zinc	0	U	B	19.5	Parameter detected in associated blank.
ACS-GWMW48-03	Phenol	8	J	J	10	Compound reported less than CRQL but greater than IDL.
	Potassium	8270	J	E	16	ICP Criteria exceeded.
	Sodium	42700	J	E	76	ICP Criteria exceeded.
	Zinc	0	U		52.9	Parameter detected in associated blank.
ACS-GWMW49-03	Methylene Chloride	0	UJ	U	400	Calibration criteria exceeded.
	Carbon Disulfide	0	UJ	U	400	Calibration criteria exceeded.
	1,1,1-Trichloroethane	0	UJ	U	400	Calibration criteria exceeded.
	Carbon Tetrachloride	0	UJ	U	400	Calibration criteria exceeded.
	2-Hexanone	0	UJ	U	400	Calibration criteria exceeded.
	Nitrobenzene	0	UJ	U	20	Calibration criteria exceeded.
	Hexachlorobutadiene	0	UJ	U	20	Calibration criteria exceeded.
	2-Nitroaniline	0	UJ	U	50	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	50	Calibration criteria exceeded.
	Aluminum	1130	J	N	10	Parameter detected in associated blank
	Calcium	80300	J		8	Parameter detected in associated blank
	Copper	6.3	J	B	1	Parameter detected in associated blank
	Magnesium	9980	J		3	Parameter detected in associated blank
	Potassium	5480	J	E	16	ICP Criteria exceeded.
	Sodium	25800	J	E	76	ICP Criteria exceeded.
	Zinc	0	U		44	Parameter detected in associated blank.
ACS-GWMW49-93	Phenol	120	J		20	Parameter detected in associated blank.
	2,2'-Oxybis(1-Chloropropane)	25	J		20	Calibration criteria exceeded.
	N-Nitrosodi-N-Propylamine	0	UJ	U	20	Calibration criteria exceeded.
	Hexachloroethane	0	UJ	U	20	Calibration criteria exceeded.
	Hexachlorobutadiene	0	UJ	U	20	Calibration criteria exceeded.
	2-Nitroaniline	0	UJ	U	50	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	50	Calibration criteria exceeded.
	Lead	0	U		4.3	Parameter detected in associated blank
	Potassium	6320	J	E	16	ICP Criteria exceeded.
	Zinc	0	U		34.9	Parameter detected in associated blank.
ACS-GWMW50-03	2,2'-Oxybis(1-Chloropropane)	0	UJ	U	60	Calibration criteria exceeded.
	N-Nitrosodi-N-Propylamine	0	UJ	U	60	Calibration criteria exceeded.
	Hexachloroethane	0	UJ	U	60	Calibration criteria exceeded.
	Hexachlorobutadiene	0	UJ	U	60	Calibration criteria exceeded.
	2-Nitroaniline	0	UJ	U	150	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	150	Calibration criteria exceeded.
	Aluminum	12000	J	N	10	Parameter detected in associated blank
	Potassium	21000	J	E	16	ICP Criteria exceeded.
	Thallium	0	U	B	2.2	Parameter detected in associated blank.
ACS-GWMW51-03	Aluminum	1040	J	N	10	Parameter detected in associated blank
	Lead	0	U		3.9	Parameter detected in associated blank

Summary of Qualified Data
Groundwater Monitoring Round 4
American Chemical Service, Inc.
Griffith, Indiana

Sample ID	Parameter	CONC	DVQ	LQ	RDL	Comment
ACS-GWMW51-03	Potassium	3880	J	BE	16	ICP Criteria exceeded.
	Sodium	108000	J	E	76	ICP Criteria exceeded.
	Zinc	0	U	B	18.9	Parameter detected in associated blank.
ACS-GWMW51-93	Hexachlorobutadiene	0	UJ	U	10	Calibration criteria exceeded.
	2-Nitroaniline	0	UJ	U	25	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	25	Calibration criteria exceeded.
	Bis(2-Ethylhexyl)Phthalate	0	U	J	10	Parameter detected in associated blank.
	Aluminum	1130	J	N	10	Parameter detected in associated blank
	Lead	0	U		3.9	Parameter detected in associated blank
	Potassium	3880	J	BE	16	ICP Criteria exceeded.
	Thallium	0	U	B	3.1	Parameter detected in associated blank.
	Zinc	0	U	B	20	Parameter detected in associated blank.
ACS-GWMW52-03	Phenol	0	U		33	Parameter detected in associated blank.
	2,2'-oxybis(1-Chloropropane)	0	UJ	U	10	Calibration criteria exceeded.
	N-Nitrosodi-N-Propylamine	0	UJ	U	10	Calibration criteria exceeded.
	Hexachloroethane	0	UJ	U	10	Calibration criteria exceeded.
	Hexachlorobutadiene	0	UJ	U	10	Calibration criteria exceeded.
	2-Nitroaniline	0	UJ	U	25	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	25	Calibration criteria exceeded.
	Lead	0	U		4.1	Parameter detected in associated blank
	Potassium	3640	J	BE	16	ICP Criteria exceeded.
	Zinc	0	U		21.7	Parameter detected in associated blank.
ACS-GWMW53-03	Methylene Chloride	0	U	J	10	Calibration criteria exceeded.
	Acetone	0	U		12	Parameter detected in associated blank.
	2-Butanone	0	UJ	U	10	Calibration criteria exceeded.
	4-Methyl-2-Pentanone	5	J	J	10	Compound reported less than CRQL but greater than IDL.
	2-Hexanone	0	UJ	U	10	Calibration criteria exceeded.
	Phenol	50	J		10	Parameter detected in associated blank.
	2,2'-oxybis(1-Chloropropane)	0	UJ	U	10	Calibration criteria exceeded.
	N-Nitrosodi-N-Propylamine	0	UJ	U	10	Calibration criteria exceeded.
	Hexachloroethane	0	UJ	U	10	Calibration criteria exceeded.
	Hexachlorobutadiene	0	UJ	U	10	Calibration criteria exceeded.
	2-Nitroaniline	0	UJ	U	25	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	25	Calibration criteria exceeded.
	Bis(2-Ethylhexyl)Phthalate	0	U		12	Parameter detected in associated blank.
	Potassium	29000	J	E	16	ICP Criteria exceeded.
ACS-GWMW54-03	Methylene Chloride	0	UJ	U	10	Calibration criteria exceeded.
	Carbon Disulfide	0	UJ	U	10	Calibration criteria exceeded.
	1,1,1-Trichloroethane	0	UJ	U	10	Calibration criteria exceeded.
	Carbon Tetrachloride	0	UJ	U	10	Calibration criteria exceeded.
	2-Hexanone	0	UJ	U	10	Calibration criteria exceeded.
	Nitrobenzene	0	UJ	U	30	Calibration criteria exceeded.
	Hexachlorobutadiene	0	UJ	U	30	Calibration criteria exceeded.
	2-Nitroaniline	0	UJ	U	75	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	75	Calibration criteria exceeded.
	Aluminum	1980	J	N	10	Parameter detected in associated blank
	Calcium	126000	J		8	Parameter detected in associated blank
	Copper	39.3	J		1	Parameter detected in associated blank
	Magnesium	52000	J		3	Parameter detected in associated blank
	Potassium	2750	J	BE	16	ICP Criteria exceeded.
	Sodium	28700	J	E	76	ICP Criteria exceeded.
	Zinc	0	U		53.6	Parameter detected in associated blank.
ACS-GWMW55-03	Bromomethane	0	UJ	U	10	Calibration criteria exceeded.
	Chloroethane	0	UJ	U	10	Calibration criteria exceeded.
	Hexachlorobutadiene	0	UJ	U	10	Calibration criteria exceeded.
	4-Chloro-3-Methylphenol	0	UJ	U	10	Calibration criteria exceeded.
	2-Nitroaniline	0	UJ	U	25	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	25	Calibration criteria exceeded.
	Aluminum	6100	J	N	10	Parameter detected in associated blank
	Calcium	78200	J		8	Parameter detected in associated blank
	Copper	54.1	J		1	Parameter detected in associated blank
	Magnesium	47700	J		3	Parameter detected in associated blank
	Potassium	6660	J	E	16	ICP Criteria exceeded.
	Sodium	49500	J	E	76	ICP Criteria exceeded.
	Zinc	0	U		77.1	Parameter detected in associated blank.
ACS-GWTB02-03	Methylene Chloride	0	UJ	U	10	Calibration criteria exceeded.
	Bromoform	0	UJ	U	10	Calibration criteria exceeded.
ACS-GWTB04-03	2-Butanone	0	UJ	U	10	Calibration criteria exceeded.
	4-Methyl-2-Pentanone	0	UJ	U	10	Calibration criteria exceeded.
	2-Hexanone	0	UJ	U	10	Calibration criteria exceeded.

