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CHARACTERIZATION OF BACKGROUND WATER QUALITY FOR STREAMS AND GROUNDWATER DRAFT FINAL MAY 1994

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REPORT

CHARACTERIZATION OF BACKGROUND WATER QUALITY FOR STREAMS AND GROUNDWATER

FERNALD ENVIRONMENTAL MANAGEMENT PROJECT
FERNALD, OHIO

REMEDIAL INVESTIGATION and FEASIBILITY STUDY

May 1994

U.S. DEPARTMENT OF ENERGY
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LIST OF ACRONYMS

AAS/GF	atomic absorption spectrometry/graphic furnace
ASL	analytical support level
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
cfs	cubic feet per second
CI	confidence interval
CRDL	Contract Required Detection Limit
DFO	Director's Final Findings and Orders
DOE	U.S. Department of Energy
DQO	data quality objective
EM	Environmental Monitoring [Program]
EPA	U.S. Environmental Protection Agency
FEMP	Fernald Environmental Management Project
FERMCO	Fernald Environmental Management Corporation
FFCA	Federal Facility Compliance Agreement
FS	feasibility study
gpm	gallons per minute
ICAP	inductively coupled argon plasma
IDL	Instrument Detection Limit
LQ	lognormal
IT	IT Corporation
MDL	method detection limit
meq/L	milliequivalents per liter
mg/L	milligrams per liter
ng/L	nanograms per liter
NLO	National lead Company of Ohio, Inc.
NQ	normal qualified
ODH	Ohio Department of Health
OEPA	Ohio Environmental Protection Agency
pCi/g	picocuries per gram
pCi/L	picocuries per liter
PCB	polychlorinated biphenyl
QA/QC	quality assurance/quality control
QAPP	Quality Assurance Project Plan
RAGS	Risk Assessment Guidance for Superfund
RCRA	Resource Conservation and Recovery Act

LIST OF ACRONYMS
(continued)

RI	remedial investigation
RI/FS	Remedial Investigation/Feasibility Study
SCQ	CERCLA Sitewide Quality Assurance Project Plan
SSOD	Storm Sewer Outfall Ditch
SVOC	semivolatile organic compound
TKN	total kjeldahl nitrogen
TOC	total organic carbon
TON	total organic nitrogen
TDS	total dissolved solids
TOX	total organic halides
U	undefined distribution
UCL	upper confidence limit
μg/L	micrograms per liter
μmhos/cm	micromhos per centimeter
USGS	U.S. Geological Survey
UTL	upper tolerance limit
VOC	volatile organic compound
WEMCO	Westinghouse Environmental Management Company of Ohio
W_{crit}	critical value

1.0 INTRODUCTION

This report provides the background water quality characterization for the Fernald Environmental Management Project (FEMP), located in southwestern Ohio approximately 18 miles northwest of Cincinnati. This characterization includes an evaluation of groundwater quality in the regionally extensive Great Miami Aquifer and the local perched groundwater, as well as surface water quality in the adjacent Great Miami River and Paddys Run. This characterization is required for the remedial investigations (RIs) and feasibility studies (FSs) currently being conducted at the FEMP.

1.1 BRIEF HISTORY OF THE SITE

The Feed Material Production Center was a contractor-operated federal facility where pure uranium materials were produced for the U.S. Department of Energy (DOE) between 1951 and 1989. The site is located on 1050 acres in a rural area of Hamilton and Butler counties (Figure 1-1). Production of pure uranium metal at the facility was suspended in July 1989. In February 1991, the DOE announced its intention to formally end production and submitted a closure plan to Congress, which became effective in June 1991. In August 1991, the site was renamed the Fernald Environmental Management Project in accordance with the new environmental cleanup and restoration mission.

On March 9, 1985, the U.S. Environmental Protection Agency (EPA) issued a Notice of Noncompliance to the DOE identifying EPA's major concerns over potential environmental impacts associated with the FEMP's past and ongoing operations. On July 18, 1986, a Federal Facility Compliance Agreement (FFCA) pertaining to environmental impacts associated with the FEMP was signed by the DOE and EPA. The FFCA was entered into, pursuant to Executive Order 12088 (43 FR 47707), to ensure compliance with existing environmental statutes and to implement regulations such as the Clean Air Act, the Resource Conservation and Recovery Act (RCRA), and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

Consistent with the requirements of Section 120 of CERCLA, a Consent Agreement was signed by the DOE and EPA in April 1990 and became effective June 29, 1990. This 1990 Consent Agreement amended the CERCLA portion of the 1986 FFCA. The 1990 Consent Agreement defined five "operable units" at the FEMP and surrounding area. The site was divided into operable units to more effectively manage the ongoing CERCLA investigations. These operable units are as follows:

- Operable Unit 1 - Waste Pit Area
- Operable Unit 2 - Other Waste Units
- Operable Unit 3 - Former Production Area
- Operable Unit 4 - Silos 1-4
- Operable Unit 5 - Environmental Media

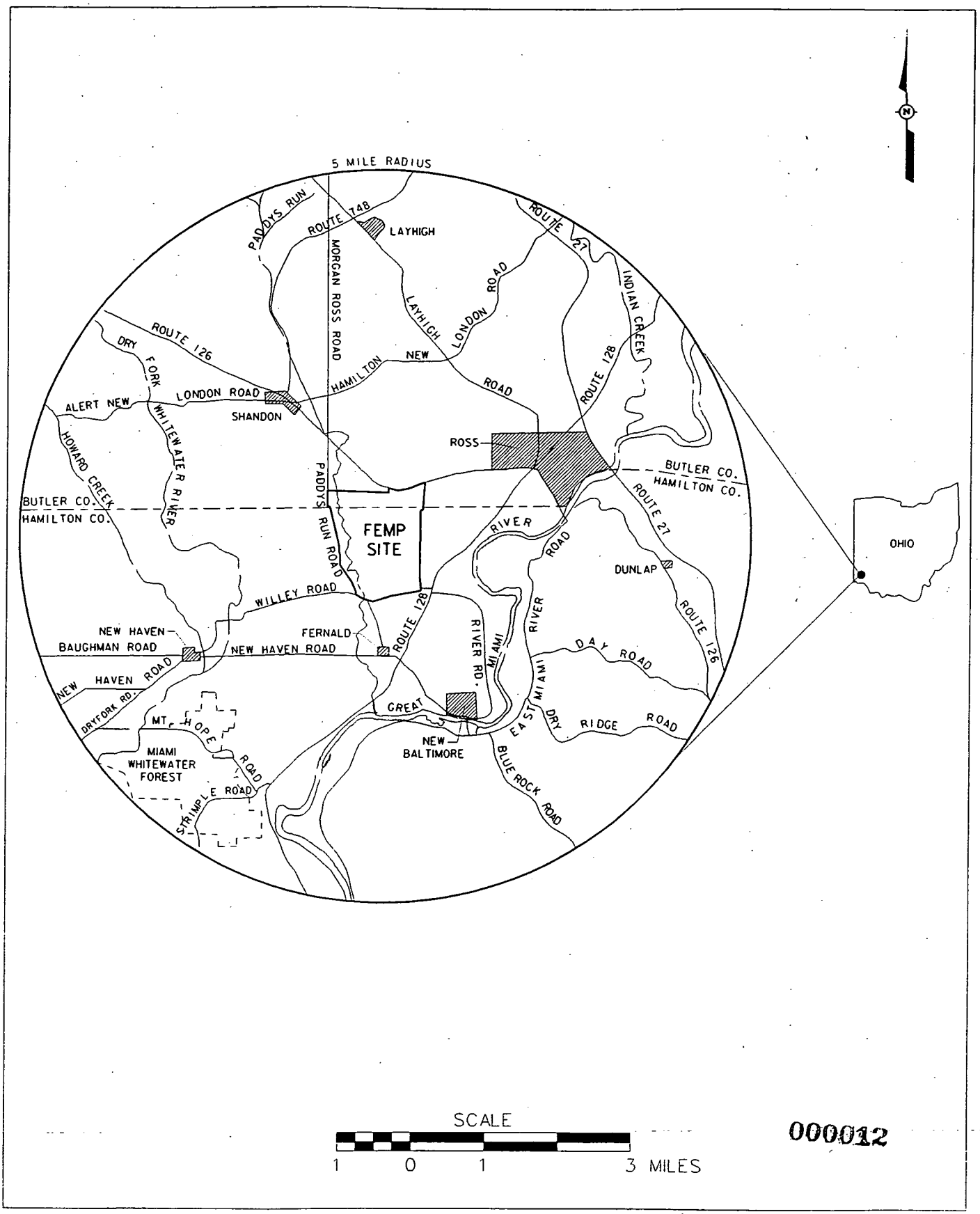


FIGURE 1-1. FEMP SITE LOCATION MAP

In general, the operable units address specific areas or facilities at the site and were defined by their location or the potential for similar technologies to be used in the ultimate cleanup. In September 1991, an Amended Consent Agreement was signed by the DOE and EPA. This Amended Consent Agreement established new schedules for completion of the ongoing RI/FS, identified 14 removal actions to abate immediate threats to the environment, and established a site-wide operable unit encompassing Operable Units 1 through 5 to ensure that actions taken under the individual operable units are protective to human health and the environment.

The 1986 FFCA between the DOE and EPA also stipulated that the site would comply with RCRA regulations and requirements. The DOE entered into a Consent Decree with the State of Ohio on December 2, 1988, which outlined specific actions necessary to attain compliance with RCRA and the Clean Water Act. This Consent Decree included the characterization and proper management of hazardous waste, groundwater monitoring of RCRA-regulated units, and the control of wastewater and surface water runoff. In 1990, negotiations between the State of Ohio and DOE resulted in an Amended Consent Decree, which was finalized and signed in January 1993. The 1993 Amended Consent Decree outlines many requirements for managing RCRA facilities at the FEMP. The RCRA groundwater monitoring requirements are outlined in the Director's Final Findings and Orders issued by the Ohio Environmental Protection Agency (OEPA) in September 1993.

1.2 PURPOSE

The purpose of this report is to gather and statistically evaluate data on background surface water and groundwater quality near the FEMP facility. The data used for this statistical evaluation are derived from RI/FS samples collected through December 31, 1993. This evaluation is intended to satisfy the requirements of the ongoing CERCLA RI/FS investigations and to provide supporting information for the RCRA groundwater monitoring program.

Background surface water and groundwater quality must be established for three principal reasons:

- To differentiate between naturally occurring concentrations of constituents and contaminant levels attributed to site sources
- To identify potential chemicals of concern for the risk assessment process
- To comply with RCRA monitoring requirements

In order to evaluate the potential impacts of the FEMP on water quality, it is necessary to determine the natural characteristics of all surface water bodies and groundwater zones that could potentially be affected. At the FEMP, surface water includes the Great Miami River, which flows along the eastern and southern boundaries of the site, and one of its tributaries, Paddys Run, an on-property stream which receives surface runoff and glacial overburden seepage from the FEMP. Groundwater occurs

locally as perched water in the glacial overburden under the FEMP and regionally in the underlying Great Miami Aquifer. The interrelationship of these water bodies is discussed in Section 1.4.

1.3 GEOLOGIC SETTING

The bedrock in the FEMP area is flat-lying, calcareous shale and thin-bedded limestone of Late Ordovician age (approximately 450 million years ago). During the mid-Pleistocene Epoch (125,000 to 450,000 years ago), continental glaciers advanced as far south as the FEMP area. Concurrent with the advances of the continental ice sheets, the sea level fell approximately 300 feet as an increasing amount of water was stored in the ice sheets. The combined effect of melting ice fronts and lowered sea level produced deep erosional valleys in the Ordovician bedrock in southwestern Ohio. Figure 1-2 shows the depth of the valleys carved in the Ordovician bedrock before they were filled.

As the continental glaciers retreated and sea level rose, these deep erosional valleys were partially filled with well-graded sand and gravel outwash deposits. Many of the deep valleys that were carved during the Pleistocene are presently occupied with surface streams, such as the Ohio River and the Great Miami River. These rivers recharge the outwash deposits creating aquifers which contain large quantities of water. This network of partially filled valleys comprises the principal water supply aquifer system in southwestern Ohio. Generally, groundwater is not found in usable quantities in the Ordovician bedrock.

The FEMP is located over a portion of a Pleistocene valley that does not have a present-day surface stream. This valley segment extends from the Great Miami River Valley south of Ross westward toward Harrison, Ohio, and is called the New Haven Trough (Figures 1-2 and 1-3). During the last stage of continental glaciation (approximately 11,000 to 70,000 years ago), a small lobe of the Wisconsin ice sheet pushed across the New Haven Trough down what is now the valley occupied by Paddys Run. As the ice advanced, it deposited a layer of clay-rich till. As the ice retreated, fluvial, lacustrine, and loess deposits were deposited on top of the till. Collectively, this younger till and sediments are referred to as glacial overburden.

The glacial overburden deposits in the FEMP area have a thickness that ranges up to 50 feet; however, the thickness is usually between 20 and 30 feet. The glacial overburden has been removed where the Great Miami River, Paddys Run, and the Storm Sewer Outfall Ditch (SSOD) have stripped off the glacial overburden as they carved their present channels. The regionally extensive valley sand and gravel fill deposits that make up the Great Miami Aquifer are referred to as glacial outwash.

Figure 1-3 is a schematic cross section showing the relative distribution of geologic materials beneath the FEMP. Relatively impermeable Ordovician bedrock comprises the valley floor and walls. Glacial outwash deposits fill the valley forming the Great Miami Aquifer. Within the glacial outwash

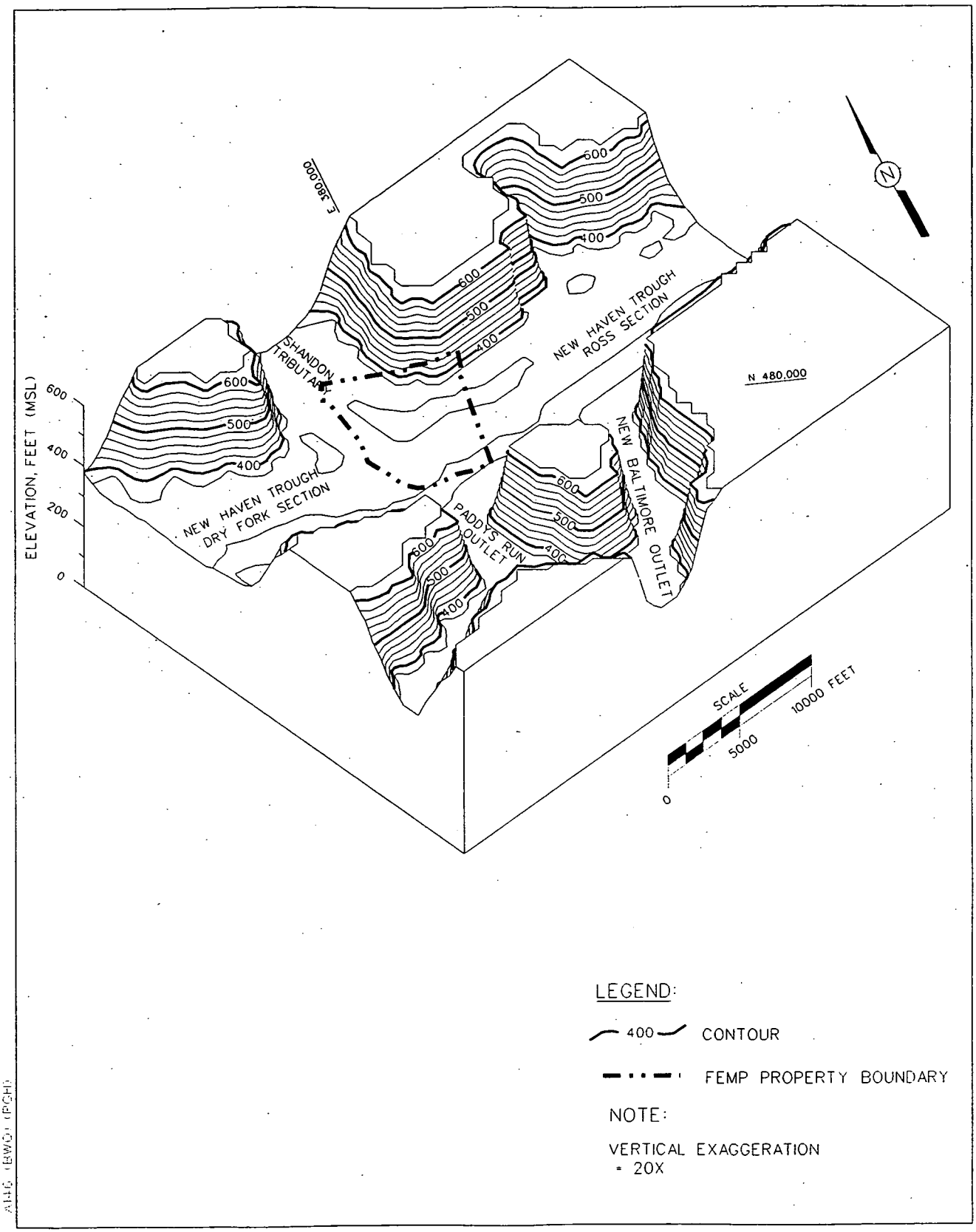
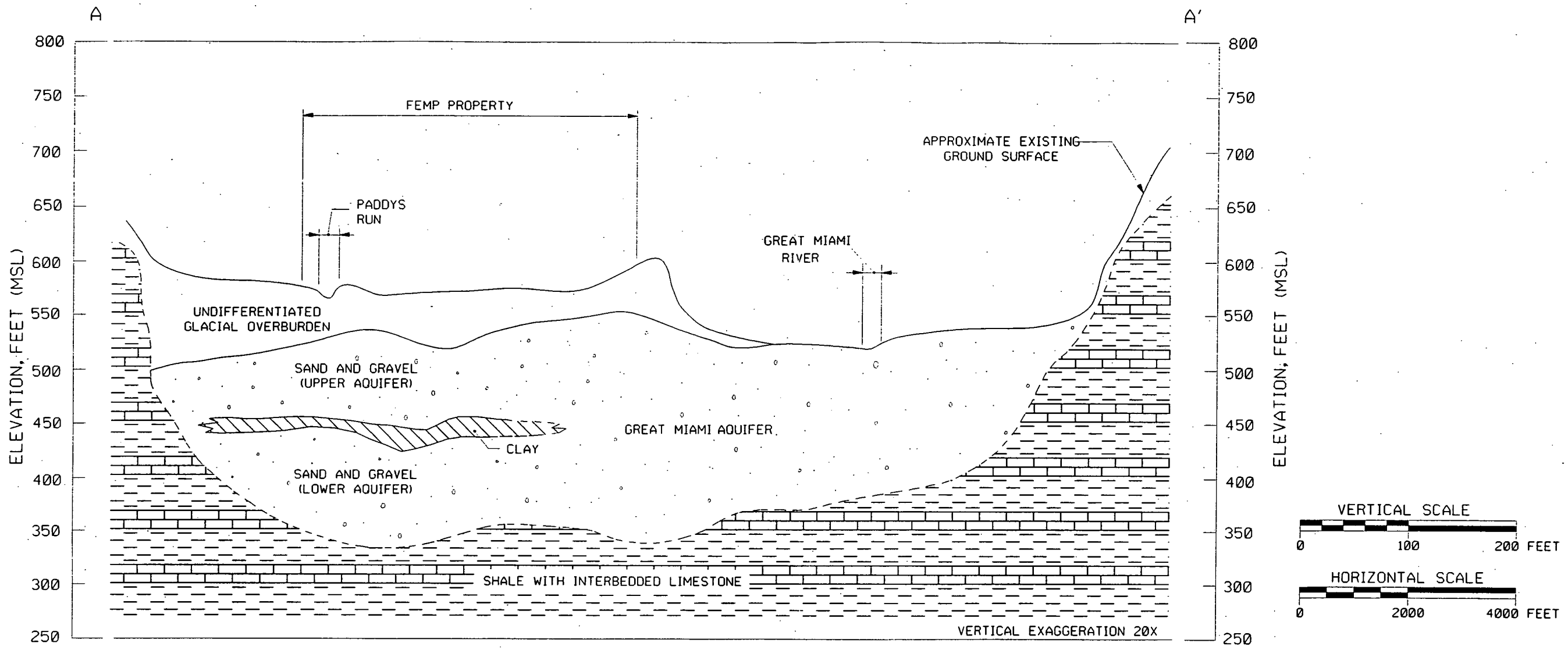
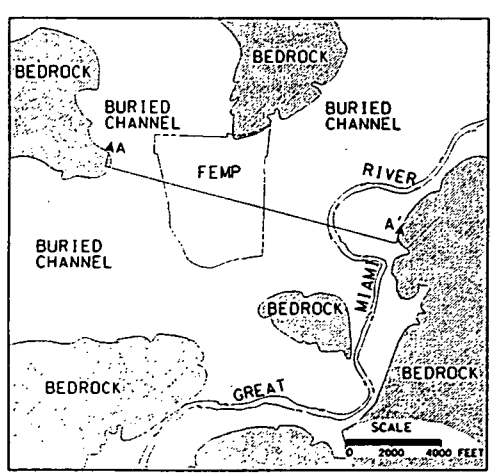


FIGURE 1-2. SCHEMATIC 3-DIMENSIONAL DIAGRAM OF BEDROCK VALLEYS



CROSS SECTION A-A'



LOCATION OF CROSS SECTION

REFERENCES:

MODIFIED FROM U.S.G.S. PROFESSIONAL PAPER NO. 605-A USING AVAILABLE OHIO STATE WATER WELL RECORDS, SOWC WATER WELL DATA, DAMES & MOORE'S "FEED MATERIALS PRODUCTION CENTER GROUNDWATER STUDY, TASK C REPORT" FOR THE DOE (1985), AND IT (1986) BORING LOGS.

NOTE:

THE DEPTH AND THICKNESS OF THE SUBSURFACE STRATA INDICATED ON THE SECTIONS WERE GENERALIZED FROM AND INTERPOLATED BETWEEN TEST BORINGS. INFORMATION ON ACTUAL SUBSURFACE CONDITIONS EXISTS ONLY AT THE LOCATION OF THE TEST BORINGS AND IT IS POSSIBLE THAT SUBSURFACE CONDITIONS BETWEEN THE TEST BORINGS MAY VARY FROM THOSE INDICATED.

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FIGURE 1-3. SCHEMATIC CROSS SECTION OF BEDROCK CHANNEL AND VALLEY FILL DEPOSITS

under the FEMP, there is a low-permeability clay interbed ranging from 5 to 20 feet thick that divides the aquifer into upper and lower portions, with approximately the upper 20 feet being unsaturated.

1.4 HYDROLOGIC SETTING

The Great Miami Aquifer is composed of several deep Pleistocene valleys filled or partially filled with outwash sands and gravel that are primarily recharged by the Great Miami River and its tributaries. In the FEMP area, these tributaries include the Dry Fork of the Whitewater River and Paddys Run (Figure 1-4). The New Haven Trough is the section of the Great Miami Aquifer that is of primary interest to the FEMP. The New Haven Trough is filled with 120 to 200 feet of sand and gravel. The glacial outwash deposits receive recharge in the FEMP area from a deep valley tributary on the north called the Shandon Tributary, as well as from the Dry Fork Section on the west (Figure 1-2).

The Dry Fork of the Whitewater River is a surface stream that flows perpendicular to the axis of the New Haven Trough and provides recharge to the Great Miami Aquifer west of the FEMP throughout most years. Paddys Run is a smaller, intermittent stream that flows from north to south along the western portion of the FEMP and recharges the aquifer during the winter and early spring. The general groundwater flow direction within the New Haven Trough from the Dry Fork of the Whitewater River is to the east toward the FEMP and on to the Great Miami River.

Individual water-supply wells in the Great Miami Aquifer are capable of yielding 1000 to 3000 gallons per minute (gpm). Since the outwash deposits are virtually the only usable aquifer in the region, they have been highly developed as a source of industrial and drinking water supply. Overlying the Great Miami Aquifer are glacial overburden deposits which contain perched groundwater. Perched water in the glacial overburden occurs at a depth of approximately 3 to 14 feet below the land surface.

1.4.1 Great Miami River

The FEMP is located within the Great Miami River drainage basin, which is one of the largest watersheds in southern Ohio (Figure 1-5). The river has a total length of 170 river miles and drains an area of approximately 5400 square miles in southwestern Ohio and southeastern Indiana. The drainage basin includes the Whitewater River, which is a major tributary that joins the Great Miami River downstream of the FEMP six river miles above the Ohio River. The headwaters of the Great Miami River are located in west-central Ohio. The river flows southwestward and empties into the Ohio River, downstream of Cincinnati, west of the junction of Ohio, Indiana, and Kentucky. The Great Miami River flows within 3800 feet of the eastern boundary of the FEMP and approximately one mile south of the southern boundary (Figure 1-4).

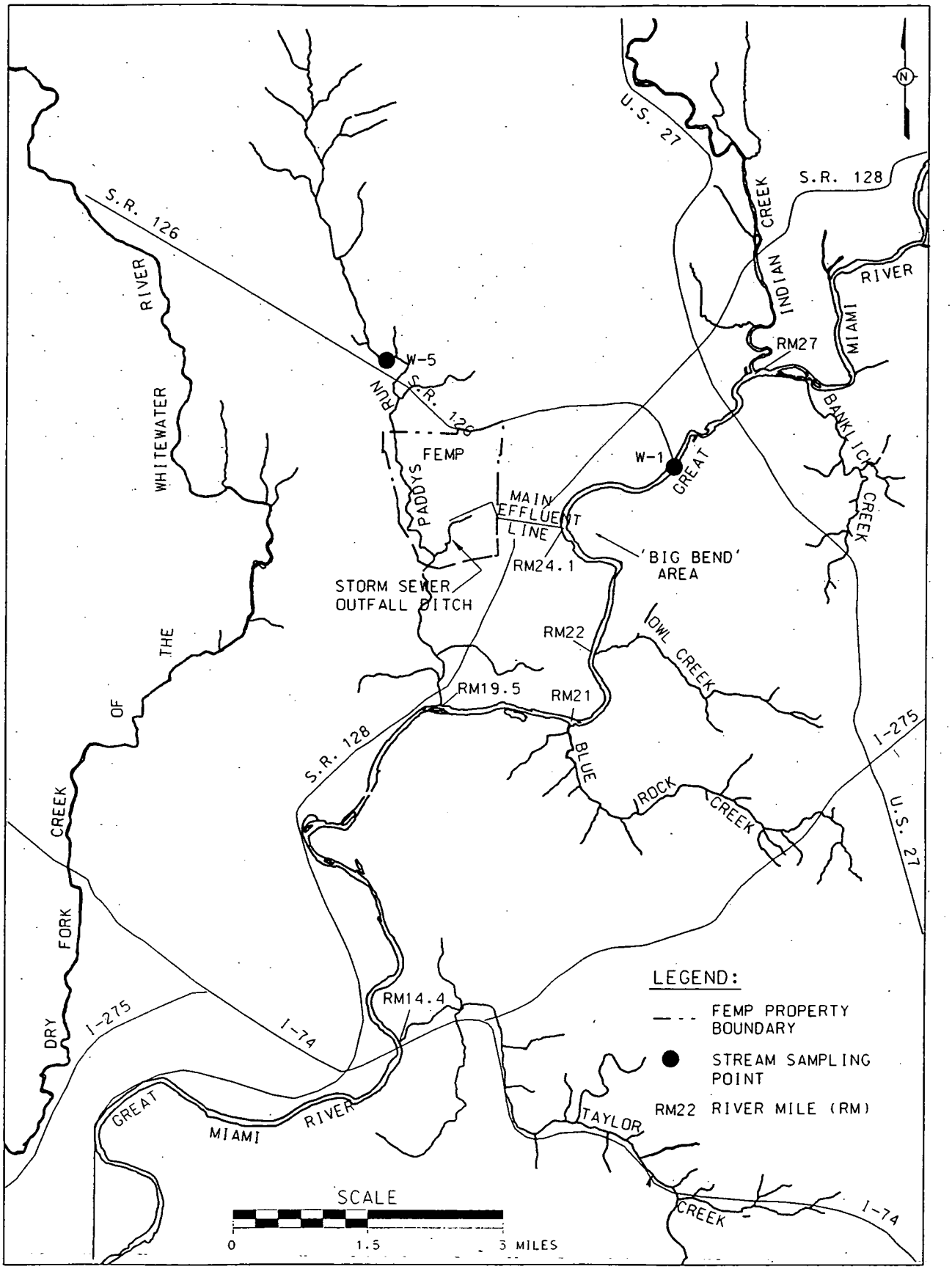


FIGURE 1-4. SURFACE WATER FEATURES IN THE VICINITY OF THE FEMP

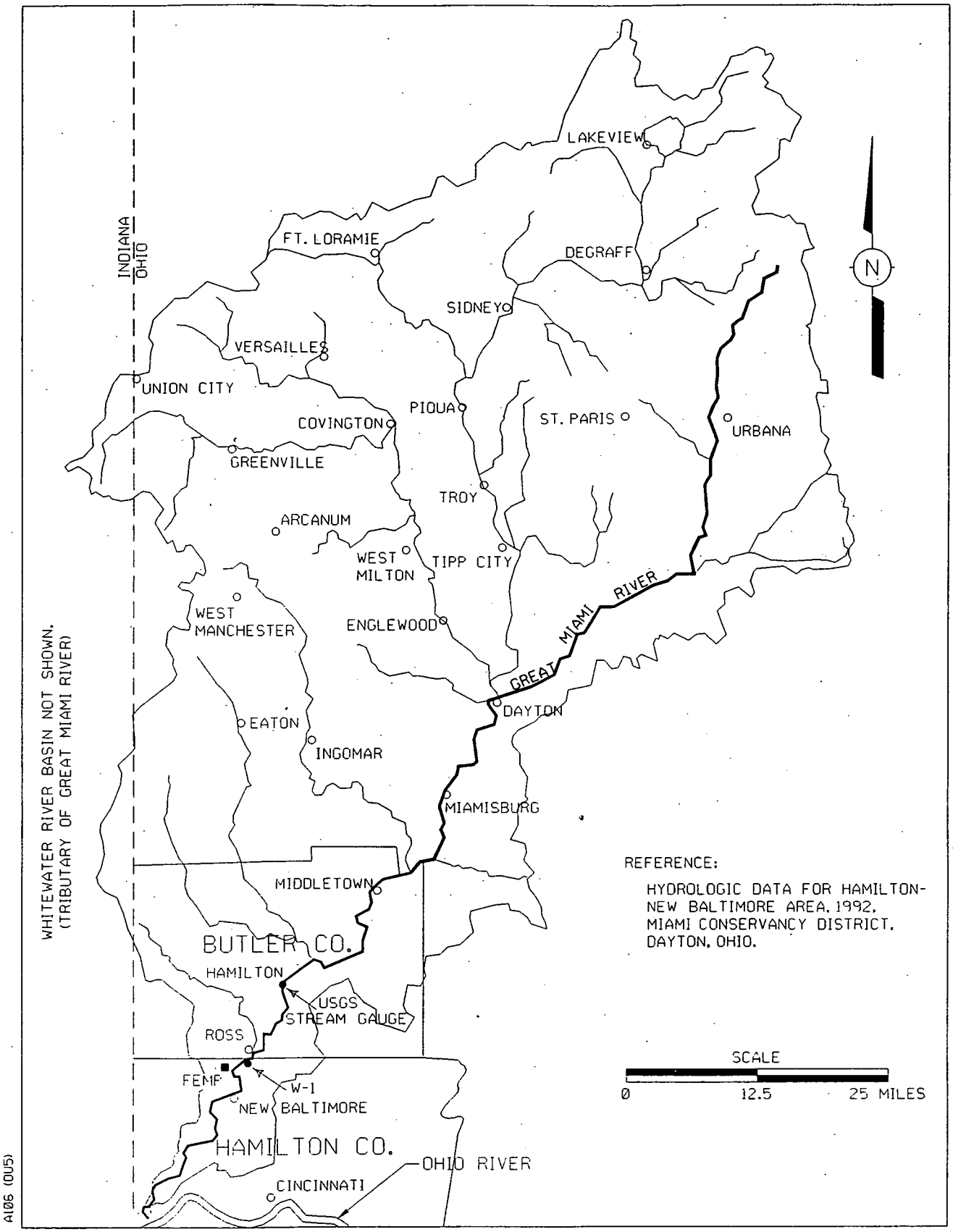


FIGURE 1-5. GREAT MIAMI RIVER BASIN

The U.S. Geological Survey (USGS) operates a flow gauging station on the Great Miami River approximately 10 miles upstream of the FEMP (approximately nine miles upstream of sampling point W-1) at Hamilton, Ohio (Figure 1-5). This point is about 136 miles downstream of the river source. The corresponding drainage area is approximately 3630 square miles, and roughly 90 percent of the Ohio portion of the watershed area lies upstream of the Hamilton gauging station. The average discharge of the Great Miami River at Hamilton, based on 55 years of record, is 3305 cubic feet per second (cfs). The maximum discharge recorded, since the construction of flood control facilities upstream of Hamilton in 1922, was 108,000 cfs (Dove 1961). The 10-year flood discharge is estimated to be approximately 81,455 cfs. Peak flow rates tend to occur in the late winter and spring.

Numerous studies at the FEMP prior to the RI/FS investigations have used sampling point W-1 as the background monitoring point on the Great Miami River. W-1 is located at the State Route 126 bridge, which crosses the river near Ross, Ohio (Figures 1-4 and 1-5). All surface water runoff or discharges from the FEMP site enter the river downstream of this sampling location. Location W-1 is downwind of the FEMP; however, the possible effects of airborne contaminants on water quality at W-1 are not expected to be measurable. This will be discussed further in Section 3.1.1 (Sampling Locations - Surface Water).

1.4.2 Paddys Run

Paddys Run is an ungauged ephemeral tributary of the Great Miami River. The stream is 8.8 river miles long and drains an area of 16 square miles (Dames & Moore 1985). The headwaters of Paddys Run are located about five miles north-northwest of the FEMP and about three miles north of the town of Shandon, Ohio (Figure 1-4). The stream originates in a bedrock upland area, travels through an agricultural area near the town of Shandon, and then flows southward along the western edge of the FEMP to the Great Miami River.

The channel of Paddys Run has an average gradient of about 20 feet per mile. Paddys Run flows on the glacial overburden between Shandon and the FEMP. The Paddys Run channel has cut entirely through the glacial overburden at a point about 3500 feet south of the northern boundary of the FEMP and provides recharge to the Great Miami Aquifer.

Several small tributaries drain the northern and western edges of the FEMP and flow into Paddys Run. A large drainage channel, the SSOD, drains the eastern and southern sides of the FEMP and enters Paddys Run about 500 feet north of the southern boundary of the FEMP (Figure 1-4). Prior to the present controls, surface water drainage flowed primarily to Paddys Run. Surface water drainage from the former production area and the waste storage area is presently controlled at the FEMP and is discharged to the Great Miami River after settling. Before the chambers of the retention basin were built in 1986 and 1988, Paddys Run received the majority of the storm sewer flow from the former production area via the SSOD.

Paddys Run is intermittent and in the summer months may flow briefly in response to storm events. From December through May, there is typically a small flow in the stream due to snowmelt, rainfall runoff, and groundwater base flow.

Sampling point W-5 has historically been used as a background monitoring point for Paddys Run. This point is located north of the intersection of State Route 126 and Paddys Run (Figure 1-4). Sampling point W-5 is not downwind of the FEMP, so the effect of airborne contaminants on stream water quality is not a concern at this sampling location.

1.4.3 Great Miami Aquifer

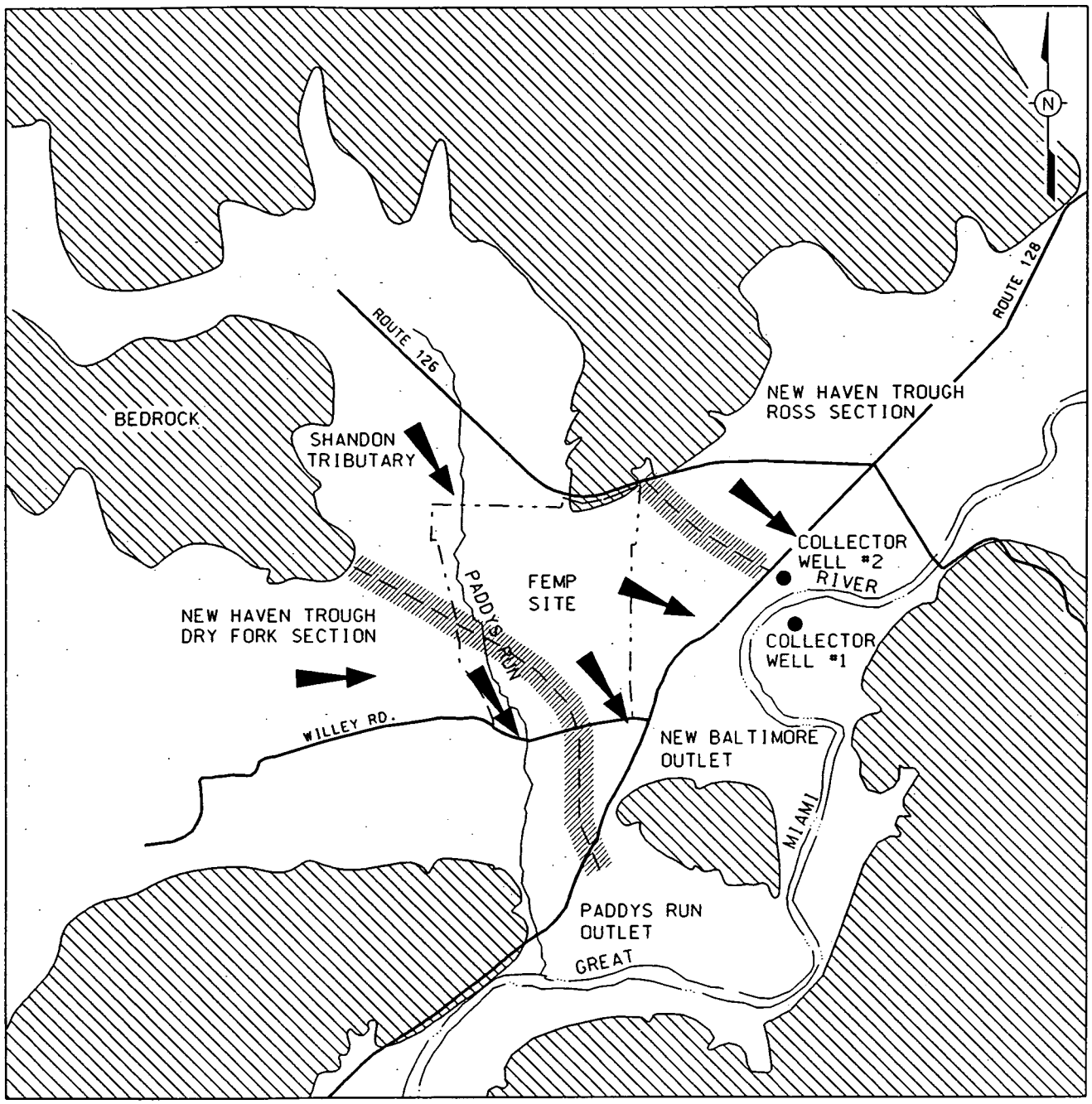
Figure 1-6 shows the conceptual model for groundwater flow in the vicinity of the FEMP. This model is based on water-table measurements collected by the FEMP on a local scale, and regional water levels collected by the Miami Conservancy District (DOE 1993a). Figure 1-6 shows the three flow regions within the Great Miami Aquifer system that are of concern to the FEMP. The bedrock walls bounding the glacial outwash restrict flow to within the valleys.

The Ross section of the New Haven Trough, northeast of the FEMP, has virtually no interaction with groundwater flow from under the FEMP. There are two large collector wells operated by the Southwestern Ohio Water Company which create a cone of depression across the width of the Ross section of the New Haven Trough, effectively forming a barrier to flow. The approximate location of the groundwater divide formed by the cone of depression is shown on Figure 1-6.

The Shandon Tributary to the New Haven Trough provides groundwater that flows under the northern portion of the FEMP and discharges into the Great Miami River east and south of the FEMP. The groundwater flow moves southeasterly through the New Baltimore Outlet from the New Haven Trough. The Shandon Tributary is the source area for groundwater moving under the waste storage and former production areas of the FEMP in the Great Miami Aquifer.

To the west, the Dry Fork section of the New Haven Trough is the source area for groundwater moving under the southwestern portion of the FEMP. The west to east flow turns south and leaves the New Haven Trough via the Paddys Run Outlet to join the Great Miami River. The Dry Fork area is therefore the recharge area for groundwater flowing in the Great Miami Aquifer under the southwestern portion of the FEMP.

A complicating factor in this model is the seasonal flow and resulting recharge from Paddys Run. Figure 1-6 shows the location of the groundwater divide when there is no recharge from Paddys Run. When recharge occurs, the location of the groundwater divide shifts to the south and west and lies directly under Paddys Run as far south as Willey Road.



LEGEND:

- FEMP PROPERTY BOUNDARY
- GROUNDWATER FLOW DIVIDE LINE
- AREA OF FLUCTUATION OF GROUNDWATER DIVIDE
- GENERAL FLOW DIRECTION
- BEDROCK

APPROX. SCALE
0 2500 5000 FEET

1cindy-t7.dgn FERMCO [RES-2233] 4/26/94 GES

FIGURE 1-6. GREAT MIAMI AQUIFER CONCEPTUAL FLOW MODEL

1.4.4 Glacial Overburden

Monitoring wells in the glacial overburden were generally constructed with well screens that are 2 to 10 feet long. The screens usually penetrate more than one type of glacial overburden material. Because the silt, sand, and gravel deposits in the glacial overburden are more permeable than the silty clay till, it is highly likely that most movement of the groundwater (laterally or vertically) is through the coarser-grained materials. However, since the well screens are completed in more than one type of material, the hydraulic heads and water quality measured in each well cannot always be assigned with confidence to a single type of overburden material. Hence the data for each well, such as hydraulic heads and water quality, are representative of the undifferentiated glacial overburden.

Rainfall and snowmelt infiltrate into glacial overburden except where the ground surface is covered by a building, parking lot, or other impermeable man-made structures. Perched groundwater in the overburden flows laterally toward the nearest drainage ditch, stream channel, or storm drain. Contouring of water levels in the glacial overburden wells shows that potential flow is from northeast to southwest. Since Paddys Run and the SSOD have eroded completely through the glacial overburden, it is not possible for perched water to travel laterally beyond either surface feature. Groundwater levels are also depressed in the vicinity of storm drains running through the former production area, indicating that shallow groundwater is flowing laterally into the drains. Studies to date indicate perched groundwater flow involves relatively small localized areas and velocities are low compared to flow volumes and velocities that exist in the Great Miami Aquifer.