Summary of Qualified Data
Groundwater Monitoring Round 4
American Chemical Service, Inc.
Griffith, Indiana

Sample ID	Parameter	CONC	DVQ	LQ	RDL	Comment
ACS-GWFB01-03	Methylene Chloride	0	UJ	U	10	Calibration criteria exceeded.
	Bromoform	0	UJ	U	10	Calibration criteria exceeded.
	N-Nitrosodi-N-Propylamine	0	UJ	U	10	Calibration criteria exceeded.
	Nitrobenzene	0	UJ	U	10	Calibration criteria exceeded.
	Hexachlorobutadiene	0	UJ	U	10	Calibration criteria exceeded.
	2-Nitroaniline	0	UJ	U	25	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	25	Calibration criteria exceeded.
	Aluminum	0	U	BN	22.8	Parameter detected in associated blank
	Calcium	152	J	B	8	Parameter detected in associated blank
	Copper	0	U	B	3.2	Parameter detected in associated blank
	Magnesium	0	U	B	34	Parameter detected in associated blank
	Potassium	0	UJ	BE	30.5	Parameter detected in associated blank. ICP Criteria exceeded.
	Sodium	0	UJ	BE	1760	Parameter detected in associated blank. ICP Criteria exceeded.
	Zinc	0	U		45.8	Parameter detected in associated blank.
ACS-GWFB02-03	Bromomethane	0	UJ	U	10	Calibration criteria exceeded.
	Chloroethane	0	UJ	U	10	Calibration criteria exceeded.
	N-Nitrosodi-N-Propylamine	0	UJ	U	10	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	25	Calibration criteria exceeded.
	Potassium	0	J	UE	16	ICP Criteria exceeded.
ACS-GWFB03-03	2,2'-oxybis(1-Chloropropane)	0	UJ	U	10	Calibration criteria exceeded.
	N-Nitrosodi-N-Propylamine	0	UJ	U	10	Calibration criteria exceeded.
	Hexachloroethane	0	UJ	U	10	Calibration criteria exceeded.
	Hexachlorobutadiene	0	UJ	U	10	Calibration criteria exceeded.
	2-Nitroaniline	0	UJ	U	25	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	25	Calibration criteria exceeded.
	Potassium	34.7	J	BE	16	ICP Criteria exceeded.
ACS-GWFB04-03	Aluminum	0	U	B	15.6	Parameter detected in associated blank
	Magnesium	0	U	B	89.3	Parameter detected in associated blank
	Potassium	0	UJ	BE	48.2	Parameter detected in associated blank. ICP Criteria exceeded.
	Sodium	0	UJ	BE	1980	Parameter detected in associated blank. ICP Criteria exceeded.
	Zinc	0	U	B	10.7	Parameter detected in associated blank.
ACS-GWFB05-03	Potassium	0	UJ	BE	38.3	Parameter detected in associated blank. ICP Criteria exceeded.
	Sodium	0	UJ	B	2400	Parameter detected in associated blank. ICP Criteria exceeded.
	Thallium	0	U	B	2	Parameter detected in associated blank.
	Zinc	0	U	B	11.3	Parameter detected in associated blank.
ACS-GWM01S-03	N-Nitrosodi-N-Propylamine	0	UJ	U	10	Calibration criteria exceeded.
	Nitrobenzene	0	UJ	U	10	Calibration criteria exceeded.
	Hexachlorobutadiene	0	UJ	U	10	Calibration criteria exceeded.
	2-Nitroaniline	0	UJ	U	25	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	25	Calibration criteria exceeded.
	Bis(2-Ethylhexyl)Phthalate	0	U	JB	10	Parameter detected in associated blank.
	Aluminum	891	J	N	10	Parameter detected in associated blank
	Calcium	251000	J		8	Parameter detected in associated blank
	Copper	0	UJ	B	8.3	Parameter detected in associated blank
	Magnesium	91100	J		3	Parameter detected in associated blank
	Potassium	38100	J	E	16	ICP Criteria exceeded.
	Sodium	125000	J	E	76	ICP Criteria exceeded.
	Zinc	0	U		21.3	Parameter detected in associated blank.
ACS-GWM03S-03	N-Nitrosodi-N-Propylamine	0	UJ	U	10	Calibration criteria exceeded.
	Nitrobenzene	0	UJ	U	10	Calibration criteria exceeded.
	Hexachlorobutadiene	0	UJ	U	10	Calibration criteria exceeded.
	2-Nitroaniline	0	UJ	U	25	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	25	Calibration criteria exceeded.
	Bis(2-Ethylhexyl)Phthalate	0	U	JB	10	Parameter detected in associated blank.
	Aluminum	257	J	N	10	Parameter detected in associated blank
	Calcium	134000	J		8	Parameter detected in associated blank
	Copper	5	U	B	1	Parameter detected in associated blank
	Magnesium	39000	J		3	Parameter detected in associated blank
	Potassium	13400	J	E	16	ICP Criteria exceeded.
	Sodium	42500	J	E	76	ICP Criteria exceeded.
	Zinc	0	U	B	18.9	Parameter detected in associated blank.
ACS-GWM03S-93	Bromomethane	0	UJ	U	10	Calibration criteria exceeded.
	Chloroethane	0	UJ	U	10	Calibration criteria exceeded.
	N-Nitrosodi-N-Propylamine	0	UJ	U	10	Calibration criteria exceeded.
	Nitrobenzene	0	UJ	U	10	Calibration criteria exceeded.
	Hexachlorobutadiene	0	UJ	U	10	Calibration criteria exceeded.
	2-Nitroaniline	0	UJ	U	25	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	25	Calibration criteria exceeded.
	Bis(2-Ethylhexyl)Phthalate	0	U	JB	10	Parameter detected in associated blank.
	Aluminum	137	J	BN	10	Parameter detected in associated blank
	Calcium	131000	J		8	Parameter detected in associated blank
	Copper	0	U	B	3.9	Parameter detected in associated blank