1.4.5 Monitoring Wells

A three-dimensional monitoring well network was established for the FEMP RI as shown in Figure 1-7. Each well used in the RI has a unique number in which the left digit indicates the well type followed by a three or four-digit location number. Figure 1-7 illustrates each type of well.

Wells that are screened in the glacial overburden are classified as Type 1 wells. Within the Great Miami Aquifer, monitoring wells placed at and just below the water table are classified as Type 2 wells, and are installed with five feet of screen above and 10 feet of screen below the water table. Intermediate depth monitoring wells are placed just above the clay interbed or at the equivalent elevation and are classified as Type 3 wells. Wells completed near the base of the aquifer are classified as Type 4 wells. Figure 1-7 also shows Type 6 wells installed for Paddys Run Road Site investigations. Type 6 wells monitor the zone between Type 2 and Type 3 wells.

Private wells sampled during the FEMP RI monitoring program have been classified according to the same numbering scheme. When possible, the depth of each well was measured or obtained from well records and the wells were given numbers which conform to the Type 1 through Type 4 numbering scheme.

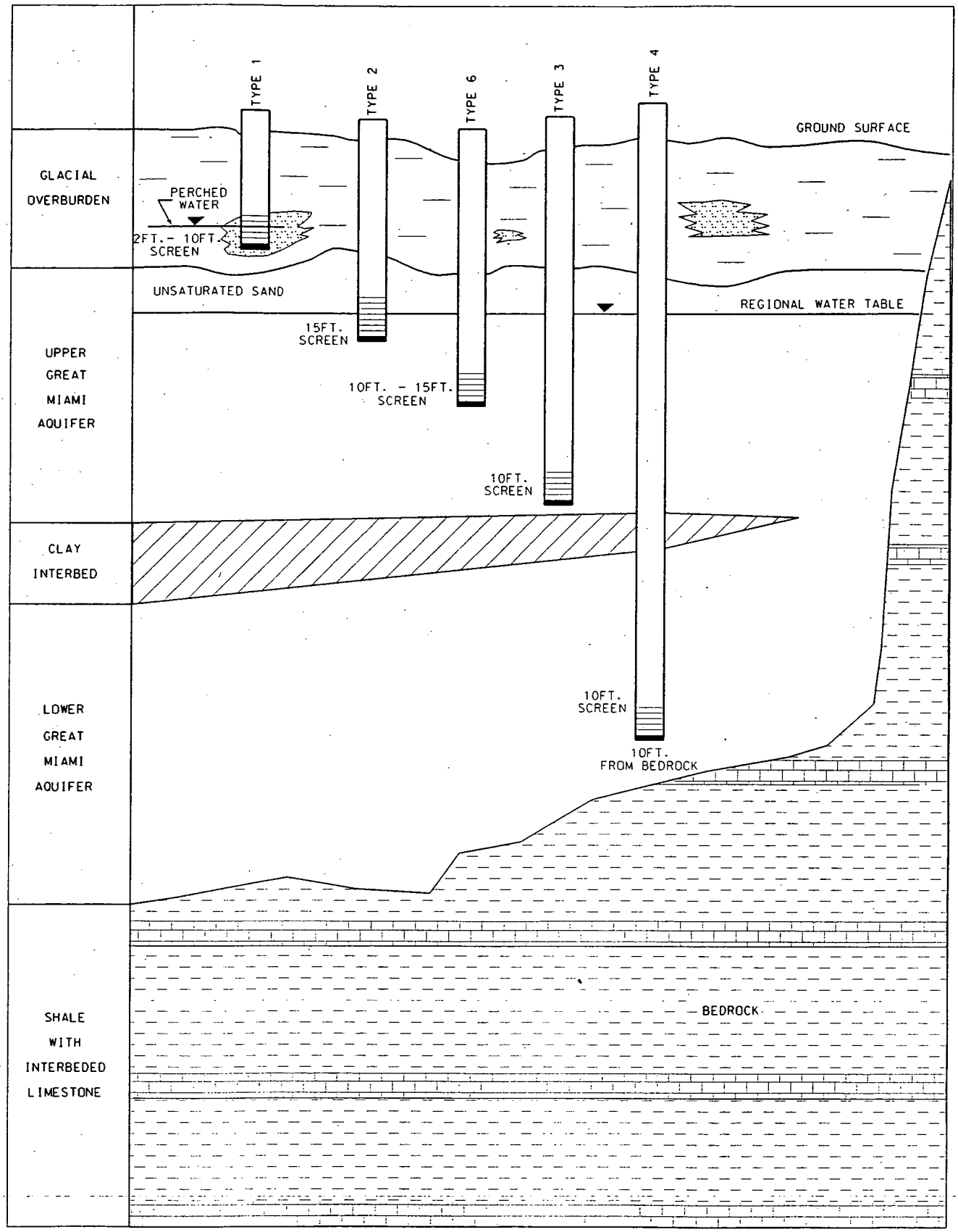


FIGURE 1-7. CLASSIFICATION SCHEME FOR MONITORING WELLS

More than 700 monitoring wells and private wells have been completed in the Great Miami Aquifer and glacial overburden that have been used to study groundwater quality in and around the FEMP. Wells were selected to characterize background groundwater quality if they were located outside and upgradient of the FEMP property or at least away from the effects of any operations.

1.5 EPA GUIDANCE ON BACKGROUND CHARACTERIZATION

Characterization of background surface water and groundwater quality is necessary for both RCRA and CERCLA site investigations. Several documents have been published by the EPA that discuss procedures to select numbers and locations of sampling points, data quality objectives, data validation procedures, statistical methods for evaluating data, and the final end use of background data and statistics.

The general procedures to be used in a CERCLA RI/FS are outlined in "Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA" (EPA 1988a). In this document the EPA states that sampling should be conducted in areas perceived to be upgradient from the contaminant source in order to identify background levels and to determine if there are contributions of contaminants from other sources. However, no details are given about the amount of data, quality of data, or methods of data evaluation necessary for background characterization.

These topics are discussed in more detail in the document "Risk Assessment Guidance for Superfund Human Health Evaluation Manual, Part A, Interim Final" (EPA 1989a). In this document, it is stated that: "Background samples are collected at or near the hazardous waste site in areas not influenced by site contamination. They are collected from each medium of concern in these off-site areas. That is, the locations of background samples must be from areas that could not have received contamination from the site, but that do have the same basic characteristics as the medium of concern at the site." The Risk Assessment Guidance for Superfund (RAGS) also suggests that statistics may be used in some cases to test the hypothesis that "there is no difference between contaminant concentrations in background areas and on site." This is commonly referred to as the null hypothesis.

If statistics are to be used, the RAGS further states that: "The number of background samples collected at a site should be sufficient to accept or reject the null hypothesis with a specified likelihood of error." However, the statistical procedures needed to perform the hypothesis testing are not specified in the RAGS. Instead, it defers to another document, "Statistical Analysis of Ground-Water Monitoring Data at RCRA Facilities, Interim Final Guidance" (EPA 1989b), for details concerning statistical procedures.

Guidance on background characterization for RCRA-related studies is more clearly defined and is provided in the following documents:

- "RCRA Ground-Water Monitoring Technical Enforcement Guidance Document" (EPA 1986)
- "Statistical Methods for Evaluating Ground-Water Monitoring from Hazardous Waste Facilities, Final Rule" (EPA 1988b)
- "Statistical Analysis of Ground-Water Monitoring Data at RCRA Facilities, Interim Final Guidance" (EPA 1989b)
- "Statistical Analysis of Ground-Water Monitoring Data at RCRA Facilities, Addendum to Interim Final Guidance" (EPA 1992)

Details of statistical procedures are discussed in Chapter 4 and Appendix F of this report. In summary, the procedures include the following:

- Identification and treatment of high nondetect data
- Identification and treatment of outliers
- Averaging multiple data from the same sampling event (i.e., duplicate, triplicates, etc.)
- Testing for data distribution (normal and lognormal)
- Calculation of descriptive statistics (parametric and nonparametric)
- Comparison of populations

1.6 SUMMARY OF REVISIONS MADE TO THE DRAFT REPORT (MAY 1993)

A draft version of "Characterization of Background Water Quality for Streams and Groundwater" was submitted to the EPA and OEPA in May 1993. The draft report was subsequently approved by those agencies, pending incorporation of comment responses and inclusion of new data collected during the field programs conducted in the spring and summer of 1993. The revisions that have occurred between the draft document and the current report are discussed in Appendix G. Where appropriate, some significant revisions are described in the pertinent sections of the report text.

The major change that has occurred for this document is that more validated RI/FS data are available, particularly for surface water sampling points W-1 and W-5 on the Great Miami River and on Paddys Run, respectively. Additionally, data from the spring and summer 1993 field programs are also available for background groundwater sampling locations. Furthermore, for the 1993 field programs, analysis of both filtered and unfiltered samples were performed for inorganic and radiological parameters. Background water quality data from these analyses are included in the revised report.

Minor changes have occurred to the number and location of wells used to characterize background water quality in the Great Miami Aquifer. In the draft report, 25 Type 2, Type 3, and Type 4 wells were used to characterize the aquifer. Based on further review of data for these wells, three of the wells initially selected to characterize background (2383, 2384, and 3044) have been discarded. They have been discarded because they are located close to Paddys Run where the stream has eroded

through the glacial overburden, and the wells may therefore be influenced by surface water that has infiltrated from the stream.

Two wells have been added since the draft report. No data were available for well 2728 prior to the 1993 sampling program. New data for this well enables its use for background characterization. Well 2105 was disqualified previously because of one anomalous sample. The data from the one sample has been excluded and the remainder of the data appear similar to other data from the Great Miami Aquifer. Therefore, well 2105 was considered usable.

Altogether there was a net reduction of one well used to characterize the Great Miami Aquifer. The wells used to characterize the background water quality in the glacial overburden have not changed; the same five wells are used in this report because they are the most appropriate. The process for evaluating and selecting wells is described in Chapter 3.

Several steps were performed on the compiled potential background data set prior to statistical analysis:

1) nonvalidated data were removed
2) high nondetect values were removed
3) data outliers were identified and removed
4) data for replicate samples were averaged

Steps 1 and 2 were performed during the preparation of both the draft report and for this revision. Steps 3 and 4 were performed for the revised document. These procedures were added in order to remove possibly inappropriate data from the background data set and to reduce potential sample bias caused by replicate sampling (i.e., duplicates, triplicates). The data evaluation procedures are discussed in Chapter 4 and Appendix G.

Once the modifications to the background data set were complete, statistical analyses of each data group were performed. The types of statistical analyses performed on the data and the list of descriptive statistics provided have changed slightly from those presented in the draft report. Most notably:

- The one-sided 95 percent upper tolerance limit (UTL) has been replaced by the 95th percentile.
- The two-sided 95 percent upper confidence limit (UCL) has been replaced by the one-sided 95 percent UCL.
- For data groups having lognormal distributions, the geometric mean has been replaced by an "estimated mean" and the geometric standard deviation was replaced by an "estimated standard deviation."

In general, the reason for these modifications is to limit the reported statistical results to those most useful and appropriate for the particular data distribution. Further discussion is provided in Appendix G. The protocol and equations for calculating the new statistics as well as those presented previously are included in Appendix F.

Additional changes to the draft "Background Water Quality" document involve incorporating comment responses as discussed in DOE's correspondence with EPA and OEPA, dated August 31, 1993. Some minor revisions were also made to the description of site setting, groundwater monitoring, sampling and analysis programs, and data validation to promote consistency with the Operable Unit 5 RI Report.

2.0 PREVIOUS STUDIES

Numerous studies have been performed at the FEMP in the past in which background surface water or groundwater quality was investigated. In addition, characterization work continues to be performed at the site for the RCRA, CERCLA, and Environmental Monitoring (EM) Programs. Only the validated CERCLA RI/FS data set is being evaluated to establish background water quality in this document. The nonvalidated background data from the previous studies and other ongoing monitoring programs are useful for comparative purposes. This chapter provides a brief overview of the many sampling programs that have contributed to the overall background data for the FEMP. Summaries of the background data that were collected in these studies are found in Appendix A.

2.1 ENVIRONMENTAL MONITORING PROGRAM

The EM Program began before RCRA and CERCLA regulations were instituted. Surface water and sediment sampling were initiated to measure the effects of routine discharges of treated effluent into the Great Miami River, and the periodic discharge of untreated surface water runoff into the SSOD and Paddys Run. The program was developed by National Lead of Ohio, Inc. (NLO), the first operator of the site for the DOE. There were three sampling points initially established on the Great Miami River. Sampling point W-1 was established upstream by 1954 to provide background data for the river (Figure 1-4). The other two original sampling points were located downstream and are not representative of background water quality.

On Paddys Run, sampling point W-5 was established in 1979 at an upstream point (about 0.5 mile north of the FEMP) and has been monitored routinely to provide background data on Paddys Run (Figure 1-4). All the other EM sampling points on Paddys Run are adjacent to or downstream of the FEMP property and are not representative of background water quality.

In late 1981, above-background concentrations of uranium were found in several private wells near the FEMP, and NLO initiated the EM Private Well Program. By 1984, 19 private wells were being sampled on a monthly basis. The program continued to grow and as of 1991, 41 individual private wells had been sampled (Figure 2-1); however, not all these wells are sampled every year (Westinghouse Environmental Management Company of Ohio [WEMCO] 1992). Monthly samples are analyzed for total uranium; one monthly sample per year is also analyzed for 16 metals. Data for wells upgradient of the FEMP are summarized in Appendix A, Tables A-1 and A-2.

2.2 U.S. GEOLOGICAL SURVEY SURFACE WATER MONITORING

A USGS stream gauging station is located about 10 miles upstream of the FEMP at Hamilton, Ohio (Figure 1-5). From July 1963 to November 1973, stream water samples were collected between one and four times per month. These samples were analyzed for a wide variety of inorganic constituents and a few organic constituents. Although this sampling point is 10 miles upstream, the large amount

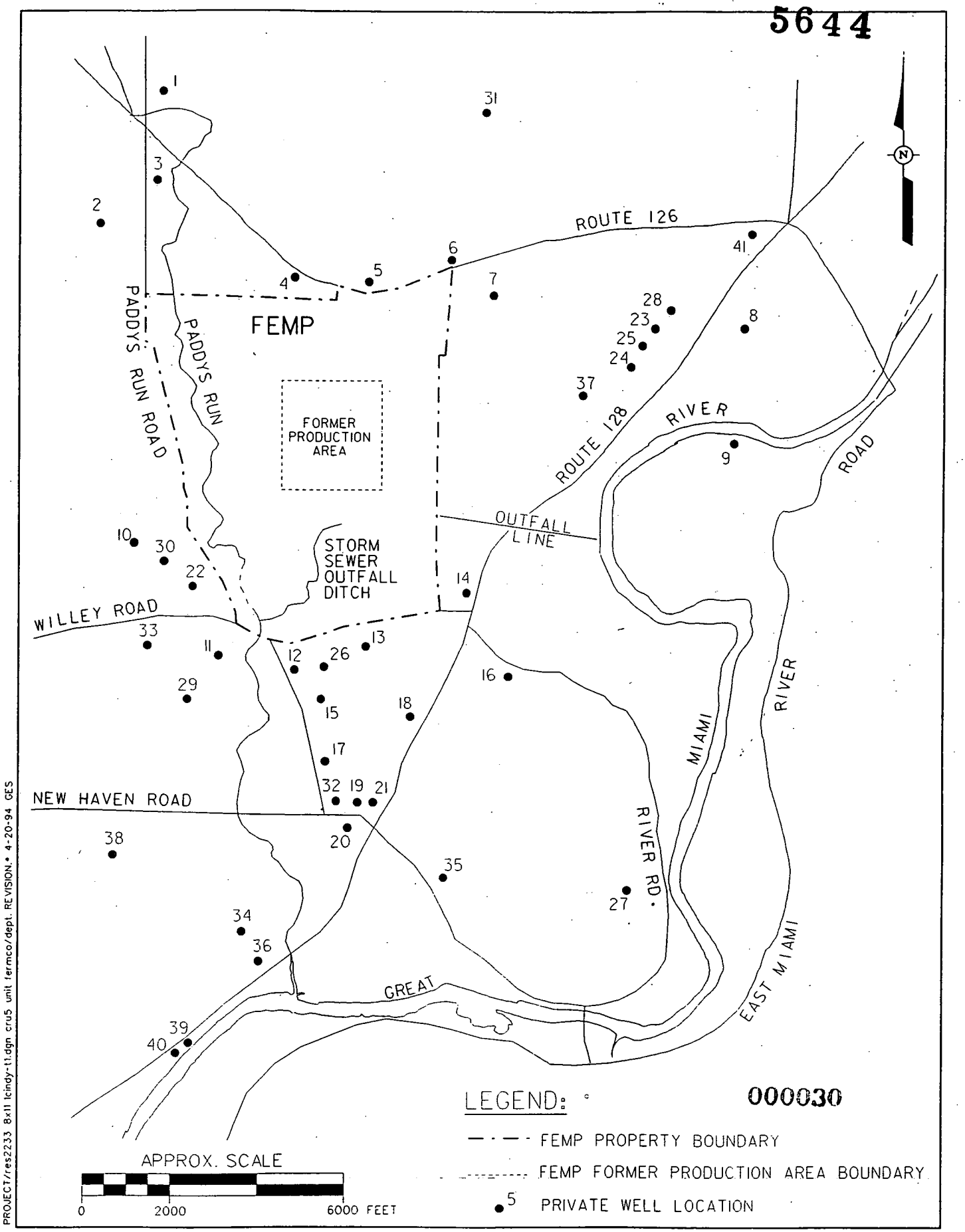


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FIGURE 2-1. LOCATIONS OF PRIVATE WELLS SAMPLED FOR THE FEMP ENVIRONMENTAL MONITORING PROGRAM

of data available is useful for comparative purposes. USGS stream water quality data are summarized in Appendix A, Table A-3.

2.3 U.S. GEOLOGICAL SURVEY GROUNDWATER STUDY

The USGS conducted a one-time collection of samples from private wells adjacent to the FEMP in August 1982 (Sedam 1984). A total of 33 well samples were collected, but many of these were analyzed only for total uranium. Of the 33 samples collected, 9 were from wells located on the west or southwest side of the FEMP that can be considered upgradient of the FEMP (Figure 2-2). The depths of these wells range from 70 to 90 feet and they are completed in the upper part of the Great Miami Aquifer. The data for the nine wells located upgradient of the FEMP are summarized in Appendix A, Table A-4. It has been determined that wells designated H-101, H-102, H-103 correspond to EM wells 10, 30, and 22, respectively. In addition, wells H-101 and EM-10 are also the same as well 2104.

2.4 IT CORPORATION FINAL INTERIM REPORT

This study (IT 1986) was conducted in 1985 and 1986 to estimate the extent of off-property contaminant migration from the FEMP and to assess the associated health risks. During this study, six new monitoring wells were drilled and water samples were collected from numerous surface water and groundwater monitoring points. Paddys Run was sampled once at W-5, and the Great Miami River was sampled twice at upstream sampling point W-1 (Figure 1-4). Groundwater samples were collected from a large number of wells, many of which are upgradient of the FEMP (Figure 2-3). Many of these samples were analyzed for an array of organic, inorganic, and radiological constituents. Data for well samples collected upgradient of the FEMP are summarized in Table A-5 of Appendix A.

2.5 ARGONNE NATIONAL LABORATORY ENVIRONMENTAL SURVEY

An environmental survey of the FEMP was performed in 1986 by Argonne National Laboratory under the direction of DOE. The results of the sampling and analysis are reported in "FMPC Sampling and Analysis Report" (DOE 1988a). During this study, one water sample was collected from sampling point W-1 on the Great Miami River and was analyzed for a variety of organic, inorganic, and radiological constituents (Table A-6, Appendix A).

2.6 OHIO DEPARTMENT OF HEALTH

In January 1985, the DOE, through a cooperative agreement, requested that the Ohio Department of Health (ODH) collect samples of drinking water from private wells in the vicinity of the FEMP. Groundwater samples were collected primarily in 1985 and 1986, with additional samples collected up to January 1988. These samples were analyzed for gross alpha, gross beta, and total uranium. Approximately 246 private well samples were collected and analyzed (ODH 1988).

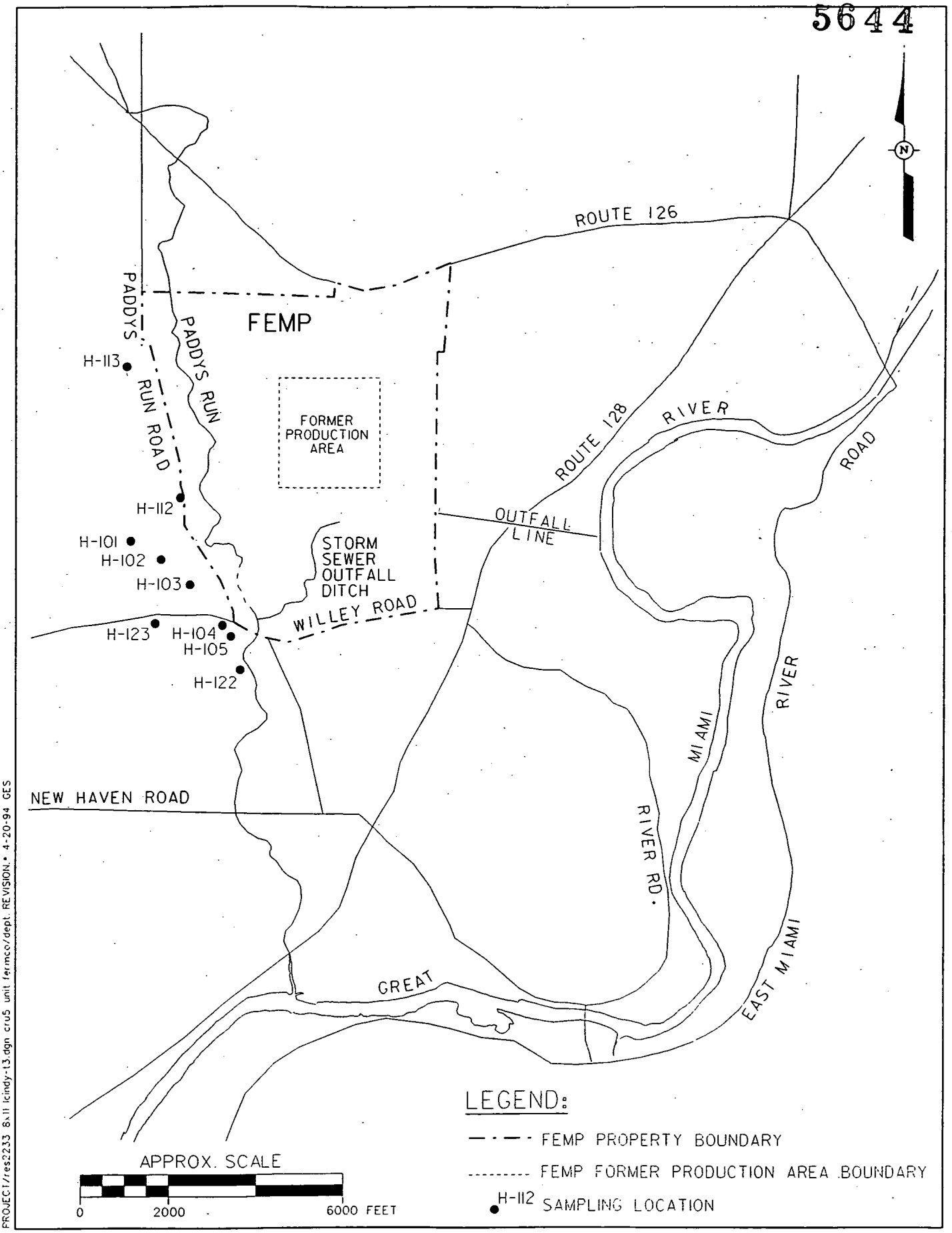
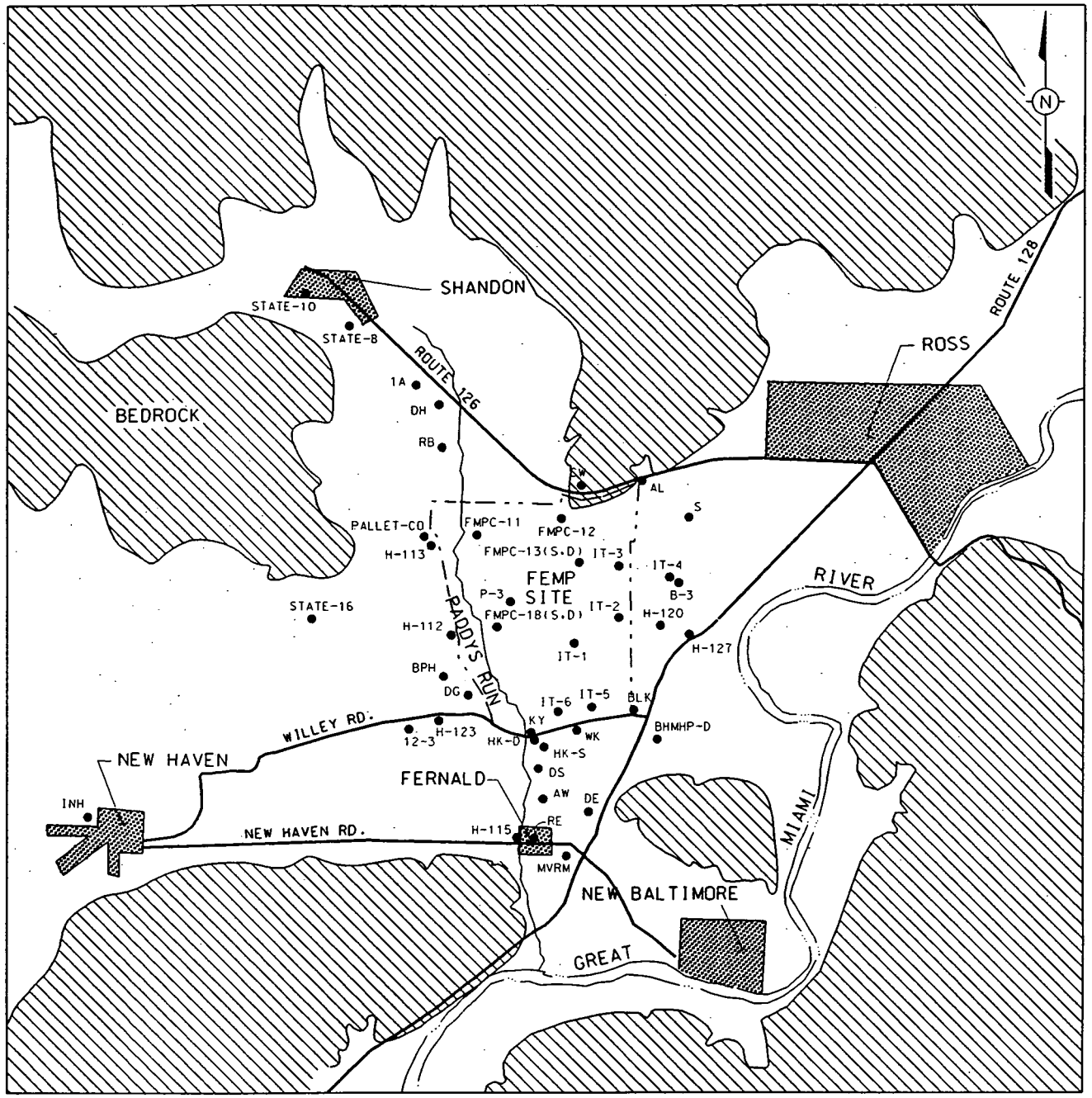


FIGURE 2-2. LOCATIONS OF UPGRADIENT WELLS SAMPLED BY THE U.S. GEOLOGICAL SURVEY IN 1982



NOTE:

1. INVENTORY INCLUDES RESIDENTIAL, COMMERCIAL, INDUSTRIAL, AGRICULTURAL, AND MONITORING WELLS.
2. COMPLETION DEPTHS AND CONSTRUCTION DETAILS FOR SOME WELLS ARE UNKNOWN.

REFERENCE:

IT CORPORATION, 1986. "FINAL INTERIM REPORT-AIR, SOIL, WATER, AND HEALTH RISK ASSESSMENT IN THE VICINITY OF THE FMPC, FERNALD, OHIO."

LEGEND:

- HK-S ● WELL LOCATION
- — - - FEMP PROPERTY BOUNDARY
- MUNICIPAL AREA
- BEDROCK

APPROX. SCALE

0 2500 5000 FEET

1cindy-t8.dgn FERMCO [RES-2233] 4/26/94 GES

FIGURE 2-3. LOCATIONS OF WELLS SAMPLED BY IT CORPORATION IN 1986

2.7 OEPA STUDY OF THE GREAT MIAMI RIVER

The OEPA conducted a study of water quality in the Great Miami River in 1989. During this investigation, seven water samples were collected from sampling point W-1 and analyzed for numerous metals and general water quality constituents (Table A-15, Appendix A).

2.8 PREVIOUS RI/FS BACKGROUND STUDIES

The RI/FS program for the FEMP began in 1986. The objective was to study the nature and extent of environmental contamination at the site and to assess the potential for adverse human health and environmental effects. Groundwater and surface water sampling was initiated in early 1988 following the plans and procedures contained in an EPA-approved Work Plan (DOE 1988b).

During the progression of the remedial investigation, two reports have been written in which background water quality was addressed. In both cases, incomplete data sets and nonvalidated data were used to derive background water quality characteristics. Additionally, the statistical approaches and procedures employed, well locations chosen, and data sets used to calculate background concentrations in each media were different.

In the draft "Groundwater Report" (DOE 1990a), data from samples collected between April 1988 and March 1989 were evaluated. The data were separated into four groups: glacial overburden and the Ross, Shandon, and Dry Fork sections of the Great Miami Aquifer. The specific wells used to represent background for each of these four groups were:

- Glacial overburden - wells 1024, 1059, 1060, and 1065
- Ross section, Great Miami Aquifer - wells 2026, 2121, 2122, 3063, 3099, and 3100
- Shandon section, Great Miami Aquifer - wells 2050, 2056, 2066, and 2105
- Dry Fork section, Great Miami Aquifer - wells 2036, 2057, and 2123

Arithmetic means of background values calculated for each of these four groups are listed in Appendix A, Tables A-7 through A-10. Means were calculated for 17 radionuclides and 31 inorganic constituents.

A similar exercise was performed later during preparation of the "Site-Wide Characterization Report" (DOE 1993c). The same wells were used in the "Groundwater Report"; however, two additional wells, 1052 and 2043, were included in the characterization of the glacial overburden and the Shandon section background values, respectively.

The background groundwater quality statistics presented in the "Site-Wide Characterization Report" are in Appendix A, Tables A-11 through A-14.

2.9 RCRA GROUNDWATER MONITORING

A RCRA Detection Monitoring Program was initiated at the FEMP in 1985 due to the disposal of barium chloride in Waste Pit 4 from 1980 to 1983. The Detection Monitoring Program consisted of sampling 41 monitoring wells six times each between August 1985 and November 1987. In November 1987, based upon statistical comparisons completed as part of the program, the EPA and the OEPA were notified that Waste Pit 4 could be affecting groundwater quality in the waste pit area. At that time, the RCRA Detection Monitoring Program was changed to a RCRA Assessment Monitoring Program.

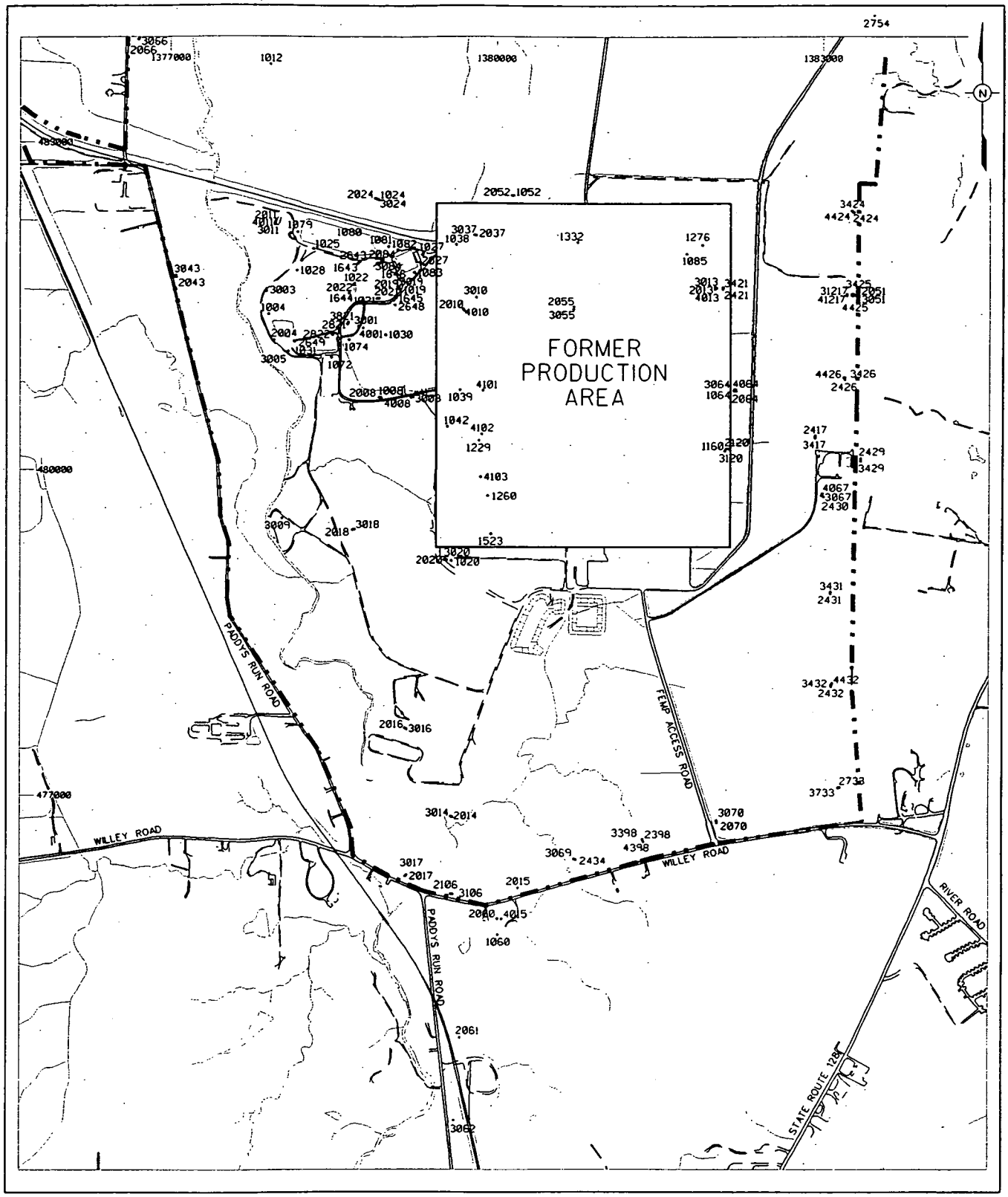
The Groundwater Quality Assessment Program Plan was the guiding document for the RCRA Assessment Monitoring of Waste Pit 4. This plan was revised several times to address regulator comments and programmatic findings. By the end of 1991, the number of wells sampled for the program had increased from 41 to 54.

The RCRA Assessment Monitoring Program was altered when a revised Part A Permit Application was submitted in June 1991. Prior to June 1991, Waste Pit 4 was the only regulated unit requiring groundwater monitoring under RCRA. The Part A Permit identified eight additional units requiring groundwater monitoring. In order to maintain RCRA compliance, the Groundwater Monitoring Plan was written which provided for a monitoring network with three "lines" of wells. By the beginning of 1993, the number of wells sampled for the program had increased to 84.

During 1993, it was determined that it would be both difficult and impractical to meet RCRA requirements under the current monitoring program. In order to integrate RCRA and CERCLA monitoring activities, an Alternate Monitoring Program was proposed and accepted by OEPA. This program identified 33 downgradient on-property wells to be monitored for RCRA to assess off-property releases from the FEMP.

Figure 2-4 shows all wells which have been sampled as part of the FEMP RCRA Groundwater Monitoring Program. Wells were sampled for various analytes consisting of general water quality, drinking water suitability, as well as chemical and radiological indicator parameters.

Results from the RCRA Detection Monitoring Program are summarized in the RCRA Groundwater Reports (ASI/IT 1988; Dames & Moore 1986a, 1986b, 1987a, 1987b, and 1987c). Results from the RCRA Assessment Monitoring Program are furnished in the RCRA Annual Groundwater Reports (DOE 1990b, 1991, 1992a, 1993b, and 1994).



SCALE

0 1000 2000 FEET

LEGEND:

1060 MONITORING WELL

FEMP PROPERTY BOUNDARY

000035

PROJECT/rea2233 8x11 dmp.dgn CRUS UNIT FERMCO/DEPT. INITIAL REVISON.# 12-21-93 GES

FIGURE 2-4. RCRA GROUNDWATER MONITORING WELLS

3.0 DEVELOPMENT OF THE RI/FS BACKGROUND DATA SET

The RI/FS program was designed to determine the effects of FEMP operations on all environmental media, ecology, and human health. During this ongoing program, a substantial amount of surface water and groundwater data and interpretations have been generated. Preliminary data and data interpretations for background water quality have already been presented in the draft "Groundwater Report" (DOE 1990a) and the "Site-Wide Characterization Report" (DOE 1993c). This chapter concentrates on the aspects of the RI/FS program that pertain to background water quality and development of the comprehensive data set used in succeeding chapters to characterize background.

3.1 SAMPLING LOCATIONS

3.1.1 Surface Water

Sampling point W-1 on the Great Miami River was selected as a location to monitor water quality upstream of the FEMP. Station W-1 is located two miles directly east of the FEMP property boundary and about 1.5 miles upstream from the FEMP effluent line (Figure 1-4). Sampling occurred where State Route 126 crosses the river near Ross, Ohio.

Total uranium values for surface soil outside the FEMP property sampled in 1984 and 1986 indicate that some airborne dispersion of total uranium occurred from the production area toward the northeast, the direction of prevailing wind for the area. However, concentrations of total uranium in surface soil decrease rapidly in a northeast direction down to about 7 to 13 pCi/g (picocuries per gram) near the northeast corner of the FEMP property. Concentrations were even lower off-property in a north and northeast direction. Near Ross, Ohio (where W-1 is located), total uranium activity levels typically ranged from 1 to 3 pCi/g, which is similar to background concentrations of total uranium in surface soils. The watershed area upstream of sampling point W-1 is large and the flow rate at W-1 is substantial. Therefore, it is not expected that airborne transport of radionuclides will have a measurable effect on background water quality readings at sampling point W-1.

When the bridge at Ross was rebuilt in 1990, water samples were collected about nine miles upriver near Hamilton, Ohio. As described in Chapter 7, the total uranium concentrations at Hamilton were essentially the same as the concentrations measured at Ross before and after construction (Figure 7-1). Thus, the available evidence indicates that sampling point W-1 is an appropriate location for collection of background data for the Great Miami River.

Sampling point W-5 was identified in the RI/FS Work Plan as the background monitoring location for Paddys Run (Figure 1-4). However, the Work Plan specified that the data for W-5 would be provided through routine sampling conducted under the EM Program, so no RI/FS samples were collected at sampling point W-5 prior to 1993. EM data from sampling point W-5 were originally

intended to be the background data for the RI/FS program; however, these data were not complete (i.e., no Hazardous Substance List [HSL] organics or metals were analyzed) and could not be validated according to currently existing criteria. Therefore, two RI/FS water samples were collected from sampling point W-5 in 1993 and were analyzed for the full suite of organic, inorganic, and radiological analytes.

The RI/FS W-5 sampling location in 1993 was several hundred feet downstream of the original W-5 location used by EM. The RI/FS W-5 location is at the intersection of Paddys Run and State Route 126, whereas the EM W-5 location is at the intersection of Paddys Run and Paddys Run Road. After reviewing the data, it was determined that total uranium concentrations from the two locations are essentially the same (refer to Appendix C and Figure 8-1).

3.1.2 Groundwater

Presently, there are approximately 376 Type 1 wells, 216 Type 2 wells, 121 Type 3 wells, and 33 Type 4 wells in and around the FEMP property. These numbers do not include private wells that have been incorporated into the RI/FS program.

The next sections describe how wells were selected which could potentially represent background groundwater quality and how these wells were screened to eliminate wells that might not be representative of ambient groundwater. Several criteria were used in the screening process to develop the final inventory of wells. Water quality data from these wells were then used to characterize background conditions.

3.1.2.1 Identification of Potential Background Monitoring Wells

A current map of RI/FS well locations was visually scanned, and all wells that appeared to be potentially usable for background characterization were tabulated (Table 3-1). These included all RI/FS wells and private water-supply wells sampled during the RI/FS program that were:

- Northeast of the FEMP toward Ross, Ohio
- North and northwest of the FEMP toward Shandon, Ohio
- West of Paddys Run
- South of the FEMP (Type 1 wells)
- Within the FEMP but away from site activities and wastes

The list includes those wells that were originally identified as background monitoring wells for the "Site-Wide Characterization Report" (DOE 1993c), as well as several more wells that have been added for consideration. A number of wells located within the FEMP property were retained as potential sources of background data because they were close to the northern or western edges of the property and away from FEMP activities and wastes.

Table 3-1

Wells Considered for Use in Characterizing Background Water Quality

General Area	FEMP Wells	Private Wells
Northeast of the FEMP	2098,[a] 3098[a]	2026,[a] 2121,[a] 2122,[a] 3063,[a] 3099,[a] 3100[a]
North and northwest of the FEMP	2043,[a] 2066,[b] 2679,[g] 3043,[a] 3066,[g] 3679[g]	1040,[a] 1058,[b] 1059,[a] 2050,[a] 2056,[a] 2105[a]
West of Paddys Run	2044,[e] 2096,[a] 2383,[e] 2384,[e] 3044,[e] 3096,[a] 4096,[a] AW-1[d]	2036,[a] 2057,[a] 2104,[a] 2123[a]
Within the FEMP property	1009,[d] 1011,[g] 1012,[c] 1015,[d] 1024,[a] 1052,[g] 1065,[a] 1679,[d] 1728,[g] 1733,[g] 1754,[d] 2024,[g] 2728,[a] 2754,[c] 3024,[a] 4011,[a] 4424[f]	1124[b]
South of the FEMP	-	1060[a]
Total	33	18
Usable background wells	13	16

[a]Wells used in the background study.

[b]Wells excluded due to lack of driller's logs or unknown total depth.

[c]Wells excluded due to well being installed in geologic formations not of interest.

[d]Wells excluded due to lack of validated RI/FS data.

[e]Wells excluded due to location next to Paddys Run

[f]Wells downgradient of the waste pit area and former production area.

[g]Wells excluded due to unusual water chemistry.

NOTE: Type 1 wells have been completed in the glacial overburden. Type 2, 3, and 4 wells are completed in the Great Miami Aquifer.

In addition, four Type 1 wells located toward the southern edge of the property were evaluated as potential background monitoring wells. These wells are located some distance away from any potential contaminant source. Also, Paddys Run and the SSOD have completely eroded through the glacial overburden in this area, precluding lateral transport beyond these features; therefore, the wells were retained for consideration. However, as discussed later in this chapter, the chemical data from these wells were carefully evaluated before any were chosen to be background representatives.

As shown in Table 3-1, there are a total of 51 wells that have been considered. Most of these are monitoring wells constructed for the FEMP (33 out of 51), while 18 of the wells are privately owned. The locations of these potential background wells are shown in Figures 3-1 through 3-4. The majority of the wells are Type 1 and Type 2 wells. Fewer Type 3 and Type 4 wells are available for consideration. Most of the wells are located to the north and west of the FEMP. Figures 3-1 and 3-2 also show groundwater elevation contours for Type 1 and Type 2 wells, respectively. Groundwater elevation contours for Type 3 and Type 4 wells are essentially the same as shown in Figure 3-2 for the Type 2 wells.

3.1.2.2 Screening of Background Locations

The 51 wells identified as candidate background wells were then evaluated to determine whether they are representative of background groundwater quality conditions. These 51 wells were screened based on the following criteria:

- A driller's log, well completion log, or other document was required in order to establish the total depth of a well and the formation from which water samples were collected.

- The chemistry of samples should not contain "unusual" concentrations of chemical or radiological constituents. In particular, total uranium was one constituent that was used as a screening tool. The definition of "unusual" was based on subjective professional judgment. The "unusual" data were visually compared against the bulk of the data from other wells, and if the data appeared to have much higher values than the other data, the well was excluded from further consideration.

- The general chemistry of the well samples should group together when plotted on a trilinear diagram. If a well has general chemistry that is significantly different from other wells, then it would plot differently on the trilinear diagram. If so, the well would be excluded from further consideration as representative of background groundwater quality.

Many of the wells considered as potential background wells are privately owned. The installation procedures used to construct these wells do not conform to those normally required for RI/FS monitoring wells (e.g., a geologic log and well construction information are available for each of the monitoring wells constructed for the FEMP). An effort was made to collect geologic and well construction information for each of the private wells. Drillers' logs and well completion records

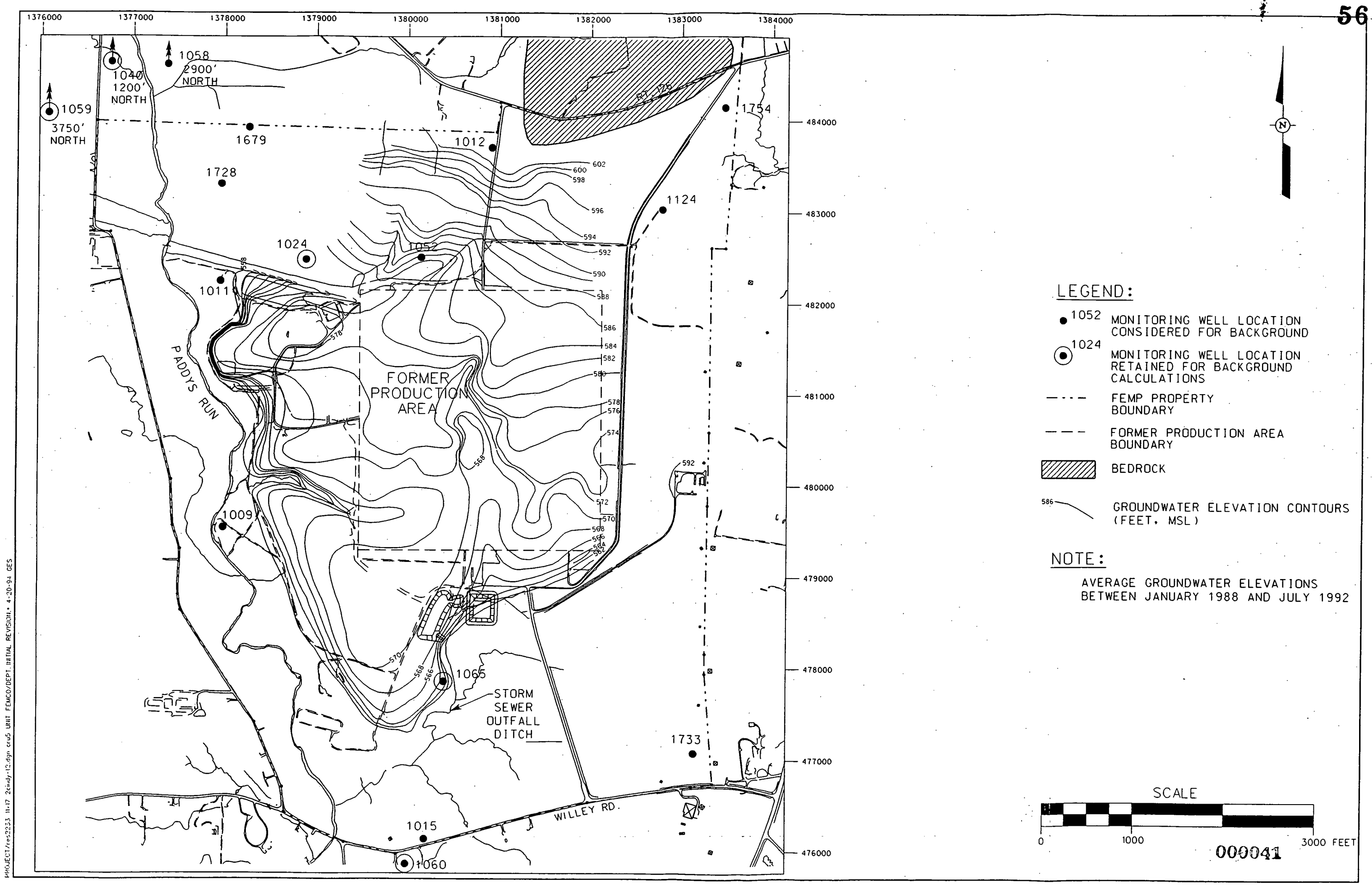


FIGURE 3-1. LOCATIONS OF TYPE 1 WELLS CONSIDERED FOR BACKGROUND

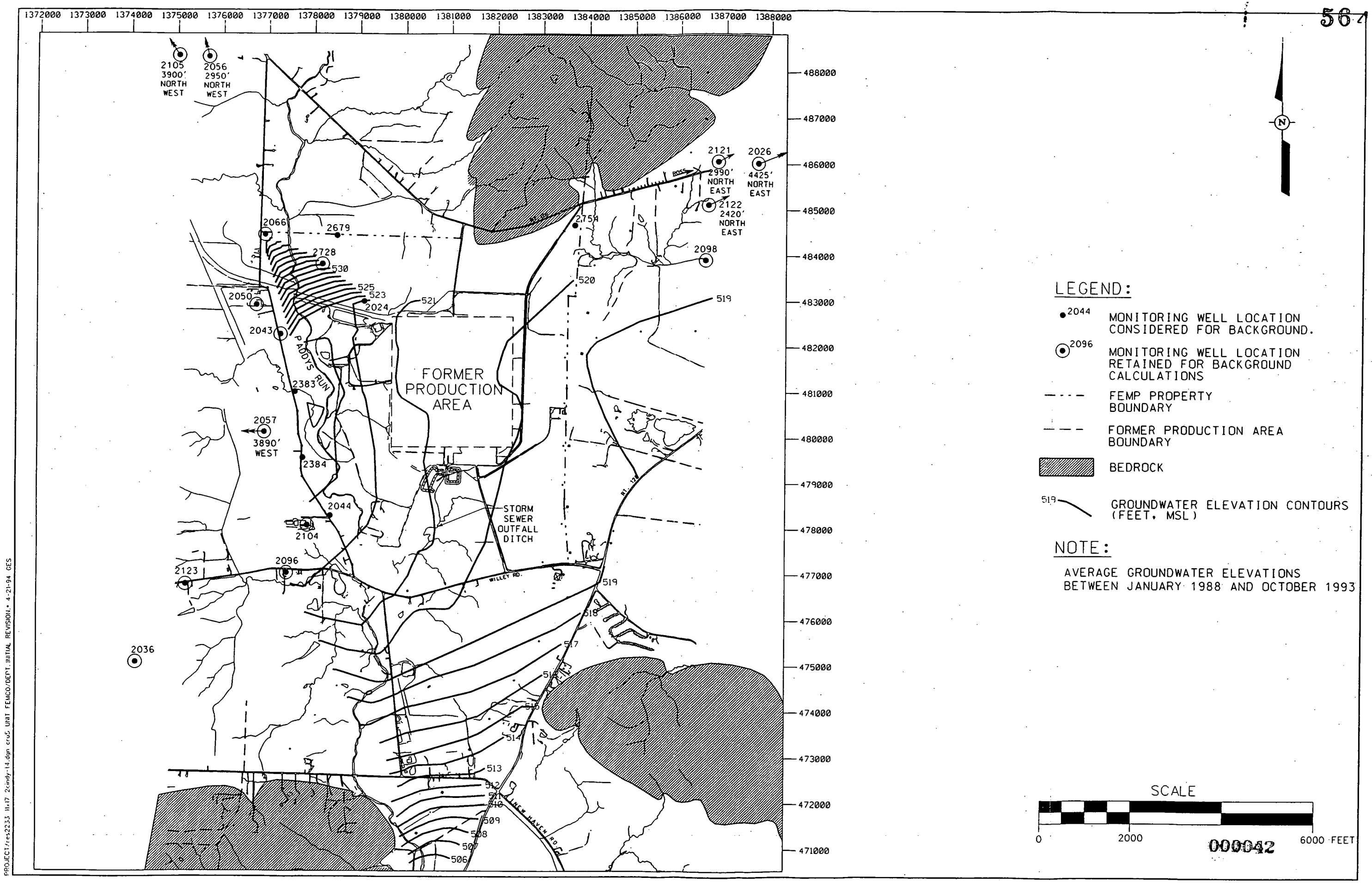


FIGURE 3-2. LOCATIONS OF TYPE 2 WELLS CONSIDERED FOR BACKGROUND

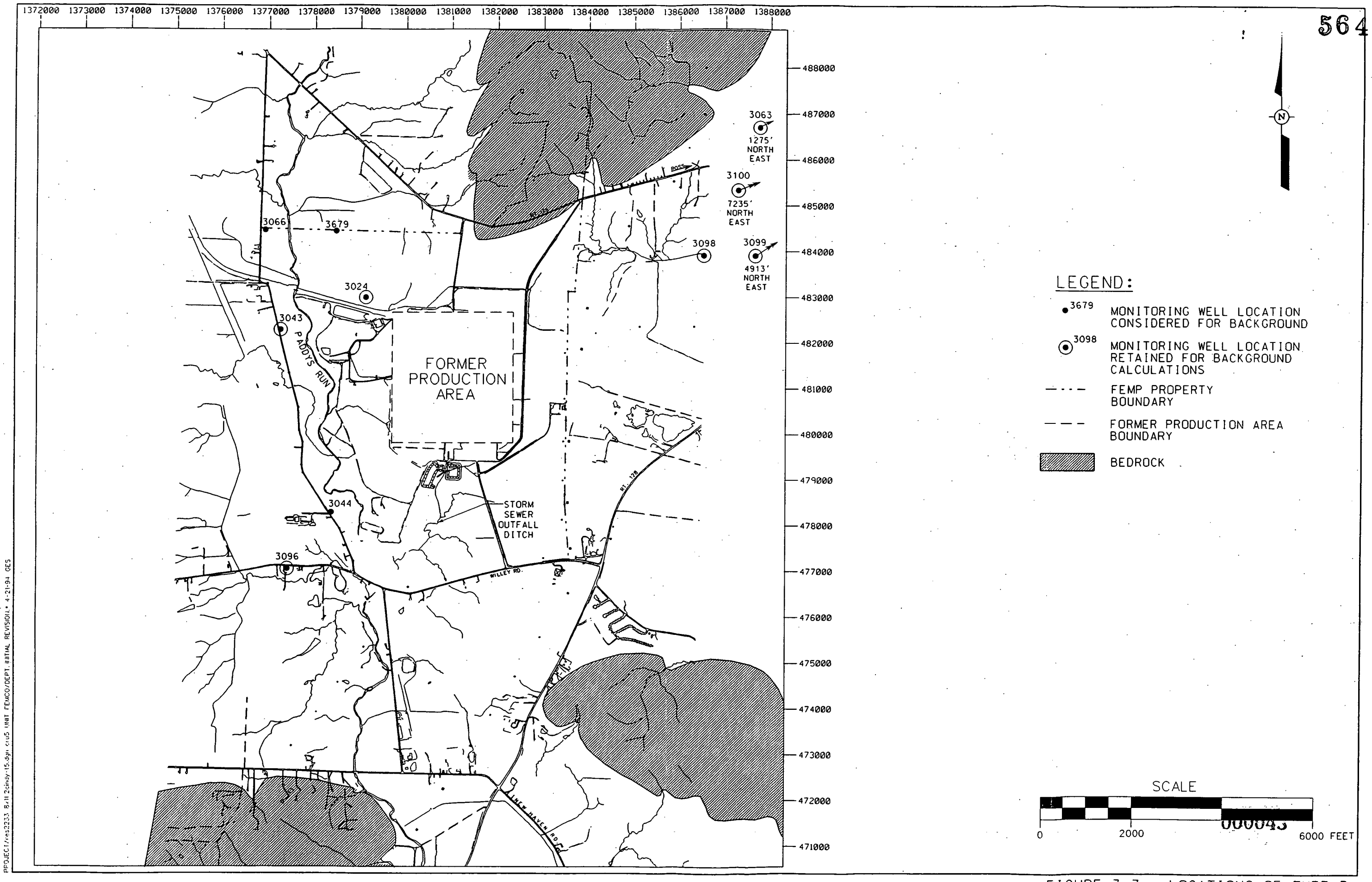


FIGURE 3-3. LOCATIONS OF TYPE 3 WELLS CONSIDERED FOR BACKGROUND

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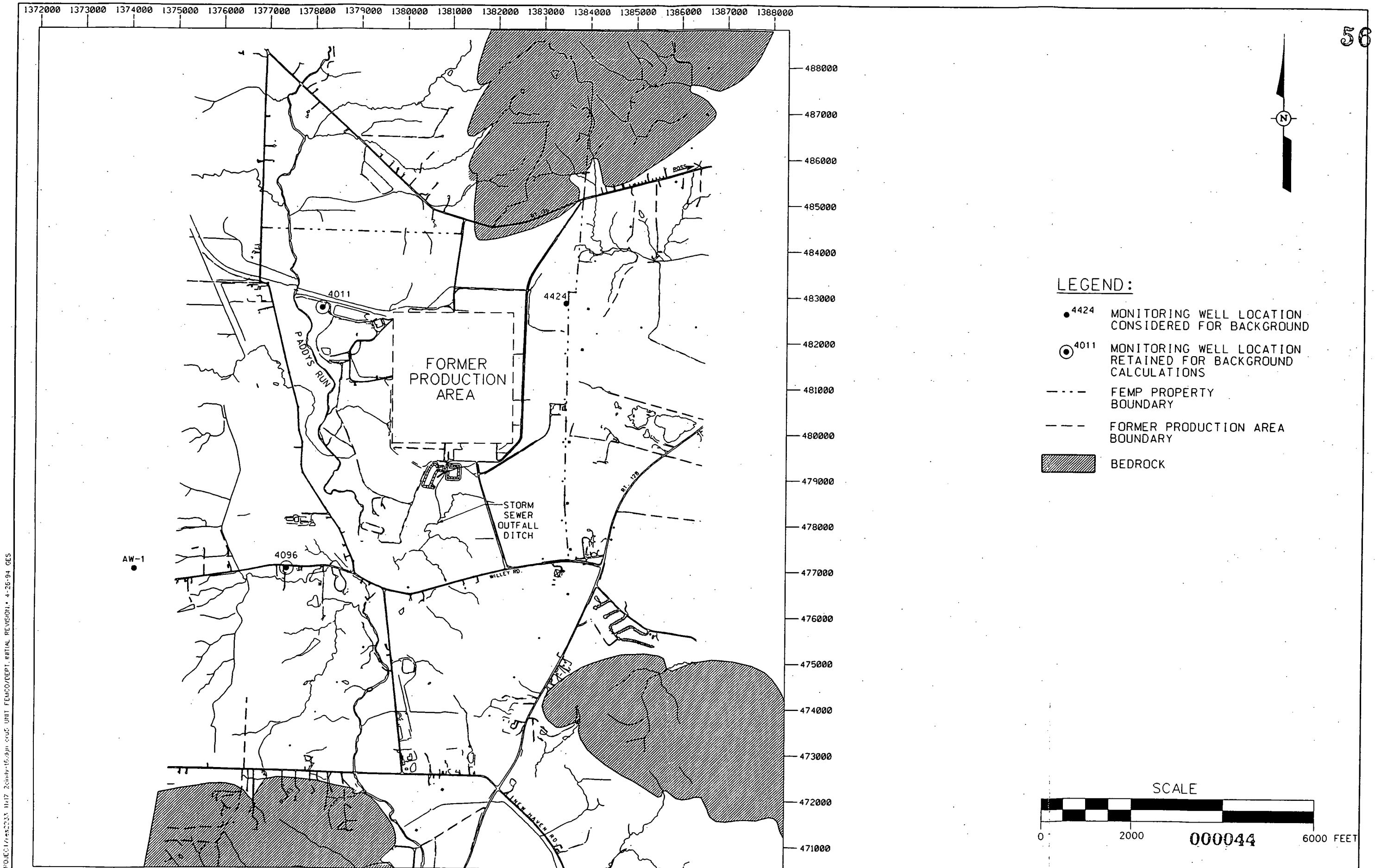

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FIGURE 3-4. LOCATIONS OF TYPE 4 WELLS CONSIDERED FOR BACKGROUND

were located for 12 of the candidate private wells. These logs show the total depth of the well, geologic materials encountered during drilling, well construction information, and well-yield tests in some cases.

A driller's log was not available for four other private wells; however, other records that specified total well depth were located. Based on well location and depth, two of the four wells (2121 and 2122) are completed in the Great Miami Aquifer and the two others (1059 and 1060) are completed in glacial overburden. Thus, total depth is known for 16 of the 18 candidate private wells. Wells without information on total depth or without a driller's log (1058 and 1124) were removed from the list of candidate wells. Drilling, geologic, and well construction information collected for the 16 private wells retained for background evaluation are presented in Appendix B and summarized in Table 3-2.

For two residential wells (2121 and 2122) located northeast of the FEMP (Figure 3-2), the total depths of the wells are known but the screened intervals are unknown. There is no glacial overburden present in this area, so there is no question that these two wells are screened in the Great Miami Aquifer. Total depths are known for two other wells (1059 and 1060, Figure 3-1), but again screen intervals are unknown. These wells are much shallower, so it is known that the formation in which the wells are completed is the glacial overburden. The screened intervals of all other wells used to characterize background groundwater quality are known, and are shown on well completion logs included in Appendix B.

Two wells considered were determined not to be representative of the geologic formations of interest. One FEMP well (1012) was drilled and screened into bedrock and another FEMP well (2754) has been screened in a clay and silty clay layer above the normally saturated portion of the Great Miami Aquifer. Since samples from these wells are not representative of the two geologic formations of interest, the wells have been deleted from consideration as background wells.

Wells for which no RI/FS water sample analytic data were available were deleted from the list of potential background candidates. These include wells 1009, 1015, 1679, 1754, and AW-1 (five wells total). Thus, a total of nine wells were excluded because the wells lack any analytical results or for physical reasons (i.e., lack of well log or constructed in geological materials not being evaluated). Four other wells were excluded that are located along Paddys Run Road on the western edge of the FEMP property (wells 2044, 2383, 2384, and 3044). These wells are west of Paddys Run, but are sufficiently close that they may be influenced by surface water that has recharged the Great Miami Aquifer. Additionally, well 4424, located toward the northeast corner of the FEMP property, is downgradient of the waste pit area and the former production area.

Table 3-2

Physical Data for Private Wells

Private Well	Driller's Log[a]	Total Depth (ft)	Screen Interval (ft)	Diameter (in.)	Miami Conservancy District Data Sheet
1040	470766	60	55-57	6	-
1059	-	42[b]	-	-	-
1060	-	20[c]	-	-	-
2026	421162	75	73-75	6	-
2036	366561	107	101-103	6	-
2050	641364	90	69.5-73.5	6	-
2056	619130	77	72-77	6	-
2057	291492	125	120-125	6	-
2104	366564	90	84-88	6	-
2105	470772	80	76-80	6	-
2121	-	72[d]	-	-	5317011
2122	-	61.4[d]	-	-	5318014
2123	227445	103	101-103	5	-
3063	512160	80	77-80	6	-
3099	634852	61	58-61	6	-
3100	570956	88	85-88	6	-

[a]Ohio Department of Natural Resources well construction log number.

[b]Total depth measured at the time of pump installation.

[c]Total depth measured at the time of water-level measurement and recorded on field activity daily log.

[d]Total depth measurement that appears on the Miami Conservancy District field data sheet.

A total of eight other wells were excluded because of unusual water chemistry or questionable results of sample analyses. Table 3-3 shows examples of the "suspect" data. The first group of excluded wells (1011, 1052, and 2024) is located along the north edge of the waste pit and former production areas. These wells contain elevated levels of total uranium, sulfate, and occasionally iron. Presumably the contaminants originate from the waste pit area and are migrating in a east-northeast direction. The second group of excluded wells (2679, 3066, and 3679) is located in the northwest corner and along the north edge of the FEMP property. These wells contain elevated levels of sodium, chloride, iron, and ammonia. Since groundwater in the Great Miami Aquifer in this area is flowing in an east-southeast direction, these elevated concentrations must come from an off-site source to the northwest of the FEMP property. Other excluded wells (1728 and 1733) are relatively new wells completed in the glacial overburden which apparently were not adequately developed and purged prior to sampling. Data from sample analyses are therefore suspect.

The eight wells discussed in the preceding paragraph were deleted because water samples from these wells differed substantially from the rest of the wells being considered. The total number of remaining wells considered to represent background groundwater quality conditions is 29, 5 completed in the glacial overburden and 24 in the Great Miami Aquifer.

3.1.2.3 General Water Chemistry and Charge Balance

The next step for well selection involved a graphical display of water quality for the remaining wells. Trilinear diagrams were used for this purpose. The graphical displays of data were useful to judge the relative homogeneity of water chemistry within the various geological regimes of interest (e.g., glacial overburden and various tributaries of the Great Miami Aquifer).

The values of major cations (calcium, magnesium, sodium, potassium, and ammonium) and major anions (bicarbonate, sulfate, chloride, and nitrate) were tabulated for each of the remaining wells. When a sample had an analysis performed for each of the major ions (i.e., there were no missing values), then the ion concentrations were converted from milligrams per liter (mg/L) to milliequivalents per liter (meq/L) and a cation-anion balance was performed to check for electrical neutrality. In other words, the sum of the cation charges should be approximately equal to the sum of anion charges for an individual water sample. If any sample values were nondetects, these were assigned a value equal to one-half the detection limit. Charge balance error (Freeze and Cherry 1979) was computed as:

$$Percent\ Error = \frac{\sum cations - \sum anions}{\sum cations + \sum anions} \times 100$$

Table 3-3

Wells Deleted From Consideration Because of Unusual Chemical Characteristics

Well Number	Sample Number	Constitutent	F/U[a]	Value	Units
1011	3056	Iron	F	16.4	mg/L
	3857	Iron	F	27.0	mg/L
	120262	Iron	F	21.3	mg/L
	120262	Iron	U	27.2	mg/L
	3056	Manganese	F	1.70	mg/L
	3350	Manganese	F	1.225	mg/L
	3630	Manganese	F	1.11	mg/L
	3857	Manganese	F	1.95	mg/L
	12062	Manganese	F	1.30	mg/L
	12062	Total Organic Carbon	U	9.0	mg/L
	3857	Total Uranium	U	25	µg/L
	66818	Total Uranium	U	80	µg/L
	120263	Total Uranium	U	44.7	µg/L
	120263F	Total Uranium	F	40.9	µg/L
1052	66421	Sulfate	U	239	mg/L
	66421	Total Uranium	U	11	µg/L
	3909	Total Uranium	U	6	µg/L
2024	3104	Iron	F	4.96	mg/L
	3374	Iron	F	6.20	mg/L
	3656	Iron	F	4.30	mg/L
	3843	Iron	F	4.43	mg/L
	GW930412-7	Iron	U	5.60	mg/L
	3104	Sulfate	U	240	mg/L
	3374	Sulfate	U	310	mg/L
	3324	Sulfate	U	385	mg/L
	GW930412-7	Sulfate	U	188	mg/L
	3374	Total Uranium	U	5.0	µg/L
	3656	Total Uranium	U	5.0	µg/L
	66843	Total Uranium	U	8.43	µg/L

Table 3-3
(continued)

Well Number	Sample Number	Constituent	F/U[a]	Value	Units
3066	3123	Ammonia	U	19	mg/L
	3711	Ammonia	U	28.6	mg/L
	GW930407-15	Ammonia	U	25	mg/L
	3123	Chloride	U	826	mg/L
	3711	Chloride	U	660	mg/L
	66437	Chloride	U	647	mg/L
	66499	Chloride	U	735	mg/L
	GW930407-15	Chloride	U	750	mg/L
	3123	Iron	U	19.3	mg/L
	3711	Iron	F	16.7	mg/L
	3895	Iron	F	16.0	mg/L
	66499	Iron	F	18.2	mg/L
	GW930407-15	Iron	F	22.0	mg/L
	3123	Sodium	F	276	mg/L
	3711	Sodium	F	274	mg/L
	3895	Sodium	F	270	mg/L
	GW930407-15	Sodium	F	321	mg/L
	66437	Total Organic Carbon	U	14.51	mg/L
	GW930407-15	Total Organic Carbon	U	20.0	mg/L
2679	38310	Iron	F	4.54	mg/L
	38349	Iron	F	3.86	mg/L
	GW930524-1	Iron	F	7.94	mg/L
	GW930524-1	Iron	U	8.52	mg/L
	38310	Total Thorium	F	4.34	µg/L
3679	38316	Ammonia	U	7.72	mg/L
	38267	Ammonia	U	7.10	mg/L
	GW930524-4	Ammonia	U	6.48	mg/L
	38316	Chloride	U	436	mg/L
	38267	Chloride	U	420	mg/L
	GW930524-4	Chloride	U	443	mg/L

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Table 3-3
(continued)

Well Number	Sample Number	Constituent	F/U[a]	Values	Units
3679	38316	Iron	F	6.37	mg/L
	38267	Iron	F	5.77	mg/L
	GW930524-4	Iron	F	5.62	mg/L
	38316	Sodium	F	168.96	mg/L
	38267	Sodium	F	167	mg/L
	GW930524-4	Sodium	F	163	mg/L
	38316	Total Organic Carbon	U	11.2	mg/L
	38267	Total Organic Carbon	U	9.0	mg/L
	GW930524-4	Total Organic Carbon	U	8.0	mg/L
1728	120278	Aluminum	U	183	mg/L
		Barium	U	1.08	mg/L
		Beryllium	U	0.0095	mg/L
		Calcium	U	469	mg/L
		Cobalt	U	0.168	mg/L
		Copper	U	0.352	mg/L
		Iron	U	358	mg/L
		Lead	U	0.129	mg/L
		Magnesium	U	487	mg/L
		Manganese	U	7.48	mg/L
		Nickel	U	0.442	mg/L
		Potassium	U	32.8	mg/L
		Vandium	U	0.277	mg/L
		Zinc	U	0.991	mg/L
	120279	Total Uranium	U	12.6	μg/L
	120602	Total Uranium	U	10.1	μg/L
1733	120276	Sodium	U	91.1	mg/L
	120277	Total Uranium	U	4.4	μg/L
	120601	Total Uranium	U	2.3	μg/L

[a]F = filtered sample; U = unfiltered sample

Tables in Appendix D list samples with the concentrations of major cations and anions in mg/L, meq/L, percent of totals, and the computed charge balance error. If the charge balance error for a sample was less than five percent, the sample point was plotted on a trilinear diagram, often referred to as a Piper plot (Piper 1944).

Data from 12 samples for the five glacial overburden wells (i.e., Type 1 wells) are plotted on Figure 3-5. As shown, the groundwater in the glacial overburden is dominated by the calcium and magnesium cations and the bicarbonate anion. Calcium usually constitutes 50 percent or more of the cations (based on equivalent values) and sodium plus potassium usually make up no more than 20 percent of the cation charge. Anions were dominated by bicarbonate ions (usually 80 percent or more of the anion charge). Chloride and sulfate ions were each usually less than 20 percent of the total anion charge for each sample. The clustering of the samples is relatively tight and implies that the water chemistry in the five wells is similar.

A trilinear diagram of general water chemistry in the Great Miami Aquifer (Figure 3-6) shows a pattern similar to the plot of water chemistry for the glacial overburden. The cation charge is dominated by calcium (45 to 75 percent) and magnesium (20 to 30 percent). Sodium plus potassium values are usually less than 30 percent of the total cation charge. Bicarbonate is the largest component of the anions, generally ranging from 45 to 70 percent. Sulfate and chloride each range from 20 to 30 percent of the total anions. As with the glacial overburden background data, the clustering of the data for the Great Miami Aquifer is relatively tight. This implies that the water chemistry in the 24 wells is similar.

3.1.2.4 Summary

Through the screening process described in this section, two wells were excluded because no driller's log or well depth record could be located, two wells were excluded because they were not representative of the geologic formations of interest, five wells were excluded because RI/FS sample data are not available, four wells were excluded because of proximity to Paddys Run and the possibility of influence by surface water infiltration, one well was excluded because it is downgradient of FEMP waste pit and former production areas, and eight wells were excluded either because of inadequate well development, unusual water chemistry, or relatively high total uranium concentrations were present in samples from the wells.

Of the 51 wells initially considered, a total of 29 wells have been retained to characterize background groundwater quality. Five of the wells are completed in the glacial overburden and 24 are completed in the Great Miami Aquifer (Table 3-4). The five wells used to represent the glacial overburden (1024, 1040, 1059, 1060, and 1065) are the same five wells that were used for the draft report. For the Great Miami Aquifer, three wells (2383, 2384, and 3044) used during preparation of the draft report were eliminated because they might be affected by surface water recharge from Paddys Run.

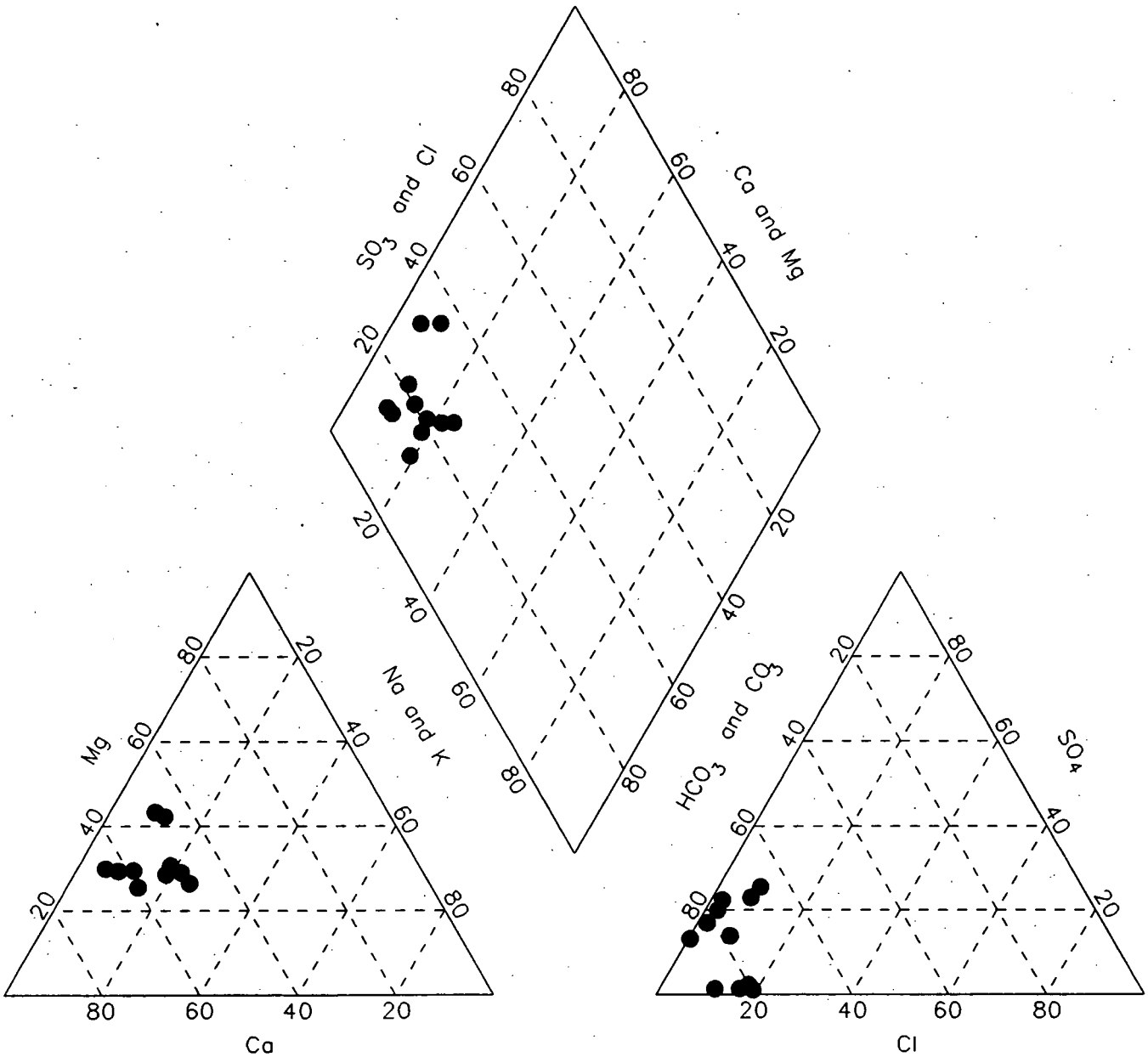

FIGURE 3-5. TRILINEAR DIAGRAM OF GENERAL WATER CHEMISTRY IN THE GLACIAL OVERBURDEN BACKGROUND WELLS

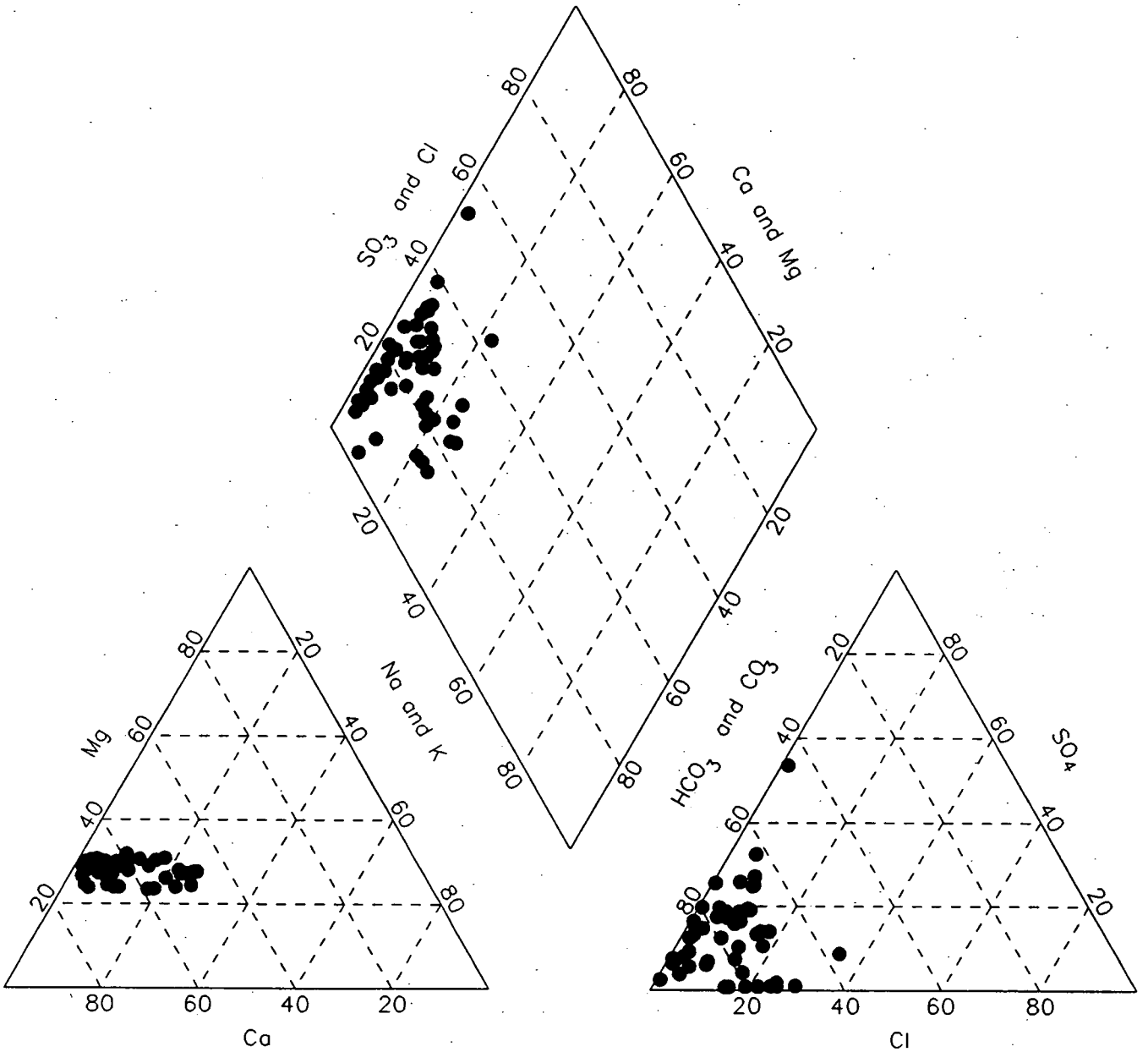

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FIGURE 3-6. TRILINEAR DIAGRAM OF GENERAL WATER CHEMISTRY IN THE GREAT MIAMI AQUIFER BACKGROUND WELLS

Table 3-4

Wells Used to Characterize Background Groundwater Quality

General Area	FEMP Wells	Private Wells
Glacial overburden	1024, 1065	1040, 1059, 1060
Northeast of the FEMP (Ross section, Great Miami Aquifer)	2098, 3098	2026, 2121, 2122, 3063, 3099, 3100
North and northwest of the FEMP (Shandon section, Great Miami Aquifer)	2043, 2066, 2728, 3024, 3043, 4011	2050, 2056, 2105
West of Paddys Run (Dry Fork Section, Great Miami Aquifer)	2096, 3096, 4096	2036, 2057, 2104, 2123
Usable background wells	13	16

NOTE: Type 1 wells are completed in the glacial overburden; Type 2, 3, and 4 wells are completed in the Great Miami Aquifer.

However, well 2728 was added because new data became available (no data existed for the well prior to 1993). Well 2105 was excluded during preparation of the draft report because of one questionable sample. However, the data for other samples from well 2105 indicate that it has chemical characteristics similar to other wells completed in the Great Miami Aquifer. Therefore, this well has now been included in the group of background wells. Altogether, there is a net decrease of one well representing the Great Miami Aquifer.

3.2 SAMPLE COLLECTION

Methods for purging wells and sampling groundwater are specified in the Quality Assurance Project Plan (QAPP) of the RI/FS Work Plan (DOE 1988b) and Appendix K of the Sitewide CERCLA Quality Assurance Project Plan (SCQ) (DOE 1992b). RI/FS monitoring wells were purged by removing three well volumes from each well, if possible, before sampling occurred. Samples were collected with bailers or pumps. For private wells, direct access to the well was not possible. Hence, a spigot or tap in the distribution line closest to the well was generally opened and allowed to flow for a few minutes before a sample was collected.

Surface water samples were collected in large grab bottles from slightly below the water surface; aliquots of the sample were then transferred to the necessary sample bottles.

When samples were collected for filtered metals or filtered radionuclide analyses, the samples were passed through a 0.45-μm membrane filter before being placed in sample bottles. Most metal samples were filtered in the field, and the majority of metals data represent dissolved concentrations. In addition to the filtered metal samples, a portion of the samples were not filtered. These data were primarily collected during 1993 so that total metal concentrations could be quantified. For radionuclide analyses, the majority of samples collected prior to 1993 were not filtered. A portion of samples were filtered yielding dissolved concentrations; this occurred primarily in the 1993 field programs. For both metals and radionuclide data, the dissolved and totals data have been kept separated and statistical evaluation of each group has been performed independently.

For a water quality sample, it is expected that dissolved concentrations will be less than or approximately equal to the total concentration for each corresponding constituent. As mentioned previously, there are much more filtered than unfiltered metals data. In addition, the data are not representative of the same time period; filtered metals data were collected from 1988 to 1993, whereas most of the unfiltered metals data were from 1993. The opposite is true for the radiological data; i.e., much more unfiltered radiological data exists than filtered data, and the filtered radiological data were collected primarily in 1993. For these reasons, the statistics (e.g., mean, median, UCL) calculated for filtered parameters may in some cases exceed the corresponding statistics of the unfiltered parameter.

3.3 ANALYTICAL PROCEDURES

Measurements of pH, specific conductance, and dissolved oxygen were performed in the field immediately before a sample was collected. In a field study conducted from 1988 through 1989, alkalinity titrations were performed on a sample aliquot within 24 hours of sample collection. Alkalinity was also analyzed at off-site laboratories.

Water samples were analyzed for chemical and radiological constituents using procedures specified in Tables 4-1, 4-2, and 4-3 of the QAPP and Appendix G of the SCQ. Most of the metals were analyzed using an inductively coupled argon plasma (ICAP) emission spectrometer. The method detection limits for several metals (antimony, arsenic, lead, molybdenum, selenium, and thallium) for ICAP are relatively high. Therefore, these metals were also analyzed by atomic absorption spectrometry with graphite furnace (AAS/GF) methods. In many cases these metals were analyzed using both methods. The cold vapor hydride method was used for mercury analyses.

Radiological analyses were performed by using contract laboratory standard operating procedures. Performance-based criteria were specified to the laboratories and acceptance windows were specified for detection limits, percent overall tracer/chemical recovery, method blank concentration, and laboratory-control sample values. The data validation process involved reviewing the reported data and comparing it to the performance-based requirements.

3.4 DATA VALIDATION PROCEDURES

All data used to calculate background water quality values in this report have been validated. Data validation is an after-the-fact, independent, systematic process of: evaluating data, comparing it to preestablished criteria, providing confirmation that the data are of the technical quality necessary to meet its intended use, and assuring that a defensible "road map" can be established to trace each sample from the time it is collected in the field to its ultimate end use. Data quality objectives (DQOs) address five principal parameters: precision, accuracy, completeness, comparability, and representativeness. To verify that these objectives are met and to determine compliance with appropriate and applicable procedures, the validation process examines: field measurements and quality control, sampling and handling procedures, laboratory analysis and reporting, and any nonconformances and discrepancies in the data. Data qualifiers are assigned to the analytical data to alert the user to any limitations placed on the data due to the quality assurance/quality control (QA/QC) requirements.