Summary of Qualified Data
Groundwater Monitoring Round 4
American Chemical Service, Inc.
Griffith, Indiana

Sample ID	Parameter	CONC	DVQ	LQ	RDL	Comment
ACS-GWM03S-93	Magnesium	38100	J		3	Parameter detected in associated blank
	Potassium	13400	J	E	16	ICP Criteria exceeded.
	Sodium	42500	J	E	76	ICP Criteria exceeded.
	Thallium	0	U	B	2	Parameter detected in associated blank.
	Zinc	0	U	B	15.3	Parameter detected in associated blank.
ACS-GWM04D-03	Bromomethane	0	UJ	U	10	Calibration criteria exceeded.
	Chloroethane	0	UJ	U	10	Calibration criteria exceeded.
	N-Nitrosodi-N-Propylamine	0	UJ	U	10	Calibration criteria exceeded.
	Nitrobenzene	0	UJ	U	10	Calibration criteria exceeded.
	Hexachlorobutadiene	0	UJ	U	10	Calibration criteria exceeded.
	4-Chloro-3-Methylphenol	0	UJ	U	10	Calibration criteria exceeded.
	2-Nitroaniline	0	UJ	U	25	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	25	Calibration criteria exceeded.
	Bis(2-Ethylhexyl)Phthalate	0	U	JB	10	Parameter detected in associated blank.
	Aluminum	1140	J	N	10	Parameter detected in associated blank
	Calcium	88000	J		8	Parameter detected in associated blank
	Copper	0	U	B	4.2	Parameter detected in associated blank
	Magnesium	41000	J		3	Parameter detected in associated blank
	Potassium	4640	J	BE	16	ICP Criteria exceeded.
	Sodium	70600	J	E	76	ICP Criteria exceeded.
	Zinc	0	U	B	13.1	Parameter detected in associated blank.
ACS-GWM04S-03	Methylene Chloride	0	UJ	U	80	Calibration criteria exceeded.
	Bromoform	0	UJ	U	80	Calibration criteria exceeded.
	Nitrobenzene	0	UJ	U	10	Calibration criteria exceeded.
	Hexachlorobutadiene	0	UJ	U	10	Calibration criteria exceeded.
	2-Nitroaniline	0	UJ	U	25	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	25	Calibration criteria exceeded.
	Bis(2-Ethylhexyl)Phthalate	0	U	JB	10	Parameter detected in associated blank.
	Aluminum	1120	J	N	10	Parameter detected in associated blank
	Calcium	281000	J		8	Parameter detected in associated blank
	Copper	0	U	B	10.8	Parameter detected in associated blank
	Magnesium	47800	J		3	Parameter detected in associated blank
	Potassium	22800	J	E	16	ICP Criteria exceeded.
	Sodium	72800	J	E	76	ICP Criteria exceeded.
	Zinc	0	U		29.8	Parameter detected in associated blank.
ACS-GWMW06-03	Bromomethane	0	UJ	U	10	Calibration criteria exceeded.
	Chloroethane	140	J		10	Calibration criteria exceeded.
	Hexachlorobutadiene	0	UJ	U	10	Calibration criteria exceeded.
	4-Chloro-3-Methylphenol	0	UJ	U	10	Calibration criteria exceeded.
	2-Nitroaniline	0	UJ	U	25	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	25	Calibration criteria exceeded.
	Bis(2-Ethylhexyl)Phthalate	0	U	JB	10	Parameter detected in associated blank.
	Aluminum	180	J	BN	10	Parameter detected in associated blank
	Calcium	174000	J		8	Parameter detected in associated blank
	Copper	0	U	B	7.5	Parameter detected in associated blank
	Magnesium	34200	J		3	Parameter detected in associated blank
	Potassium	16900	J	E	16	ICP Criteria exceeded.
	Sodium	79300	J	E	76	ICP Criteria exceeded.
	Zinc	0	U		20.4	Parameter detected in associated blank.
ACS-GWMW07-03	Methylene Chloride	0	UJ	U	10	Calibration criteria exceeded.
	Carbon Disulfide	0	UJ	U	10	Calibration criteria exceeded.
	1,1,1-Trichloroethane	0	UJ	U	10	Calibration criteria exceeded.
	Carbon Tetrachloride	0	UJ	U	10	Calibration criteria exceeded.
	2-Hexanone	0	UJ	U	10	Calibration criteria exceeded.
	Hexachlorobutadiene	0	UJ	U	10	Calibration criteria exceeded.
	4-Chloro-3-Methylphenol	0	UJ	U	10	Calibration criteria exceeded.
	2-Nitroaniline	0	UJ	U	25	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	25	Calibration criteria exceeded.
	Aluminum	1280	J	N	10	Parameter detected in associated blank
	Calcium	102000	J		8	Parameter detected in associated blank
	Copper	11.3	J	B	1	Parameter detected in associated blank
	Magnesium	28600	J		3	Parameter detected in associated blank
	Potassium	2190	J	BE	16	ICP Criteria exceeded.
	Sodium	20200	J	E	76	ICP Criteria exceeded.
	Zinc	0	U		29.6	Parameter detected in associated blank.
ACS-GWMW08-03	Methylene Chloride	0	UJ	U	10	Calibration criteria exceeded.
	Carbon Disulfide	0	UJ	U	10	Calibration criteria exceeded.
	1,1,1-Trichloroethane	0	UJ	U	10	Calibration criteria exceeded.
	Carbon Tetrachloride	0	UJ	U	10	Calibration criteria exceeded.
	2-Hexanone	0	UJ	U	10	Calibration criteria exceeded.
	Nitrobenzene	0	UJ	U	20	Calibration criteria exceeded.
	Hexachlorobutadiene	0	UJ	U	20	Calibration criteria exceeded.