For the chemical data, the guidelines and protocol used to validate the data are consistent with U.S. National Functional Guidelines for Organic and Inorganic Data Review, and with the FEMP RI/FS data validation criteria. The radiological data were validated by project-specific criteria developed to review the data, since neither EPA, DOE, nor the Nuclear Regulatory Commission have issued

guidelines for radiological data validation. The criteria have been through an extensive peer review and are consistent with the procedures used to validate the chemical data for the RI/FS.

In general, the data were evaluated based on the following parameters:

- Sample holding times
- Instrument tuning
- Initial instrument calibration
- Continuing instrument calibrations
- Surrogate recoveries
- Matrix spike recoveries
- Blank contamination
- Internal standard response
- Linearity
- Retention time shift
- Detection limits
- Accuracy of calculations
- Internal calibration standards
- Method of standard addition
- Continuing calibration standards
- Laboratory control sample
- Serial dilutions

Definitions of qualifier codes which were assigned by the laboratories or through validation for radiologic, inorganic, and organic data are presented in Appendices C, D, and E, respectively.

3.5 VALIDATED AND DELETED DATA

All RI/FS data available for the 29 background wells, sample point W-1 on the Great Miami River, and sample point W-5 on Paddys Run have been through the data validation process. The data were downloaded from the primary database at the FEMP and were separated into numerous categories. The validated radiologic, inorganic, and organic analytical data are presented in Appendices C, D, and E, respectively. All data that failed validation or for which validation was not completed have been listed in separate tables in Appendices C, D, and E. These data were not used for any of the statistical analyses. Field measurements, including dissolved oxygen, pH, and specific conductivity were retained for this study, although the data were not formally validated. These data are found in Appendix D.

The validated data set served as the basis for the characterization of background water quality presented in this report. Besides removing nonvalidated data, several additional steps were taken to modify the validated data set prior to the calculation of background statistics:

- Removal of high nondetect data
- Removal of outliers
- Averaging of replicate samples

These three steps are described in Sections 4.2.2, 4.2.3, and 4.2.4.

4.0 DATA SET MODIFICATIONS AND STATISTICAL ANALYSIS PROCEDURES

4.1 OVERVIEW

Background characteristics of water quality in four different hydrological entities are being evaluated, including two streams (Great Miami River and Paddys Run) and two hydrostratigraphic units (Great Miami Aquifer and glacial overburden). Each of these may have its own individual characteristics. The development and statistical evaluation of the background water quality data set occurred in three general steps.

Step 1 involved development of the initial background data set. This step included: selecting potentially usable sampling locations (surface water and groundwater); compiling all available data from the primary database of the FEMP that pertain to the selected locations; deleting nonvalidated data from the data set; and using available chemical data and physical information to choose the most appropriate sampling locations. The approach and procedures used in selecting the representative sampling sites have been discussed in Chapter 3. The outcome of Step 1 was a large data file containing all validated analytical data for the sampling sites chosen.

Step 2 involved further evaluation of the data set and removal of data that could potentially cause bias in the statistical results. This included removing high nondetect values and data outliers and averaging replicate sample results. The procedures used to identify and delete these data are discussed in succeeding sections of this chapter. The outcome of Step 2 was a modified data set that contained only data that were usable and appropriate for background water quality characterization.

Step 3, statistical evaluation of the final background water quality data set, involved the selection and performance of statistical procedures appropriate for background characterization. These included tests for normal and lognormal distribution of data groups, parametric descriptive statistics, nonparametric descriptive statistics, and comparisons of populations. The rationale for the statistical design and the overall evaluation approach is described in the latter part of this chapter.

Step 1 (development of the background data set) was described in Chapter 3. Chapter 4 is devoted to describing how the initial data set was modified (Step 2) and how it was statistically analyzed (Step 3). EPA guidance regarding statistical procedures for data analysis has been followed to the fullest extent possible.

4.2 MODIFICATIONS OF THE BACKGROUND DATA SET

The initially compiled background data set was modified in five different ways:

- All nonvalidated data were removed.

- High nondetect data were identified and deleted.
- Values for remaining nondetect samples were set equal to one-half the detection limit.
- Outlier data were identified and deleted.
- Data from multiple samples collected during the same sampling event were averaged together.

Each of these modifications was essential in order to create a background data set that contained only usable, representative data.

4.2.1 Treatment of Rejected/Nonvalidated Data

All rejected/nonvalidated data were removed from the background data set; these data are listed in Appendices C, D, and E for radiological, inorganic, and organic parameters, respectively. Rejected data are data that have been identified through validation as being either unreliable or unusable. Nonvalidated data are data that have not been through the validation process described in Section 3.4. The validated data were then divided into the following data groups for each of the four hydrologic entities:

- Unfiltered radiological data
- Filtered radiological data
- Filtered inorganic data
- Unfiltered inorganic data
- Unfiltered organic data

Field measurements, including dissolved oxygen, pH, and specific conductivity, were retained for this study, although the data were not formally validated. These data are included in Appendix D along with the inorganic data.

4.2.2 Treatment of Nondetect Data

Nondetect data that had unusually high detection limits were removed from the background data set. High nondetect data were data with detection limits unusually high relative to detected values or other nondetect data in the same data group. As an example, results of lead analyses using ICAP emission spectrometry typically yielded detection limits of 50 to 200 μg/L. However, analyses using AAS/GF typically yielded detection limits of 5 μg/L or less. Detected values were almost always less than 50 μg/L (lowest detection limit of ICAP) and usually less than 15 μg/L (maximum contaminant level) specified by EPA drinking water regulations).

Hence, the nondetect lead data with a detection limit of 50 μg/L or higher do not provide useful information concerning lead concentrations in the background water. The high lead nondetect data would actually bias the statistical characteristics of background water quality upward toward higher

lead concentrations. Thus, these data needed to be removed in order to more accurately estimate the distribution of lead concentrations in background water. The same situation existed for arsenic, barium, selenium, and thallium. Other inorganic, organic, and radiological parameters also had detection limits that, on occasion, were unusually high relative to the other data in the same group.

The procedure that was followed in order to identify and delete high nondetect data was to:

- Sort the data in each group from high detect to low detect values, and high nondetect to low nondetect values.
- The nondetect "values" were all set equal to one-half the detection limit.
- If the high nondetect "values" (i.e., one-half the detection limit) exceeded the median of the detect values, then the high nondetects were generally removed from the background data set; a few exceptions occurred based on subjective professional judgment (e.g., too few values would remain in the data group).
- If there were no detect values in a data group but one or more high nondetect "values" greatly exceeded the remainder of the nondetect data, then these high nondetect data were removed from the background data set.

The data that have been excluded as high nondetects are listed in Appendices C, D, and E for radiological, inorganic, and organic data, respectively. There were no nondetect data for field measurements. For all nondetect data which remained in the background data set, the sample was assigned a "value" equal to one-half the detection limit for the purpose of performing statistical analyses.

4.2.3 Identification and Treatment of Outliers and Other "Suspect" Data

As discussed above, each group of data (e.g., filtered calcium data, glacial overburden data set) was sorted according to value — high detects to low detects and then high nondetects to low nondetects. Unusually high or low detect values were identified and these selected values were then checked against the original data package to ensure that the data had been properly entered into the database. Data that were not properly entered into the database were corrected. There were very few such data that required corrections. The remainder of the "suspect" data were considered to be potential outliers. These potential outliers were handled using "Rosner's Test for Many Outliers" (Gilbert 1987) or subjective professional judgment.

"Rosner's Test for Many Outliers" (maximum of 10 outliers) is a statistical test to determine if data fall outside the range of values expected for a normally distributed sample population. Those data that fall outside the expected distribution are likely the result of sampling error, analytical error, or unusual conditions that existed at the location or time that the sample was collected. Thus, such data are probably not representative of background conditions. If the data are lognormally distributed,

computations are performed on the log-transformed data. The method is a two-tailed test and identifies both high and low outliers.

When a group of data had 25 or more data points and was normally or lognormally distributed, Rosner's Test was used to determine if the identified potential outliers were true outliers. All detect data positively identified as outliers from the Rosner's test were discarded from the background data set. However, only a few potential outliers could be evaluated using Rosner's test, either because the "outliers" were in groups that were not normally or lognormally distributed or because the data groups did not contain 25 or more data values. Rosner's test is described in more detail in Appendix F.

Potential outliers from groups of data that could not be evaluated using Rosner's test were evaluated using subjective professional judgment. A group of Fernald Environmental Management Corporation (FERMCO) staff and consultants reviewed the potential outliers and the corresponding data groups. The potential outliers were either retained or deleted from the background data set based on the group's collective professional judgment. In general, if a potential outlier was more than twice the next highest value, then it was discarded. However, consideration was also given to the distribution of all data within the data group being evaluated.

The preceding discussion focused on the evaluation of individual potential outliers. However, in a few cases, there were several outliers that came from the same well on the same date. Sample 3782 from well 2105 had nondetect calcium, nondetect magnesium, and high concentrations of sodium and chloride. These results were extreme outliers. As a consequence, the entire sample was considered suspect and all the inorganic and organic data from this sample were discarded. Two additional samples with high total uranium and uranium isotope values were sample 3096 from well 3024 and sample 30929U1060-3 from well 1060. All other samples from these two wells had total uranium concentrations and isotopic activities that were far below the levels found in the two questionable samples. Therefore, it was determined that the uranium levels in these two samples were not representative of background conditions. All radiological data that originated from these two samples were deleted from the background data set.

Another evaluation was conducted to determine whether total uranium values corresponded to isotopic values and whether isotopic values were in equilibrium. Assuming isotopic equilibrium conditions, the activity levels of uranium-234 and uranium-238 should be approximately equal in each sample. In addition, the total uranium value (in μg/L) should be approximately three times greater than the uranium-234 or uranium-238 activity level (in pCi/L [picocuries per liter]). There were a few cases where high total uranium concentrations did not have the corresponding high values of isotopic activities, and vice versa. There were also a few cases where the isotopic values (uranium-234 and

uranium-238) did not agree with one another. These data were evaluated by the FERMCO staff and consultants and data judged to be unacceptable were withdrawn from the background data set.

All radiological, inorganic, and organic data that were discarded as outliers (either using Rosner's test or subjective professional judgment) are listed in Appendices C, D, and E, respectively.

4.2.4 Data Averaging

On several occasions, two or more samples were collected at the same sampling location during the same sampling event (i.e., duplicates, triplicates, etc.). This was particularly true for surface water sampling locations W-1 and W-5 in 1993, when multiple samples were commonly collected. In order to avoid statistical bias, results from the multiple samples were averaged together (arithmetic mean) for each site and date whenever multiple sample data existed. Nondetect values were assigned a value of one-half the detection limit for computing the averages. If all the values being averaged were nondetects, then the average value was also a nondetect value. If one or more of the values being averaged were detect values, then the resulting average was also considered to be a detect value. Example computations are provided in Appendix F. The overall effect of this procedure was to condense the statistical data set so that only one "sample" result exists for any given sampling location and date.

4.3 STATISTICAL ANALYSIS

4.3.1 Testing of Data Distribution

The groups of data analyzed by parametric statistical procedures were data sets that had a sufficient number of detects and a sufficient frequency of detection such that the data could be tested to determine if they were normally or lognormally distributed. If a data set could be shown to follow a normal or lognormal distribution, conventional parametric statistical procedures were employed to evaluate the data.

There is no formal consensus within the scientific community as to a clear-cut separation between the use of parametric and nonparametric statistics. Ideally, parametric statistical analysis of data should be performed on data sets with few or no nondetect values. However, when evaluating concentrations of contaminants in environmental media, one must often cope with a variable proportion of nondetect data (Gilbert 1987). EPA (1989b) guidance suggests that a 50 percent frequency of detection be used as a criterion for separating parametric from nonparametric analyses, but also states: "These values are not hard and fast rules but are based on judgment." The guidance further states: "There are a variety of ways to deal with data that include values below detection. There is no general procedure that is applicable in all cases... The meaning of small, moderate, and large (amounts of nondetect data) is subject to judgment."

Normality testing and calculation of parametric descriptive statistics were performed on data having at least 40 percent detections and at least six detected values. A 40 percent cut-off point was selected instead of a 50 percent cut-off point because some of the important contaminants of concern at the FEMP were often present at 40 to 50 percent frequency of detection.

Whenever there was at least a 40 percent frequency of detection in a data set with at least six detections, a statistical test was performed to determine if the data were normally or lognormally distributed. The Shapiro-Wilk or Shapiro-Francia test was used to test for normality. The procedures for these tests are described in EPA (1992) guidance and are summarized in Appendix F. The "Shapiro-Wilk Test of Normality" was used when the number of data values was less than or equal to 50; the Shapiro-Francia test was used when the number of data values was greater than 50. Each of these tests for normality calculates a statistic (W or W′), which is then compared against a critical value (W_{crit}) to determine whether the data are normally or lognormally distributed. If the calculated statistic exceeded the W_{crit} value, then the data group was assigned one of the first four distributions listed below (i.e., N, L, N*, or L*).

In many cases, the results showed that a data set was neither normally nor lognormally distributed. However, the test statistic was often close to the critical value for either the normal or lognormal distribution. If a data population did not rigorously qualify as having a normal or lognormal distribution, it was classified as having a "qualified" normal (NQ) or lognormal (LQ) distribution if the calculated statistic (W or W′) was less than W_{crit} but greater than 0.95 W_{crit}. If the calculated statistic was less than 0.95 W_{crit}, then the data group was labeled as having an undefined distribution (U). Examples of the Shapiro-Wilk and Shapiro-Francia testing and the critical values for accepting normality or lognormality are included in Appendix F.

An additional test was implemented to check whether a data group was lognormally distributed. If a data group passed the Shapiro-Wilk or Shapiro-Francia test for lognormal distribution and had a log variance value less than 2.0, then lognormal distribution was assigned to the data group. However, for a few data groups, the log variance was greater than 2.0. For this situation, the data distribution was considered to be undefined (U) irrespective of the results of the Shapiro-Wilk or Shapiro-Francia test.

As statistical results are presented in succeeding chapters, the following abbreviations are used to show the results of the distribution tests:

- N = Normal distribution accepted
- L = Lognormal distribution accepted

- N* = Both normal and lognormal distributions tested positive, but normal distribution was a better fit
- L* = Both normal and lognormal distributions tested positive, but lognormal distribution was a better fit
- NQ = Normal distribution, approximately
- LQ = Lognormal distribution, approximately
- U = Distribution undefined

Parametric statistics were computed for all data groups that fully or approximately satisfied normal or lognormal distribution criteria (i.e., data groups labeled N, L, N*, L*, NQ, and LQ). The data groups that fell into the undefined distribution (U) category include all those that had less than 40 percent detection frequency or less than six detections. The U category also includes a few data groups that were tested for normal or lognormal distribution, but failed to satisfy the specified distribution criteria. Nonparametric statistics were computed for data groups with undefined distributions.

4.3.2 Parametric Descriptive Statistics

A set of descriptive statistics was calculated for each parameter in each appropriate data group. For data groups with normal distribution (i.e., N, N*, and NQ), these statistics included minimum values (detect and nondetect), maximum values (detect and nondetect), arithmetic mean, standard deviation, coefficient of variation, one-sided 95 percent UCL, and 95th percentile. For data groups with lognormal distribution (i.e., L, L*, and LQ), a slightly different set of statistics was calculated. These statistics included minimum values (detect and nondetect), maximum values (detect and nondetect), estimated mean of a lognormal distribution, estimated standard deviation of a lognormal distribution, one-sided 95 percent UCL, and 95th percentile. The formulas used to calculate each of these statistics are included in Appendix F. An additional check was performed on the calculated UCLs. If the calculated UCL exceeded the maximum detected value for a data group, then the UCL was changed to the maximum detected value.

4.3.3 Nonparametric Descriptive Statistics

If the number of detect values in a data group was less than six or the frequency of detection was less than 40 percent, then testing of data distribution or computation of parametric statistics was not possible or appropriate and the data group was determined to be undefined. As discussed earlier, the distributions for some additional data groups were also found to be undefined. For the data groups with undefined distribution, only nonparametric descriptive statistics were computed. These statistics included minimum values (detect and nondetect), maximum values (detect and nondetect), median,

one-sided 95 percent UCL, and 95th percentile. The formulas used to calculate each of these statistics are included in Appendix F.

4.3.4 Comparison of Populations

Comparisons of populations were conducted to determine whether data subgroups that could potentially be combined have similar variances or means. When conducting comparisons of two data subgroups with defined distributions (normal or lognormal), the F-test and t-test were used. The F-test compares the variances of the two subgroups while the t-test compares the means. For comparing two data subgroups with nonparametric distributions, the Wilcoxin Rank Sum test was utilized. The Kruskal-Wallis test was utilized when comparing three data subgroups.

F-Test and t-Test

The F-test and t-test are common statistical procedures used to determine whether two sample populations have similar variance and means, respectively. If so, the two groups could be considered part of one population. These tests were applied (with alpha = 0.05) to several parameters in FEMP and private glacial overburden wells to determine if the data were part of the same population (i.e., statistically not different). Examples from these procedures are presented in Appendix F.

Wilcoxin Rank Sum Test

The Wilcoxin Rank Sum test is a procedure which can be used to determine whether two sample groups with undefined distributions have equivalent means. This test assumes that the distributions of the two populations are identical in shape (variance), but the distributions need not be symmetric. In general, the Wilcoxin Rank Sum test was employed whenever the proportion of nondetects was greater than 15 percent, but less than 90 percent. This test was used for comparing FEMP and private wells in the glacial overburden. Example calculations are presented in Appendix F.

Kruskal-Wallis Test

The purpose of the Kruskal-Wallis test is to determine whether three or more sample groups have equivalent means. The Kruskal-Wallis test does not require that the sample groups have normal or lognormal distributions or even be symmetric. Therefore, the Kruskal-Wallis test can be used to evaluate the equivalency of means from three or more sample groups with undefined data distributions. This test was used for comparing total uranium data subgroups from the Ross, Shandon, and Dry Fork sections of the Great Miami Aquifer. Example calculations are presented in Appendix F.

4.4 SUMMARY OF REVISIONS TO CHAPTER 4 OF THE DRAFT REPORT

This chapter describes the procedures used to modify and statistically evaluate the background data set. These procedures have changed somewhat from the draft "Background Water Quality" report. The changes are summarized here and are described in more detail in Appendix G.

In general, data that did not pass through the validation process (i.e., nonvalidated data) were removed from the background data set, as was done previously. High nondetect data were also identified and removed, as was done previously. For this report, additional data were removed from the background data set if they were determined to be data outliers, using either Rosner's test or subjective professional judgment as a basis. The outliers constituted only a small percentage of the total background data set, albeit greater than previously. By removing the outlier data, it is believed that the remaining data (i.e., the background sample population) more accurately represent true background conditions.

Another way in which the initial background data set was manipulated prior to statistical analysis was data averaging. This occurred when more than one sample was collected and analyzed for the same location and sampling event (i.e., duplicates, triplicates, etc.). These data values were averaged so that only one set of values represented a given location and date. This procedure was not applied previously.

Once the background data set was finalized, some changes were made to the way in which data groups were evaluated. Four types of data groups were evaluated in the draft report: Pathway 1 - normal distribution; Pathway 1 - lognormal distribution; Pathway 2 - undefined distribution; and Pathway 3 - undefined distribution. In this report, only three types of data groups are evaluated: normal distributions, lognormal distributions, and undefined distributions. A standard set of descriptors for data groups is presented in Section 4.3.1.

In this revised report, the number of descriptive statistics calculated and reported for each data group has been reduced. Only those statistics that are appropriate for a given data distribution and needed for the purposes of the ongoing RIs have been included. For normally distributed data, only arithmetic mean, standard deviation, coefficient of variation, one-sided 95 percent UCL, and 95th percentile have been presented in this report. For lognormal distributions, only estimated mean, standard deviation, one-sided 95 percent UCL, and 95th percentile have been presented. For undefined distributions, only median, one-sided 95 percent UCL, and 95th percentile have been reported. These statistics for background water quality have the most utilitarian value for the purpose of RI report preparation.

5.0 GLACIAL OVERBURDEN

This chapter presents the results of radiological and chemical analyses of groundwater samples collected from background water quality wells in the glacial overburden. As described in Chapter 3, the process by which the five glacial overburden background wells (two FEMP, three private) were selected involved a careful review of all available data, including development of trilinear diagrams. The relatively tight clustering of data evident in Figure 3-5 indicates that the water chemistry in the background wells is similar. This view is supported by population comparison tests of data from FEMP and private wells for several parameters.

However, as was true for the data utilized in the previous draft report (May 1993), there do seem to be differences in the FEMP and private well data "population" for the important parameter total uranium (unfiltered). Table 5-1 shows a comparison of statistics computed for total uranium using FEMP, private, and combined glacial overburden background well data. Based on these results, and in keeping with the approach used previously, only data from private wells are used to calculate statistics to characterize background for total uranium in the glacial overburden. Additionally, because total uranium is the summation of isotopic uranium activity, background statistics for these parameters are also calculated using only data from the private wells. In contrast to total and isotopic uranium, other radiological (or chemical) values for the FEMP wells in the background data set do not appear to be anomalous and there is no apparent reason to exclude them from calculating glacial overburden background water quality statistics.

5.1 RADIOLOGICAL CONSTITUENTS

The background wells were sampled and analyzed for 17 different unfiltered and 10 different filtered radiological parameters. The number of validated analytical values in the background data set for unfiltered parameters ranged from 10 to 26; for filtered parameters, the number of validated values ranged from 1 to 4. Total uranium, uranium-234, and uranium-238 had the highest detection frequencies among the unfiltered parameters, ranging from 50 to 70 percent frequency of detection.

The descriptive statistics calculated for the 17 unfiltered radiological constituents in the glacial overburden are presented in Table 5-2. The maximum detected value for total uranium was 1.5 μg/L. The average total uranium value was 0.54 μg/L. After total uranium, uranium-234, and uranium-238, the other unfiltered radiological parameters that have the highest detection frequencies were radium-226 (41 percent), thorium-228 (46 percent), and thorium-230 (44 percent). Several of the unfiltered radiological parameters had two or less detected values (cesium-137, plutonium-238, plutonium-239/240, ruthenium-106, strontium-90, total thorium, and uranium-235/236).

Statistics for the filtered parameters are presented in Table 5-3. The amount of validated filtered radiological data for the glacial overburden is much less than the quantity of unfiltered data. This is

because filtered radiological data were not routinely collected for the glacial overburden background wells prior to 1993. No validated data were available for the following filtered radiological parameters: cesium-137, neptunium-237, plutonium-238, plutonium-239/240, ruthenium-106, strontium-90, total thorium, and uranium-235/236. A maximum of four data values were available for the filtered radiological constituents analyzed.

No data for filtered total thorium were present in the FEMP database. However, total thorium is not an analyzed value but a calculated value equal to 9.17 times thorium-232 activity. Thorium-232 constitutes the primary percentage (by mass) of all thorium in nature. The total thorium statistics in Table 5-3 have been derived by multiplying the thorium-232 statistics by the 9.17 conversion factor.

5.2 INORGANIC CONSTITUENTS

Table 5-4 presents summary statistics for filtered inorganic constituents in the glacial overburden background wells. As discussed in Chapter 3, calcium is the dominant cation in the groundwater, followed by magnesium and sodium. According to the Shapiro-Wilk test, the population distributions of these three constituents are lognormal or near lognormal. Two other filtered constituents (manganese and potassium) also had lognormal distributions. The remaining 22 filtered constituents had undefined distributions, because they either did not pass the Shapiro-Wilk test or because they had too few detect values to allow normality testing. Only nonparametric descriptive statistics are presented for the parameters with undefined distributions.

Table 5-5 presents summary statistics for unfiltered inorganic constituents in the glacial overburden background wells. The unfiltered parameters list includes the constituents shown in Table 5-4, plus additional parameters (alkalinity, ammonia, chloride, nitrate, nitrate/nitrite, phosphorus, sulfate, sulfide, total kjeldahl nitrogen (TKN), and total solids) which are primarily anions and nutrients.

Two unfiltered parameters (nitrate and sulfate) were found to have normal distributions. Two other parameters (fluoride and phosphorus) had lognormal distributions. All the other unfiltered parameters, including the unfiltered metals data, had undefined distributions. A maximum of five values exist for each of the unfiltered metals (all collected during the 1993 field programs), which is the reason no normality testing could be performed on these data groups.

Three parameters were measured in the field for the glacial overburden, dissolved oxygen, pH, and specific conductivity. The number of measurements for these parameters ranged from 22 to 30 and they are each lognormally distributed. Descriptive statistics for these parameters are listed in Table 5-6.

5.3 ORGANIC CONSTITUENTS

Three samples collected from the glacial overburden background wells in 1988 and 1989 were analyzed for volatile organic compounds (VOCs); five additional samples were collected and analyzed in 1993 (one sample and one duplicate for each of the five wells). No VOCs were detected in any of the samples or duplicates. One sample from well 1065 has been analyzed for semivolatile organic compounds (SVOCs), organophosphorus pesticides, pesticides, and polychlorinated biphenyls (PCBs). No detects were found for these analyses.

The five glacial overburden background wells have been sampled and analyzed a number of times for phenols, total organic carbon (TOC), total organic halides (TOX), and total organic nitrogen (TON). Summary statistics for validated data for these parameters are given in Table 5-7. Of the 21 values for phenols, the maximum detected value was 0.03 mg/L. Seven samples were analyzed for TOC. The maximum TOC concentration found was 9 mg/L. Of the 16 validated analyses of TOX, only 3 were detections. The maximum detected value was 0.126 mg/L. Twenty validated analyses were available for TON, with a maximum detected value of 1.35 mg/L.

Table 5-1
Summary Statistics of Unfiltered Total Uranium for Background Monitoring Wells in the Glacial Overburden

Statistics	Private wells	FEMP Wells	Combined Wells
No. of analyses	15	10	25
No. of detections	8	9	17
Detection frequency (%)	53	90	68
Minimum Detection	0.48	0.5	0.48
Maximum Detection	1.5	3.9	3.9
Minimum Nondetect	< 0.1	N/A	< 0.1
Maximum Nondetect	< 0.55	< 0.1	< 0.55
Distribution	NQ	N	U
Normal			
Mean	0.54	1.4	N/A
Standard deviation	0.47	1.1	N/A
Coefficient of variation	0.87	0.75	N/A
95% UCL	0.75	2.0	N/A
95th Percentile	1.3	3.2	N/A
Lognormal			
Mean	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A
Nonparametric			
Median	N/A	N/A	0.76
95% UCL	N/A	N/A	1
95th Percentile	N/A	N/A	2

Note:
(1) Concentrations are reported in ug/L.
(2) N/A = Not applicable.
(3) Distribution types: N = Normal, L = Lognormal, N* = Normal (but also passed Lognormal test), L* = Lognormal (but also passed Normal test), NQ = Qualified Normal, LQ= Qualified Lognormal, U = Undefined.
(4) Mean types: Normal = arithmetic mean, Lognormal = estimated mean of a lognormal distribution.
(5) Standard deviation types: Normal = arithmetic standard deviation, Lognormal = estimated standard deviation of a lognormal distribution.

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Table 5-2
Summary Statistics of Unfiltered Radiological Constituents for Background Monitoring Wells in the Glacial Overburden

Statistics	Cesium-137	Neptunium-237	Plutonium-238	Plutonium-239/240	Radium-226	Radium-228
No. of analyses	13	10	13	19	22	22
No. of detections	0	3	1	0	9	4
Detection frequency (%)	0	30	8	0	41	18
Minimum Detection	N/A	0.043	N/A	N/A	0.14	1.9
Maximum Detection	N/A	0.25	0.075	N/A	0.9	5.2
Minimum Nondetect	< 7	< 0.18	< 0.021	< 0.021	< 0.11	< 1.5
Maximum Nondetect	< 12	< 0.21	< 0.17	< 1	< 1	< 3.4
Distribution	U	U	U	U	L*	U
Normal						
Mean	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A
Lognormal						
Mean	N/A	N/A	N/A	N/A	0.37	N/A
Standard deviation	N/A	N/A	N/A	N/A	0.29	N/A
95% UCL	N/A	N/A	N/A	N/A	0.51	N/A
95th Percentile	N/A	N/A	N/A	N/A	0.90	N/A
Nonparametric						
Median	< 10	< 0.21	< 0.052	< 0.11	N/A	< 2.2
95% UCL	< 11	0.16	< 0.11	< 0.59	N/A	< 3.1
95th Percentile	< 13	0.25	0.075	< 1	N/A	3

Table 5-2 (Continued)
Summary Statistics of Unfiltered Radiological Constituents for Background Monitoring Wells in the Glacial Overburden

Statistics	Ruthenium-106	Strontium-90	Technetium-99	Total Thorium	Thorium-228	Thorium-230
No. of analyses	13	16	26	10	24	25
No. of detections	0	1	2	1	11	11
Detection frequency (%)	0	6	8	10	46	44
Minimum Detection	N/A	N/A	30	N/A	0.23	0.14
Maximum Detection	N/A	2	49.3	3.1	1.62	2.0
Minimum Nondetect	< 61	< 0.81	< 8.2	< 1	< 0.1	< 0.1
Maximum Nondetect	< 141	< 1.4	< 30	< 3	< 1.2	< 1.2
Distribution	U	U	U	U	L	L
Normal						
Mean	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A
Lognormal						
Mean	N/A	N/A	N/A	N/A	0.53	0.45
Standard deviation	N/A	N/A	N/A	N/A	0.59	0.48
95% UCL	N/A	N/A	N/A	N/A	0.83	0.68
95th Percentile	N/A	N/A	N/A	N/A	1.6	1.3
Nonparametric						
Median	< 82	< 1.1	< 20	< 2.2	N/A	N/A
95% UCL	< 91	< 1.2	< 23	< 3	N/A	N/A
95th Percentile	< 141	2	30	3.1	N/A	N/A

Table 5-2 (Continued)
Summary Statistics of Unfiltered Radiological Constituents for Background Monitoring Wells in the Glacial Overburden

Statistics	Thorium-232	Total Uranium	Uranium-234	Uranium-235/236	Uranium-238
No. of analyses	14	15	13	13	13
No. of detections	3	8	9	0	9
Detection frequency (%)	21	53	69	0	69
Minimum Detection	0.2	0.48	0.25	N/A	0.23
Maximum Detection	0.34	1.5	1.1	N/A	0.99
Minimum Nondetect	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Maximum Nondetect	< 0.32	< 0.55	< 1	< 0.27	< 1
Distribution	U	NQ	N	U	N*
Normal					
Mean	N/A	0.54	0.44	N/A	0.39
Standard deviation	N/A	0.47	0.28	N/A	0.25
Coefficient of variation	N/A	0.87	0.64	N/A	0.66
95% UCL	N/A	0.75	0.58	N/A	0.51
95th Percentile	N/A	1.3	0.90	N/A	0.80
Lognormal					
Mean	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A
Nonparametric					
Median	< 0.20	N/A	N/A	< 0.18	N/A
95% UCL	< 0.32	N/A	N/A	< 0.22	N/A
95th Percentile	0.34	N/A	N/A	< 0.27	N/A

Note:
(1) Concentrations are reported in pCi/L except Total Thorium and Total Uranium, which are in ug/L.
(2) N/A = Not applicable.
(3) Distribution types: N = Normal, L = Lognormal, N* = Normal (but also passed Lognormal test), L* = Lognormal (but also passed Normal test), NQ = Qualified Normal, LQ = Qualified Lognormal, U = Undefined.
(4) Mean types: Normal = arithmetic mean, Lognormal = estimated mean of a lognormal distribution.
(5) Standard deviation types: Normal = arithmetic standard deviation, Lognormal = estimated standard deviation of a lognormal distribution.

Table 5-3
Summary Statistics of Filtered Radiological Constituents for Background Monitoring Wells in the Glacial Overburden

Statistics	Radium-226	Radium-228	Technetium-99	Total Thorium	Thorium-228	Thorium-230
No. of analyses	4	4	4	N/A	2	4
No. of detections	1	1	1	N/A	1	0
Detection frequency (%)	25	25	25	N/A	50	0
Minimum Detection	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Detection	0.9	2.2	30	N/A	0.1	N/A
Minimum Nondetect	< 0.4	< 1.7	< 11.8	N/A	N/A	< 0.1
Maximum Nondetect	< 0.6	< 1.8	< 12.4	N/A	< 0.1	< 0.2
Distribution	U	U	U	N/A	U	U
Normal						
Mean	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A
Lognormal						
Mean	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A
Nonparametric						
Median	< 0.55	< 1.75	< 12.4	< 9 *	0.075	< 0.2
95% UCL	0.9	2.2	30	< 18 *	0.1	< 0.2
95th Percentile	0.9	2.2	30	< 18 *	0.1	< 0.2

Table 5-3 (Continued)
Summary Statistics of Filtered Radiological Constituents for Background Monitoring Wells in the Glacial Overburden

Statistics	Thorium-232	Total Uranium	Uranium-234	Uranium-235/236
No. of analyses	3	3	1	2
No. of detections	0	2	1	0
Detection frequency (%)	0	67	100	0
Minimum Detection	N/A	1	N/A	N/A
Maximum Detection	N/A	1.4	0.6	N/A
Minimum Nondetect	< 0.1	N/A	N/A	< 0.1
Maximum Nondetect	< 0.2	< 0.1	N/A	< 0.1
Distribution	U	U	U	U
Normal				
Mean	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A
Lognormal				
Mean	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A
Nonparametric				
Median	< 0.1	1	0.6	< 0.1
95% UCL	< 0.2	1.4	0.6	< 0.1
95th Percentile	< 0.2	1.4	0.6	< 0.1

Note:
(1) Concentrations are reported in pCi/L except Total Thorium and Total Uranium, which are in ug/L.
(2) N/A = Not applicable.
(3) Distribution types: N = Normal, L = Lognormal, N* = Normal (but also passed Lognormal test), L* = Lognormal (but also passed Normal test), NQ = Qualified Normal, LQ = Qualified Lognormal, U = Undefined.
(4) Mean types: Normal = arithmetic mean, Lognormal = estimated mean of a lognormal distribution.
(5) Standard deviation types: Normal = arithmetic standard deviation, Lognormal = estimated standard deviation of a lognormal distribution.
* Total Thorium statistics are calculated from Thorium-232 statistics.

Table 5-4
Summary Statistics of Filtered Inorganic Constituents for Background Monitoring Wells in the Glacial Overburden

Statistics	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper
No. of analyses	7	4	17	23	6	22	25	24	7	23
No. of detections	3	2	5	22	2	2	25	8	0	4
Detection frequency (%)	43	50	29	96	33	9	100	33	0	17
Minimum Detection	0.0375	0.0141	0.0042	0.034	0.001	0.006	74.4	0.006	N/A	0.013
Maximum Detection	0.123	0.0272	0.122	0.452	0.0018	0.007	155	0.0345	N/A	0.03
Minimum Nondetect	< 0.0193	< 0.011	< 0.001	N/A	< 0.0003	< 0.0012	N/A	< 0.0032	< 0.003	< 0.0026
Maximum Nondetect	< 0.09	< 0.0222	< 0.01	< 0.055	< 0.001	< 0.005	N/A	< 0.02	< 0.01	< 0.03
Distribution	U	U	U	U	U	U	LQ	U	U	U
Normal										
Mean	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lognormal										
Mean	N/A	N/A	N/A	N/A	N/A	N/A	96.0	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A	19.6	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A	103	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A	131	N/A	N/A	N/A
Nonparametric										
Median	< 0.09	0.0126	< 0.003	0.068	< 0.001	< 0.004	N/A	< 0.02	< 0.007	< 0.01
95% UCL	0.123	0.0272	0.0042	0.091	0.0018	< 0.005	N/A	0.006	< 0.01	< 0.01
95th Percentile	0.123	0.0272	0.122	0.451	0.0018	0.006	N/A	0.034	< 0.01	0.019

Table 5-4 (Continued)
Summary Statistics of Filtered Inorganic Constituents for Background Monitoring Wells in the Glacial Overburden

Statistics	Cyanide	Iron	Lead	Magnesium	Manganese	Mercury	Molybdenum	Nickel	Potassium
No. of analyses	4	25	17	25	23	22	20	24	23
No. of detections	0	18	6	25	19	1	2	4	21
Detection frequency (%)	0	72	35	100	83	5	10	17	91
Minimum Detection	N/A	0.0467	0.0014	20.4	0.0025	N/A	0.017	0.021	0.891
Maximum Detection	N/A	4.9	0.0087	47.8	0.22	0.0004	0.028	0.026	31.5
Minimum Nondetect	< 0.005	< 0.005	< 0.001	N/A	< 0.003	< 0.0001	< 0.003	< 0.003	< 0.632
Maximum Nondetect	< 0.01	< 0.1	< 0.005	N/A	< 0.02	< 0.0003	< 0.027	< 0.04	< 5
Distribution	U	U	U	LQ	L	U	U	U	L
Normal									
Mean	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lognormal									
Mean	N/A	N/A	N/A	32.7	0.049	N/A	N/A	N/A	8.09
Standard deviation	N/A	N/A	N/A	9.88	0.11	N/A	N/A	N/A	16.5
95% UCL	N/A	N/A	N/A	36.5	0.11	N/A	N/A	N/A	18.0
95th Percentile	N/A	N/A	N/A	47.8	0.18	N/A	N/A	N/A	29.3
Nonparametric									
Median	< 0.01	0.154	< 0.002	N/A	N/A	< 0.0002	< 0.02	< 0.02	N/A
95% UCL	< 0.01	1.77	0.002	N/A	N/A	< 0.0002	< 0.02	< 0.02	N/A
95th Percentile	< 0.01	3.58	0.0087	N/A	N/A	< 0.0003	0.017	0.022	N/A

Table 5-4 (Continued)
Summary Statistics of Filtered Inorganic Constituents for Background Monitoring Wells in the Glacial Overburden

Statistics	Selenium	Silicon	Silver	Sodium	Thallium	TDS	Vanadium	Zinc
No. of analyses	16	4	25	23	5	1	7	7
No. of detections	0	4	5	23	0	1	2	5
Detection frequency (%)	0	100	20	100	N/A	100	29	71
Minimum Detection	N/A	5.62	0.0105	5.71	N/A	N/A	0.018	0.0104
Maximum Detection	N/A	7.43	0.052	56.3	N/A	433	0.0195	0.0443
Minimum Nondetect	< 0.001	N/A	< 0.0005	N/A	< 0.001	N/A	< 0.0029	< 0.0102
Maximum Nondetect	< 0.005	N/A	< 0.02	N/A	< 0.002	N/A	< 0.012	< 0.042
Distribution	U	U	U	L	U	U	U	U
Normal								
Mean	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lognormal								
Mean	N/A	N/A	N/A	24.2	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	17.3	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	32.3	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	56.3	N/A	N/A	N/A	N/A
Nonparametric								
Median	< 0.002	6.03	< 0.01	N/A	< 0.001	433	< 0.0066	0.0317
95% UCL	< 0.002	7.43	< 0.01	N/A	< 0.002	433	0.0195	0.0443
95th Percentile	< 0.005	7.43	0.04	N/A	< 0.002	433	0.0195	0.0443

Note:
(1) Concentrations are reported in mg/L.
(2) N/A = Not applicable.
(3) Distribution types: N = Normal, L = Lognormal, N* = Normal (but also passed Lognormal test), L* = Lognormal (but also passed Normal test), NQ = Qualified Normal, LQ = Qualified Lognormal, U = Undefined.
(4) Mean types: Normal = arithmetic mean, Lognormal = estimated mean of a lognormal distribution.
(5) Standard deviation types: Normal = arithmetic standard deviation, Lognormal = estimated standard deviation of a lognormal distribution.

Table 5-5
Summary Statistics of Unfiltered Inorganic Constituents for Background Monitoring Wells in the Glacial Overburden

Statistics	Alkalinity as CaCO3	Aluminum	Ammonia	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chloride
No. of analyses	5	5	22	2	5	5	4	4	5	25
No. of detections	5	2	11	0	3	5	0	0	5	20
Detection frequency (%)	100	40	50	0	60	100	0	0	100	80
Minimum Detection	313	0.774	0.1	N/A	0.0031	0.0486	N/A	N/A	81.1	1.4
Maximum Detection	430	2.29	4.5	N/A	0.0194	0.454	N/A	N/A	172	50
Minimum Nondetect	N/A	< 0.0193	< 0.05	< 0.0041	< 0.001	N/A	< 0.0003	< 0.0012	N/A	< 0.5
Maximum Nondetect	N/A	< 0.09	< 0.1	< 0.011	< 0.001	N/A	< 0.001	< 0.005	N/A	< 8.6
Distribution	U	U	U	U	U	U	U	U	U	U
Normal										
Mean	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lognormal										
Mean	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nonparametric										
Median	360	< 0.09	0.075	< 0.0076	0.0031	0.0854	< 0.00065	< 0.0021	83.3	8.5
95% UCL	430	2.29	0.55	< 0.011	0.0194	0.454	< 0.001	< 0.005	172	25
95th Percentile	430	2.29	4.34	< 0.011	0.0194	0.454	< 0.001	< 0.005	172	45

Table 5-5 (Continued)
Summary Statistics of Unfiltered Inorganic Constituents for Background Monitoring Wells in the Glacial Overburden

Statistics	Chromium	Cobalt	Copper	Cyanide	Fluoride	Iron	Lead	Magnesium	Manganese
No. of analyses	5	5	5	5	25	5	4	5	5
No. of detections	1	0	3	0	25	5	3	5	4
Detection frequency (%)	20	0	60	0	100	100	75	100	80
Minimum Detection	N/A	N/A	0.0053	N/A	0.2	0.249	0.0013	23.1	0.0035
Maximum Detection	0.0046	N/A	0.0294	N/A	1.3	6.35	0.0016	50.7	0.205
Minimum Nondetect	< 0.0032	< 0.003	< 0.0045	< 0.001	N/A	N/A	N/A	N/A	N/A
Maximum Nondetect	< 0.006	< 0.008	< 0.0099	< 0.01	N/A	N/A	< 0.0032	N/A	< 0.0178
Distribution	U	U	U	U	L	U	U	U	U
Normal									
Mean	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lognormal									
Mean	N/A	N/A	N/A	N/A	0.59	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	0.36	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	0.75	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	1.3	N/A	N/A	N/A	N/A
Nonparametric									
Median	< 0.005	< 0.0053	0.0053	< 0.01	N/A	1.82	0.00145	35.5	0.0372
95% UCL	0.0046	< 0.008	0.0294	< 0.01	N/A	6.35	0.0016	50.7	0.205
95th Percentile	0.0046	< 0.008	0.0294	< 0.01	N/A	6.35	0.0016	50.7	0.205

Table 5-5 (Continued)
Summary Statistics of Unfiltered Inorganic Constituents for Background Monitoring Wells in the Glacial Overburden

Statistics	Mercury	Molybdenum	Nickel	Nitrate	Nitrate/Nitrite	Phosphorus	Potassium	Selenium	Silicon
No. of analyses	5	4	5	11	4	20	5	5	4
No. of detections	0	0	1	9	1	12	4	0	4
Detection frequency (%)	0	0	20	82	25	60	80	0	100
Minimum Detection	N/A	N/A	N/A	0.012	N/A	0.026	0.963	N/A	5.6
Maximum Detection	N/A	N/A	0.0072	0.3	0.07	0.18	17.2	N/A	10.7
Minimum Nondetect	< 0.0001	< 0.0041	< 0.011	< 0.1	< 0.02	< 0.02	N/A	< 0.001	N/A
Maximum Nondetect	< 0.0004	< 0.019	< 0.02	< 0.1	< 0.05	< 0.1	< 0.894	< 0.002	N/A
Distribution	U	U	U	N*	U	L	U	U	U
Normal									
Mean	N/A	N/A	N/A	0.14	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	0.094	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	0.69	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	0.19	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	0.29	N/A	N/A	N/A	N/A	N/A
Lognormal									
Mean	N/A	N/A	N/A	N/A	N/A	0.070	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	0.076	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	0.11	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	0.18	N/A	N/A	N/A
Nonparametric									
Median	< 0.0002	< 0.015	< 0.015	N/A	< 0.035	N/A	1.07	< 0.001	6.51
95% UCL	< 0.0004	< 0.019	0.0072	N/A	0.07	N/A	17.2	< 0.002	10.7
95th Percentile	< 0.0004	< 0.019	0.0072	N/A	0.07	N/A	17.2	< 0.002	10.7

Table 5-5 (Continued)
Summary Statistics of Unfiltered Inorganic Constituents for Background Monitoring Wells in the Glacial Overburden

Statistics	Silver	Sodium	Sulfate	Sulfide	Thallium	TKN	Total Solids	Vanadium	Zinc
No. of analyses	5	5	25	4	5	14	1	5	5
No. of detections	1	5	22	0	0	10	1	1	4
Detection frequency (%)	20	100	88	0	0	71	100	20	80
Minimum Detection	N/A	8.81	3	N/A	N/A	0.178	N/A	N/A	0.0192
Maximum Detection	0.0031	50	175	N/A	N/A	4.34	452	0.0051	0.352
Minimum Nondetect	< 0.002	N/A	< 0.5	< 0.5	< 0.001	< 0.1	N/A	< 0.0029	N/A
Maximum Nondetect	< 0.007	N/A	< 2	< 1	< 0.002	< 0.4	N/A	< 0.012	< 0.0066
Distribution	U	U	N	U	U	U	U	U	U
Normal									
Mean	N/A	N/A	59.8	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	46.4	N/A	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	0.777	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	75.7	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	136	N/A	N/A	N/A	N/A	N/A	N/A
Lognormal									
Mean	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nonparametric									
Median	< 0.0032	23.8	N/A	< 1	< 0.001	0.330	452	< 0.01	0.0502
95% UCL	0.0031	50	N/A	< 1	< 0.002	2.2	452	0.0051	0.352
95th Percentile	0.0031	50	N/A	< 1	< 0.002	4.34	452	0.0051	0.352

Note:
(1) Concentrations are reported in mg/L.
(2) N/A = Not applicable.
(3) Distribution types: N = Normal, L = Lognormal, N* = Normal (but also passed Lognormal test), L* = Lognormal (but also passed Normal test), NQ = Qualified Normal, LQ = Qualified Lognormal, U = Undefined.
(4) Mean types: Normal = arithmetic mean, Lognormal = estimated mean of a lognormal distribution.
(5) Standard deviation types: Normal = arithmetic standard deviation, Lognormal = estimated standard deviation of a lognormal distribution.

Table 5-6
Summary Statistics for Dissolved Oxygen, pH, and Specific Conductivity from Background Monitoring Wells in the Glacial Overburden

Statistics	Dissolved Oxygen (mg/L)	pH (SU)	Specific Conductivity (umhos/cm)
No. of analyses	22	29	30
No. of detections	22	29	30
Detection frequency (%)	100	100	100
Minimum Detection	1	6.9	470
Maximum Detection	9.2	7.7	1170
Minimum Nondetect	N/A	N/A	N/A
Maximum Nondetect	N/A	N/A	N/A
Distribution	L	LQ	L
Normal			
Mean	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A
Lognormal			
Mean	3.9	7.2	674
Standard deviation	3.1	0.18	156
95% UCL	5.4	7.3	726
95th Percentile	9.2	7.5	955
Nonparametric			
Median	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A

Note:
(1) N/A = Not applicable.
(2) Distribution types: N = Normal, L = Lognormal, N* = Normal (but also passed Lognormal test), L* = Lognormal (but also passed Normal test), NQ = Qualified Normal, LQ= Qualified Lognormal, U = Undefined.
(3) Mean types: Normal = arithmetic mean, Lognormal = estimated mean of a lognormal distribution.
(4) Standard deviation types: Normal = arithmetic standard deviation, Lognormal = estimated standard deviation of a lognormal distribution.

Table 5-7
Summary Statistics for Phenols, Total Organic Carbon, Total Organic Halides, and Total Organic Nitrogen from Background Monitoring Wells in the Glacial Overburden

Statistics	Phenols	Total Organic Carbon	Total Organic Halides	Total Organic Nitrogen
No. of analyses	21	7	16	20
No. of detections	11	4	3	10
Detection frequency (%)	52	57	19	50
Minimum Detection	0.007	1.15	0.011	0.1
Maximum Detection	0.03	9	0.126	1.35
Minimum Nondetect	< 0.002	< 1	< 0.01	< 0.1
Maximum Nondetect	< 0.01	< 3.27	< 0.05	< 0.23
Distribution	L	U	U	U
Normal				
Mean	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A
Lognormal				
Mean	0.012	N/A	N/A	N/A
Standard deviation	0.014	N/A	N/A	N/A
95% UCL	0.020	N/A	N/A	N/A
95th Percentile	0.030	N/A	N/A	N/A
Nonparametric				
Median	N/A	1.15	< 0.05	0.108
95% UCL	N/A	9	< 0.05	0.178
95th Percentile	N/A	9	0.126	0.34

Note:
(1) Concentrations are reported in mg/L.
(2) N/A = Not applicable.
(3) Distribution types: N = Normal, L = Lognormal, N* = Normal (but also passed Lognormal test), L* = Lognormal (but also passed Normal test), NQ = Qualified Normal, LQ= Qualified Lognormal, U = Undefined.
(4) Mean types: Normal = arithmetic mean, Lognormal = estimated mean of a lognormal distribution.
(5) Standard deviation types: Normal = arithmetic standard deviation, Lognormal = estimated standard deviation of a lognormal distribution.

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6.0 GREAT MIAMI AQUIFER

This chapter presents the results of radiological and chemical analyses of groundwater samples collected from wells selected as representative of background water quality in the Great Miami Aquifer. As described in Chapter 3, the process by which the 24 Great Miami Aquifer background wells (8 Ross, 9 Shandon, 7 Dry Fork) were selected involved a careful review of all available data, including development of trilinear diagrams. The relatively tight clustering of data evident in Figure 3-6 indicates that the water chemistry in the background wells is similar.

Therefore, it is reasonable to calculate one set of background water quality statistics for the Great Miami Aquifer by combining data from the three sections (Ross, Shandon, Dry Fork) that contribute to groundwater flow in the vicinity of the FEMP. Statistics computed utilizing these combined data are provided in this chapter. For comparative purposes, similar statistics for each of the tributaries are included in Appendix H.

As noted previously, a significant amount of data was collected in 1993 field programs. After review of new Great Miami Aquifer radiological data, it appears that the radiological water chemistry of well 2098 is being affected by runoff from the FEMP. Of the wells chosen to represent Great Miami Aquifer background water quality, well 2098 had the highest unfiltered and filtered total uranium results, 5.1 and 4.6 ug/L, respectively. Surface water samples were also collected in 1993 from a drainage ditch directly north of well 2098. Replicate samples were taken, with the highest unfiltered and filtered total uranium results being 13.9 and 13.6 ug/L, respectively, thus indicating the possibility of the FEMP affecting the values measured for radiological parameters for samples collected from well 2098. Therefore, in order not to bias statistical computations, radiological constituents from well 2098 have been removed from the background data set.

Table 6-1 shows a comparison of descriptive statistics for the important parameter unfiltered total uranium after the removal of data from well 2098. The statistical results for the tributaries of the Great Miami Aquifer are very similar.

6.1 RADIOLOGICAL CONSTITUENTS

The Great Miami Aquifer background wells were sampled and analyzed for 17 unfiltered and filtered radiological constituents. Summary statistics for the unfiltered constituents are presented in Table 6-2. The number of validated data available for unfiltered constituents ranged from 50 to 115.

The detection frequency varied for Great Miami Aquifer radiological constituents. Ruthenium-106 was not detected in any sample and many other unfiltered constituents (cesium-137, neptunium-237,

plutonium-238, plutonium-239/240, strontium-90, technetium-99, total thorium, thorium-232, and uranium-235/236) had very low detection frequencies (less than 11 percent). Radium-226, radium-228, thorium-228, and thorium-230 had a moderate number of detects; the frequency of detection for these four parameters ranged from 22 to 53 percent. Maximum detected values of these four unfiltered constituents were 2, 5.2, 2.9, and 2.5 pCi/L, respectively.

Total uranium was detected in 60 percent of the unfiltered samples analyzed. The total uranium data were evaluated for normality using the Shapiro-Francia method and were found to have an undefined distribution. The median value for total uranium was 0.26 μg/L; the maximum value detected was 3.1 μg/L.

Summary statistics for the 17 filtered radiological constituents are presented in Table 6-3. The amount of validated filtered radiological data for the Great Miami Aquifer is much less than the quantity of unfiltered data. This is because filtered radiological data were not routinely collected for the Great Miami Aquifer background wells prior to 1993. Seven of the 17 filtered parameters have only one data value each. Nine parameters have between 10 and 13 data values each. Statistics for total thorium were calculated based on thorium-232 statistics as described in Section 5.1. Radium-226, total uranium, uranium-234, and uranium-238 data have normal distributions. All of the other parameters have undefined distributions. Total uranium was detected in 83 percent of the filtered samples analyzed. The mean value was 0.4 μg/L and the maximum value detected was 0.8 μg/L.

6.2 INORGANIC CONSTITUENTS

Filtered and unfiltered inorganic statistics for the Great Miami Aquifer are found in Tables 6-4 and 6-5, respectively. Inorganic analyses have been performed on a large number of samples collected from Great Miami Aquifer background wells. Descriptive statistics for 27 filtered inorganic parameters are presented in Table 6-4. Fifteen of the 27 inorganic constituents have approximately 90 to 120 sample results. However, as few as 4 to 30 filtered samples exist for 10 other parameters. Five of the filtered parameters (aluminum, calcium, magnesium, potassium, and sodium) displayed lognormal data distributions. Total dissolved solids (TDS) had a normal data distribution. Data distributions for the other 21 filtered inorganic parameters were undefined.

Descriptive statistics for 37 unfiltered inorganic parameters are presented in Table 6-5. Table 6-5 includes additional nutrient and anion parameters not in Table 6-4. Over 100 validated values exist for most of the anions (chloride, fluoride, and sulfate) and a few of the nutrients (ammonia and phosphorus). Nitrate has 64 values and TKN has 53 values. For the other 30 unfiltered inorganic parameters, less than 22 values were present in the background water quality data set. Nearly all of the unfiltered metals data were collected in 1993, thus explaining the lesser quantity of these data.

Descriptive statistics of three field parameters are presented in Table 6-6. The number of values for dissolved oxygen, pH, and specific conductance ranges from 93 to 131. The mean values of these three parameters were 2.35 mg/L, 7.2 SU, and 635 μmhos/cm, respectively.

6.3 ORGANIC CONSTITUENTS

Four general organic parameters were analyzed in samples from the Great Miami Aquifer. Descriptive statistics of phenols, TOC, TOX, and TON are presented in Table 6-7. Maximum detections for these four parameters were 0.091, 4.25, 0.12, and 2.75 mg/L, respectively.

Twenty-four samples have been collected from the background wells in the Great Miami Aquifer and analyzed for organics. The organic detections are listed in Table 6-8. Very low estimated detections of organics were found in the Great Miami Aquifer background wells, some of which are common laboratory contaminants. The only three nonestimated detections were also low and are also common laboratory contaminants.

Four samples were collected from Great Miami Aquifer background wells and analyzed for herbicides, pesticides, organophosphorus pesticides, and PCBs. No detections were reported for the four samples.

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Table 6-1
Summary Statistics of Unfiltered Total Uranium for Background Monitoring Wells in the Great Miami Aquifer

Statistics	Dry Fork	Ross	Shandon	Great Miami Aquifer
No. of analyses	38	29	48	115
No. of detections	33	18	18	69
Detection frequency (%)	87	62	38	60
Minimum Detection	0.14	0.24	0.1	0.1
Maximum Detection	2.4	2.2	3.1	3.1
Minimum Nondetect	< 0.1	< 0.1	< 0.1	< 0.1
Maximum Nondetect	< 0.55	< 1.0	< 1	< 1.0
Distribution	LQ	LQ	U	U
Normal				
Mean	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A
Lognormal				
Mean	0.61	0.59	N/A	N/A
Standard deviation	0.72	0.83	N/A	N/A
95% UCL	0.87	1.0	N/A	N/A
95th Percentile	1.8	1.9	N/A	N/A
Nonparametric				
Median	N/A	N/A	< 0.1	0.26
95% UCL	N/A	N/A	0.1	0.36
95th Percentile	N/A	N/A	1.2	1.2

Note:
(1) Concentrations are reported in ug/L.
(2) N/A = Not applicable.
(3) Distribution types: N = Normal, L = Lognormal, N* = Normal (but also passed Lognormal test), L* = Lognormal (but also passed Normal test), NQ = Qualified Normal, LQ= Qualified Lognormal, U = Undefined.
(4) Mean types: Normal = arithmetic mean, Lognormal = estimated mean of a lognormal distribution.
(5) Standard deviation types: Normal = arithmetic standard deviation, Lognormal = estimated standard deviation of a lognormal distribution.

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Table 6-2
Summary Statistics of Unfiltered Radiological Constituents for Background Monitoring Wells in the Great Miami Aquifer

Statistics	Cesium-137	Neptunium-237	Plutonium-238	Plutonium-239/240	Radium-226	Radium-228
No. of analyses	70	81	62	59	105	106
No. of detections	2	4	6	5	56	23
Detection frequency (%)	3	5	10	8	53	22
Minimum Detection	5.8	0.25	0.022	0.016	0.071	1.0
Maximum Detection	6.7	0.62	0.089	0.083	2	5.2
Minimum Nondetect	< 5.8	< 0.0023	< 0.0075	< 0.003	< 0.058	< 0.19
Maximum Nondetect	< 12	< 0.48	< 0.1	< 0.089	< 1.1	< 3.2
Distribution	U	U	U	U	L	U
Normal						
Mean	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A
Lognormal						
Mean	N/A	N/A	N/A	N/A	0.46	N/A
Standard deviation	N/A	N/A	N/A	N/A	0.69	N/A
95% UCL	N/A	N/A	N/A	N/A	0.59	N/A
95th Percentile	N/A	N/A	N/A	N/A	1.5	N/A
Nonparametric						
Median	< 9.5	< 0.23	< 0.057	< 0.052	N/A	< 2.4
95% UCL	< 9.8	< 0.28	< 0.065	< 0.060	N/A	< 2.6
95th Percentile	< 12	< 0.48	0.048	0.050	N/A	3.6

Table 6-2 (Continued)
Summary Statistics of Unfiltered Radiological Constituents for Background Monitoring Wells in the Great Miami Aquifer

Statistics	Ruthenium-106	Strontium-90	Technetium-99	Total Thorium	Thorium-228	Thorium-230
No. of analyses	76	87	99	50	101	98
No. of detections	0	4	2	3	37	44
Detection frequency (%)	0	5	2	6	37	45
Minimum Detection	N/A	0.65	22	0.97	0.075	0.18
Maximum Detection	N/A	4.8	26	2.1	2.9	2.5
Minimum Nondetect	< 58	< 0.37	< 4	< 0.85	< 0.1	< 0.16
Maximum Nondetect	< 170	< 1.7	< 30	< 3.8	< 0.67	< 0.67
Distribution	U	U	U	U	U	LQ
Normal						
Mean	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A
Lognormal						
Mean	N/A	N/A	N/A	N/A	N/A	0.34
Standard deviation	N/A	N/A	N/A	N/A	N/A	0.30
95% UCL	N/A	N/A	N/A	N/A	N/A	0.40
95th Percentile	N/A	N/A	N/A	N/A	N/A	0.89
Nonparametric						
Median	< 79	< 1.1	< 18	< 2.2	< 0.50	N/A
95% UCL	< 82	< 1.1	< 19	< 2.4	< 0.58	N/A
95th Percentile	< 101	< 1.7	< 30	0.97	0.77	N/A

Table 6-2 (Continued)
Summary Statistics of Unfiltered Radiological Constituents for Background Monitoring Wells in the Great Miami Aquifer

Statistics	Thorium-232	Total Uranium	Uranium-234	Uranium-235/236	Uranium-238
No. of analyses	71	115	98	97	104
No. of detections	9	69	65	5	42
Detection frequency (%)	13	60	66	5	40
Minimum Detection	0.1	0.1	0.14	0.094	0.14
Maximum Detection	0.77	3.1	1.3	0.26	0.93
Minimum Nondetect	< 0.1	< 0.1	< 0.17	< 0.092	< 0.1
Maximum Nondetect	< 0.42	< 1.0	< 0.73	< 0.39	< 1.0
Distribution	U	U	LQ	U	LQ
Normal					
Mean	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A
Lognormal					
Mean	N/A	N/A	0.33	N/A	0.26
Standard deviation	N/A	N/A	0.25	N/A	0.20
95% UCL	N/A	N/A	0.38	N/A	0.30
95th Percentile	N/A	N/A	0.80	N/A	0.64
Nonparametric					
Median	< 0.24	0.26	N/A	< 0.21	N/A
95% UCL	< 0.26	0.36	N/A	< 0.23	N/A
95th Percentile	0.23	1.2	N/A	0.094	N/A

Note:
(1) Concentrations are reported in pCi/L except Total Thorium and Total Uranium, which are in ug/L.
(2) N/A = Not applicable.
(3) Distribution types: N = Normal, L = Lognormal, N* = Normal (but also passed Lognormal test), L* = Lognormal (but also passed Normal test), NQ = Qualified Normal, LQ = Qualified Lognormal, U = Undefined.
(4) Mean types: Normal = arithmetic mean, Lognormal = estimated mean of a lognormal distribution.
(5) Standard deviation types: Normal = arithmetic standard deviation, Lognormal = estimated standard deviation of a lognormal distribution.

Table 6-3
Summary Statistics of Filtered Radiological Constituents for Background Monitoring Wells in the Great Miami Aquifer

Statistics	Cesium-137	Neptunium-237	Plutonium-238	Plutonium-239/240	Radium-226	Radium-228
No. of analyses	1	1	1	1	11	13
No. of detections	0	1	0	1	10	0
Detection frequency (%)	0	100	0	100	91	0
Minimum Detection	N/A	N/A	N/A	N/A	0.20	N/A
Maximum Detection	N/A	0.12	N/A	0.042	2	N/A
Minimum Nondetect	N/A	N/A	N/A	N/A	N/A	< 1.7
Maximum Nondetect	< 13	N/A	< 0.04	N/A	< 0.9	< 2.9
Distribution	U	U	U	U	N*	U
Normal						
Mean	N/A	N/A	N/A	N/A	1.1	N/A
Standard deviation	N/A	N/A	N/A	N/A	0.53	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	0.50	N/A
95% UCL	N/A	N/A	N/A	N/A	1.4	N/A
95th Percentile	N/A	N/A	N/A	N/A	1.9	N/A
Lognormal						
Mean	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A
Nonparametric						
Median	< 13	0.12	< 0.04	0.042	N/A	< 2
95% UCL	< 13	0.12	< 0.04	0.042	N/A	< 2.1
95th Percentile	< 13	0.12	< 0.04	0.042	N/A	< 2.9

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Table 6-3 (Continued)
Summary Statistics of Filtered Radiological Constituents for Background Monitoring Wells in the Great Miami Aquifer

Statistics	Ruthenium-106	Strontium-90	Technetium-99	Total Thorium	Thorium-228	Thorium-230
No. of analyses	1	1	1	N/A	10	11
No. of detections	0	0	0	N/A	4	2
Detection frequency (%)	0	0	0	N/A	40	18
Minimum Detection	N/A	N/A	N/A	N/A	0.2	0.1
Maximum Detection	N/A	N/A	N/A	N/A	0.4	0.29
Minimum Nondetect	N/A	N/A	N/A	N/A	< 0.1	< 0.1
Maximum Nondetect	< 144	< 0.8	< 14	N/A	< 0.3	< 0.3
Distribution	U	U	U	N/A	U	U
Normal						
Mean	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A
Lognormal						
Mean	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A
Nonparametric						
Median	< 144	< 0.8	< 14	< 2.8 *	< 0.3	< 0.3
95% UCL	< 144	< 0.8	< 14	0.92 *	0.2	< 0.3
95th Percentile	< 144	< 0.8	< 14	2.8 *	0.4	0.29

Table 6-3 (Continued)
Summary Statistics of Filtered Radiological Constituents for Background Monitoring Wells in the Great Miami Aquifer

Statistics	Thorium-232	Total Uranium	Uranium-234	Uranium-235/236	Uranium-238
No. of analyses	11	12	11	10	11
No. of detections	3	10	9	0	9
Detection frequency (%)	27	83	82	0	82
Minimum Detection	0.1	0.1	0.23	N/A	0.23
Maximum Detection	0.3	0.8	0.9	N/A	0.9
Minimum Nondetect	< 0.07	< 0.1	< 0.4	< 0.04	< 0.2
Maximum Nondetect	< 0.4	< 1	< 0.5	< 0.2	< 0.5
Distribution	U	N	N*	U	N*
Normal					
Mean	N/A	0.4	0.50	N/A	0.51
Standard deviation	N/A	0.3	0.25	N/A	0.25
Coefficient of variation	N/A	0.6	0.50	N/A	0.49
95% UCL	N/A	0.6	0.64	N/A	0.64
95th Percentile	N/A	0.8	0.90	N/A	0.90
Lognormal					
Mean	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A
Nonparametric					
Median	< 0.3	N/A	N/A	< 0.1	N/A
95% UCL	0.1	N/A	N/A	< 0.2	N/A
95th Percentile	0.3	N/A	N/A	< 0.2	N/A

Note:
(1) Concentrations are reported in pCi/L except Total Thorium and Total Uranium, which are in ug/L.
(2) N/A = Not applicable.
(3) Distribution types: N = Normal, L = Lognormal, N* = Normal (but also passed Lognormal test), L* = Lognormal (but also passed Normal test), NQ = Qualified Normal, LQ = Qualified Lognormal, U = Undefined.
(4) Mean types: Normal = arithmetic mean, Lognormal = estimated mean of a lognormal distribution.
(5) Standard deviation types: Normal = arithmetic standard deviation, Lognormal = estimated standard deviation of a lognormal distribution.
* Total Thorium statistics are calculated from Thorium-232 statistics.

Table 6-4
Summary Statistics of Filtered Inorganic Constituents for Background Monitoring Wells in the Great Miami Aquifer

Statistics	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper
No. of analyses	27	10	89	110	23	106	111	111	23	110
No. of detections	11	0	27	97	6	16	110	35	0	31
Detection frequency (%)	41	0	30	88	26	15	99	32	0	28
Minimum Detection	0.062	N/A	0.002	0.021	0.001	0.002	63.6	0.008	N/A	0.01
Maximum Detection	0.175	N/A	0.55	0.82	0.0023	0.01	181	0.0441	N/A	0.176
Minimum Nondetect	< 0.014	< 0.027	< 0.001	< 0.0231	< 0.001	< 0.002	N/A	< 0.003	< 0.005	< 0.003
Maximum Nondetect	< 0.0982	< 0.031	< 0.01	< 0.2	< 0.001	< 0.006	< 92.6	< 0.0358	< 0.02	< 0.03
Distribution	LQ	U	U	U	U	U	LQ	U	U	U
Normal										
Mean	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lognormal										
Mean	0.0631	N/A	N/A	N/A	N/A	N/A	98.1	N/A	N/A	N/A
Standard deviation	0.103	N/A	N/A	N/A	N/A	N/A	20.8	N/A	N/A	N/A
95% UCL	0.114	N/A	N/A	N/A	N/A	N/A	101	N/A	N/A	N/A
95th Percentile	0.175	N/A	N/A	N/A	N/A	N/A	136	N/A	N/A	N/A
Nonparametric										
Median	N/A	< 0.03	< 0.002	0.053	< 0.001	< 0.0036	N/A	< 0.02	< 0.009	< 0.01
95% UCL	N/A	< 0.031	< 0.003	0.0611	< 0.001	< 0.005	N/A	< 0.02	< 0.01	< 0.01
95th Percentile	N/A	< 0.031	0.26	0.669	0.0022	0.006	N/A	0.03	< 0.01	0.083

Table 6-4 (Continued)
Summary Statistics of Filtered Inorganic Constituents for Background Monitoring Wells in the Great Miami Aquifer

Statistics	Cyanide	Iron	Lead	Magnesium	Manganese	Mercury	Molybdenum	Nickel	Potassium
No. of analyses	12	111	79	111	106	104	90	111	101
No. of detections	0	74	13	111	83	10	21	14	94
Detection frequency (%)	0	67	16	100	78	10	23	13	93
Minimum Detection	N/A	0.007	0.0016	15.7	0.002	0.0002	0.004	0.012	0.664
Maximum Detection	N/A	5.42	0.029	46	0.916	0.001	0.04	0.0279	4.03
Minimum Nondetect	< 0.01	< 0.005	< 0.001	N/A	< 0.001	< 0.0002	< 0.01	< 0.011	< 0.777
Maximum Nondetect	< 0.02	< 0.1	< 0.008	N/A	< 0.02	< 0.0003	< 0.02	< 0.04	< 3
Distribution	U	U	U	L*	U	U	U	U	LQ
Normal									
Mean	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lognormal									
Mean	N/A	N/A	N/A	27.3	N/A	N/A	N/A	N/A	1.75
Standard deviation	N/A	N/A	N/A	5.81	N/A	N/A	N/A	N/A	0.830
95% UCL	N/A	N/A	N/A	28.3	N/A	N/A	N/A	N/A	1.90
95th Percentile	N/A	N/A	N/A	37.8	N/A	N/A	N/A	N/A	3.32
Nonparametric									
Median	< 0.02	0.4	< 0.002	N/A	0.05	< 0.0002	< 0.02	< 0.02	N/A
95% UCL	< 0.02	1.25	< 0.002	N/A	0.073	< 0.0002	< 0.02	< 0.02	N/A
95th Percentile	< 0.02	4.14	0.009	N/A	0.78	0.0004	0.025	0.023	N/A

Table 6-4 (Continued)
Summary Statistics of Filtered Inorganic Constituents for Background Monitoring Wells in the Great Miami Aquifer

Statistics	Selenium	Silicon	Silver	Sodium	Thallium	TDS	Vanadium	Zinc
No. of analyses	79	4	110	106	16	20	27	23
No. of detections	6	4	13	106	0	20	12	10
Detection frequency (%)	8	100	12	100	0	100	44	43
Minimum Detection	0.00105	2.6	0.0031	1.96	N/A	320	0.01	0.0068
Maximum Detection	0.006	3.46	0.034	101	N/A	673	0.0244	0.133
Minimum Nondetect	< 0.001	N/A	< 0.0005	N/A	< 0.001	N/A	< 0.003	< 0.002
Maximum.Nondetect	< 0.005	N/A	< 0.02	N/A	< 0.003	N/A	< 0.01	< 0.024
Distribution	U	U	U	L	U	N*	U	U
Normal								
Mean	N/A	N/A	N/A	N/A	N/A	480	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	109	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A	0.226	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	522	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	658	N/A	N/A
Lognormal								
Mean	N/A	N/A	N/A	18.7	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	20.9	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	22.6	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	55.0	N/A	N/A	N/A	N/A
Nonparametric								
Median	< 0.002	3.1	< 0.01	N/A	< 0.002	N/A	< 0.01	< 0.0161
95% UCL	< 0.002	3.46	< 0.01	N/A	< 0.003	N/A	0.0143	0.0228
95th Percentile	0.004	3.46	0.0138	N/A	< 0.003	N/A	0.0234	0.0568

Note:
(1) Concentrations are reported in mg/L.
(2) N/A = Not applicable.
(3) Distribution types: N = Normal, L = Lognormal, N* = Normal (but also passed Lognormal test), L* = Lognormal (but also passed Normal test), NQ = Qualified Normal, LQ = Qualified Lognormal, U = Undefined.
(4) Mean types: Normal = arithmetic mean, Lognormal = estimated mean of a lognormal distribution.
(5) Standard deviation types: Normal = arithmetic standard deviation, Lognormal = estimated standard deviation of a lognormal distribution.

Table 6-5
Summary Statistics of Unfiltered Inorganic Constituents for Background Monitoring Wells in the Great Miami Aquifer

Statistics	Alkalinity as CaCO3	Aluminum	Ammonia	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chloride
No. of analyses	21	15	101	11	16	16	16	16	16	110
No. of detections	21	4	40	0	7	14	0	3	16	98
Detection frequency (%)	100	27	40	0	44	88	0	19	100	89
Minimum Detection	210	0.06	0.045	N/A	0.0011	0.0368	N/A	0.0022	78	0.02
Maximum Detection	430	0.225	12.6	N/A	0.0294	0.768	N/A	0.0135	162	120
Minimum Nondetect	N/A	< 0.014	< 0.05	< 0.005	< 0.001	< 0.0231	< 0.001	< 0.002	N/A	< 0.75
Maximum Nondetect	N/A	< 0.0985	< 0.4	< 0.031	< 0.002	< 0.0737	< 0.002	< 0.005	N/A	< 35
Distribution	N*	U	U	U	U	L	U	U	L*	U
Normal										
Mean	327	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	57.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	0.177	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	349	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	422	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lognormal										
Mean	N/A	N/A	N/A	N/A	N/A	0.320	N/A	N/A	115	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	0.605	N/A	N/A	24.7	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	0.768	N/A	N/A	127	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	0.768	N/A	N/A	159	N/A
Nonparametric										
Median	N/A	< 0.036	< 0.1	< 0.03	< 0.002	N/A	< 0.001	< 0.003	N/A	20
95% UCL	N/A	0.06	< 0.3	< 0.031	0.0021	N/A	< 0.001	< 0.005	N/A	23
95th Percentile	N/A	0.225	4.2	< 0.031	0.0294	N/A	< 0.002	0.0135	N/A	73

Table 6-5 (Continued)
Summary Statistics of Unfiltered Inorganic Constituents for Background Monitoring Wells in the Great Miami Aquifer

Statistics	Chromium	Cobalt	Copper	Cyanide	Fluoride	Iron	Lead	Magnesium	Manganese
No. of analyses	16	15	16	16	113	15	15	16	16
No. of detections	2	1	2	0	110	14	1	16	16
Detection frequency (%)	13	7	13	0	97	93	7	100	100
Minimum Detection	0.0067	N/A	0.0113	N/A	0.1	0.312	N/A	20.1	0.0043
Maximum Detection	0.0211	0.0086	0.0354	N/A	1.9	5.5	0.002	39	0.904
Minimum Nondetect	< 0.003	< 0.005	< 0.003	< 0.00002	< 0.1	N/A	< 0.001	N/A	N/A
Maximum Nondetect	< 0.0214	< 0.01	< 0.01	< 0.02	< 0.5	< 0.0481	< 0.003	N/A	N/A
Distribution	U	U	U	U	LQ	N	U	N*	L
Normal									
Mean	N/A	N/A	N/A	N/A	N/A	2.74	N/A	30.0	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	1.81	N/A	5.16	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A	0.663	N/A	0.172	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	3.56	N/A	32.3	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	5.72	N/A	38.5	N/A
Lognormal									
Mean	N/A	N/A	N/A	N/A	0.38	N/A	N/A	N/A	0.268
Standard deviation	N/A	N/A	N/A	N/A	0.27	N/A	N/A	N/A	0.561
95% UCL	N/A	N/A	N/A	N/A	0.43	N/A	N/A	N/A	0.781
95th Percentile	N/A	N/A	N/A	N/A	0.89	N/A	N/A	N/A	0.904
Nonparametric									
Median	< 0.004	< 0.008	< 0.00455	< 0.01	N/A	N/A	< 0.002	N/A	N/A
95% UCL	< 0.01	< 0.009	< 0.0058	< 0.01	N/A	N/A	< 0.002	N/A	N/A
95th Percentile	0.0211	0.0086	0.0354	< 0.02	N/A	N/A	0.002	N/A	N/A

Table 6-5 (Continued)
Summary Statistics of Unfiltered Inorganic Constituents for Background Monitoring Wells in the Great Miami Aquifer

Statistics	Mercury	Molybdenum	Nickel	Nitrate	Nitrate/ Nitrite	Phosphorus	Potassium	Selenium	Silicon
No. of analyses	15	8	16	64	12	102	16	15	1
No. of detections	0	0	1	52	4	75	13	1	1
Detection frequency (%)	0	0	6	81	33	74	81	7	100
Minimum Detection	N/A	N/A	N/A	0.014	0.02	0.01	0.648	N/A	N/A
Maximum Detection	N/A	N/A	0.0514	24.9	4.1	3.08	1.96	0.00075	5.81
Minimum Nondetect	< 0.0002	< 0.01	< 0.011	< 0.02	< 0.05	< 0.01	< 1.44	< 0.001	N/A
Maximum Nondetect	< 0.0002	< 0.02	< 0.031	< 0.1	< 0.05	< 0.05	< 2.09	< 0.002	N/A
Distribution	U	U	U	U	U	U	L*	U	U
Normal									
Mean	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lognormal									
Mean	N/A	N/A	N/A	N/A	N/A	N/A	1.19	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A	0.437	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A	1.42	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A	1.96	N/A	N/A
Nonparametric									
Median	< 0.0002	< 0.011	< 0.02	0.835	< 0.05	0.055	N/A	< 0.001	5.81
95% UCL	< 0.0002	< 0.015	< 0.031	1.88	0.051	0.08	N/A	< 0.002	5.81
95th Percentile	< 0.0002	< 0.02	0.0514	11.4	4.1	0.954	N/A	0.00075	5.81

Table 6-5 (Continued)
Summary Statistics of Unfiltered Inorganic Constituents for Background Monitoring Wells in the Great Miami Aquifer

Statistics	Silver	Sodium	Sulfate	Sulfide	Thallium	TKN	Total Solids	Vanadium	Zinc
No. of analyses	16	16	110	6	15	53	18	16	14
No. of detections	1	16	101	0	0	38	18	2	2
Detection frequency (%)	6	100	92	0	0	72	100	13	14
Minimum Detection	N/A	3.08	2.79	N/A	N/A	0.1	330	0.0076	0.0087
Maximum Detection	0.0117	50.4	321	N/A	N/A	4.74	773	0.0117	0.021
Minimum Nondetect	< 0.003	N/A	< 2	< 0.5	< 0.001	< 0.1	N/A	< 0.003	< 0.0034
Maximum Nondetect	< 0.01	N/A	< 2	< 0.5	< 0.003	< 0.4	N/A	< 0.01	< 0.0378
Distribution	U	N*	U	U	U	LQ	L*	U	U
Normal									
Mean	N/A	22.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	15.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	0.664	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	29.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	47.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lognormal									
Mean	N/A	N/A	N/A	N/A	N/A	0.890	491	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	2.05	121	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	1.48	546	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	3.30	711	N/A	N/A
Nonparametric									
Median	< 0.004	N/A	43.4	< 0.5	< 0.002	N/A	N/A	< 0.0055	< 0.0111
95% UCL	< 0.005	N/A	54.4	< 0.5	< 0.003	N/A	N/A	< 0.007	< 0.0229
95th Percentile	0.0117	N/A	197	< 0.5	< 0.003	N/A	N/A	0.0117	0.021

Note:
(1) Concentrations are reported in mg/L.
(2) N/A = Not applicable.
(3) Distribution types: N = Normal, L = Lognormal, N* = Normal (but also passed Lognormal test), L* = Lognormal (but also passed Normal test), NQ = Qualified Normal, LQ = Qualified Lognormal, U = Undefined.
(4) Mean types: Normal = arithmetic mean, Lognormal = estimated mean of a lognormal distribution.
(5) Standard deviation types: Normal = arithmetic standard deviation, Lognormal = estimated standard deviation of a lognormal distribution.

Table 6-6
Summary Statistics for Dissolved Oxygen, pH, and Specific Conductivity from Background Monitoring Wells in the Great Miami Aquifer

Statistics	Dissolved Oxygen (mg/L)	pH (SU)	Specific Conductivity (umhos/cm)
No. of analyses	93	131	131
No. of detections	93	131	131
Detection frequency (%)	100	100	100
Minimum Detection	0.1	6.3	370
Maximum Detection	10.4	7.9	1890
Minimum Nondetect	N/A	N/A	N/A
Maximum Nondetect	N/A	N/A	N/A
Distribution	L	NQ	LQ
Normal			
Mean	N/A	7.2	N/A
Standard deviation	N/A	0.26	N/A
Coefficient of variation	N/A	0.036	N/A
95% UCL	N/A	7.3	N/A
95th Percentile	N/A	7.7	N/A
Lognormal			
Mean	2.35	N/A	635
Standard deviation	3.59	N/A	161
95% UCL	3.07	N/A	659
95th Percentile	7.84	N/A	928
Nonparametric			
Median	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A

Note:
(1) N/A = Not applicable.
(2) Distribution types: N = Normal, L = Lognormal, N* = Normal (but also passed Lognormal test), L* = Lognormal (but also passed Normal test), NQ = Qualified Normal, LQ= Qualified Lognormal, U = Undefined.
(3) Mean types: Normal = arithmetic mean, Lognormal = estimated mean of a lognormal distribution.
(4) Standard deviation types: Normal = arithmetic standard deviation, Lognormal = estimated standard deviation of a lognormal distribution.

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Table 6-7
Summary Statistics for Phenols, Total Organic Carbon, Total Organic Halides, and Total Organic Nitrogen from Background Monitoring Wells in the Great Miami Aquifer

Statistics	Phenols	Total Organic Carbon	Total Organic Halides	Total Organic Nitrogen
No. of analyses	94	25	85	86
No. of detections	46	17	13	61
Detection frequency (%)	49	68	15	71
Minimum Detection	0.00575	1	0.012	0.075
Maximum Detection	0.091	4.25	0.12	2.75
Minimum Nondetect	< 0.005	< 1	< 0.01	< 0.1
Maximum Nondetect	< 0.014	< 1	< 0.05	< 0.21
Distribution	U	NQ	U	U
Normal				
Mean	N/A	1.80	N/A	N/A
Standard deviation	N/A	1.26	N/A	N/A
Coefficient of variation	N/A	0.697	N/A	N/A
95% UCL	N/A	2.23	N/A	N/A
95th Percentile	N/A	3.87	N/A	N/A
Lognormal				
Mean	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A
Nonparametric				
Median	< 0.012	N/A	< 0.05	0.113
95% UCL	0.01	N/A	< 0.05	0.2
95th Percentile	0.03	N/A	0.052	0.9

Note:
(1) Concentrations are reported in mg/L.
(2) N/A = Not applicable.
(3) Distribution types: N = Normal, L = Lognormal, N* = Normal (but also passed Lognormal test), L* = Lognormal (but also passed Normal test), NQ = Qualified Normal, LQ= Qualified Lognormal, U = Undefined.
(4) Mean types: Normal = arithmetic mean, Lognormal = estimated mean of a lognormal distribution.
(5) Standard deviation types: Normal = arithmetic standard deviation, Lognormal = estimated standard deviation of a lognormal distribution.

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Table 6-8
Organic Constituents Detected for
Background Monitoring Wells in the Great Miami Aquifer

Sample Location	Sample Date	Sample ID	Constituent	Concentration (ug/L)	Validation Qualifier
Volatile Organic Compounds					
3043	13-Jun-89	66439	1,1-Dichloroethene	2	J
3024	12-Apr-93	GW930412-8	2-Butanone *	37	J
4096	6-May-93	GW930506-7	2-Butanone *	88	-
2066	9-Aug-89	66498	Acetone *	6	J
3043	13-Jun-89	66439	Benzene	2	J
3043	30-Aug-89	66573	Carbon disulfide	3	J
4011	5-Oct-90	4345	Chlorobenzene	1	J
3043	13-Jun-89	66439	Chlorobenzene	2	J
3043	13-Jun-89	66439	Toluene *	3	J
4096	6-May-93	GW930506-7	Toluene *	8	J
3043	13-Jun-89	66439	Trichloroethene	2	J
Semivolatile Organic Compounds					
2043	13-Sep-89	66585	bis(2-Ethylhexyl)phthalate *	2	J
3043	13-Sep-89	66586	bis(2-Ethylhexyl)phthalate *	15	-
2728	4-Apr-93	113514	Butyl benzyl phthalate *	4	J
3043	13-Sep-89	66586	Di-n-butyl phthalate *	10	-
2043	13-Sep-89	66585	Phenol	2	J

* These organic constituents are common laboratory contaminants.

000104

7.0 GREAT MIAMI RIVER

This chapter presents the results of radiological and chemical analyses of surface water collected from background sampling point W-1 in the Great Miami River. Figure 7-1 shows unfiltered total uranium data (nonvalidated) collected by the EM Program at W-1 for a seven-year period. For a portion of this period the location of W-1 was moved approximately nine miles upriver while the State Route 126 bridge at Ross was rebuilt (the usual W-1 location). As seen from Figure 7-1, the total uranium concentrations measured at W-1 were undistinguishable before, during, and after the temporary relocation of W-1.

RI/FS samples were collected from sampling point W-1 on three occasions in 1988 and 1989. Sampling was conducted on two more occasions in 1993 for inorganic and organic constituents. EM Program data (nonvalidated) from W-1 for 1991 are shown in Table 7-1 for several parameters. The results of statistical computations to characterize Great Miami River background water quality are shown in Tables 7-2 through 7-7. Only validated RI/FS data were used to calculate these statistics.

7.1 RADIOLOGICAL CONSTITUENTS

Descriptive statistics for W-1 unfiltered radiological data are presented in Table 7-2. A total of 17 radiological parameters were evaluated. Of these, there were no detects for eight of the unfiltered parameters and only one detect for three other parameters. Only thorium-228, thorium-230, total uranium, uranium-234, and uranium-238 had three or more detections out of five sampling events. The median total uranium value (undefined distribution) is 1 μg/L. Figure 7-1 shows that unfiltered total uranium values at sampling point W-1 for the period 1986 through 1993 typically ranged between 1 and 2 μg/L.