Summary of Qualified Data
Groundwater Monitoring Round 4
American Chemical Service, Inc.
Griffith, Indiana

Sample ID	Parameter	CONC	DVQ	LQ	RDL	Comment
ACS-GWMW08-03	2-Nitroaniline	0	UJ	U	50	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	50	Calibration criteria exceeded.
	Aluminum	839	J	N	10	Parameter detected in associated blank
	Calcium	55200	J		8	Parameter detected in associated blank
	Copper	0	U	B	7.3	Parameter detected in associated blank
	Magnesium	17700	J		3	Parameter detected in associated blank
	Potassium	1410	J	BE	16	ICP Criteria exceeded.
	Sodium	13500	J	E	76	ICP Criteria exceeded.
	Zinc	0	U		33.7	Parameter detected in associated blank.
ACS-GWMW09-03	Isophorone	0.7	J	J	10	Compound reported less than CRQL but greater than IDL.
	Copper	0	U	B	6	Parameter detected in associated blank
	Potassium	11000	J	E	16	ICP Criteria exceeded.
	Sodium	66400	J	E	76	ICP Criteria exceeded.
	Thallium	0	U	B	2.1	Parameter detected in associated blank.
	Zinc	0	U		23.4	Parameter detected in associated blank.
ACS-GWMW10C-03	Hexachlorobutadiene	0	UJ	U	10	Calibration criteria exceeded.
	4-Chloro-3-Methylphenol	0	UJ	U	10	Calibration criteria exceeded.
	2-Nitroaniline	0	UJ	U	25	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	25	Calibration criteria exceeded.
	Aluminum	6990	J	N	10	Parameter detected in associated blank
	Calcium	141000	J		8	Parameter detected in associated blank
	Copper	45.5	J		1	Parameter detected in associated blank
	Magnesium	65900	J		3	Parameter detected in associated blank
	Potassium	7460	J	E	16	ICP Criteria exceeded.
	Sodium	158000	J	E	76	ICP Criteria exceeded.
	Zinc	119	J		1	Parameter detected in associated blank.
ACS-GWMW11-03	2-Butanone	0	UJ	U	10	Calibration criteria exceeded.
	4-Methyl-2-Pentanone	0	UJ	U	10	Calibration criteria exceeded.
	2-Hexanone	0	UJ	U	10	Calibration criteria exceeded.
	Phenol	0	U		23	Parameter detected in associated blank.
	N-Nitrosodi-N-Propylamine	0	UJ	U	10	Calibration criteria exceeded.
	Copper	0	U	B	3.9	Parameter detected in associated blank
	Lead	0	U		4.6	Parameter detected in associated blank
	Potassium	1150	J	BE	16	ICP Criteria exceeded.
	Sodium	0	U	B	4890	Parameter detected in associated blank.
	Zinc	0	U	B	14.1	Parameter detected in associated blank.
ACS-GWMW12-03	Chlorobenzene	5	J	J	10	Compound reported less than CRQL but greater than IDL.
	Dimethylphthalate	3	J	J	20	Calibration criteria exceeded.
	Antimony	0	U	B	1.2	Parameter detected in associated blank
	Arsenic	7.8	J	B	2	Parameter detected in associated blank
	Chromium	8.9	J	B	1	Parameter detected in associated blank
	Cobalt	2.4	J	B	1	Parameter detected in associated blank
	Copper	15	J	B	1	Parameter detected in associated blank
	Potassium	2930	J	BE	16	ICP Criteria exceeded.
	Sodium	0	UJ	E	10600	Parameter detected in associated blank. ICP Criteria exceeded.
	Thallium	0	U	B	2.3	Parameter detected in associated blank
	Zinc	0	U		27.1	Parameter detected in associated blank.
ACS-GWMW13-03	Methylene Chloride	1	J	J	10	Compound reported less than CRQL but greater than IDL.
	Phenol	7	J	J	10	Compound reported less than CRQL but greater than IDL.
	Bis(2-Ethylhexyl)Phthalate	2	J	J	10	Parameter detected in associated blank.
	Aluminum	0	U	B	172	Parameter detected in associated blank
	Copper	0	U	B	2.3	Parameter detected in associated blank
	Nickel	0	U	B	1.9	Parameter detected in associated blank
	Potassium	2020	J	BE	16	ICP Criteria exceeded.
	Sodium	24600	J	E	76	ICP Criteria exceeded.
	Zinc	0	U	B	12.1	Parameter detected in associated blank.
ACS-GWMW14-03	Toluene	1	J	J	10	Compound reported less than CRQL but greater than IDL.
	Bis(2-Ethylhexyl)Phthalate	3	J	J	10	Parameter detected in associated blank.
	Antimony	0	U	B	1.3	Parameter detected in associated blank
	Potassium	6440	J	E	16	ICP Criteria exceeded.
	Sodium	0	UJ	E	11600	Parameter detected in associated blank. ICP Criteria exceeded.
ACS-GWMW15-03	Bromomethane	0	UJ	U	10	Calibration criteria exceeded.
	Chloroethane	0	UJ	U	10	Calibration criteria exceeded.
	N-Nitrosodi-N-Propylamine	0	UJ	U	10	Calibration criteria exceeded.
	Nitrobenzene	0	UJ	U	10	Calibration criteria exceeded.
	Hexachlorobutadiene	0	UJ	U	10	Calibration criteria exceeded.
	2-Nitroaniline	0	UJ	U	25	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	25	Calibration criteria exceeded.
	Bis(2-Ethylhexyl)Phthalate	0	U	B	27	Parameter detected in associated blank.
	Aluminum	487	J	N	10	Parameter detected in associated blank
	Calcium	73000	J		8	Parameter detected in associated blank
	Copper	13.2	J	B	1	Parameter detected in associated blank

Summary of Qualified Data
Groundwater Monitoring Round 4
American Chemical Service, Inc.
Griffith, Indiana