Table 7-3 presents the descriptive statistics of filtered radiological data for the Great Miami River. Filtered samples were collected on three different dates from W-1 and evaluated for the same 17 unfiltered radiological parameters. Ten of the filtered parameters had no detections. In general, the median values of the filtered radiological parameters are nearly the same as the corresponding unfiltered radiological parameters for W-1.

7.2 INORGANIC CONSTITUENTS

Descriptive statistics calculated for filtered and unfiltered inorganic data are presented in Tables 7-4 and 7-5, respectively. Because of the relatively limited number of RI/FS samples, all data distributions are undefined.

For the filtered inorganics, 26 different parameters were analyzed (Table 7-4). For the unfiltered inorganics, 35 different parameters were analyzed (Table 7-5). Of the 26 parameters common to both

groups, the median filtered and unfiltered data were similar, except for aluminum, iron, manganese, silicon, and zinc. For these five parameters, the unfiltered medians were considerably higher than the filtered median values. This should be expected, since these five elements are common to silt and clay particles, which are contained in the unfiltered samples.

Only one value of pH and specific conductivity field parameters has been measured. These values are 8.3 SU and 666 μmhos/cm, respectively.

7.3 ORGANIC CONSTITUENTS

Table 7-6 presents descriptive statistics for the four general organic parameters: phenols, TOC, TOX, and TON. These data indicate that low levels of organic compounds are present in the Great Miami River, which is to be expected because towns, sewage treatment plants, and industries are located upstream of the FEMP. The identity of the sources of these compounds cannot be determined based on these indicator tests. The TOX values suggest low levels of halogenated compounds are present in the stream.

Sampling point W-1 has been sampled and analyzed for VOCs, SVOCs, pesticides, PCBs, and organophosphorus pesticides on two different occasions in 1993. Only very low estimated values for acetone, methylene chloride, and bis (2-Ethelhexyl)phthalate were detected. Each of these constituents is a common laboratory contaminant and the results are likely caused by cross-contamination.

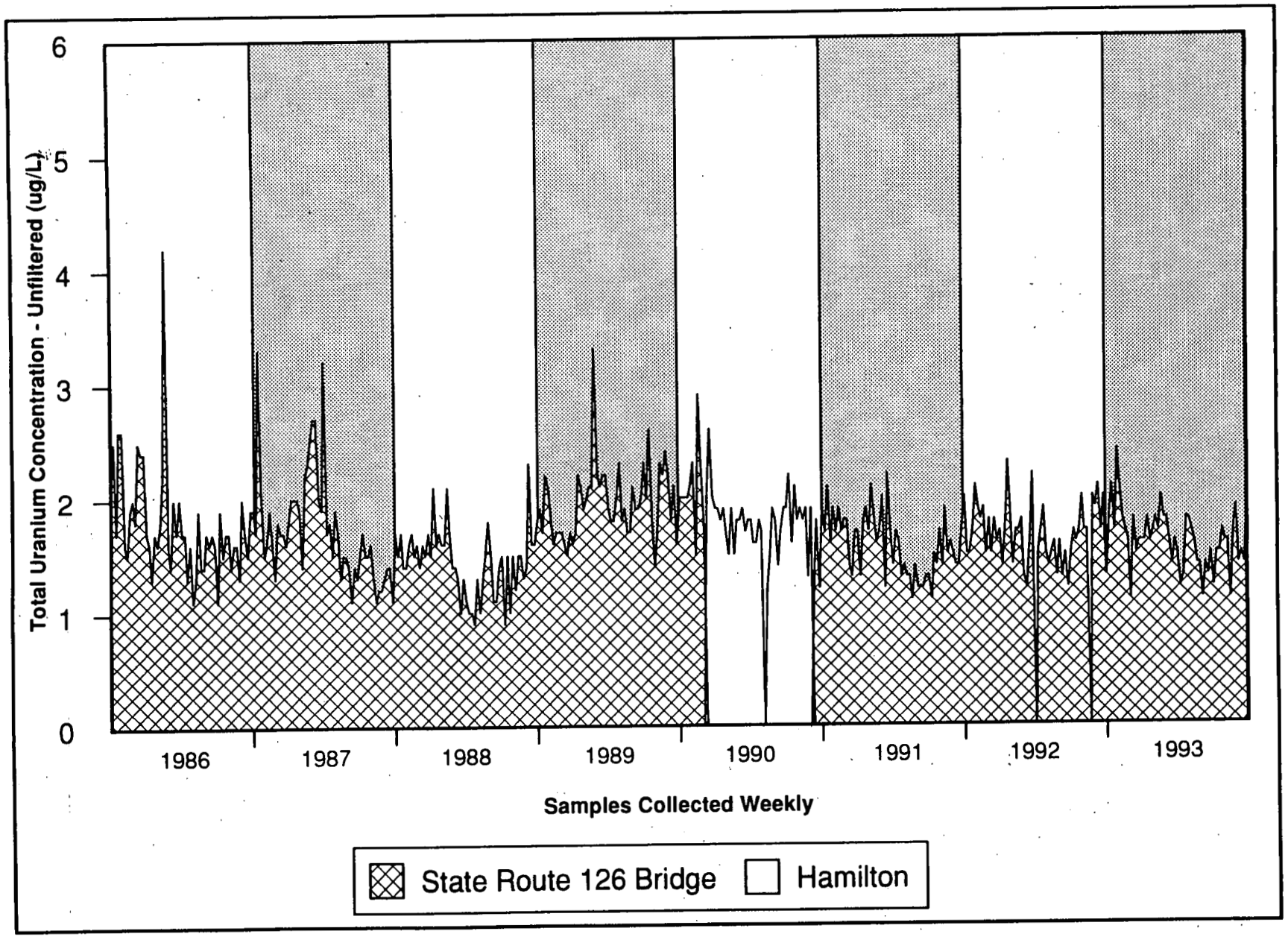

Figure 7-1. Total Uranium Background Concentrations
Measured for Great Miami River at Sampling Point W-1

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Table 7-1

Summary of Background Surface Water Quality Data Collected by EM at Sampling Point W-1 on the Great Miami River

Parameter		Number of Samples	Minimum	Maximum	Average
pH	(SU)	52	7.7	8.8	8.3
Fluoride	(mg/L)	52	0.2	1.0	0.48
Nitrate-Nitrogen	(mg/L)	49	1.0	<5.0	3.9
Total Uranium	(μg/L)	52	0.74	1.5	1.1
Radium - 226[a]	(pCi/L)	12	<0.1	0.1	<0.1
Radium - 228[a]	(pCi/L)	12	<0.1	0.2	0.1
Strontium - 90[a]	(pCi/L)	2	<1.3	1.7	---
Cesium - 137[a]	(pCi/L)	2	<4.1	<5.3	---
Technetium - 99[a]	(pCi/L)	2	<7.7	<7.9	---

[a]One-month composites of daily samples.

Note: Data are from unfiltered samples; data source (WEMCO 1992).

Table 7-2
Summary Statistics of Unfiltered Radiological Constituents for Background Surface Water in the Great Miami River

Statistics	Cesium-137	Neptunium-237	Plutonium-238	Plutonium-239/240	Radium-226	Radium-228
No. of analyses	4	5	5	5	4	5
No. of detections	0	0	0	0	1	1
Detection frequency (%)	0	0	0	0	25	20
Minimum Detection	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Detection	N/A	N/A	N/A	N/A	0.41	2.2
Minimum Nondetect	< 8	< 0.22	< 0.038	< 0.038	< 0.12	< 1.6
Maximum Nondetect	< 11	< 0.32	< 0.39	< 0.39	< 0.3	< 2.3
Distribution	U	U	U	U	U	U
Normal						
Mean	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A
Lognormal						
Mean	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A
Nonparametric						
Median	< 9	< 0.23	< 0.046	< 0.046	< 0.25	< 2.2
95% UCL	< 11	< 0.32	< 0.39	< 0.39	0.41	2.2
95th Percentile	< 11	< 0.32	< 0.39	< 0.39	0.41	2.2

Table 7-2 (Continued)
Summary Statistics of Unfiltered Radiological Constituents for Background Surface Water in the Great Miami River

Statistics	Ruthenium-106	Strontium-90	Technetium-99	Total Thorium	Thorium-228	Thorium-230
No. of analyses	4	5	5	N/A	5	5
No. of detections	0	0	0	N/A	3	4
Detection frequency (%)	0	0	0	N/A	60	80
Minimum Detection	N/A	N/A	N/A	N/A	0.54	0.26
Maximum Detection	N/A	N/A	N/A	N/A	0.62	0.36
Minimum Nondetect	< 63	< 0.91	< 8	N/A	< 0.2	N/A
Maximum Nondetect	< 92	< 1.3	< 18	N/A	< 0.23	< 0.2
Distribution	U	U	U	N/A	U	U
Normal						
Mean	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A
Lognormal						
Mean	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A
Nonparametric						
Median	< 80	< 1.1	< 15	< 1.8 *	0.54	0.27
95% UCL	< 92	< 1.3	< 18	< 2.9 *	0.62	0.36
95th Percentile	< 92	< 1.3	< 18	< 2.9 *	0.62	0.36

Table 7-2 (Continued)
Summary Statistics of Unfiltered Radiological Constituents for Background Surface Water in the Great Miami River

Statistics	Thorium-232	Total Uranium	Uranium-234	Uranium-235/236	Uranium-238
No. of analyses	5	5	5	5	5
No. of detections	0	5	5	1	3
Detection frequency (%)	0	100	100	20	60
Minimum Detection	N/A	0.74	0.3	N/A	0.59
Maximum Detection	N/A	1.4	1.1	0.25	0.76
Minimum Nondetect	< 0.17	N/A	N/A	< 0.15	< 0.26
Maximum Nondetect	< 0.32	N/A	N/A	< 0.27	< 0.27
Distribution	U	U	U	U	U
Normal					
Mean	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A
Lognormal					
Mean	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A
Nonparametric					
Median	< 0.2	1	0.53	< 0.26	0.59
95% UCL	< 0.32	1.4	1.1	0.25	0.76
95th Percentile	< 0.32	1.4	1.1	0.25	0.76

Note:
(1) Concentrations are reported in pCi/L except Total Thorium and Total Uranium, which are in ug/L.
(2) N/A = Not applicable.
(3) Distribution types: N = Normal, L = Lognormal, N* = Normal (but also passed Lognormal test), L* = Lognormal (but also passed Normal test), NQ = Qualified Normal, LQ = Qualified Lognormal, U = Undefined.
(4) Mean types: Normal = arithmetic mean, Lognormal = estimated mean of a lognormal distribution.
(5) Standard deviation types: Normal = arithmetic standard deviation, Lognormal = estimated standard deviation of a lognormal distribution.
* Total Thorium statistics are calculated from Thorium-232 statistics.

Table 7-3
Summary Statistics of Filtered Radiological Constituents for Background Surface Water in the Great Miami River

Statistics	Cesium-137	Neptunium-237	Plutonium-238	Plutonium-239/240	Radium-226	Radium-228
No. of analyses	2	3	3	3	3	3
No. of detections	0	0	0	0	0	0
Detection frequency (%)	0	0	0	0	0	0
Minimum Detection	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Detection	N/A	N/A	N/A	N/A	N/A	N/A
Minimum Nondetect	< 9	< 0.24	< 0.03	< 0.03	< 0.1	< 1.7
Maximum Nondetect	< 11	< 0.28	< 0.4	< 0.4	< 0.4	< 2.3
Distribution	U	U	U	U	U	U
Normal						
Mean	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A
Lognormal						
Mean	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A
Nonparametric						
Median	< 10	< 0.25	< 0.04	< 0.04	< 0.2	< 1.8
95% UCL	< 11	< 0.28	< 0.4	< 0.4	< 0.4	< 2.3
95th Percentile	< 11	< 0.28	< 0.4	< 0.4	< 0.4	< 2.3

Table 7-3 (Continued)
Summary Statistics of Filtered Radiological Constituents for Background Surface Water in the Great Miami River

Statistics	Ruthenium-106	Strontium-90	Technetium-99	Total Thorium	Thorium-228	Thorium-230
No. of analyses	2	3	2	N/A	3	3
No. of detections	0	0	0	N/A	2	2
Detection frequency (%)	0	0	0	N/A	67	67
Minimum Detection	N/A	N/A	N/A	N/A	0.79	0.38
Maximum Detection	N/A	N/A	N/A	N/A	0.86	0.62
Minimum Nondetect	N/A	< 0.94	< 8	N/A	N/A	N/A
Maximum Nondetect	< 74	< 1.2	< 10	N/A	< 0.3	< 0.3
Distribution	U	U	U	N/A	U	U
Normal						
Mean	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A
Lognormal						
Mean	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A
Nonparametric						
Median	< 74	< 1.1	< 9	< 2.4 *	0.79	0.38
95% UCL	< 74	< 1.2	< 10	2.5 *	0.86	0.62
95th Percentile	< 74	< 1.2	< 10	2.5 *	0.86	0.62

Table 7-3 (Continued)
Summary Statistics of Filtered Radiological Constituents for Background Surface Water in the Great Miami River

Statistics	Thorium-232	Total Uranium	Uranium-234	Uranium-235/236	Uranium-238
No. of analyses	3	3	3	3	3
No. of detections	1	3	3	0	3
Detection frequency (%)	33	100	100	0	100
Minimum Detection	N/A	0.52	0.44	N/A	0.44
Maximum Detection	0.27	1.1	0.5	N/A	0.50
Minimum Nondetect	< 0.24	N/A	N/A	< 0.22	N/A
Maximum Nondetect	< 0.27	N/A	N/A	< 0.37	N/A
Distribution	U	U	U	U	U
Normal					
Mean	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A
Lognormal					
Mean	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A
Nonparametric					
Median	< 0.27	1	0.46	< 0.25	0.45
95% UCL	0.27	1.1	0.5	< 0.37	0.50
95th Percentile	0.27	1.1	0.5	< 0.37	0.50

Note:
(1) Concentrations are reported in pCi/L except Total Thorium and Total Uranium, which are in ug/L.
(2) N/A = Not applicable.
(3) Distribution types: N = Normal, L = Lognormal, N* = Normal (but also passed Lognormal test), L* = Lognormal (but also passed Normal test), NQ = Qualified Normal, LQ = Qualified Lognormal, U = Undefined.
(4) Mean types: Normal = arithmetic mean, Lognormal = estimated mean of a lognormal distribution.
(5) Standard deviation types: Normal = arithmetic standard deviation, Lognormal = estimated standard deviation of a lognormal distribution.
* Total Thorium statistics are calculated from Thorium-232 statistics.

Table 7-4
Summary Statistics of Filtered Inorganic Constituents for Background Surface Water in the Great Miami River

Statistics	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper
No. of analyses	2	2	3	4	2	4	4	4	2	4
No. of detections	2	0	2	4	0	0	4	0	0	0
Detection frequency (%)	100	0	67	100	0	0	100	0	0	0
Minimum Detection	0.0861	N/A	0.00165	0.0749	N/A	N/A	66	N/A	N/A	N/A
Maximum Detection	0.115	N/A	0.0024	0.1	N/A	N/A	79	N/A	N/A	N/A
Minimum Nondetect	N/A	< 0.005	N/A	N/A	< 0.002	< 0.002	N/A	< 0.01	< 0.01	< 0.01
Maximum Nondetect	N/A	< 0.005	< 0.002	N/A	< 0.002	< 0.005	N/A	< 0.02	< 0.01	< 0.01
Distribution	U	U	U	U	U	U	U	U	U	U
Normal										
Mean	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lognormal										
Mean	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nonparametric										
Median	0.100	< 0.005	0.00165	0.0856	< 0.002	< 0.005	72	< 0.015	< 0.01	< 0.01
95% UCL	0.115	< 0.005	0.002	0.1	< 0.002	< 0.005	79	< 0.02	< 0.01	< 0.01
95th Percentile	0.115	< 0.005	0.002	0.1	< 0.002	< 0.005	79	< 0.02	< 0.01	< 0.01

Table 7-4 (Continued)
Summary Statistics of Filtered Inorganic Constituents for Background Surface Water in the Great Miami River

Statistics	Cyanide	Iron	Lead	Magnesium	Manganese	Mercury	Molybdenum	Nickel	Potassium
No. of analyses	2	4	3	4	4	4	4	4	4
No. of detections	2	0	0	4	0	0	0	0	4
Detection frequency (%)	100	0	0	100	0	0	0	0	100
Minimum Detection	0.0022	N/A	N/A	27.2	N/A	N/A	N/A	N/A	3.4
Maximum Detection	0.0041	N/A	N/A	34.9	N/A	N/A	N/A	N/A	6.2
Minimum Nondetect	N/A	< 0.005	< 0.002	N/A	< 0.001	< 0.0002	< 0.01	< 0.02	N/A
Maximum Nondetect	N/A	< 0.05	< 0.004	N/A	< 0.02	< 0.0002	< 0.02	< 0.02	N/A
Distribution	U	U	U	U	U	U	U	U	U
Normal									
Mean	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lognormal									
Mean	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nonparametric									
Median	0.0031	< 0.02	< 0.002	29.4	< 0.01	< 0.0002	< 0.02	< 0.02	3.7
95% UCL	0.0041	< 0.05	< 0.004	34.9	< 0.02	< 0.0002	< 0.02	< 0.02	6.2
95th Percentile	0.0041	< 0.05	< 0.004	34.9	< 0.02	< 0.0002	< 0.02	< 0.02	6.2

Table 7-4 (Continued)
Summary Statistics of Filtered Inorganic Constituents for Background Surface Water in the Great Miami River

Statistics	Selenium	Silicon	Silver	Sodium	Thallium	Vanadium	Zinc
No. of analyses	3	2	3	4	2	2	2
No. of detections	0	2	0	4	0	0	0
Detection frequency (%)	0	100	0	100	0	0	0
Minimum Detection	N/A	2.50	N/A	27.1	N/A	N/A	N/A
Maximum Detection	N/A	3.04	N/A	77.2	N/A	N/A	N/A
Minimum Nondetect	< 0.002	N/A	< 0.01	N/A	< 0.002	< 0.01	< 0.0063
Maximum Nondetect	< 0.002	N/A	< 0.01	N/A	< 0.002	< 0.01	< 0.0148
Distribution	U	U	U	U	U	U	U
Normal							
Mean	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lognormal							
Mean	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nonparametric							
Median	< 0.002	2.77	< 0.01	52.6	< 0.002	< 0.01	< 0.0105
95% UCL	< 0.002	3.04	< 0.01	77.2	< 0.002	< 0.01	< 0.0148
95th Percentile	< 0.002	3.04	< 0.01	77.2	< 0.002	< 0.01	< 0.0148

Note:
(1) Concentrations are reported in mg/L.
(2) N/A = Not applicable.
(3) Distribution types: N = Normal, L = Lognormal, N* = Normal (but also passed Lognormal test), L* = Lognormal (but also passed Normal test), NQ = Qualified Normal, LQ = Qualified Lognormal, U = Undefined.
(4) Mean types: Normal = arithmetic mean, Lognormal = estimated mean of a lognormal distribution.
(5) Standard deviation types: Normal = arithmetic standard deviation, Lognormal = estimated standard deviation of a lognormal distribution.

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Table 7-5
Summary Statistics of Unfiltered Inorganic Constituents for Background Surface Water in the Great Miami River

Statistics	Alkalinity as CaCO3	Aluminum	Ammonia	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium
No. of analyses	2	2	4	2	4	5	2	5	5
No. of detections	2	2	2	0	2	5	0	2	5
Detection frequency (%)	100	100	50	0	50	100	0	40	100
Minimum Detection	232	1.3	0.1	N/A	0.0018	0.049	N/A	0.006	61.2
Maximum Detection	245	1.89	0.11	N/A	0.0036	0.1	N/A	0.0098	77
Minimum Nondetect	N/A	N/A	< 0.1	< 0.005	< 0.002	N/A	< 0.002	< 0.002	N/A
Maximum Nondetect	N/A	N/A	< 0.1	< 0.005	< 0.005	N/A	< 0.002	< 0.005	N/A
Distribution	U	U	U	U	U	U	U	U	U
Normal									
Mean	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lognormal									
Mean	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nonparametric									
Median	238	1.60	0.075	< 0.005	0.0021	0.089	< 0.002	< 0.005	70.4
95% UCL	245	1.89	0.11	< 0.005	0.0036	0.1	< 0.002	0.0098	77
95th Percentile	245	1.89	0.11	< 0.005	0.0036	0.1	< 0.002	0.0098	77

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Table 7-5 (Continued)
Summary Statistics of Unfiltered Inorganic Constituents for Background Surface Water in the Great Miami River

Statistics	Chloride	Chromium	Cobalt	Copper	Cyanide	Fluoride	Iron	Lead	Magnesium
No. of analyses	5	5	2	5	2	5	5	4	5
No. of detections	5	0	0	1	2	5	5	1	5
Detection frequency (%)	100	0	0	20	100	100	100	25	100
Minimum Detection	18.0	N/A	N/A	N/A	0.0030	0.27	0.164	N/A	21.5
Maximum Detection	325	N/A	N/A	0.0118	0.0052	0.9	2.23	0.010	33.9
Minimum Nondetect	N/A	< 0.002	< 0.01	< 0.0091	N/A	N/A	N/A	< 0.002	N/A
Maximum Nondetect	N/A	< 0.02	< 0.01	< 0.01	N/A	N/A	N/A	< 0.01	N/A
Distribution	U	U	U	U	U	U	U	U	U
Normal									
Mean	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lognormal									
Mean	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nonparametric									
Median	53.1	< 0.01	< 0.01	< 0.01	0.0041	0.33	0.7	< 0.0077	28.7
95% UCL	325	< 0.02	< 0.01	0.0118	0.0052	0.9	2.23	0.010	33.9
95th Percentile	325	< 0.02	< 0.01	0.0118	0.0052	0.9	2.23	0.010	33.9

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Table 7-5 (Continued)
Summary Statistics of Unfiltered Inorganic Constituents for Background Surface Water in the Great Miami River

Statistics	Manganese	Mercury	Molybdenum	Nickel	Nitrate	Phosphorus	Potassium	Selenium	Silicon
No. of analyses	5	4	5	5	5	5	5	4	2
No. of detections	5	0	1	2	5	5	5	0	2
Detection frequency (%)	100	0	20	40	100	100	100	0	100
Minimum Detection	0.0089	N/A	N/A	0.011	0.4	0.12	2.3	N/A	4.47
Maximum Detection	0.082	N/A	0.02	0.023	6.58	1.1	6.08	N/A	5.90
Minimum Nondetect	N/A	< 0.0002	< 0.003	< 0.02	N/A	N/A	N/A	< 0.002	N/A
Maximum Nondetect	N/A	< 0.0002	< 0.02	< 0.02	N/A	N/A	N/A	< 0.002	N/A
Distribution	U	U	U	U	U	U	U	U	U
Normal									
Mean	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lognormal									
Mean	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nonparametric									
Median	0.07	< 0.0002	< 0.02	< 0.02	3.7	0.30	3.82	< 0.002	5.18
95% UCL	0.082	< 0.0002	0.02	0.023	6.58	1.1	6.08	< 0.002	5.90
95th Percentile	0.082	< 0.0002	0.02	0.023	6.58	1.1	6.08	< 0.002	5.90

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Table 7-5 (Continued)
Summary Statistics of Unfiltered Inorganic Constituents for Background Surface Water in the Great Miami River

Statistics	Silver	Sodium	Sulfate	Sulfide	Thallium	TKN	Vanadium	Zinc
No. of analyses	5	5	4	1	2	2	2	2
No. of detections	0	5	4	0	0	2	0	1
Detection frequency (%)	0	100	100	0	0	100	0	50
Minimum Detection	N/A	12.9	45.6	N/A	N/A	1.11	N/A	N/A
Maximum Detection	N/A	75.8	138	N/A	N/A	1.84	N/A	0.0446
Minimum Nondetect	< 0.0005	N/A	N/A	N/A	< 0.002	N/A	< 0.01	N/A
Maximum Nondetect	< 0.03	N/A	N/A	< 0.5	< 0.002	N/A	< 0.01	< 0.0324
Distribution	U	U	U	U	U	U	U	U
Normal								
Mean	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lognormal								
Mean	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nonparametric								
Median	< 0.01	27.2	89.3	< 0.5	< 0.002	1.47	< 0.01	0.0304
95% UCL	< 0.03	75.8	138	< 0.5	< 0.002	1.84	< 0.01	0.0446
95th Percentile	< 0.03	75.8	138	< 0.5	< 0.002	1.84	< 0.01	0.0446

Note:
(1) Concentrations are reported in mg/L.
(2) N/A = Not applicable.
(3) Distribution types: N = Normal, L = Lognormal, N* = Normal (but also passed Lognormal test), L* = Lognormal (but also passed Normal test), NQ = Qualified Normal, LQ = Qualified Lognormal, U = Undefined.
(4) Mean types: Normal = arithmetic mean, Lognormal = estimated mean of a lognormal distribution.
(5) Standard deviation types: Normal = arithmetic standard deviation, Lognormal = estimated standard deviation of a lognormal distribution.

Table 7-6
Summary Statistics for Phenols, Total Organic Carbon, Total Organic Halides, and Total Organic Nitrogen from Background Surface Water in the Great Miami River

Statistics	Phenols	Total Organic Carbon	Total Organic Halides	Total Organic Nitrogen
No. of analyses	4	2	5	5
No. of detections	1	2	4	5
Detection frequency (%)	25	100	80	100
Minimum Detection	N/A	1.97	0.0189	0.2
Maximum Detection	0.01	3.06	0.25	1.73
Minimum Nondetect	< 0.01	N/A	N/A	N/A
Maximum Nondetect	< 0.01	N/A	< 0.05	N/A
Distribution	U	U	U	U
Normal				
Mean	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A
Lognormal				
Mean	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A
Nonparametric				
Median	< 0.01	2.51	0.025	1.1
95% UCL	0.01	3.06	0.25	1.73
95th Percentile	0.01	3.06	0.25	1.73

Note:
(1) Concentrations are reported in mg/L.
(2) N/A = Not applicable.
(3) Distribution types: N = Normal, L = Lognormal, N* = Normal (but also passed Lognormal test), L* = Lognormal (but also passed Normal test), NQ = Qualified Normal, LQ= Qualified Lognormal, U = Undefined.
(4) Mean types: Normal = arithmetic mean, Lognormal = estimated mean of a lognormal distribution.
(5) Standard deviation types: Normal = arithmetic standard deviation, Lognormal = estimated standard deviation of a lognormal distribution.

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Table 7-7
Organic Constituents Detected for
Background Surface Water in the Great Miami River

Sample Location	Sample Date	Sample ID	Constituent	Concentration (ug/L)	Validation Qualifier
Volatile Organic Compounds					
W-1	20-May-93	120068-1	Acetone *	2	J
W-1	20-May-93	120064-2	Acetone *	3	J
W-1	20-May-93	120075-2	Methylene chloride *	10	J
Semivolatile Organic Compound					
W-1	23-Jun-93	120414	bis(2-Ethylhexyl)phthalate *	1	J

* These organic constituents are common laboratory contaminants.

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8.0 PADDYS RUN

This chapter presents the results of radiological and chemical analyses of surface water samples collected from sampling point W-5 in Paddys Run. Figure 8-1 shows unfiltered total uranium data (nonvalidated) collected by the EM Program at W-5 for a seven-year period. Table 8-1 shows 1991 EM Program data from W-5 for several parameters.

No validated background samples for Paddys Run were available prior to 1993. Since then, RI/FS samples have been collected from W-5 on two occasions. Data results from these samples used to characterize background in Paddys Run are provided in Tables 8-2 through 8-6. Sampling point W-5 for the RI/FS samples is in Paddys Run, just upstream of where it crosses under State Route 126.

8.1 RADIOLOGICAL CONSTITUENTS

Descriptive statistics for 16 unfiltered radiological parameters are presented in Table 8-2. Each parameter has data for either one or two sampling events. Half of the 16 parameters had no detected values. The two detections for unfiltered total uranium were 0.90 μg/L and 1.1 μg/L. This compares closely to the long-term average of unfiltered total uranium displayed in Figures 8-1, which is about 1.2 μg/L. The median values for total uranium, uranium-234, and uranium-238 shown in Table 8-2 are about the same as those measured in the Great Miami River.

Descriptive statistics for 17 filtered radiological parameters are presented in Table 8-3. Data exist for either one or two RI/FS sampling events for each of these parameters. The maximum value detected for filtered total uranium at W-5 was 1.1 μg/L, which is essentially the same as the maximum value detected for unfiltered total uranium.

8.2 INORGANIC CONSTITUENTS

Sampling point W-5 was sampled on two different dates in 1993 and analyzed for 26 filtered inorganic parameters. However, not all parameters were analyzed for both sampling dates. The descriptive statistics for filtered inorganic data are presented in Table 8-4.

The same 26 parameters were analyzed for the unfiltered inorganic samples. In addition, another nine anion and nutrient parameters were analyzed in the unfiltered samples. The descriptive statistics of the unfiltered inorganic parameters are presented in Table 8-5. For the parameters common to both Tables 8-4 and 8-5, the median values of each are very similar, except the aluminum and iron medians, which are higher in the unfiltered sample data. Fine silt and clay in the stream most likely cause the somewhat higher concentrations of aluminum and iron in the unfiltered samples.

There were no field measurements available for dissolved oxygen, pH, or specific conductivity from this sampling location in 1993. The average pH value for the 1991 EM data from W-5 was 7.8 SU (Table 8-1).

8.3 ORGANIC CONSTITUENTS

Sampling point W-5 was sampled and analyzed twice in 1993 for general organic parameters: phenols, TOC, TOX, and TON. Descriptive statistics for these four parameters are presented in Table 8-6.

Sampling point W-5 was also sampled and analyzed twice in 1993 for VOCs, SVOCs, pesticides, PCBs, and organophosphorus pesticides. No organic compounds were detected among these samples.

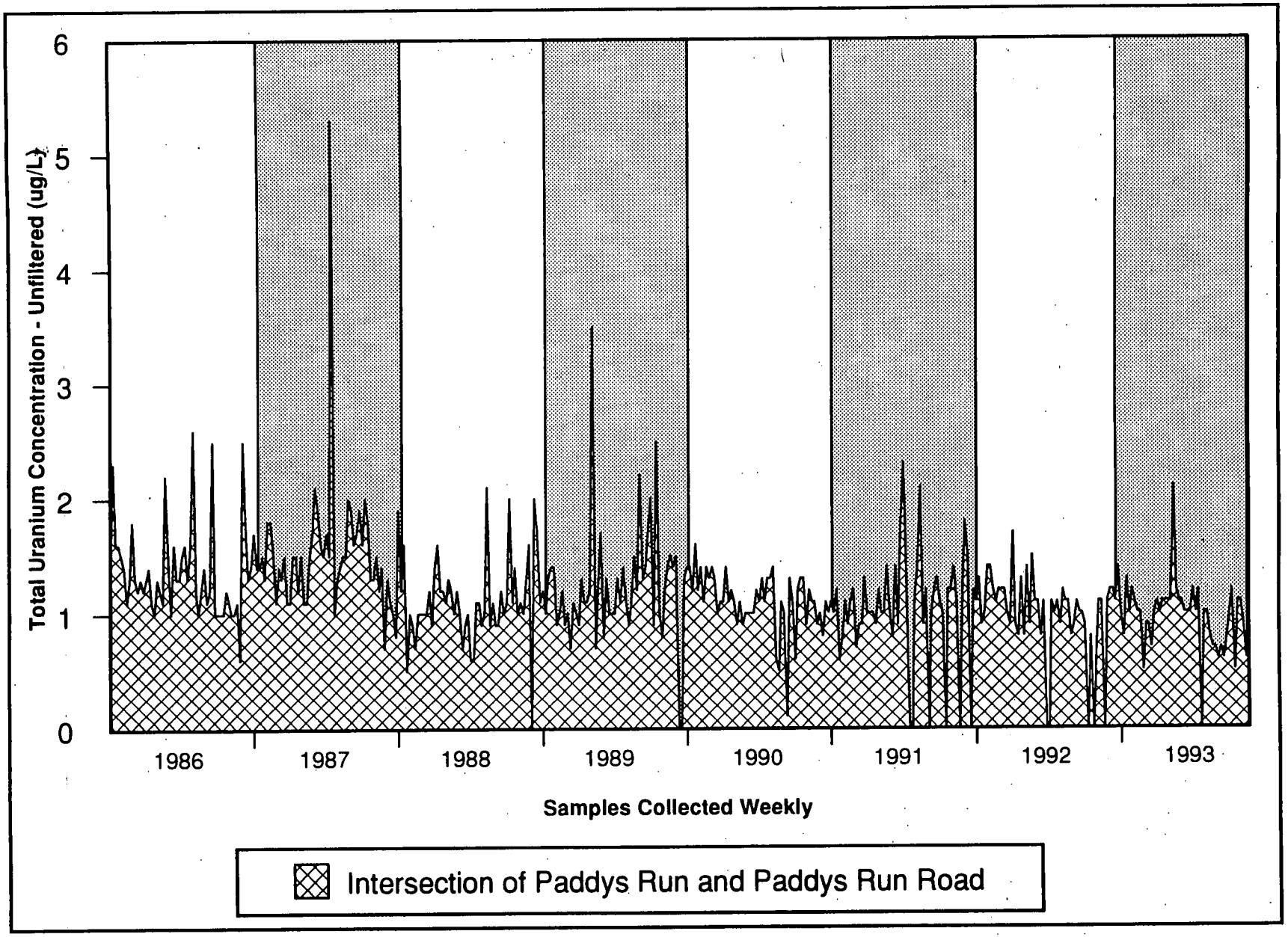

Figure 8-1. Total Uranium Background Concentrations
Measured for Paddys Run at Sampling Point W-5

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Table 8-1

Summary of Background Surface Water Quality Data Collected by EM at Sampling Point W-5 on Paddys Run

Parameter		Number of Samples	Minimum	Maximum	Average
pH	(SU)	47	7.5	8.2	7.8
Fluoride	(mg/L)	14	0.2	0.5	0.29
Nitrate-Nitrogen	(mg/L)	13	<1.0	5.0	3.2
Total Uranium	(μg/L)	47	0.41	1.6	0.78
Radium - 226[a]	(pCi/L)	6	<0.1	<0.1	<0.1
Radium - 228[a]	(pCi/L)	6	<0.1	0.1	<0.1

[a]Two-month composites of weekly samples.

Note: Data are from unfiltered samples; data source (WEMCO 1992).

Table 8-2
Summary Statistics of Unfiltered Radiological Constituents for Background Surface Water in Paddys Run

Statistics	Cesium-137	Plutonium-238	Plutonium-239/240	Radium-226	Radium-228	Ruthenium-106
No. of analyses	1	1	1	2	2	1
No. of detections	1	0	1	1	1	0
Detection frequency (%)	100	0	100	50	50	0
Minimum Detection	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Detection	3.1	N/A	0.093	0.35	2.1	N/A
Minimum Nondetect	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Nondetect	N/A	< 0.04	N/A	< 0.14	< 2.2	< 110
Distribution	U	U	U	U	U	U
Normal						
Mean	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A
Lognormal						
Mean	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A
Nonparametric						
Median	3.1	< 0.04	0.093	0.21	1.6	< 110
95% UCL	3.1	< 0.04	0.093	0.35	2.1	< 110
95th Percentile	3.1	< 0.04	0.093	0.35	2.1	< 110

Table 8-2 (Continued)
Summary Statistics of Unfiltered Radiological Constituents for Background Surface Water in Paddys Run

Statistics	Strontium-90	Technetium-99	Total Thorium	Thorium-228	Thorium-230	Thorium-232
No. of analyses	1	2	1	2	2	2
No. of detections	1	0	0	0	0	0
Detection frequency (%)	100	0	0	0	0	0
Minimum Detection	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Detection	0.96	N/A	N/A	N/A	N/A	N/A
Minimum Nondetect	N/A	< 14	N/A	< 0.11	< 0.15	< 0.15
Maximum Nondetect	N/A	< 14.6	< 1.4	< 0.2	< 0.4	< 0.3
Distribution	U	U	U	U	U	U
Normal						
Mean	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A
Lognormal						
Mean	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A
Nonparametric						
Median	0.96	< 14.3	< 1.4	< 0.15	< 0.27	< 0.22
95% UCL	0.96	< 14.6	< 1.4	< 0.2	< 0.4	< 0.3
95th Percentile	0.96	< 14.6	< 1.4	< 0.2	< 0.4	< 0.3

Table 8-2 (Continued)
Summary Statistics of Unfiltered Radiological Constituents for Background Surface Water in Paddys Run

Statistics	Total Uranium	Uranium-234	Uranium-235/236	Uranium-238
No. of analyses	2	1	2	2
No. of detections	2	1	0	2
Detection frequency (%)	100	100	0	100
Minimum Detection	0.90	N/A	N/A	0.6
Maximum Detection	1.1	0.7	N/A	0.73
Minimum Nondetect	N/A	N/A	< 0.3	N/A
Maximum Nondetect	N/A	N/A	< 0.7	N/A
Distribution	U	U	U	U
Normal				
Mean	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A
Lognormal				
Mean	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A
Nonparametric				
Median	0.98	0.7	< 0.5	0.66
95% UCL	1.1	0.7	< 0.7	0.73
95th Percentile	1.1	0.7	< 0.7	0.73

Note:
(1) Concentrations are reported in pCi/L except Total Thorium and Total Uranium, which are in ug/L.
(2) N/A = Not applicable.
(3) Distribution types: N = Normal, L = Lognormal, N* = Normal (but also passed Lognormal test), L* = Lognormal (but also passed Normal test), NQ = Qualified Normal, LQ = Qualified Lognormal, U = Undefined.
(4) Mean types: Normal = arithmetic mean, Lognormal = estimated mean of a lognormal distribution.
(5) Standard deviation types: Normal = arithmetic standard deviation, Lognormal = estimated standard deviation of a lognormal distribution.

Table 8-3
Summary Statistics of Filtered Radiological Constituents for Background Surface Water in Paddys Run

Statistics	Cesium-137	Neptunium-237	Plutonium-238	Plutonium-239/240	Radium-226	Radium-228
No. of analyses	1	1	1	1	2	2
No. of detections	1	1	0	1	0	0
Detection frequency (%)	100	100	0	100	0	0
Minimum Detection	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Detection	3.9	0.42	N/A	0.29	N/A	N/A
Minimum Nondetect	N/A	N/A	N/A	N/A	< 0.2	< 1.5
Maximum Nondetect	N/A	N/A	< 0.08	N/A	< 0.4	< 2.7
Distribution	U	U	U	U	U	U
Normal						
Mean	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A
Lognormal						
Mean	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A
Nonparametric						
Median	3.9	0.42	< 0.08	0.29	< 0.3	< 2.1
95% UCL	3.9	0.42	< 0.08	0.29	< 0.4	< 2.7
95th Percentile	3.9	0.42	< 0.08	0.29	< 0.4	< 2.7

Table 8-3 (Continued)
Summary Statistics of Filtered Radiological Constituents for Background Surface Water in Paddys Run

Statistics	Ruthenium-106	Strontium-90	Technetium-99	Total Thorium	Thorium-228	Thorium-230
No. of analyses	1	1	2	1	2	2
No. of detections	0	1	0	0	0	1
Detection frequency (%)	0	100	0	0	0	50
Minimum Detection	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Detection	N/A	0.86	N/A	N/A	N/A	0.28
Minimum Nondetect	N/A	N/A	< 13	N/A	< 0.1	N/A
Maximum Nondetect	< 101	N/A	< 14	< 1	< 0.14	< 0.2
Distribution	U	U	U	U	U	U
Normal						
Mean	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A
Lognormal						
Mean	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A
Nonparametric						
Median	< 101	0.86	< 14	< 1	< 0.12	0.19
95% UCL	< 101	0.86	< 14	< 1	< 0.14	0.28
95th Percentile	< 101	0.86	< 14	< 1	< 0.14	0.28

Table 8-3 (Continued)
Summary Statistics of Filtered Radiological Constituents for Background Surface Water in Paddys Run

Statistics	Thorium-232	Total Uranium	Uranium-234	Uranium-235/236	Uranium-238
No. of analyses	2	2	2	2	2
No. of detections	0	2	2	0	2
Detection frequency (%)	0	100	100	0	100
Minimum Detection	N/A	0.81	0.45	N/A	0.48
Maximum Detection	N/A	1.1	0.7	N/A	0.5
Minimum Nondetect	< 0.1	N/A	N/A	< 0.088	N/A
Maximum Nondetect	< 0.11	N/A	N/A	< 0.1	N/A
Distribution	U	U	U	U	U
Normal					
Mean	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A
Lognormal					
Mean	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A
Nonparametric					
Median	< 0.105	0.95	0.57	< 0.094	0.49
95% UCL	< 0.11	1.1	0.7	< 0.1	0.5
95th Percentile	< 0.11	1.1	0.7	< 0.1	0.5

Note:
(1) Concentrations are reported in pCi/L except Total Thorium and Total Uranium, which are in ug/L.
(2) N/A = Not applicable.
(3) Distribution types: N = Normal, L = Lognormal, N* = Normal (but also passed Lognormal test), L* = Lognormal (but also passed Normal test), NQ = Qualified Normal, LQ = Qualified Lognormal, U = Undefined.
(4) Mean types: Normal = arithmetic mean, Lognormal = estimated mean of a lognormal distribution.
(5) Standard deviation types: Normal = arithmetic standard deviation, Lognormal = estimated standard deviation of a lognormal distribution.

Table 8-4
Summary Statistics of Filtered Inorganic Constituents for Background Surface Water in Paddys Run

Statistics	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper
No. of analyses	2	2	2	2	1	2	2	2	1	1
No. of detections	1	0	0	2	0	0	2	0	0	0
Detection frequency (%)	50	0	0	100	0	0	100	0	0	0
Minimum Detection	N/A	N/A	N/A	0.0304	N/A	N/A	85.3	N/A	N/A	N/A
Maximum Detection	0.132	N/A	N/A	0.0526	N/A	N/A	107	N/A	N/A	N/A
Minimum Nondetect	N/A	< 0.005	< 0.002	N/A	N/A	< 0.005	N/A	< 0.006	N/A	N/A
Maximum Nondetect	< 0.123	< 0.014	< 0.00205	N/A	< 0.002	< 0.005	N/A	< 0.01	< 0.01	< 0.01
Distribution	U	U	U	U	U	U	U	U	U	U
Normal										
Mean	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lognormal										
Mean	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nonparametric										
Median	0.0968	< 0.0095	< 0.00203	0.0415	< 0.002	< 0.005	95.9	< 0.008	< 0.01	< 0.01
95% UCL	0.132	< 0.014	< 0.00205	0.0526	< 0.002	< 0.005	107	< 0.01	< 0.01	< 0.01
95th Percentile	0.132	< 0.014	< 0.00205	0.0526	< 0.002	< 0.005	107	< 0.01	< 0.01	< 0.01

Table 8-4 (Continued)
Summary Statistics of Filtered Inorganic Constituents for Background Surface Water in Paddys Run

Statistics	Cyanide	Iron	Lead	Magnesium	Manganese	Mercury	Molybdenum	Nickel	Potassium
No. of analyses	1	2	2	2	1	2	2	1	2
No. of detections	0	0	0	2	1	0	0	0	2
Detection frequency (%)	0	0	0	100	100	0	0	0	100
Minimum Detection	N/A	N/A	N/A	20.4	N/A	N/A	N/A	N/A	1.96
Maximum Detection	N/A	N/A	N/A	27.7	0.0257	N/A	N/A	N/A	3.50
Minimum Nondetect	N/A	< 0.02	< 0.0016	N/A	N/A	< 0.0001	< 0.017	N/A	N/A
Maximum Nondetect	< 0.005	< 0.022	< 0.002	N/A	N/A	< 0.0002	< 0.02	< 0.02	N/A
Distribution	U	U	U	U	U	U	U	U	U
Normal									
Mean	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lognormal									
Mean	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nonparametric									
Median	< 0.005	< 0.021	< 0.0018	24.1	0.0257	< 0.00015	< 0.019	< 0.02	2.73
95% UCL	< 0.005	< 0.022	< 0.002	27.7	0.0257	< 0.0002	< 0.02	< 0.02	3.50
95th Percentile	< 0.005	< 0.022	< 0.002	27.7	0.0257	< 0.0002	< 0.02	< 0.02	3.50

Table 8-4 (Continued)
Summary Statistics of Filtered Inorganic Constituents for Background Surface Water in Paddys Run

Statistics	Selenium	Silicon	Silver	Sodium	Thallium	Vanadium	Zinc
No. of analyses	2	2	2	2	1	1	1
No. of detections	0	2	0	2	0	0	0
Detection frequency (%)	0	100	0	100	0	0	0
Minimum Detection	N/A	2.43	N/A	12.9	N/A	N/A	N/A
Maximum Detection	N/A	3.01	N/A	18.3	N/A	N/A	N/A
Minimum Nondetect	< 0.002	N/A	< 0.002	N/A	N/A	N/A	N/A
Maximum Nondetect	< 0.003	N/A	< 0.01	N/A	< 0.002	< 0.01	< 0.005
Distribution	U	U	U	U	U	U	U
Normal							
Mean	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lognormal							
Mean	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nonparametric							
Median	< 0.0025	2.72	< 0.006	15.6	< 0.002	< 0.01	< 0.005
95% UCL	< 0.003	3.01	< 0.01	18.3	< 0.002	< 0.01	< 0.005
95th Percentile	< 0.003	3.01	< 0.01	18.3	< 0.002	< 0.01	< 0.005

Note:
(1) Concentrations are reported in mg/L.
(2) N/A = Not applicable.
(3) Distribution types: N = Normal, L = Lognormal, N* = Normal (but also passed Lognormal test), L* = Lognormal (but also passed Normal test), NQ = Qualified Normal, LQ = Qualified Lognormal, U = Undefined.
(4) Mean types: Normal = arithmetic mean, Lognormal = estimated mean of a lognormal distribution.
(5) Standard deviation types: Normal = arithmetic standard deviation, Lognormal = estimated standard deviation of a lognormal distribution.

Table 8-5
Summary Statistics of Unfiltered Inorganic Constituents for Background Surface Water in Paddys Run

Statistics	Alkalinity as CaCO3	Aluminum	Ammonia	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chloride
No. of analyses	2	2	2	2	2	2	1	2	2	2
No. of detections	2	2	1	0	0	2	0	0	2	2
Detection frequency (%)	100	100	50	0	0	100	0	0	100	100
Minimum Detection	235	0.195	N/A	N/A	N/A	0.034	N/A	N/A	86.6	27.8
Maximum Detection	342	0.64	0.0387	N/A	N/A	0.0534	N/A	N/A	107	31.6
Minimum Nondetect	N/A	N/A	N/A	< 0.005	< 0.00185	N/A	N/A	< 0.005	N/A	N/A
Maximum Nondetect	N/A	N/A	< 0.1	< 0.014	< 0.002	N/A	< 0.002	< 0.005	N/A	N/A
Distribution	U	U	U	U	U	U	U	U	U	U
Normal										
Mean	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lognormal										
Mean	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nonparametric										
Median	289	0.418	0.0443	< 0.0095	< 0.00193	0.0437	< 0.002	< 0.005	96.8	29.7
95% UCL	342	0.64	0.0387	< 0.014	< 0.002	0.0534	< 0.002	< 0.005	107	31.6
95th Percentile	342	0.64	0.0387	< 0.014	< 0.002	0.0534	< 0.002	< 0.005	107	31.6

Table 8-5 (Continued)
Summary Statistics of Unfiltered Inorganic Constituents for Background Surface Water in Paddys Run

Statistics	Chromium	Cobalt	Copper	Cyanide	Fluoride	Iron	Lead	Magnesium	Manganese
No. of analyses	2	1	1	2	2	2	2	2	1
No. of detections	0	0	0	0	2	2	0	2	1
Detection frequency (%)	0	0	0	0	100	100	0	100	100
Minimum Detection	N/A	N/A	N/A	N/A	0.215	0.129	N/A	20.7	N/A
Maximum Detection	N/A	N/A	N/A	N/A	0.22	0.513	N/A	27.8	0.035
Minimum Nondetect	< 0.006	N/A	N/A	< 0.002	N/A	N/A	< 0.002	N/A	N/A
Maximum Nondetect	< 0.01	< 0.01	< 0.01	< 0.005	N/A	N/A	< 0.00395	N/A	N/A
Distribution	U	U	U	U	U	U	U	U	U
Normal									
Mean	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lognormal									
Mean	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nonparametric									
Median	< 0.008	< 0.01	< 0.01	< 0.0035	0.218	0.321	< 0.00298	24.2	0.035
95% UCL	< 0.01	< 0.01	< 0.01	< 0.005	0.22	0.513	< 0.00395	27.8	0.035
95th Percentile	< 0.01	< 0.01	< 0.01	< 0.005	0.22	0.513	< 0.00395	27.8	0.035

Table 8-5 (Continued)
Summary Statistics of Unfiltered Inorganic Constituents for Background Surface Water in Paddys Run

Statistics	Mercury	Molybdenum	Nickel	Nitrate	Phosphorus	Potassium	Selenium	Silicon	Silver
No. of analyses	2	2	1	2	1	2	2	2	2
No. of detections	0	0	0	1	1	2	0	2	0
Detection frequency (%)	0	0	0	50	100	100	0	100	0
Minimum Detection	N/A	N/A	N/A	N/A	N/A	2.12	N/A	2.95	N/A
Maximum Detection	N/A	N/A	N/A	1.66	0.228	3.58	N/A	3.36	N/A
Minimum Nondetect	< 0.0001	< 0.017	N/A	N/A	N/A	N/A	< 0.001	N/A	< 0.002
Maximum Nondetect	< 0.0002	< 0.02	< 0.02	< 1.72	N/A	N/A	< 0.002	N/A	< 0.01
Distribution	U	U	U	U	U	U	U	U	U
Normal									
Mean	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lognormal									
Mean	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nonparametric									
Median	< 0.00015	< 0.019	< 0.02	1.26	0.228	2.85	< 0.0015	3.15	< 0.006
95% UCL	< 0.0002	< 0.02	< 0.02	1.66	0.228	3.58	< 0.002	3.36	< 0.01
95th Percentile	< 0.0002	< 0.02	< 0.02	1.66	0.228	3.58	< 0.002	3.36	< 0.01

Table 8-5 (Continued)
Summary Statistics of Unfiltered Inorganic Constituents for Background Surface Water in Paddys Run

Statistics	Sodium	Sulfate	Sulfide	Thallium	TKN	Vanadium	Zinc
No. of analyses	2	2	2	1	2	1	1
No. of detections	2	2	0	0	1	0	0
Detection frequency (%)	100	100	0	0	50	0	0
Minimum Detection	13	46.8	N/A	N/A	N/A	N/A	N/A
Maximum Detection	18.2	55.7	N/A	N/A	0.288	N/A	N/A
Minimum Nondetect	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A
Maximum Nondetect	N/A	N/A	< 1	< 0.002	< 0.251	< 0.01	< 0.005
Distribution	U	U	U	U	U	U	U
Normal							
Mean	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lognormal							
Mean	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nonparametric							
Median	15.6	51.2	< 0.75	< 0.002	0.207	< 0.01	< 0.005
95% UCL	18.2	55.7	< 1	< 0.002	0.288	< 0.01	< 0.005
95th Percentile	18.2	55.7	< 1	< 0.002	0.288	< 0.01	< 0.005

Note:
(1) Concentrations are reported in mg/L.
(2) N/A = Not applicable.
(3) Distribution types: N = Normal, L = Lognormal, N* = Normal (but also passed Lognormal test), L* = Lognormal (but also passed Normal test), NQ = Qualified Normal, LQ = Qualified Lognormal, U = Undefined.
(4) Mean types: Normal = arithmetic mean, Lognormal = estimated mean of a lognormal distribution.
(5) Standard deviation types: Normal = arithmetic standard deviation, Lognormal = estimated standard deviation of a lognormal distribution.

Table 8-6
Summary Statistics for Phenols, Total Organic Carbon, Total Organic Halides, and Total Organic Nitrogen from Background Surface Water in Paddys Run

Statistics	Phenols	Total Organic Carbon	Total Organic Halides	Total Organic Nitrogen
No. of analyses	2	2	2	2
No. of detections	0	2	1	1
Detection frequency (%)	0	100	50	50
Minimum Detection	N/A	1.68	N/A	N/A
Maximum Detection	N/A	5.35	0.0109	0.288
Minimum Nondetect	< 0.005	N/A	N/A	N/A
Maximum Nondetect	< 0.01	N/A	< 0.01	< 0.213
Distribution	U	U	U	U
Normal				
Mean	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A
Lognormal				
Mean	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A
Nonparametric				
Median	< 0.0075	3.52	0.00795	0.197
95% UCL	< 0.01	5.35	0.0109	0.288
95th Percentile	< 0.01	5.35	0.0109	0.288

Note:
(1) Concentrations are reported in mg/L.
(2) N/A = Not applicable.
(3) Distribution types: N = Normal, L = Lognormal, N* = Normal (but also passed Lognormal test), L* = Lognormal (but also passed Normal test), NQ = Qualified Normal, LQ= Qualified Lognormal, U = Undefined.
(4) Mean types: Normal = arithmetic mean, Lognormal = estimated mean of a lognormal distribution.
(5) Standard deviation types: Normal = arithmetic standard deviation, Lognormal = estimated standard deviation of a lognormal distribution.

9.0 CONCLUSIONS

This report presents and evaluates background water quality data for surface water (Paddys Run and the Great Miami River) and groundwater (glacial overburden and the Great Miami Aquifer) near the FEMP. Tables 9-1 and 9-2 present statistical summaries of unfiltered and filtered radiological constituents, respectively, in glacial overburden groundwater, the Great Miami Aquifer, the Great Miami River, and Paddys Run.

Tables 9-3 and 9-4 present statistical summaries of filtered and unfiltered inorganic data, respectively, for the same four hydrologic entities. Statistical summaries of four general organic parameters (phenols, TOC, TOX, and TON) are presented in Table 9-5.

Following are the major conclusions of this report:

- There are sufficient wells (i.e., FEMP wells and private wells) to characterize background groundwater quality in both the glacial overburden and the Great Miami Aquifer. Data from 29 groundwater wells have been validated and evaluated in order to characterize water quality in the glacial overburden and the Great Miami Aquifer. These 29 wells were carefully selected from among a potential list of 51 wells located upgradient from the FEMP or located sufficiently distant that they were not affected by FEMP activities or wastes. Sixteen of the 29 wells used to characterize background groundwater quality are private wells. The other 13 are FEMP wells specifically constructed for monitoring purposes. Five wells are completed in the glacial overburden and 24 wells are completed in the Great Miami Aquifer.

- The data set associated with the 29 background wells is sufficient to characterize background groundwater quality in both the glacial overburden and the Great Miami Aquifer for radiological, inorganic, and organic parameters. All data used to compute background water quality statistics in this report were validated according to procedures outlined in Section 3.4.

- A trilinear plot of the major cation and anion data from the five glacial overburden background wells shows a tight clustering of the data, implying that the water chemistry in these wells is similar. Additionally, several comparison tests were performed for the glacial overburden FEMP wells versus private wells. In general, the FEMP wells and private wells appeared to be from the same population except for total uranium results; therefore, the FEMP wells were excluded from the statistics for this parameter as they were in the draft report. In this revised report, isotopic uranium results from the FEMP wells were eliminated as well because total uranium is the summation of isotopic uranium activity.

- Major cation and anion data for the three sections of the Great Miami Aquifer that contribute background flow in the vicinity of the FEMP were plotted on a trilinear diagram. The tight clustering of the data implies that the water chemistry in the three sections is similar. Therefore, it is reasonable to calculate one set of background water quality statistics for the Great Miami Aquifer by combining data from the three sections.

The radiological water chemistry of well 2098 appears to be affected by the FEMP. Consequently, these data were removed from the background data set.

- The trilinear plots for the Great Miami Aquifer and the glacial overburden were compared, and they exhibit the same clustering pattern. This implies that the glacial overburden and Great Miami Aquifer background water chemistry is similar.

- Summary statistics for unfiltered total uranium in the glacial overburden background wells are as follows:

  - Mean 0.54 μg/L
  - 95 percent UCL 0.75 μg/L
  - 95th percentile 1.3 μg/L

- Summary statistics for unfiltered total uranium in the Great Miami Aquifer background wells are as follows:

  - Median 0.26 μg/L
  - 95 percent UCL 0.36 μg/L
  - 95th percentile 1.2 μg/L

- There were no detections of organics in the glacial overburden background wells. Very low estimated detections of organics were found in the Great Miami Aquifer background wells, some of which are common laboratory contaminants. The only three nonestimated detections were also low and are also common laboratory contaminants.

- When the draft "Background Water Quality" report was prepared, only limited RI/FS data were available for sampling points W-1 and W-5 in the Great Miami River (three sampling events) and Paddys Run (no validated data), respectively. Since that time, both W-1 and W-5 have been sampled on two different occasions, with analyses conducted for a comprehensive array of radiological and chemical parameters. Results from these analyses for the important parameter total uranium (unfiltered) compare closely with long-term EM data from these locations.

- Data from sampling point W-1 are sufficient to characterize background concentrations of radiological, inorganic, and organic parameters in the Great Miami River. Summary statistics for unfiltered total uranium background in the Great Miami River are as follows:

  - Median 1 μg/L
  - 95 percent UCL 1.4 μg/L
  - 95th percentile 1.4 μg/L

  Organic analyses available for sampling point W-1 showed no detectable concentrations of pesticides, PCBs, or organophosphorus pesticides. The two VOCs (acetone, methylene chloride) and one SVOC (bis(2-Ethylhexyl) phthalate) detected were very low estimated results and are also common laboratory contaminants.

- Data from sampling point W-5 are sufficient to characterize background concentrations for Paddys Run. Summary statistics for unfiltered total uranium background in Paddys Run are as follows:

  - Median 0.98 μg/L
  - 95 percent UCL 1.1 μg/L
  - 95th percentile 1.1 μg/L

  Organic analyses for two sampling dates showed no detectable concentrations of VOCs, SVOCs, pesticides, PCBs, or organophosphorus pesticides.

- Primarily because of extensive field programs conducted in the spring and summer of 1993, the amount of data available for background water quality characterization has increased significantly since the draft version of this report was prepared (May 1993). Additionally, in the 1993 field programs, both unfiltered and filtered samples were collected for radionuclide and inorganic chemical analyses. Previously, mainly unfiltered radionuclides and filtered metals analyses were performed.

Table 9-1
Summary Statistics of Unfiltered Radiological Constituents for Background Water Quality

Constituent	No. of analyses	No. of detections	Range of Detects	Range of Nondetects	Distribution type	95% UCL	95th Percentile*
Cesium-137							
Glacial Overburden	13	0	N/A	< 7 - < 12	U	< 11	< 13
Great Miami Aquifer	70	2	5.8 - 6.7	< 5.8 - < 12	U	< 9.8	< 12
Great Miami River	4	0	N/A	< 8 - < 11	U	< 11	< 11
Paddys Run	1	1	3.1	N/A	U	3.1	3.1
Neptunium-237							
Glacial Overburden	10	3	0.043 - 0.25	< 0.18 - < 0.21	U	0.16	0.25
Great Miami Aquifer	81	4	0.25 - 0.62	< 0.0023 - < 0.48	U	< 0.28	< 0.48
Great Miami River	5	0	N/A	< 0.22 - < 0.32	U	< 0.32	< 0.32
Paddys Run	0	0	N/A	N/A	N/A	N/A	N/A
Plutonium-238							
Glacial Overburden	13	1	0.075	< 0.021 - < 0.17	U	< 0.11	0.075
Great Miami Aquifer	62	6	0.022 - 0.089	< 0.0075 - < 0.1	U	< 0.065	0.048
Great Miami River	5	0	N/A	< 0.038 - < 0.39	U	< 0.39	< 0.39
Paddys Run	1	0	N/A	< 0.04	U	< 0.04	< 0.04
Plutonium-239/240							
Glacial Overburden	19	0	N/A	< 0.021 - < 1	U	< 0.59	< 1
Great Miami Aquifer	59	5	0.016 - 0.083	< 0.003 - < 0.089	U	< 0.060	0.050
Great Miami River	5	0	N/A	< 0.038 - < 0.39	U	< 0.39	< 0.39
Paddys Run	1	1	0.093	N/A	U	0.093	0.093
Radium-226							
Glacial Overburden	22	9	0.14 - 0.9	< 0.11 - < 1	L*	0.51	0.90
Great Miami Aquifer	105	56	0.071 - 2	< 0.058 - < 1.1	L	0.59	1.5
Great Miami River	4	1	0.41	< 0.12 - < 0.3	U	0.41	0.41
Paddys Run	2	1	0.35	< 0.14	U	0.35	0.35
Radium-228							
Glacial Overburden	22	4	1.9 - 5.2	< 1.5 - < 3.4	U	< 3.1	3
Great Miami Aquifer	106	23	1.0 - 5.2	< 0.19 - < 3.2	U	< 2.6	3.6
Great Miami River	5	1	2.2	< 1.6 - < 2.3	U	2.2	2.2
Paddys Run	2	1	2.1	< 2.2	U	2.1	2.1
Ruthenium-106							
Glacial Overburden	13	0	N/A	< 61 - < 141	U	< 91	< 141
Great Miami Aquifer	76	0	N/A	< 58 - < 170	U	< 82	< 101
Great Miami River	4	0	N/A	< 63 - < 92	U	< 92	< 92
Paddys Run	1	0	N/A	< 110	U	< 110	< 110

Table 9-1 (Continued)
Summary Statistics of Unfiltered Radiological Constituents for Background Water Quality

Constituent	No. of analyses	No. of detections	Range of Detects	Range of Nondetects	Distribution type	95% UCL	95th Percentile
Strontium-90							
Glacial Overburden	16	1	2	< 0.81 - < 1.4	U	< 1.2	2
Great Miami Aquifer	87	4	0.65 - 4.8	< 0.37 - < 1.7	U	< 1.1	< 1.7
Great Miami River	5	0	N/A	< 0.91 - < 1.3	U	< 1.3	< 1.3
Paddys Run	1	1	0.96	N/A	U	0.96	0.96
Technetium-99							
Glacial Overburden	26	2	30 - 49.3	< 8.2 - < 30	U	< 23	30
Great Miami Aquifer	99	2	22 - 26	< 4 - < 30	U	< 19	< 30
Great Miami River	5	0	N/A	< 8 - < 18	U	< 18	< 18
Paddys Run	2	0	N/A	< 14 - < 14.6	U	< 14.6	< 14.6
Total Thorium							
Glacial Overburden	10	1	3.1	< 1 - < 3	U	< 3	3.1
Great Miami Aquifer	50	3	0.97 - 2.1	< 0.85 - < 3.8	U	< 2.4	0.97
Great Miami River	N/A	N/A	N/A	N/A	N/A	< 2.9 *	< 2.9 *
Paddys Run	1	0	N/A	< 1.4	U	< 1.4	< 1.4
Thorium-228							
Glacial Overburden	24	11	0.23 - 1.62	< 0.1 - < 1.2	L	0.83	1.6
Great Miami Aquifer	101	37	0.075 - 2.9	< 0.1 - < 0.67	U	< 0.58	0.77
Great Miami River	5	3	0.54 - 0.62	< 0.2 - < 0.23	U	0.62	0.62
Paddys Run	2	0	N/A	< 0.11 - < 0.2	U	< 0.2	< 0.2
Thorium-230							
Glacial Overburden	25	11	0.14 - 2.0	< 0.1 - < 1.2	L	0.68	1.3
Great Miami Aquifer	98	44	0.18 - 2.5	< 0.16 - < 0.67	LQ	0.40	0.89
Great Miami River	5	4	0.26 - 0.36	< 0.2	U	0.36	0.36
Paddys Run	2	0	N/A	< 0.15 - < 0.4	U	< 0.4	< 0.4
Thorium-232							
Glacial Overburden	14	3	0.2 - 0.34	< 0.1 - < 0.32	U	< 0.32	0.34
Great Miami Aquifer	71	9	0.1 - 0.77	< 0.1 - < 0.42	U	< 0.26	0.23
Great Miami River	5	0	N/A	< 0.17 - < 0.32	U	< 0.32	< 0.32
Paddys Run	2	0	N/A	< 0.15 - < 0.3	U	< 0.3	< 0.3
Total Uranium							
Glacial Overburden	15	8	0.48 - 1.5	< 0.1 - < 0.55	NQ	0.75	1.3
Great Miami Aquifer	115	69	0.1 - 3.1	< 0.1 - < 1.0	U	0.36	1.2
Great Miami River	5	5	0.74 - 1.4	N/A	U	1.4	1.4
Paddys Run	2	2	0.90 - 1.1	N/A	U	1.1	1.1

Table 9-1 (Continued)
Summary Statistics of Unfiltered Radiological Constituents for Background Water Quality

Constituent	No. of analyses	No. of detections	Range of Detects	Range of Nondetects	Distribution type	95% UCL	95th Percentile
Uranium-234							
Glacial Overburden	13	9	0.25 - 1.1	< 0.1 - < 1	N	0.58	0.90
Great Miami Aquifer	98	65	0.14 - 1.3	< 0.17 - < 0.73	LQ	0.38	0.80
Great Miami River	5	5	0.3 - 1.1	N/A	U	1.1	1.1
Paddys Run	1	1	0.7	N/A	U	0.7	0.7
Uranium-235/236							
Glacial Overburden	13	0	N/A	< 0.1 - < 0.27	U	< 0.22	< 0.27
Great Miami Aquifer	97	5	0.094 - 0.26	< 0.092 - < 0.39	U	< 0.23	0.094
Great Miami River	5	1	0.25	< 0.15 - < 0.27	U	0.25	0.25
Paddys Run	2	0	N/A	< 0.3 - < 0.7	U	< 0.7	< 0.7
Uranium-238							
Glacial Overburden	13	9	0.23 - 0.99	< 0.1 - < 1	N*	0.51	0.80
Great Miami Aquifer	104	42	0.14 - 0.93	< 0.1 - < 1.0	LQ	0.30	0.64
Great Miami River	5	3	0.59 - 0.76	< 0.26 - < 0.27	U	0.76	0.76
Paddys Run	2	2	0.6 - 0.73	N/A	U	0.73	0.73

Note:
(1) Concentrations are reported in pCi/L except Total Thorium and Total Uranium, which are in ug/L.
(2) N/A = Not applicable.
(3) Distribution types: N = Normal, L = Lognormal, N* = Normal (but also passed Lognormal test), L* = Lognormal (but also passed Normal test), NQ = Qualified Normal, LQ = Qualified Lognormal, U = Undefined.
(4) This table solely presents the results of statistical computations. Further interpretation may be required to determine numbers to be used in risk assessment and nature and extent comparisons.
* Total Thorium statistics are calculated from Thorium-232 statistics.

Table 9-2
Summary Statistics of Filtered Radiological Constituents for Background Water Quality

Constituent	No. of analyses	No. of detections	Range of Detects	Range of Nondetects	Distribution type	95% UCL	95th Percentile
Cesium-137							
Glacial Overburden	0	0	N/A	N/A	N/A	N/A	N/A
Great Miami Aquifer	1	0	N/A	< 13	U	< 13	< 13
Great Miami River	2	0	N/A	< 9 - < 11	U	< 11	< 11
Paddys Run	1	1	3.9	N/A	U	3.9	3.9
Neptunium-237							
Glacial Overburden	0	0	N/A	N/A	N/A	N/A	N/A
Great Miami Aquifer	1	1	0.12	N/A	U	0.12	0.12
Great Miami River	3	0	N/A	< 0.24 - < 0.28	U	< 0.28	< 0.28
Paddys Run	1	1	0.42	N/A	U	0.42	0.42
Plutonium-238							
Glacial Overburden	0	0	N/A	N/A	N/A	N/A	N/A
Great Miami Aquifer	1	0	N/A	< 0.04	U	< 0.04	< 0.04
Great Miami River	3	0	N/A	< 0.03 - < 0.4	U	< 0.4	< 0.4
Paddys Run	1	0	N/A	< 0.08	U	< 0.08	< 0.08
Plutonium-239/240							
Glacial Overburden	0	0	N/A	N/A	N/A	N/A	N/A
Great Miami Aquifer	1	1	0.042	N/A	U	0.042	0.042
Great Miami River	3	0	N/A	< 0.03 - < 0.4	U	< 0.4	< 0.4
Paddys Run	1	1	0.29	N/A	U	0.29	0.29
Radium-226							
Glacial Overburden	4	1	0.9	< 0.4 - < 0.6	U	0.9	0.9
Great Miami Aquifer	11	10	0.20 - 2	< 0.9	N*	1.4	1.9
Great Miami River	3	0	N/A	< 0.1 - < 0.4	U	< 0.4	< 0.4
Paddys Run	2	0	N/A	< 0.2 - < 0.4	U	< 0.4	< 0.4
Radium-228							
Glacial Overburden	4	1	2.2	< 1.7 - < 1.8	U	2.2	2.2
Great Miami Aquifer	13	0	N/A	< 1.7 - < 2.9	U	< 2.1	< 2.9
Great Miami River	3	0	N/A	< 1.7 - < 2.3	U	< 2.3	< 2.3
Paddys Run	2	0	N/A	< 1.5 - < 2.7	U	< 2.7	< 2.7
Ruthenium-106							
Glacial Overburden	0	0	N/A	N/A	N/A	N/A	N/A
Great Miami Aquifer	1	0	N/A	< 144	U	< 144	< 144
Great Miami River	2	0	N/A	< 74	U	< 74	< 74
Paddys Run	1	0	N/A	< 101	U	< 101	< 101

Table 9-2 (Continued)
Summary Statistics of Filtered Radiological Constituents for Background Water Quality

Constituent	No. of analyses	No. of detections	Range of Detects	Range of Nondetects	Distribution type	95% UCL	95th Percentile
Strontium-90							
Glacial Overburden	0	0	N/A	N/A	N/A	N/A	N/A
Great Miami Aquifer	1	0	N/A	< 0.8	U	< 0.8	< 0.8
Great Miami River	3	0	N/A	< 0.94 - < 1.2	U	< 1.2	< 1.2
Paddys Run	1	1	0.86	N/A	U	0.86	0.86
Technetium-99							
Glacial Overburden	4	1	30	< 11.8 - < 12.4	U	30	30
Great Miami Aquifer	1	0	N/A	< 14	U	< 14	< 14
Great Miami River	2	0	N/A	< 8 - < 10	U	< 10	< 10
Paddys Run	2	0	N/A	< 13 - < 14	U	< 14	< 14
Total Thorium							
Glacial Overburden	N/A	N/A	N/A	N/A	N/A	< 18 *	< 18 *
Great Miami Aquifer	N/A	N/A	N/A	N/A	N/A	0.92 *	2.8 *
Great Miami River	N/A	N/A	N/A	N/A	N/A	2.5 *	2.5 *
Paddys Run	1	0	N/A	< 1	U	< 1	< 1
Thorium-228							
Glacial Overburden	2	1	0.1	< 0.1	U	0.1	0.1
Great Miami Aquifer	10	4	0.2 - 0.4	< 0.1 - < 0.3	U	0.2	0.4
Great Miami River	3	2	0.79 - 0.86	< 0.3	U	0.86	0.86
Paddys Run	2	0	N/A	< 0.1 - < 0.14	U	< 0.14	< 0.14
Thorium-230							
Glacial Overburden	4	0	N/A	< 0.1 - < 0.2	U	< 0.2	< 0.2
Great Miami Aquifer	11	2	0.1 - 0.29	< 0.1 - < 0.3	U	< 0.3	0.29
Great Miami River	3	2	0.38 - 0.62	< 0.3	U	0.62	0.62
Paddys Run	2	1	0.28	< 0.2	U	0.28	0.28
Thorium-232							
Glacial Overburden	3	0	N/A	< 0.1 - < 0.2	U	< 0.2	< 0.2
Great Miami Aquifer	11	3	0.1 - 0.3	< 0.07 - < 0.4	U	0.1	0.3
Great Miami River	3	1	0.27	< 0.24 - < 0.27	U	0.27	0.27
Paddys Run	2	0	N/A	< 0.1 - < 0.11	U	< 0.11	< 0.11
Total Uranium							
Glacial Overburden	3	2	1 - 1.4	< 0.1	U	1.4	1.4
Great Miami Aquifer	12	10	0.1 - 0.8	< 0.1 - < 1	N	0.6	0.8
Great Miami River	3	3	0.52 - 1.1	N/A	U	1.1	1.1
Paddys Run	2	2	0.81 - 1.1	N/A	U	1.1	1.1

Table 9-2 (Continued)
Summary Statistics of Filtered Radiological Constituents for Background Water Quality

Constituent	No. of analyses	No. of detections	Range of Detects	Range of Nondetects	Distribution type	95% UCL	95th Percentile
Uranium-234							
Glacial Overburden	1	1	0.6	N/A	U	0.6	0.6
Great Miami Aquifer	11	9	0.23 - 0.9	< 0.4 - < 0.5	N*	0.64	0.90
Great Miami River	3	3	0.44 - 0.5	N/A	U	0.5	0.5
Paddys Run	2	2	0.45 - 0.7	N/A	U	0.7	0.7
Uranium-235/236							
Glacial Overburden	2	0	N/A	< 0.1	U	< 0.1	< 0.1
Great Miami Aquifer	10	0	N/A	< 0.04 - < 0.2	U	< 0.2	< 0.2
Great Miami River	3	0	N/A	< 0.22 - < 0.37	U	< 0.37	< 0.37
Paddys Run	2	0	N/A	< 0.088 - < 0.1	U	< 0.1	< 0.1
Uranium-238							
Glacial Overburden	0	0	N/A	N/A	N/A	N/A	N/A
Great Miami Aquifer	11	9	0.23 - 0.9	< 0.2 - < 0.5	N*	0.64	0.90
Great Miami River	3	3	0.44 - 0.50	N/A	U	0.50	0.50
Paddys Run	2	2	0.48 - 0.5	N/A	U	0.5	0.5

Note:
(1) Concentrations are reported in pCi/L except Total Thorium and Total Uranium, which are in ug/L.
(2) N/A = Not applicable.
(3) Distribution types: N = Normal, L = Lognormal, N* = Normal (but also passed Lognormal test), L* = Lognormal (but also passed Normal test), NQ = Qualified Normal, LQ = Qualified Lognormal, U = Undefined.
(4) This table solely presents the results of statistical computations. Further interpretation may be required to determine numbers to be used in risk assessment and nature and extent comparisons.
* Total Thorium statistics are calculated from Thorium-232 statistics.

Table 9-3
Summary Statistics of Filtered Inorganic Constituents for Background Water Quality

Constituent	No. of analyses	No. of detections	Range of Detects	Range of Nondetects	Distribution type	95% UCL	95th Percentile
Aluminum							
Glacial Overburden	7	3	0.0375 - 0.123	< 0.0193 - < 0.09	U	0.123	0.123
Great Miami Aquifer	27	11	0.062 - 0.175	< 0.014 - < 0.0982	LQ	0.114	0.175
Great Miami River	2	2	0.0861 - 0.115	N/A	U	0.115	0.115
Paddys Run	2	1	0.132	< 0.123	U	0.132	0.132
Antimony							
Glacial Overburden	4	2	0.0141 - 0.0272	< 0.011 - < 0.0222	U	0.0272	0.0272
Great Miami Aquifer	10	0	N/A	< 0.027 - < 0.031	U	< 0.031	< 0.031
Great Miami River	2	0	N/A	< 0.005	U	< 0.005	< 0.005
Paddys Run	2	0	N/A	< 0.005 - < 0.014	U	< 0.014	< 0.014
Arsenic							
Glacial Overburden	17	5	0.0042 - 0.122	< 0.001 - < 0.01	U	0.0042	0.122
Great Miami Aquifer	89	27	0.002 - 0.55	< 0.001 - < 0.01	U	< 0.003	0.26
Great Miami River	3	2	0.00165 - 0.0024	< 0.002	U	0.002	0.002
Paddys Run	2	0	N/A	< 0.002 - < 0.00205	U	< 0.00205	< 0.00205
Barium							
Glacial Overburden	23	22	0.034 - 0.452	< 0.055	U	0.091	0.451
Great Miami Aquifer	110	97	0.021 - 0.82	< 0.0231 - < 0.2	U	0.0611	0.669
Great Miami River	4	4	0.0749 - 0.1	N/A	U	0.1	0.1
Paddys Run	2	2	0.0304 - 0.0526	N/A	U	0.0526	0.0526
Beryllium							
Glacial Overburden	6	2	0.001 - 0.0018	< 0.0003 - < 0.001	U	0.0018	0.0018
Great Miami Aquifer	23	6	0.001 - 0.0023	< 0.001	U	< 0.001	0.0022
Great Miami River	2	0	N/A	< 0.002	U	< 0.002	< 0.002
Paddys Run	1	0	N/A	< 0.002	U	< 0.002	< 0.002
Cadmium							
Glacial Overburden	22	2	0.006 - 0.007	< 0.0012 - < 0.005	U	< 0.005	0.006
Great Miami Aquifer	106	16	0.002 - 0.01	< 0.002 - < 0.006	U	< 0.005	0.006
Great Miami River	4	0	N/A	< 0.002 - < 0.005	U	< 0.005	< 0.005
Paddys Run	2	0	N/A	< 0.005	U	< 0.005	< 0.005

Table 9-3 (Continued)
Summary Statistics of Filtered Inorganic Constituents for Background Water Quality

Constituent	No. of analyses	No. of detections	Range of Detects	Range of Nondetects	Distribution type	95% UCL	95th Percentile
Calcium							
Glacial Overburden	25	25	74.4 - 155	N/A	LQ	103	131
Great Miami Aquifer	111	110	63.6 - 181	< 92.6	LQ	101	136
Great Miami River	4	4	66 - 79	N/A	U	79	79
Paddys Run	2	2	85.3 - 107	N/A	U	107	107
Chromium							
Glacial Overburden	24	8	0.006 - 0.0345	< 0.0032 - < 0.02	U	0.006	0.034
Great Miami Aquifer	111	35	0.008 - 0.0441	< 0.003 - < 0.0358	U	< 0.02	0.03
Great Miami River	4	0	N/A	< 0.01 - < 0.02	U	< 0.02	< 0.02
Paddys Run	2	0	N/A	< 0.006 - < 0.01	U	< 0.01	< 0.01
Cobalt							
Glacial Overburden	7	0	N/A	< 0.003 - < 0.01	U	< 0.01	< 0.01
Great Miami Aquifer	23	0	N/A	< 0.005 - < 0.02	U	< 0.01	< 0.01
Great Miami River	2	0	N/A	< 0.01	U	< 0.01	< 0.01
Paddys Run	1	0	N/A	< 0.01	U	< 0.01	< 0.01
Copper							
Glacial Overburden	23	4	0.013 - 0.03	< 0.0026 - < 0.03	U	< 0.01	0.019
Great Miami Aquifer	110	31	0.01 - 0.176	< 0.003 - < 0.03	U	< 0.01	0.083
Great Miami River	4	0	N/A	< 0.01	U	< 0.01	< 0.01
Paddys Run	1	0	N/A	< 0.01	U	< 0.01	< 0.01
Cyanide							
Glacial Overburden	4	0	N/A	< 0.005 - < 0.01	U	< 0.01	< 0.01
Great Miami Aquifer	12	0	N/A	< 0.01 - < 0.02	U	< 0.02	< 0.02
Great Miami River	2	2	0.0022 - 0.0041	N/A	U	0.0041	0.0041
Paddys Run	1	0	N/A	< 0.005	U	< 0.005	< 0.005
Iron							
Glacial Overburden	25	18	0.0467 - 4.9	< 0.005 - < 0.1	U	1.77	3.58
Great Miami Aquifer	111	74	0.007 - 5.42	< 0.005 - < 0.1	U	1.25	4.14
Great Miami River	4	0	N/A	< 0.005 - < 0.05	U	< 0.05	< 0.05
Paddys Run	2	0	N/A	< 0.02 - < 0.022	U	< 0.022	< 0.022

Table 9-3 (Continued)
Summary Statistics of Filtered Inorganic Constituents for Background Water Quality

Constituent	No. of analyses	No. of detections	Range of Detects	Range of Nondetects	Distribution type	95% UCL	95th Percentile
Lead							
Glacial Overburden	17	6	0.0014 - 0.0087	< 0.001 - < 0.005	U	0.002	0.0087
Great Miami Aquifer	79	13	0.0016 - 0.029	< 0.001 - < 0.008	U	< 0.002	0.009
Great Miami River	3	0	N/A	< 0.002 - < 0.004	U	< 0.004	< 0.004
Paddys Run	2	0	N/A	< 0.0016 - < 0.002	U	< 0.002	< 0.002
Magnesium							
Glacial Overburden	25	25	20.4 - 47.8	N/A	LQ	36.5	47.8
Great Miami Aquifer	111	111	15.7 - 46	N/A	L*	28.3	37.8
Great Miami River	4	4	27.2 - 34.9	N/A	U	34.9	34.9
Paddys Run	2	2	20.4 - 27.7	N/A	U	27.7	27.7
Manganese							
Glacial Overburden	23	19	0.0025 - 0.22	< 0.003 - < 0.02	L	0.11	0.18
Great Miami Aquifer	106	83	0.002 - 0.916	< 0.001 - < 0.02	U	0.073	0.78
Great Miami River	4	0	N/A	< 0.001 - < 0.02	U	< 0.02	< 0.02
Paddys Run	1	1	0.0257	N/A	U	0.0257	0.0257
Mercury							
Glacial Overburden	22	1	0.0004	< 0.0001 - < 0.0003	U	< 0.0002	< 0.0003
Great Miami Aquifer	104	10	0.0002 - 0.001	< 0.0002 - < 0.0003	U	< 0.0002	0.0004
Great Miami River	4	0	N/A	< 0.0002	U	< 0.0002	< 0.0002
Paddys Run	2	0	N/A	< 0.0001 - < 0.0002	U	< 0.0002	< 0.0002
Molybdenum							
Glacial Overburden	20	2	0.017 - 0.028	< 0.003 - < 0.027	U	< 0.02	0.017
Great Miami Aquifer	90	21	0.004 - 0.04	< 0.01 - < 0.02	U	< 0.02	0.025
Great Miami River	4	0	N/A	< 0.01 - < 0.02	U	< 0.02	< 0.02
Paddys Run	2	0	N/A	< 0.017 - < 0.02	U	< 0.02	< 0.02
Nickel							
Glacial Overburden	24	4	0.021 - 0.026	< 0.003 - < 0.04	U	< 0.02	0.022
Great Miami Aquifer	111	14	0.012 - 0.0279	< 0.011 - < 0.04	U	< 0.02	0.023
Great Miami River	4	0	N/A	< 0.02	U	< 0.02	< 0.02
Paddys Run	1	0	N/A	< 0.02	U	< 0.02	< 0.02

Table 9-3 (Continued)
Summary Statistics of Filtered Inorganic Constituents for Background Water Quality

Constituent	No. of analyses	No. of detections	Range of Detects	Range of Nondetects	Distribution type	95% UCL	95th Percentile
Potassium							
Glacial Overburden	23	21	0.891 - 31.5	< 0.632 - < 5	L	18.0	29.3
Great Miami Aquifer	101	94	0.664 - 4.03	< 0.777 - < 3	LQ	1.90	3.32
Great Miami River	4	4	3.4 - 6.2	N/A	U	6.2	6.2
Paddys Run	2	2	1.96 - 3.50	N/A	U	3.50	3.50
Selenium							
Glacial Overburden	16	0	N/A	< 0.001 - < 0.005	U	< 0.002	< 0.005
Great Miami Aquifer	79	6	0.00105 - 0.006	< 0.001 - < 0.005	U	< 0.002	0.004
Great Miami River	3	0	N/A	< 0.002	U	< 0.002	< 0.002
Paddys Run	2	0	N/A	< 0.002 - < 0.003	U	< 0.003	< 0.003
Silicon							
Glacial Overburden	4	4	5.62 - 7.43	N/A	U	7.43	7.43
Great Miami Aquifer	4	4	2.6 - 3.46	N/A	U	3.46	3.46
Great Miami River	2	2	2.50 - 3.04	N/A	U	3.04	3.04
Paddys Run	2	2	2.43 - 3.01	N/A	U	3.01	3.01
Silver							
Glacial Overburden	25	5	0.0105 - 0.052	< 0.0005 - < 0.02	U	< 0.01	0.04
Great Miami Aquifer	110	13	0.0031 - 0.034	< 0.0005 - < 0.02	U	< 0.01	0.0138
Great Miami River	3	0	N/A	< 0.01	U	< 0.01	< 0.01
Paddys Run	2	0	N/A	< 0.002 - < 0.01	U	< 0.01	< 0.01
Sodium							
Glacial Overburden	23	23	5.71 - 56.3	N/A	L	32.3	56.3
Great Miami Aquifer	106	106	1.96 - 101	N/A	L	22.6	55.0
Great Miami River	4	4	27.1 - 77.2	N/A	U	77.2	77.2
Paddys Run	2	2	12.9 - 18.3	N/A	U	18.3	18.3
Thallium							
Glacial Overburden	5	0	N/A	< 0.001 - < 0.002	U	< 0.002	< 0.002
Great Miami Aquifer	16	0	N/A	< 0.001 - < 0.003	U	< 0.003	< 0.003
Great Miami River	2	0	N/A	< 0.002	U	< 0.002	< 0.002
Paddys Run	1	0	N/A	< 0.002	U	< 0.002	< 0.002

Table 9-3 (Continued)
Summary Statistics of Filtered Inorganic Constituents for Background Water Quality

Constituent	No. of analyses	No. of detections	Range of Detects	Range of Nondetects	Distribution type	95% UCL	95th Percentile
TDS							
Glacial Overburden	1	1	433	N/A	U	433	433
Great Miami Aquifer	20	20	320 - 673	N/A	N*	522	658
Great Miami River	0	0	N/A	N/A	N/A	N/A	N/A
Paddys Run	0	0	N/A	N/A	N/A	N/A	N/A
Vanadium							
Glacial Overburden	7	2	0.018 - 0.0195	< 0.0029 - < 0.012	U	0.0195	0.0195
Great Miami Aquifer	27	12	0.01 - 0.0244	< 0.003 - < 0.01	U	0.0143	0.0234
Great Miami River	2	0	N/A	< 0.01	U	< 0.01	< 0.01
Paddys Run	1	0	N/A	< 0.01	U	< 0.01	< 0.01
Zinc							
Glacial Overburden	7	5	0.0104 - 0.0443	< 0.0102 - < 0.042	U	0.0443	0.0443
Great Miami Aquifer	23	10	0.0068 - 0.133	< 0.002 - < 0.024	U	0.0228	0.0568
Great Miami River	2	0	N/A	< 0.0063 - < 0.0148	U	< 0.0148	< 0.0148
Paddys Run	1	0	N/A	< 0.005	U	< 0.005	< 0.005

Note:
(1) Concentrations are reported in mg/L.
(2) N/A = Not applicable.
(3) Distribution types: N = Normal, L = Lognormal, N* = Normal (but also passed Lognormal test), L* = Lognormal (but also passed Normal test), NQ = Qualified Normal, LQ = Qualified Lognormal, U = Undefined.
(4) This table solely presents the results of statistical computations. Further interpretation may be required to determine numbers to be used in risk assessment and nature and extent comparisons.