Sample ID	Parameter	CONC	DVQ	LQ	RDL	Comment
ACS-GWMW15-03	Magnesium	74300	J		3	Parameter detected in associated blank
	Potassium	118000	J	E	16	ICP Criteria exceeded.
	Sodium	415000	J	E	76	ICP Criteria exceeded.
	Thallium	0	U	B	2.8	Parameter detected in associated blank.
	Zinc	0	U	B	17.9	Parameter detected in associated blank.
ACS-GWMW18-03	Aluminum	0	U	B	35.7	Parameter detected in associated blank
	Iron	0	U		208	Parameter detected in associated blank
	Potassium	3220	J	BE	16	ICP Criteria exceeded.
	Sodium	67500	J	E	76	ICP Criteria exceeded.
	Thallium	0	U	B	2.8	Parameter detected in associated blank.
	Zinc	0	U		20.2	Parameter detected in associated blank.
	TKN	0.499	J		0.1	Duplicate QC criteria exceeded
ACS-GWMW19-03	Benzene	1	J	J	10	Compound reported less than CRQL but greater than IDL.
	Potassium	98000	J	E	16	ICP Criteria exceeded.
	Sodium	719000	J	E	76	ICP Criteria exceeded.
	Thallium	0	U	B	4.7	Parameter detected in associated blank.
	Zinc	0	U	B	16.1	Parameter detected in associated blank.
ACS-GWMW21-03	Acetone	0	U	J	12	Parameter detected in associated blank.
	Aluminum	0	U	B	54.6	Parameter detected in associated blank
	Copper	0	U	B	4.8	Parameter detected in associated blank
	Nickel	0	U	B	4.2	Parameter detected in associated blank
	Potassium	4330	J	BE	16	ICP Criteria exceeded.
	Sodium	38600	J	E	76	ICP Criteria exceeded.
	Zinc	0	U	B	15.8	Parameter detected in associated blank.
ACS-GWMW22-03	Antimony	0	U	B	3.8	Parameter detected in associated blank
	Potassium	24700	J	E	16	ICP Criteria exceeded.
	Sodium	338000	J	E	76	ICP Criteria exceeded.
	Thallium	0	U	B	2.6	Parameter detected in associated blank.
	Zinc	0	U	B	17.6	Parameter detected in associated blank.
ACS-GWMW23-03	2,2'-oxybis(1-Chloropropane)	0	UJ	U	10	Calibration criteria exceeded.
	N-Nitrosodi-N-Propylamine	0	UJ	U	10	Calibration criteria exceeded.
	Hexachloroethane	0	UJ	U	10	Calibration criteria exceeded.
	Hexachlorobutadiene	0	UJ	U	10	Calibration criteria exceeded.
	2-Nitroaniline	0	UJ	U	25	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	25	Calibration criteria exceeded.
	Lead	0	U		7.7	Parameter detected in associated blank
	Potassium	3940	J	BE	16	ICP Criteria exceeded.
	Zinc	0	U		32.9	Parameter detected in associated blank.
ACS-GWMW24-03	Phenol	0	U		15	Parameter detected in associated blank.
	2,2'-oxybis(1-Chloropropane)	0	UJ	U	10	Calibration criteria exceeded.
	N-Nitrosodi-N-Propylamine	0	UJ	U	10	Calibration criteria exceeded.
	Hexachloroethane	0	UJ	U	10	Calibration criteria exceeded.
	Hexachlorobutadiene	0	UJ	U	10	Calibration criteria exceeded.
	2-Nitroaniline	0	UJ	U	25	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	25	Calibration criteria exceeded.
	Bis(2-Ethylhexyl)Phthalate	0	U	J	10	Parameter detected in associated blank.
	Potassium	6240	J	E	16	ICP Criteria exceeded.
ACS-GWMW28-03	Bromomethane	0	UJ	U	10	Calibration criteria exceeded.
	Chloroethane	0	UJ	U	10	Calibration criteria exceeded.
	Phenol	37	J		10	Parameter detected in associated blank.
	N-Nitrosodi-N-Propylamine	0	UJ	U	10	Calibration criteria exceeded.
	Nitrobenzene	0	UJ	U	10	Calibration criteria exceeded.
	Hexachlorobutadiene	0	UJ	U	10	Calibration criteria exceeded.
	2-Nitroaniline	0	UJ	U	25	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	25	Calibration criteria exceeded.
	Bis(2-Ethylhexyl)Phthalate	0	U	JB	10	Parameter detected in associated blank.
	gamma-BHC (Lindane)	0	UJ	U	0.05	MS Criteria exceeded.
	Aluminum	2850	J	N	10	Parameter detected in associated blank
	Calcium	96800	J		8	Parameter detected in associated blank
	Copper	40.5	J		1	Parameter detected in associated blank
	Magnesium	39700	J		3	Parameter detected in associated blank
	Potassium	2980	J	BE	16	ICP Criteria exceeded.
	Sodium	16400	J	E	76	ICP Criteria exceeded.
	Thallium	0	U	B	2.5	Parameter detected in associated blank.
	Zinc	0	U		42.2	Parameter detected in associated blank.
ACS-GWMW29-03	Bis(2-Ethylhexyl)Phthalate	6	J	J	10	Parameter detected in associated blank.
	Aluminum	0	U	B	90.5	Parameter detected in associated blank
	Chromium	0	U	B	1.7	Parameter detected in associated blank
	Copper	0	U	B	2.6	Parameter detected in associated blank
	Nickel	0	U	B	5	Parameter detected in associated blank
	Potassium	2950	J	BE	16	ICP Criteria exceeded.
	Sodium	73900	J	E	76	ICP Criteria exceeded.

Summary of Qualified Data
Groundwater Monitoring Round 4
American Chemical Service, Inc.
Griffith, Indiana

Sample ID	Parameter	CONC	DVQ	LQ	RDL	Comment
ACS-GWMW29-03	Zinc	0	U	B	10.9	Parameter detected in associated blank.
ACS-GWMW30-03	Hexachlorobutadiene	0	UJ	U	10	Calibration criteria exceeded.
	2-Nitroaniline	0	UJ	U	25	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	25	Calibration criteria exceeded.
	Bis(2-Ethylhexyl)Phthalate	0	U	J	10	Parameter detected in associated blank.
	Aluminum	1830	J	N	10	Parameter detected in associated blank
	Antimony	0	U	B	1.1	Parameter detected in associated blank
	Potassium	3260	J	BE	16	ICP Criteria exceeded.
	Zinc	0	U		39.5	Parameter detected in associated blank.
ACS-GWMW31-03	Bromomethane	0	UJ	U	10	Calibration criteria exceeded.
	Chloroethane	0	UJ	U	10	Calibration criteria exceeded.
	Nitrobenzene	0	UJ	U	20	Calibration criteria exceeded.
	Hexachlorobutadiene	0	UJ	U	20	Calibration criteria exceeded.
	2-Nitroaniline	0	UJ	U	50	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	50	Calibration criteria exceeded.
	Aluminum	1890	J	N	10	Parameter detected in associated blank
	Calcium	94900	J		8	Parameter detected in associated blank
	Copper	43.7	J		1	Parameter detected in associated blank
	Magnesium	34100	J		3	Parameter detected in associated blank
	Potassium	2410	J	BE	16	ICP Criteria exceeded.
	Sodium	19800	J	E	76	ICP Criteria exceeded.
	Zinc	0	U		37.6	Parameter detected in associated blank.
ACS-GWMW32-03	Bromomethane	0	UJ	U	10	Calibration criteria exceeded.
	Chloroethane	0	UJ	U	10	Calibration criteria exceeded.
	Nitrobenzene	0	UJ	U	20	Calibration criteria exceeded.
	Hexachlorobutadiene	0	UJ	U	20	Calibration criteria exceeded.
	2-Nitroaniline	0	UJ	U	50	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	50	Calibration criteria exceeded.
	Aluminum	780	J	N	10	Parameter detected in associated blank
	Calcium	75200	J		8	Parameter detected in associated blank
	Copper	13.4	J	B	1	Parameter detected in associated blank
	Magnesium	47500	J		3	Parameter detected in associated blank
	Potassium	4630	J	BE	16	ICP Criteria exceeded.
	Sodium	35400	J	E	76	ICP Criteria exceeded.
	Zinc	0	U		30.8	Parameter detected in associated blank.
ACS-GWMW33-03	Benzene	1	J	J	10	Compound reported less than CRQL but greater than IDL.
	Isophorone	1	J	J	20	Compound reported less than CRQL but greater than IDL.
	Aluminum	0	U	B	195	Parameter detected in associated blank
	Potassium	15500	J	E	16	ICP Criteria exceeded.
	Sodium	178000	J	E	76	ICP Criteria exceeded.
	Zinc	0	U	B	16	Parameter detected in associated blank.
ACS-GWMW34-03	Toluene	1	J	J	10	Compound reported less than CRQL but greater than IDL.
	Aluminum	0	U	B	167	Parameter detected in associated blank
	Potassium	4480	J	BE	16	ICP Criteria exceeded.
	Sodium	37200	J	E	76	ICP Criteria exceeded.
	Zinc	0	U		21.6	Parameter detected in associated blank.
ACS-GWMW36-03	Methylene Chloride	0	UJ	U	10	Calibration criteria exceeded.
	Carbon Disulfide	0	UJ	U	10	Calibration criteria exceeded.
	1,1,1-Trichloroethane	0	UJ	U	10	Calibration criteria exceeded.
	Carbon Tetrachloride	0	UJ	U	10	Calibration criteria exceeded.
	2-Hexanone	0	UJ	U	10	Calibration criteria exceeded.
	Nitrobenzene	0	UJ	U	30	Calibration criteria exceeded.
	Hexachlorobutadiene	0	UJ	U	30	Calibration criteria exceeded.
	2-Nitroaniline	0	UJ	U	75	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	75	Calibration criteria exceeded.
	Aluminum	4770	J	N	10	Parameter detected in associated blank
	Calcium	75400	J		8	Parameter detected in associated blank
	Copper	37.9	J		1	Parameter detected in associated blank
	Magnesium	46600	J		3	Parameter detected in associated blank
	Potassium	4690	J	BE	16	ICP Criteria exceeded.
	Sodium	40600	J	E	76	ICP Criteria exceeded.
	Zinc	0	U		45.7	Parameter detected in associated blank.
ACS-GWMW37-03	2-Butanone	0	UJ	U	10	Calibration criteria exceeded.
	4-Methyl-2-Pentanone	0	UJ	U	10	Calibration criteria exceeded.
	2-Hexanone	0	UJ	U	10	Calibration criteria exceeded.
	N-Nitrosodi-N-Propylamine	0	UJ	U	10	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	25	Calibration criteria exceeded.
	Lead	0	U		4.1	Parameter detected in associated blank
	Potassium	2060	J	BE	16	ICP Criteria exceeded.
	Zinc	0	U		23.7	Parameter detected in associated blank.
ACS-GWMW37-93	2-Butanone	0	UJ	U	10	Calibration criteria exceeded.
	4-Methyl-2-Pentanone	0	UJ	U	10	Calibration criteria exceeded.

Summary of Qualified Data
Groundwater Monitoring Round 4
American Chemical Service, Inc.
Griffith, Indiana

Sample ID	Parameter	CONC	DVQ	LQ	RDL	Comment
ACS-GWMW37-93	2-Hexanone	0	UJ	U	10	Calibration criteria exceeded.
	N-Nitrosodi-N-Propylamine	0	UJ	U	10	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	25	Calibration criteria exceeded.
	Lead	0	U		3.9	Parameter detected in associated blank
	Potassium	1990	J	BE	16	ICP Criteria exceeded.
	Zinc	0	U		22	Parameter detected in associated blank.
ACS-GWMW38-03	Phenol	0	U	J	10	Parameter detected in associated blank.
	2,2'-Oxybis(1-Chloropropane)	0	UJ	U	10	Calibration criteria exceeded.
	N-Nitrosodi-N-Propylamine	0	UJ	U	10	Calibration criteria exceeded.
	Hexachloroethane	0	UJ	U	10	Calibration criteria exceeded.
	Hexachlorobutadiene	0	UJ	U	10	Calibration criteria exceeded.
	2-Nitroaniline	0	UJ	U	25	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	25	Calibration criteria exceeded.
	Lead	0	U		10	Parameter detected in associated blank
	Potassium	959	J	BE	16	ICP Criteria exceeded.
	Sodium	0	U		7380	Parameter detected in associated blank.
	Nitrite	0	UJ		0.02	Holdtime exceeded
ACS-GWMW39-03	Phenol	0	U		33	Parameter detected in associated blank.
	2,2'-Oxybis(1-Chloropropane)	0	UJ	U	10	Calibration criteria exceeded.
	N-Nitrosodi-N-Propylamine	0	UJ	U	10	Calibration criteria exceeded.
	Hexachloroethane	0	UJ	U	10	Calibration criteria exceeded.
	Hexachlorobutadiene	0	UJ	U	10	Calibration criteria exceeded.
	2-Nitroaniline	0	UJ	U	25	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	25	Calibration criteria exceeded.
	Copper	0	U	B	3.6	Parameter detected in associated blank
	Lead	0	U	B	1.6	Parameter detected in associated blank
	Potassium	8190	J	E	16	ICP Criteria exceeded.
	Zinc	0	U	B	12.8	Parameter detected in associated blank.
	Nitrite	0	UJ		0.02	Holdtime exceeded
ACS-GWMW40-03	Phenol	0	U		20	Parameter detected in associated blank.
	N-Nitrosodi-N-Propylamine	0	UJ	U	10	Calibration criteria exceeded.
	Lead	0	U		7.8	Parameter detected in associated blank
	Potassium	2220	J	BE	16	ICP Criteria exceeded.
	Sodium	0	U		5560	Parameter detected in associated blank.
	Zinc	0	U		35.1	Parameter detected in associated blank.
ACS-GWMW40-93	Acetone	0	U		15	Parameter detected in associated blank.
	2-Butanone	0	UJ	U	10	Calibration criteria exceeded.
	4-Methyl-2-Pentanone	0	UJ	U	10	Calibration criteria exceeded.
	2-Hexanone	0	UJ	U	10	Calibration criteria exceeded.
	Phenol	0	U	J	10	Parameter detected in associated blank.
	N-Nitrosodi-N-Propylamine	0	UJ	U	10	Calibration criteria exceeded.
	Copper	0	U	B	3.4	Parameter detected in associated blank
	Lead	0	U		5.4	Parameter detected in associated blank
	Potassium	1180	J	BE	16	ICP Criteria exceeded.
	Sodium	0	U	B	4950	Parameter detected in associated blank.
	Zinc	0	U	B	14.8	Parameter detected in associated blank.
ACS-GWMW41-03	Potassium	964	J	BE	16	ICP Criteria exceeded.
	Sodium	0	UJ	E	9560	Parameter detected in associated blank. ICP Criteria exceeded.
	Thallium	0	U	B	2.4	Parameter detected in associated blank.
	Zinc	0	U		30.3	Parameter detected in associated blank.
ACS-GWMW42-03	2-Butanone	0	UJ	U	10	Calibration criteria exceeded.
	4-Methyl-2-Pentanone	0	UJ	U	10	Calibration criteria exceeded.
	2-Hexanone	0	UJ	U	10	Calibration criteria exceeded.
	Phenol	41	J		10	Parameter detected in associated blank.
	N-Nitrosodi-N-Propylamine	0	UJ	U	10	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	25	Calibration criteria exceeded.
	Lead	0	U		5.7	Parameter detected in associated blank
	Potassium	2350	J	BE	16	ICP Criteria exceeded.
	Zinc	0	U		30.4	Parameter detected in associated blank.
ACS-GWMW43-03	2-Butanone	0	UJ	U	10	Calibration criteria exceeded.
	4-Methyl-2-Pentanone	0	UJ	U	10	Calibration criteria exceeded.
	2-Hexanone	0	UJ	U	10	Calibration criteria exceeded.
	Phenol	75	J		30	Parameter detected in associated blank.
	Hexachlorobutadiene	0	UJ	U	20	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	50	Calibration criteria exceeded.
	Hexachlorobenzene	0	UJ	U	20	Calibration criteria exceeded.
	Potassium	5610	J	E	16	ICP Criteria exceeded.
	Sodium	0	U		13100	Parameter detected in associated blank.
ACS-GWMW44-03	Dimethylphthalate	9	J	J	10	Calibration criteria exceeded.
	Chromium	0	U	B	4	Parameter detected in associated blank
	Nickel	0	U	B	3.6	Parameter detected in associated blank
	Potassium	1370	J	BE	16	ICP Criteria exceeded.

Summary of Qualified Data
Groundwater Monitoring Round 4
American Chemical Service, Inc.
Griffith, Indiana

Sample ID	Parameter	CONC	DVQ	LQ	RDL	Comment
ACS-GWMW44-03	Sodium	18900	J	E	76	ICP Criteria exceeded.
	Zinc	0	U	B	12.1	Parameter detected in associated blank.
ACS-GWMW45-03	Chlorobenzene	26	J	J	80	Compound reported less than CRQL but greater than IDL.
	Xylene (total)	33	J	J	80	Compound reported less than CRQL but greater than IDL.
	Bis(2-Chloroethyl)Ether	13	J	J	20	Calibration criteria exceeded.
	1,4-Dichlorobenzene	3	J	J	20	Compound reported less than CRQL but greater than IDL.
	1,2-Dichlorobenzene	5	J	J	20	Compound reported less than CRQL but greater than IDL.
	2,2'-oxybis(1-Chloropropane)	7	J	J	20	Calibration criteria exceeded.
	2-Methylnaphthalene	5	J	J	20	Calibration criteria exceeded.
	Aluminum	0	U	B	100	Parameter detected in associated blank
	Chromium	0	U	B	3	Parameter detected in associated blank
	Potassium	8350	J	E	16	ICP Criteria exceeded.
	Sodium	101000	J	E	76	ICP Criteria exceeded.
	Zinc	0	U	B	16	Parameter detected in associated blank.
ACS-GWMW46-03	N-Nitrosodi-N-Propylamine	0	UJ	U	10	Calibration criteria exceeded.
	Aluminum	0	U	B	186	Parameter detected in associated blank
	Copper	0	U	B	2.6	Parameter detected in associated blank
	Lead	0	U	B	1.6	Parameter detected in associated blank
	Potassium	1190	J	BE	16	ICP Criteria exceeded.
	Zinc	0	U	B	11.8	Parameter detected in associated blank.
ACS-GWMW47-03	Hexachlorobutadiene	0	UJ	U	10	Calibration criteria exceeded.
	2-Nitroaniline	0	UJ	U	25	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	25	Calibration criteria exceeded.
	Bis(2-Ethylhexyl)Phthalate	0	U	J	10	Parameter detected in associated blank.
	Aluminum	724	J	N	10	Parameter detected in associated blank
	Antimony	0	U	B	1.2	Parameter detected in associated blank
	Chromium	0	U	B	2.1	Parameter detected in associated blank
	Potassium	959	J	BE	16	ICP Criteria exceeded.
	Sodium	0	U		6750	Parameter detected in associated blank.
	Thallium	0	U	B	4.3	Parameter detected in associated blank.
	Zinc	0	U	B	19.5	Parameter detected in associated blank.
ACS-GWMW48-03	Phenol	8	J	J	10	Compound reported less than CRQL but greater than IDL.
	Potassium	8270	J	E	16	ICP Criteria exceeded.
	Sodium	42700	J	E	76	ICP Criteria exceeded.
	Zinc	0	U		52.9	Parameter detected in associated blank.
ACS-GWMW49-03	Methylene Chloride	0	UJ	U	400	Calibration criteria exceeded.
	Carbon Disulfide	0	UJ	U	400	Calibration criteria exceeded.
	1,1,1-Trichloroethane	0	UJ	U	400	Calibration criteria exceeded.
	Carbon Tetrachloride	0	UJ	U	400	Calibration criteria exceeded.
	2-Hexanone	0	UJ	U	400	Calibration criteria exceeded.
	Nitrobenzene	0	UJ	U	20	Calibration criteria exceeded.
	Hexachlorobutadiene	0	UJ	U	20	Calibration criteria exceeded.
	2-Nitroaniline	0	UJ	U	50	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	50	Calibration criteria exceeded.
	Aluminum	1130	J	N	10	Parameter detected in associated blank
	Calcium	80300	J		8	Parameter detected in associated blank
	Copper	6.3	J	B	1	Parameter detected in associated blank
	Magnesium	9980	J		3	Parameter detected in associated blank
	Potassium	5480	J	E	16	ICP Criteria exceeded.
	Sodium	25800	J	E	76	ICP Criteria exceeded.
	Zinc	0	U		44	Parameter detected in associated blank.
ACS-GWMW49-93	Phenol	120	J		20	Parameter detected in associated blank.
	2,2'-Oxybis(1-Chloropropane)	25	J		20	Calibration criteria exceeded.
	N-Nitrosodi-N-Propylamine	0	UJ	U	20	Calibration criteria exceeded.
	Hexachloroethane	0	UJ	U	20	Calibration criteria exceeded.
	Hexachlorobutadiene	0	UJ	U	20	Calibration criteria exceeded.
	2-Nitroaniline	0	UJ	U	50	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	50	Calibration criteria exceeded.
	Lead	0	U		4.3	Parameter detected in associated blank
	Potassium	6320	J	E	16	ICP Criteria exceeded.
	Zinc	0	U		34.9	Parameter detected in associated blank.
ACS-GWMW50-03	2,2'-Oxybis(1-Chloropropane)	0	UJ	U	60	Calibration criteria exceeded.
	N-Nitrosodi-N-Propylamine	0	UJ	U	60	Calibration criteria exceeded.
	Hexachloroethane	0	UJ	U	60	Calibration criteria exceeded.
	Hexachlorobutadiene	0	UJ	U	60	Calibration criteria exceeded.
	2-Nitroaniline	0	UJ	U	150	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	150	Calibration criteria exceeded.
	Aluminum	12000	J	N	10	Parameter detected in associated blank
	Potassium	21000	J	E	16	ICP Criteria exceeded.
	Thallium	0	U	B	2.2	Parameter detected in associated blank.
ACS-GWMW51-03	Aluminum	1040	J	N	10	Parameter detected in associated blank
	Lead	0	U		3.9	Parameter detected in associated blank

Summary of Qualified Data
Groundwater Monitoring Round 4
American Chemical Service, Inc.
Griffith, Indiana

Sample ID	Parameter	CONC	DVQ	LQ	RDL	Comment
ACS-GWMW51-03	Potassium	3880	J	BE	16	ICP Criteria exceeded.
	Sodium	108000	J	E	76	ICP Criteria exceeded.
	Zinc	0	U	B	18.9	Parameter detected in associated blank.
ACS-GWMW51-93	Hexachlorobutadiene	0	UJ	U	10	Calibration criteria exceeded.
	2-Nitroaniline	0	UJ	U	25	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	25	Calibration criteria exceeded.
	Bis(2-Ethylhexyl)Phthalate	0	U	J	10	Parameter detected in associated blank.
	Aluminum	1130	J	N	10	Parameter detected in associated blank
	Lead	0	U		3.9	Parameter detected in associated blank
	Potassium	3880	J	BE	16	ICP Criteria exceeded.
	Thallium	0	U	B	3.1	Parameter detected in associated blank.
	Zinc	0	U	B	20	Parameter detected in associated blank.
ACS-GWMW52-03	Phenol	0	U		33	Parameter detected in associated blank.
	2,2'-oxybis(1-Chloropropane)	0	UJ	U	10	Calibration criteria exceeded.
	N-Nitrosodi-N-Propylamine	0	UJ	U	10	Calibration criteria exceeded.
	Hexachloroethane	0	UJ	U	10	Calibration criteria exceeded.
	Hexachlorobutadiene	0	UJ	U	10	Calibration criteria exceeded.
	2-Nitroaniline	0	UJ	U	25	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	25	Calibration criteria exceeded.
	Lead	0	U		4.1	Parameter detected in associated blank
	Potassium	3640	J	BE	16	ICP Criteria exceeded.
	Zinc	0	U		21.7	Parameter detected in associated blank.
ACS-GWMW53-03	Methylene Chloride	0	U	J	10	Calibration criteria exceeded.
	Acetone	0	U		12	Parameter detected in associated blank.
	2-Butanone	0	UJ	U	10	Calibration criteria exceeded.
	4-Methyl-2-Pentanone	5	J	J	10	Compound reported less than CRQL but greater than IDL.
	2-Hexanone	0	UJ	U	10	Calibration criteria exceeded.
	Phenol	50	J		10	Parameter detected in associated blank.
	2,2'-oxybis(1-Chloropropane)	0	UJ	U	10	Calibration criteria exceeded.
	N-Nitrosodi-N-Propylamine	0	UJ	U	10	Calibration criteria exceeded.
	Hexachloroethane	0	UJ	U	10	Calibration criteria exceeded.
	Hexachlorobutadiene	0	UJ	U	10	Calibration criteria exceeded.
	2-Nitroaniline	0	UJ	U	25	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	25	Calibration criteria exceeded.
	Bis(2-Ethylhexyl)Phthalate	0	U		12	Parameter detected in associated blank.
	Potassium	29000	J	E	16	ICP Criteria exceeded.
ACS-GWMW54-03	Methylene Chloride	0	UJ	U	10	Calibration criteria exceeded.
	Carbon Disulfide	0	UJ	U	10	Calibration criteria exceeded.
	1,1,1-Trichloroethane	0	UJ	U	10	Calibration criteria exceeded.
	Carbon Tetrachloride	0	UJ	U	10	Calibration criteria exceeded.
	2-Hexanone	0	UJ	U	10	Calibration criteria exceeded.
	Nitrobenzene	0	UJ	U	30	Calibration criteria exceeded.
	Hexachlorobutadiene	0	UJ	U	30	Calibration criteria exceeded.
	2-Nitroaniline	0	UJ	U	75	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	75	Calibration criteria exceeded.
	Aluminum	1980	J	N	10	Parameter detected in associated blank
	Calcium	126000	J		8	Parameter detected in associated blank
	Copper	39.3	J		1	Parameter detected in associated blank
	Magnesium	52000	J		3	Parameter detected in associated blank
	Potassium	2750	J	BE	16	ICP Criteria exceeded.
	Sodium	28700	J	E	76	ICP Criteria exceeded.
	Zinc	0	U		53.6	Parameter detected in associated blank.
ACS-GWMW55-03	Bromomethane	0	UJ	U	10	Calibration criteria exceeded.
	Chloroethane	0	UJ	U	10	Calibration criteria exceeded.
	Hexachlorobutadiene	0	UJ	U	10	Calibration criteria exceeded.
	4-Chloro-3-Methylphenol	0	UJ	U	10	Calibration criteria exceeded.
	2-Nitroaniline	0	UJ	U	25	Calibration criteria exceeded.
	4-Nitrophenol	0	UJ	U	25	Calibration criteria exceeded.
	Aluminum	6100	J	N	10	Parameter detected in associated blank
	Calcium	78200	J		8	Parameter detected in associated blank
	Copper	54.1	J		1	Parameter detected in associated blank
	Magnesium	47700	J		3	Parameter detected in associated blank
	Potassium	6660	J	E	16	ICP Criteria exceeded.
	Sodium	49500	J	E	76	ICP Criteria exceeded.
	Zinc	0	U		77.1	Parameter detected in associated blank.
ACS-GWTB02-03	Methylene Chloride	0	UJ	U	10	Calibration criteria exceeded.
	Bromoform	0	UJ	U	10	Calibration criteria exceeded.
ACS-GWTB04-03	2-Butanone	0	UJ	U	10	Calibration criteria exceeded.
	4-Methyl-2-Pentanone	0	UJ	U	10	Calibration criteria exceeded.
	2-Hexanone	0	UJ	U	10	Calibration criteria exceeded.

APPENDIX H

BLACK & VEATCH SPLIT GROUNDWATER ANALYTICAL RESULTS

Results not yet received from Black & Veatch
– will forward when received.