Table 9-4
Summary Statistics of Unfiltered Inorganic Constituents for Background Water Quality

Constituent	No. of analyses	No. of detections	Range of Detects	Range of Nondetects	Distribution type	95% UCL	95th Percentile
Alkalinity as CaCO3							
Glacial Overburden	5	5	313 - 430	N/A	U	430	430
Great Miami Aquifer	21	21	210 - 430	N/A	N*	349	422
Great Miami River	2	2	232 - 245	N/A	U	245	245
Paddys Run	2	2	235 - 342	N/A	U	342	342
Aluminum							
Glacial Overburden	5	2	0.774 - 2.29	< 0.0193 - < 0.09	U	2.29	2.29
Great Miami Aquifer	15	4	0.06 - 0.225	< 0.014 - < 0.0985	U	0.06	0.225
Great Miami River	2	2	1.3 - 1.89	N/A	U	1.89	1.89
Paddys Run	2	2	0.195 - 0.64	N/A	U	0.64	0.64
Ammonia							
Glacial Overburden	22	11	0.1 - 4.5	< 0.05 - < 0.1	U	0.55	4.34
Great Miami Aquifer	101	40	0.045 - 12.6	< 0.05 - < 0.4	U	< 0.3	4.2
Great Miami River	4	2	0.1 - 0.11	< 0.1	U	0.11	0.11
Paddys Run	2	1	0.0387	< 0.1	U	0.0387	0.0387
Antimony							
Glacial Overburden	2	0	N/A	< 0.0041 - < 0.011	U	< 0.011	< 0.011
Great Miami Aquifer	11	0	N/A	< 0.005 - < 0.031	U	< 0.031	< 0.031
Great Miami River	2	0	N/A	< 0.005	U	< 0.005	< 0.005
Paddys Run	2	0	N/A	< 0.005 - < 0.014	U	< 0.014	< 0.014
Arsenic							
Glacial Overburden	5	3	0.0031 - 0.0194	< 0.001	U	0.0194	0.0194
Great Miami Aquifer	16	7	0.0011 - 0.0294	< 0.001 - < 0.002	U	0.0021	0.0294
Great Miami River	4	2	0.0018 - 0.0036	< 0.002 - < 0.005	U	0.0036	0.0036
Paddys Run	2	0	N/A	< 0.00185 - < 0.002	U	< 0.002	< 0.002
Barium							
Glacial Overburden	5	5	0.0486 - 0.454	N/A	U	0.454	0.454
Great Miami Aquifer	16	14	0.0368 - 0.768	< 0.0231 - < 0.0737	L	0.768	0.768
Great Miami River	5	5	0.049 - 0.1	N/A	U	0.1	0.1
Paddys Run	2	2	0.034 - 0.0534	N/A	U	0.0534	0.0534
Beryllium							
Glacial Overburden	4	0	N/A	< 0.0003 - < 0.001	U	< 0.001	< 0.001
Great Miami Aquifer	16	0	N/A	< 0.001 - < 0.002	U	< 0.001	< 0.002
Great Miami River	2	0	N/A	< 0.002	U	< 0.002	< 0.002
Paddys Run	1	0	N/A	< 0.002	U	< 0.002	< 0.002

Table 9-4 (Continued)
Summary Statistics of Unfiltered Inorganic Constituents for Background Water Quality

Constituent	No. of analyses	No. of detections	Range of Detects	Range of Nondetects	Distribution type	95% UCL	95th Percentile
Cadmium							
Glacial Overburden	4	0	N/A	< 0.0012 - < 0.005	U	< 0.005	< 0.005
Great Miami Aquifer	16	3	0.0022 - 0.0135	< 0.002 - < 0.005	U	< 0.005	0.0135
Great Miami River	5	2	0.006 - 0.0098	< 0.002 - < 0.005	U	0.0098	0.0098
Paddys Run	2	0	N/A	< 0.005	U	< 0.005	< 0.005
Calcium							
Glacial Overburden	5	5	81.1 - 172	N/A	U	172	172
Great Miami Aquifer	16	16	78 - 162	N/A	L*	127	159
Great Miami River	5	5	61.2 - 77	N/A	U	77	77
Paddys Run	2	2	86.6 - 107	N/A	U	107	107
Chloride							
Glacial Overburden	25	20	1.4 - 50	< 0.5 - < 8.6	U	25	45
Great Miami Aquifer	110	98	0.02 - 120	< 0.75 - < 35	U	23	73
Great Miami River	5	5	18.0 - 325	N/A	U	325	325
Paddys Run	2	2	27.8 - 31.6	N/A	U	31.6	31.6
Chromium							
Glacial Overburden	5	1	0.0046	< 0.0032 - < 0.006	U	0.0046	0.0046
Great Miami Aquifer	16	2	0.0067 - 0.0211	< 0.003 - < 0.0214	U	< 0.01	0.0211
Great Miami River	5	0	N/A	< 0.002 - < 0.02	U	< 0.02	< 0.02
Paddys Run	2	0	N/A	< 0.006 - < 0.01	U	< 0.01	< 0.01
Cobalt							
Glacial Overburden	5	0	N/A	< 0.003 - < 0.008	U	< 0.008	< 0.008
Great Miami Aquifer	15	1	0.0086	< 0.005 - < 0.01	U	< 0.009	0.0086
Great Miami River	2	0	N/A	< 0.01	U	< 0.01	< 0.01
Paddys Run	1	0	N/A	< 0.01	U	< 0.01	< 0.01
Copper							
Glacial Overburden	5	3	0.0053 - 0.0294	< 0.0045 - < 0.0099	U	0.0294	0.0294
Great Miami Aquifer	16	2	0.0113 - 0.0354	< 0.003 - < 0.01	U	< 0.0058	0.0354
Great Miami River	5	1	0.0118	< 0.0091 - < 0.01	U	0.0118	0.0118
Paddys Run	1	0	N/A	< 0.01	U	< 0.01	< 0.01
Cyanide							
Glacial Overburden	5	0	N/A	< 0.001 - < 0.01	U	< 0.01	< 0.01
Great Miami Aquifer	16	0	N/A	< 0.00002 - < 0.02	U	< 0.01	< 0.02
Great Miami River	2	2	0.0030 - 0.0052	N/A	U	0.0052	0.0052
Paddys Run	2	0	N/A	< 0.002 - < 0.005	U	< 0.005	< 0.005

Table 9-4 (Continued)
Summary Statistics of Unfiltered Inorganic Constituents for Background Water Quality

Constituent	No. of analyses	No. of detections	Range of Detects	Range of Nondetects	Distribution type	95% UCL	95th Percentile
Fluoride							
Glacial Overburden	25	25	0.2 - 1.3	N/A	L	0.75	1.3
Great Miami Aquifer	113	110	0.1 - 1.9	< 0.1 - < 0.5	LQ	0.43	0.89
Great Miami River	5	5	0.27 - 0.9	N/A	U	0.9	0.9
Paddys Run	2	2	0.215 - 0.22	N/A	U	0.22	0.22
Iron							
Glacial Overburden	5	5	0.249 - 6.35	N/A	U	6.35	6.35
Great Miami Aquifer	15	14	0.312 - 5.5	< 0.0481	N	3.56	5.72
Great Miami River	5	5	0.164 - 2.23	N/A	U	2.23	2.23
Paddys Run	2	2	0.129 - 0.513	N/A	U	0.513	0.513
Lead							
Glacial Overburden	4	3	0.0013 - 0.0016	< 0.0032	U	0.0016	0.0016
Great Miami Aquifer	15	1	0.002	< 0.001 - < 0.003	U	< 0.002	0.002
Great Miami River	4	1	0.010	< 0.002 - < 0.01	U	0.010	0.010
Paddys Run	2	0	N/A	< 0.002 - < 0.00395	U	< 0.00395	< 0.00395
Magnesium							
Glacial Overburden	5	5	23.1 - 50.7	N/A	U	50.7	50.7
Great Miami Aquifer	16	16	20.1 - 39	N/A	N*	32.3	38.5
Great Miami River	5	5	21.5 - 33.9	N/A	U	33.9	33.9
Paddys Run	2	2	20.7 - 27.8	N/A	U	27.8	27.8
Manganese							
Glacial Overburden	5	4	0.0035 - 0.205	< 0.0178	U	0.205	0.205
Great Miami Aquifer	16	16	0.0043 - 0.904	N/A	L	0.781	0.904
Great Miami River	5	5	0.0089 - 0.082	N/A	U	0.082	0.082
Paddys Run	1	1	0.035	N/A	U	0.035	0.035
Mercury							
Glacial Overburden	5	0	N/A	< 0.0001 - < 0.0004	U	< 0.0004	< 0.0004
Great Miami Aquifer	15	0	N/A	< 0.0002	U	< 0.0002	< 0.0002
Great Miami River	4	0	N/A	< 0.0002	U	< 0.0002	< 0.0002
Paddys Run	2	0	N/A	< 0.0001 - < 0.0002	U	< 0.0002	< 0.0002
Molybdenum							
Glacial Overburden	4	0	N/A	< 0.0041 - < 0.019	U	< 0.019	< 0.019
Great Miami Aquifer	8	0	N/A	< 0.01 - < 0.02	U	< 0.015	< 0.02
Great Miami River	5	1	0.02	< 0.003 - < 0.02	U	0.02	0.02
Paddys Run	2	0	N/A	< 0.017 - < 0.02	U	< 0.02	< 0.02

Table 9-4 (Continued)
Summary Statistics of Unfiltered Inorganic Constituents for Background Water Quality

Constituent	No. of analyses	No. of detections	Range of Detects	Range of Nondetects	Distribution type	95% UCL	95th Percentile
Nickel							
Glacial Overburden	5	1	0.0072	< 0.011 - < 0.02	U	0.0072	0.0072
Great Miami Aquifer	16	1	0.0514	< 0.011 - < 0.031	U	< 0.031	0.0514
Great Miami River	5	2	0.011 - 0.023	< 0.02	U	0.023	0.023
Paddys Run	1	0	N/A	< 0.02	U	< 0.02	< 0.02
Nitrate							
Glacial Overburden	11	9	0.012 - 0.3	< 0.1	N*	0.19	0.29
Great Miami Aquifer	64	52	0.014 - 24.9	< 0.02 - < 0.1	U	1.88	11.4
Great Miami River	5	5	0.4 - 6.58	N/A	U	6.58	6.58
Paddys Run	2	1	1.66	< 1.72	U	1.66	1.66
Nitrate/Nitrite							
Glacial Overburden	4	1	0.07	< 0.02 - < 0.05	U	0.07	0.07
Great Miami Aquifer	12	4	0.02 - 4.1	< 0.05	U	0.051	4.1
Great Miami River	0	0	N/A	N/A	N/A	N/A	N/A
Paddys Run	0	0	N/A	N/A	N/A	N/A	N/A
Phosphorus							
Glacial Overburden	20	12	0.026 - 0.18	< 0.02 - < 0.1	L	0.11	0.18
Great Miami Aquifer	102	75	0.01 - 3.08	< 0.01 - < 0.05	U	0.08	0.954
Great Miami River	5	5	0.12 - 1.1	N/A	U	1.1	1.1
Paddys Run	1	1	0.228	N/A	U	0.228	0.228
Potassium							
Glacial Overburden	5	4	0.963 - 17.2	< 0.894	U	17.2	17.2
Great Miami Aquifer	16	13	0.648 - 1.96	< 1.44 - < 2.09	L*	1.42	1.96
Great Miami River	5	5	2.3 - 6.08	N/A	U	6.08	6.08
Paddys Run	2	2	2.12 - 3.58	N/A	U	3.58	3.58
Selenium							
Glacial Overburden	5	0	N/A	< 0.001 - < 0.002	U	< 0.002	< 0.002
Great Miami Aquifer	15	1	0.00075	< 0.001 - < 0.002	U	< 0.002	0.00075
Great Miami River	4	0	N/A	< 0.002	U	< 0.002	< 0.002
Paddys Run	2	0	N/A	< 0.001 - < 0.002	U	< 0.002	< 0.002
Silicon							
Glacial Overburden	4	4	5.6 - 10.7	N/A	U	10.7	10.7
Great Miami Aquifer	1	1	5.81	N/A	U	5.81	5.81
Great Miami River	2	2	4.47 - 5.90	N/A	U	5.90	5.90
Paddys Run	2	2	2.95 - 3.36	N/A	U	3.36	3.36

Table 9-4 (Continued)
Summary Statistics of Unfiltered Inorganic Constituents for Background Water Quality

Constituent	No. of analyses	No. of detections	Range of Detects	Range of Nondetects	Distribution type	95% UCL	95th Percentile
Silver							
Glacial Overburden	5	1	0.0031	< 0.002 - < 0.007	U	0.0031	0.0031
Great Miami Aquifer	16	1	0.0117	< 0.003 - < 0.01	U	< 0.005	0.0117
Great Miami River	5	0	N/A	< 0.0005 - < 0.03	U	< 0.03	< 0.03
Paddys Run	2	0	N/A	< 0.002 - < 0.01	U	< 0.01	< 0.01
Sodium							
Glacial Overburden	5	5	8.81 - 50	N/A	U	50	50
Great Miami Aquifer	16	16	3.08 - 50.4	N/A	N*	29.1	47.1
Great Miami River	5	5	12.9 - 75.8	N/A	U	75.8	75.8
Paddys Run	2	2	13 - 18.2	N/A	U	18.2	18.2
Sulfate							
Glacial Overburden	25	22	3 - 175	< 0.5 - < 2	N	75.7	136
Great Miami Aquifer	110	101	2.79 - 321	< 2	U	54.4	197
Great Miami River	4	4	45.6 - 138	N/A	U	138	138
Paddys Run	2	2	46.8 - 55.7	N/A	U	55.7	55.7
Sulfide							
Glacial Overburden	4	0	N/A	< 0.5 - < 1	U	< 1	< 1
Great Miami Aquifer	6	0	N/A	< 0.5	U	< 0.5	< 0.5
Great Miami River	1	0	N/A	< 0.5	U	< 0.5	< 0.5
Paddys Run	2	0	N/A	< 0.5 - < 1	U	< 1	< 1
Thallium							
Glacial Overburden	5	0	N/A	< 0.001 - < 0.002	U	< 0.002	< 0.002
Great Miami Aquifer	15	0	N/A	< 0.001 - < 0.003	U	< 0.003	< 0.003
Great Miami River	2	0	N/A	< 0.002	U	< 0.002	< 0.002
Paddys Run	1	0	N/A	< 0.002	U	< 0.002	< 0.002
TKN							
Glacial Overburden	14	10	0.178 - 4.34	< 0.1 - < 0.4	U	2.2	4.34
Great Miami Aquifer	53	38	0.1 - 4.74	< 0.1 - < 0.4	LQ	1.48	3.30
Great Miami River	2	2	1.11 - 1.84	N/A	U	1.84	1.84
Paddys Run	2	1	0.288	< 0.251	U	0.288	0.288
Total Solids							
Glacial Overburden	1	1	452	N/A	U	452	452
Great Miami Aquifer	18	18	330 - 773	N/A	L*	546	711
Great Miami River	0	0	N/A	N/A	N/A	N/A	N/A
Paddys Run	0	0	N/A	N/A	N/A	N/A	N/A

Table 9-4 (Continued)
Summary Statistics of Unfiltered Inorganic Constituents for Background Water Quality

Constituent	No. of analyses	No. of detections	Range of Detects	Range of Nondetects	Distribution type	95% UCL	95th Percentile
Vanadium							
Glacial Overburden	5	1	0.0051	< 0.0029 - < 0.012	U	0.0051	0.0051
Great Miami Aquifer	16	2	0.0076 - 0.0117	< 0.003 - < 0.01	U	< 0.007	0.0117
Great Miami River	2	0	N/A	< 0.01	U	< 0.01	< 0.01
Paddys Run	1	0	N/A	< 0.01	U	< 0.01	< 0.01
Zinc							
Glacial Overburden	5	4	0.0192 - 0.352	< 0.0066	U	0.352	0.352
Great Miami Aquifer	14	2	0.0087 - 0.021	< 0.0034 - < 0.0378	U	< 0.0229	0.021
Great Miami River	2	1	0.0446	< 0.0324	U	0.0446	0.0446
Paddys Run	1	0	N/A	< 0.005	U	< 0.005	< 0.005

Note:
(1) Concentrations are reported in mg/L.
(2) N/A = Not applicable.
(3) Distribution types: N = Normal, L = Lognormal, N* = Normal (but also passed Lognormal test), L* = Lognormal (but also passed Normal test), NQ = Qualified Normal, LQ = Qualified Lognormal, U = Undefined.
(4) This table solely presents the results of statistical computations. Further interpretation may be required to determine numbers to be used in risk assessment and nature and extent comparisons.

Table 9-5
Summary Statistics of Phenols, Total Organic Carbon, Total Organic Halides, and Total Organic Nitrogen for Background Water Quality

Constituent	No. of analyses	No. of detections	Range of Detects	Range of Nondetects	Distribution type	95% UCL	95th Percentile
Phenols							
Glacial Overburden	21	11	0.007 - 0.03	< 0.002 - < 0.01	L	0.020	0.030
Great Miami Aquifer	94	46	0.00575 - 0.091	< 0.005 - < 0.014	U	0.01	0.03
Great Miami River	4	1	0.01	< 0.01	U	0.01	0.01
Paddys Run	2	0	N/A	< 0.005 - < 0.01	U	< 0.01	< 0.01
Total Organic Carbon							
Glacial Overburden	7	4	1.15 - 9	< 1 - < 3.27	U	9	9
Great Miami Aquifer	25	17	1 - 4.25	< 1	NQ	2.23	3.87
Great Miami River	2	2	1.97 - 3.06	N/A	U	3.06	3.06
Paddys Run	2	2	1.68 - 5.35	N/A	U	5.35	5.35
Total Organic Halides							
Glacial Overburden	16	3	0.011 - 0.126	< 0.01 - < 0.05	U	< 0.05	0.126
Great Miami Aquifer	85	13	0.012 - 0.12	< 0.01 - < 0.05	U	< 0.05	0.052
Great Miami River	5	4	0.0189 - 0.25	< 0.05	U	0.25	0.25
Paddys Run	2	1	0.0109	< 0.01	U	0.0109	0.0109
Total Organic Nitrogen							
Glacial Overburden	20	10	0.1 - 1.35	< 0.1 - < 0.23	U	0.178	0.34
Great Miami Aquifer	86	61	0.075 - 2.75	< 0.1 - < 0.21	U	0.2	0.9
Great Miami River	5	5	0.2 - 1.73	N/A	U	1.73	1.73
Paddys Run	2	1	0.288	< 0.213	U	0.288	0.288

Note:
(1) Concentrations are reported in mg/L.
(2) N/A = Not applicable.
(3) Distribution types: N = Normal, L = Lognormal, N* = Normal (but also passed Lognormal test), L* = Lognormal (but also passed Normal test), NQ = Qualified Normal, LQ = Qualified Lognormal, U = Undefined.
(4) This table solely presents the results of statistical computations. Further interpretation may be required to determine numbers to be used in risk assessment and nature and extent comparisons.

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APPENDIX A

DATA FROM PREVIOUS STUDIES

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Note: The data in this appendix are as reported in the respective source document.

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Table A-1

Uranium in Private Wells Sampled by the FEMP Environmental Monitoring Program, 1991

Well Number[a]	Depth of Well (feet)[b]	Number of Samples	Concentration (pCi/L)		
			Minimum	Maximum	Arithmetic Mean
1	--	11	0.07	0.54	0.20
2	--	--	--	--	--
3	60	12	0.14	0.61	0.20
4	25	12	0.74	1.6	1.2
6	50	--	--	--	--
7	58	12	0.61	1.4	1.0
8	130	12	0.34	0.74	0.54
10	90	12	0.27	0.54	0.41
11	40	12	0.74	2.0	1.4
20	27	--	--	--	--
22	80	12	0.47	0.81	0.68
23	--	12	0.41	0.68	0.54
24	60	12	0.27	0.68	0.41
25	--	4	0.14	0.34	0.27
28	--	4	0.41	1.0	0.61
29	70	12	1.0	1.9	1.4
30	27	4	0.27	0.61	0.34
31	--	--	--	--	--
33	90	6	0.20	0.34	0.27
41	--	11	0.27	0.61	0.41
All Wells	--	--	0.07	2.0	0.62

[a]See Figure 2-1 for well locations.

[b]Approximate depth.

Table A-2

Metals in Private Wells Sampled by the FEMP Environmental Monitoring Program in 1991
(in mg/l)

Well Number[a]	Arsenic	Barium	Cadmium	Calcium	Chromium	Copper	Iron	Lead
1	<0.010	0.38	<0.005	73	<0.010	<0.025	3.4	0.0060
3	0.016	0.48	<0.005	79	<0.010	<0.025	3.7	0.0032
4	<0.010	<0.20	<0.005	98	<0.010	<0.025	<0.10	<0.0030
7	<0.010	<0.20	<0.005	110	<0.010	<0.025	3.5	<0.0030
8	<0.010	<0.20	<0.005	94	<0.010	<0.025	<0.10	<0.0030
10	<0.010	<0.20	<0.005	100	<0.010	<0.025	2.4	<0.0030
11	<0.010	<0.20	0.020	110	<0.010	0.031	<0.10	<0.0030
22	<0.010	<0.20	<0.005	82	<0.010	<0.025	<0.10	<0.0030
23	<0.010	<0.20	<0.005	84	<0.010	0.028	0.18	<0.0030
24	<0.010	<0.20	<0.005	55	<0.010	<0.025	<0.10	<0.0030
25	<0.010	<0.20	<0.005	78	<0.010	<0.025	<0.10	<0.0030
28	<0.010	<0.20	<0.005	83	<0.010	<0.025	0.24	0.0076
29	<0.010	<0.20	<0.005	21	<0.010	<0.025	0.78	<0.0030
30	<0.010	<0.20	<0.005	70	<0.010	0.030	<0.10	<0.0030
33	<0.010	<0.20	<0.005	46	<0.010	0.048	<0.10	<0.0030
41	<0.010	<0.20	<0.005	91	<0.010	<0.025	<0.025	<0.0030
Arithmetic Mean	<0.010	<0.20	<0.005	79.6	<0.010	<0.025	0.91	0.0023

Table A-2
(Continued)

Well Number	Magnesium	Manganese	Nickel	Potassium	Selenium	Silver	Sodium	Zinc
1	22	0.020	<0.040	<5.0	<0.005	<0.010	17	0.045
3	22	0.020	<0.040	<5.0	<0.005	<0.010	29	0.030
4	40	<0.015	<0.040	<5.0	<0.005	<0.010	28	0.12
7	30	0.16	<0.040	<5.0	<0.005	<0.010	7.6	0.033
8	26	0.25	<0.040	<5.0	<0.005	<0.010	14	0.029
10	24	0.24	<0.040	<5.0	<0.005	<0.010	9.6	0.094
11	29	<0.015	<0.040	<5.0	<0.005	<0.010	88	0.19
22	22	0.049	<0.040	<5.0	<0.005	<0.010	13	0.035
23	26	0.080	<0.040	<5.0	<0.005	<0.010	<5.0	0.025
24	15	0.040	<0.040	<5.0	<0.005	<0.010	<5.0	0.046
25	32	<0.015	<0.040	<5.0	<0.005	<0.010	22	<0.020
28	24	0.079	<0.040	<5.0	<0.005	<0.010	<5.0	0.022
29	6.0	0.057	<0.040	<5.0	<0.005	<0.010	<5.0	0.023
30	19	<0.015	<0.040	<5.0	<0.005	<0.010	11	0.027
33	13	<0.015	<0.040	<5.0	<0.005	0.031	8.8	<0.020
41	28	0.13	<0.040	<5.0	<0.005	<0.010	9.4	0.033
Arithmetic Mean	23.5	0.073	<0.040	<5.0	<0.005	<0.010	16.7	0.048

[a]See Figure 7 for well locations. Samples were collected during the month of July.
Source of data: WEMCO, 1992.

Table A-3. Background Water Quality for the Great Miami River Collected by the U. S. Geological Survey Near Hamilton, Ohio, 1963-1973.

Date	Specific Conductance (umhos/cm)	Dissolved Oxygen (mg/L)	pH (SU)	Alkalinity as CaCO3 (mg/L)	Bicarbonate Alkalinity as HCO3 (mg/L)	Hardness Total as CaCO3 (mg/L)	Calcium Dissolved (mg/L)
31-Jul-63	777	8.3	8	195	240	330	
07-Aug-63	792	5	7.8	195	240	330	
14-Aug-63	700	4.9	7.5	176	210	290	
28-Aug-63	765	4.6	7.6	221	270	320	
05-Sep-63	832	4.4	7.6	244	300	350	
11-Sep-63	850	4	7.4	235	290	350	
18-Sep-63	863	3.8	7.3	254	310	350	
24-Sep-63	878	4.1	7.3	210	260	350	
02-Oct-63	903	2.8	7.2	243	300	360	
17-Oct-63	950	2.6	7.4	243	300	370	
23-Oct-63	935	2.2	7.3	238	290	360	
30-Oct-63	933	2.2	7.4	276	340	370	
13-Nov-63	938	2.3	7.1	220	270	370	
11-Dec-63	869	4.8	6.8	207	250	360	88
16-Jan-64	958	5.4	6.8	200	240	360	95
17-Feb-64	883	4.9	6.8	203	250	360	90
18-Mar-64	567	10	6.9	162	200	260	73
15-Apr-64	672	7.4	7.2	213	260	320	79
20-May-64	723	6.8	7	238	290	340	82
17-Jun-64	643	4.7	6.9	208	250	290	71
15-Jul-64	721	6.6	6.9	207	250	330	
21-Jul-64	747	4.8	6.8	203	250	330	
29-Jul-64	765	4.6	6.7	213	260	330	
05-Aug-64	797	6	7.6	206	250	340	
12-Aug-64	742	3.2	7.5	176	210	310	
19-Aug-64	826	3.4	7.6	203	250	340	
26-Aug-64	864	3.4	7.6	189	230	360	
02-Sep-64	876	5.1	7.6	189	230	360	
16-Sep-64	938	2.6	7.4	164	200	380	
23-Sep-64	905	3.6	7.6	195	240	350	
30-Sep-64	903	3.3	7.9	174	210	360	
07-Oct-64	903	3.4	7.4	187	230	360	
14-Oct-64	924	3.2	7.4	194	240	380	
21-Oct-64	922	3.1	7.4	190	230	370	
28-Oct-64	903	1.1	7.3	193	240	370	
04-Nov-64	919	2.5	7.4	226	280	370	
11-Nov-64	855	3.6	7.4	198	240	350	
18-Nov-64	852	1	7.3	187	230	350	
16-Dec-64	710	6.8	7.4	184	220	310	75
13-Jan-65	736	8	7.6	198	240	330	81
17-Feb-65	620	10.2	7.8	180	220	310	77
17-Mar-65	665	9.4	7.8	192	230	320	79
14-Apr-65	428	9.2	7.7	128	160	210	54
19-May-65	699	4.6	7.7	220	270	340	81
16-Jun-65	762	6.2	7.2	210	260	340	82
07-Jul-65	752	4.2	7.6	190	230	330	
14-Jul-65	685	6.8	7.6	156	190	300	
21-Jul-65	816	7.2	7.6	184	220	350	

Table A-3. Background Water Quality for the Great Miami River Collected by the U. S. Geological Survey Near Hamilton, Ohio, 1963-1973.

Date	Specific Conductance (umhos/cm)	Dissolved Oxygen (mg/L)	pH (SU)	Alkalinity as CaCO3 (mg/L)	Bicarbonate Alkalinity as HCO3 (mg/L)	Hardness Total as CaCO3 (mg/L)	Calcium Dissolved (mg/L)
28-Jul-65	821	5.6	7.1	198	240	350	
04-Aug-65	842	3.6	7.2	197	240	350	
11-Aug-65							
11-Aug-65	859	3.2	7.6	195	240	350	
18-Aug-65	853	2.2	7.8	194	240	350	
24-Aug-65	873	4	7.7	177	220	360	
31-Aug-65							
31-Aug-65	853	0.9	7.6	197	240	350	
08-Sep-65	778	3	7.6	177	220	320	
15-Sep-65	636	1.3	7.5	162	200	260	
22-Sep-65	712	2.4	7.6	167	200	310	
28-Sep-65	812	0.8	7.5	189	230	350	
06-Oct-65	847	5	7.5		230	360	
12-Oct-65	741	3.2	6.9		200	320	
19-Oct-65	825	2.2	7.3	228	280	340	
27-Oct-65	707	5.6	7.3		230	340	
03-Nov-65	798	4	7.5		270	370	
09-Nov-65	842	2.2	7.3		270	380	
17-Nov-65	828	4	7.4		280	370	
15-Dec-65	743	5.3	7.5		240	330	82
12-Jan-66	720	11.4	7.6		270	350	87
16-Feb-66	592	11	7.5		220	290	75
15-Mar-66	744	6.8	7.2		270	360	88
13-Apr-66	720	7.4	7.4		250	330	82
18-May-66	697	5.8	7.6		280	340	84
16-Jun-66	756	2.6	7.4		250	340	83
12-Jul-66	699	1	7.4		230	300	
19-Jul-66	688	1.8	7.2		230	310	
26-Jul-66	809	3.8	7.4		260	350	
02-Aug-66	820	2.2	7.1		220	330	
09-Aug-66	764	0.2	7.3		250	310	
16-Aug-66	697	2.7	7.3		230	290	
23-Aug-66	746	3.4	7.3		220	320	
30-Aug-66	835	0.8	7.1		220	360	
07-Sep-66	869	3.4	7.3		250	350	
14-Sep-66	870	0.1	6.7		200	350	
20-Sep-66	811	1	6.8		200	330	
28-Sep-66	783	3.2	7.1		230	320	
05-Oct-66	821	1.4	6.7		220	330	
12-Oct-66	876	1.6	7.3		260	350	
19-Oct-66	802	2.4	7.3		240	340	
25-Oct-66	871	3	7.3		240	370	
16-Nov-66	723	9.2	7.7		270	350	88
14-Dec-66	491	11.8	7.7		190	240	65
18-Jan-67	790	9	7.5		310	380	92
15-Feb-67	0	0	0				
15-Mar-67	558	9.8	7.4		230	290	72
19-Apr-67	677	6.9	7.5		270	320	80

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Table A-3. Background Water Quality for the Great Miami River Collected by the U. S. Geological Survey Near Hamilton, Ohio, 1963-1973.

Date	Specific Conductance (umhos/cm)	Dissolved Oxygen (mg/L)	pH (SU)	Alkalinity as CaCO3 (mg/L)	Bicarbonate Alkalinity as HCO3 (mg/L)	Hardness Total as CaCO3 (mg/L)	Calcium Dissolved (mg/L)
17-May-67	576	8.6	7.3		250	300	75
14-Jun-67	762	3.2	7.5		290	360	85
05-Jul-67	690	10.8	7.8		260	320	
26-Jul-67	785	2	7.2		240	350	
01-Aug-67	472	4.2	7.4		170	210	
08-Aug-67	770	3.4	7.2		230	340	
16-Aug-67	842	3.4	7.2		230	360	
23-Aug-67	881	2.1	7.4		240	360	
30-Aug-67	882	2.8	7.3		220	360	
07-Sep-67	914	2.4	7.1		190	400	
13-Sep-67	917	2.4	7.2		220	370	
19-Sep-67	915	3.8	7.2		200	390	
28-Sep-67	834	2	7		190	370	
04-Oct-67	850	2.6	7.2	172	210	350	
11-Oct-67	830	2.8	7.2	184	220	330	
18-Oct-67	891	3	7.4	185	230	350	
25-Oct-67	856	3	7.3	184	220	370	
01-Nov-67	856	3.2	7.3	179	220	350	
08-Nov-67	782	7.8	7.7	225	270	350	
14-Nov-67	808	5.6	7.5	203	250	350	89
13-Dec-67	463	11	7.8	135	160	230	62
18-Jan-68	881	9.6	7.7	236	290	380	99
14-Feb-68	726	11	7.7	233	280	360	92
20-Mar-68	705	7.6	7.8	226	280	340	79
23-Apr-68	708	8.2	7.6	212	260	340	81
15-May-68	672	6.2	7.8	215	260	320	79
12-Jun-68	667	7	8	225	270	330	82
02-Jul-68	684	4.8	7.6	207	250	330	
10-Jul-68	749	5	7.7	215	260	350	
17-Jul-68	696	4.2	7.8	215	260	310	
23-Jul-68	554	4.2	7.7	169	210	260	
31-Jul-68	621	5	7.7	192	230	300	
07-Aug-68	635	5.4	7.9	217	260	310	
14-Aug-68	609	5.9	7.6	205	250	300	
21-Aug-68	727	4.6	7.8	238	290	360	
28-Aug-68	772	4.6	7.7	223	270	370	
05-Sep-68	759	4.6	7.5	215	260	350	
12-Sep-68	726	4.4	7.7	233	280	330	
18-Sep-68	783	3.6	7.5	203	250	340	
24-Sep-68	760	4.6	7.6	221	270	340	
02-Oct-68	833	2.9	7.4	215	260	370	
09-Oct-68	800	3.8	7.3	202	250	340	
16-Oct-68	836	3.2	7.5	213	260	360	
23-Oct-68	860	3.2	7.4	220	270	370	
31-Oct-68	868	3.6	7.4	223	270	370	
20-Nov-68	628	9.6	7.5	192	230	300	77
18-Dec-68	774	10	7.6	241	290	360	90
15-Jan-69	835	10.6	7.6	274	330	390	98

Table A-3. Background Water Quality for the Great Miami River Collected by the U. S. Geological Survey Near Hamilton, Ohio, 1963-1973.

Date	Specific Conductance (umhos/cm)	Dissolved Oxygen (mg/L)	pH (SU)	Alkalinity as CaCO3 (mg/L)	Bicarbonate Alkalinity as HCO3 (mg/L)	Hardness Total as CaCO3 (mg/L)	Calcium Dissolved (mg/L)
12-Feb-69	611	11.9	7.8	205	250	300	74
12-Mar-69	757	9.6	7.7	236	290	350	87
16-Apr-69	689	9	7.8	221	270	320	79
21-May-69	438	8.8	7.7	138	170	220	56
17-Jun-69	586	6.6	7.8	192	230	280	68
08-Jul-69	584	7	8	205	250	300	
15-Jul-69	650	6	7.8	218	270	340	
23-Jul-69	533	7.2	7.8	190	230	260	
30-Jul-69	659	6.8	8	231	280	330	
06-Aug-69	775	6.2	8	256	310	360	
13-Aug-69	496	7.4	7.8	180	220	250	
19-Aug-69	693	7.6	7.9	230	280	330	
27-Aug-69	784	4	7.8	251	310	350	
03-Sep-69	430	5.6	7.6	126	150	190	
10-Sep-69	826	3.2	7.7	249	300	340	
17-Sep-69	836	2.2	7.6	249	300	350	
24-Sep-69	748	3	7.7	226	280	320	
29-Sep-69	841	5.4	7.6	243	300	350	
08-Oct-69	856	6.1	7.8	241	290	360	
15-Oct-69	876	5	7.8	230	280	370	
22-Oct-69	838	4.5	8	236	290	340	
29-Oct-69	875	5.7					
12-Nov-69	882	5.3	7.7	254	310	370	
17-Dec-69	749	9.3	7.8	241	290	360	
21-Jan-70	962	10.7	7.8	267	330	370	
11-Feb-70	677	12.4	8.1	226	280	320	
11-Mar-70	664	11.5	8.1	221	270	320	
15-Apr-70	704	9.8	8	246	300	340	
20-May-70	648	0	8	226	280	320	
17-Jun-70	726	6.7	8	254	310	350	
08-Jul-70	705	3	7.9	226	280	320	
15-Jul-70	760	8.2	8.1	243	300	340	
22-Jul-70	801	5.3	7.6	225	270	330	
29-Jul-70	779	4.9	7.8	235	290	320	
05-Aug-70	701	5.5	7.9	212	260	290	
13-Aug-70	778	3.3	7.6	241	290	340	
19-Aug-70	787	1.1	7.4	225	270	310	
26-Aug-70	763	6.3	7.7	226	280	320	
02-Sep-70	857	6.4	7.6	241	290	330	
09-Sep-70	818	5.4	7.7	221	270	320	
16-Sep-70	797	4.7	7.8	226	280	310	
23-Sep-70	886	1.1	7.7	238	290	340	
30-Sep-70	879	4.5	7.7	233	280	330	
07-Oct-70	902	5.7	7.9	239	290	350	
14-Oct-70	820	4	7.8	231	280	310	
21-Oct-70	786	6.5	7.8	217	260	310	
28-Oct-70	856	3.6	7.6	235	290	340	
11-Nov-70	868	4.6	7.6	246	300	350	

Table A-3. Background Water Quality for the Great Miami River Collected by the U. S. Geological Survey Near Hamilton, Ohio, 1963-1973.

Date	Specific Conductance (umhos/cm)	Dissolved Oxygen (mg/L)	pH (SU)	Alkalinity as CaCO3 (mg/L)	Bicarbonate Alkalinity as HCO3 (mg/L)	Hardness Total as CaCO3 (mg/L)	Calcium Dissolved (mg/L)
16-Dec-70	755	7.9	7.7	223	270	330	
13-Jan-71	796	9.9	7.7	243	300	360	
24-Feb-71	344	12.8	7.7	102	120	160	
31-Mar-71	758	9.3	8	238	290	350	
28-Apr-71	807	9.3	7.4	239	290	350	
26-May-71	711	7.6	7.6	225	270	320	
30-Jun-71	514	6.3	7.3	164	200	250	
07-Jul-71	695	8	7.7	215	260	320	
14-Jul-71	655	4.8	7.7	182	220	270	
21-Jul-71	817	7	7.6	233	280	340	
28-Jul-71	608	5.4	7.3	164	200	240	
04-Aug-71	752	3.1	7.7	208	250	300	
11-Aug-71	808	5.8	7.6	221	270	320	
18-Aug-71	876	4.5	7.7	233	280	330	
25-Aug-71	899	4	7.8	238	290	330	
01-Sep-71	857	4.1	7.5	221	270	320	
08-Sep-71	692	3.9	7.6	197	240	290	
15-Sep-71	747	3.6	7.5	215	260	290	
22-Sep-71	794	5	7.7	226	280	320	
06-Oct-71	838	4	7.6	243	300	340	
13-Oct-71	875	3.2	7.4	228	280	320	
20-Oct-71	717	4.6	7.6	207	250	290	
27-Oct-71	830	4	7.4	243	300	330	
10-Nov-71	891	5.3	7.7	254	310	350	
15-Dec-71	611	11.5	7.4	190	230	290	
19-Jan-72	800	12	7.6	261	320	390	
16-Feb-72	761	11.4	7.7	220	270	310	
15-Mar-72	739	11	7.8	238	290	350	
19-Apr-72	536	8.7	7.7	179	220	260	
17-May-72	498	9.5	7.6	166	200	240	
21-Jun-72	480	6.6	7.6	154	190	230	
05-Jul-72	706	6.7	7.9	235	290	330	
12-Jul-72	704	8.4	7.9	223	270	320	
19-Jul-72	693	8.1	8	228	280	310	
26-Jul-72	762	6.8	8	239	290	350	
02-Aug-72	819	8.5	7.8	243	300	390	
09-Aug-72	818	7.2	7.8	235	290	370	
16-Aug-72	854	4.5	7.7	254	310	350	
23-Aug-72	744	2.7	7.2	207	250	300	
30-Aug-72	690	7.4	7.6	190	230	290	
06-Sep-72	860	6.2	7.4	221	270	350	
13-Sep-72	910	4.9	7.3	243	300	370	
20-Sep-72	720	8.3	7.9	197	240	310	
27-Sep-72	500	7.2	6.9	143	170	230	
04-Oct-72	555	7.5	7.7	176	210	260	
11-Oct-72	700	7.8	7.6	228	280	330	
18-Oct-72	710	7.8	7.9	220	270	330	
25-Oct-72	810	7.6	7.8	254	310	370	

Table A-3. Background Water Quality for the Great Miami River Collected by the U. S. Geological Survey Near Hamilton, Ohio, 1963-1973.

Date	Specific Conductance (umhos/cm)	Dissolved Oxygen (mg/L)	pH (SU)	Alkalinity as CaCO3 (mg/L)	Bicarbonate Alkalinity as HCO3 (mg/L)	Hardness Total as CaCO3 (mg/L)	Calcium Dissolved (mg/L)
08-Nov-72	490	10.2	7.8	161	200	250	
20-Dec-72	635	12.3	8	194	240	270	
17-Jan-73	830	11.9	7.7	277	340	390	
21-Feb-73	730	11.4	8	244	300	360	
21-Mar-73	530	12.1	7.8	180	220	280	
18-Apr-73	485	9.9	7.9	169	210	250	
09-May-73	540	8.3	7.8	190	230	260	
20-Jun-73	440	7.6	7.7	148	180	220	
05-Jul-73	400	7.4	7.6	141	170	240	
11-Jul-73	650	5.8	8	230	280	330	
18-Jul-73	725	7.8	8	248	300	350	
25-Jul-73	500	7.6	7.7	180	220	250	
01-Aug-73	700	6.9	7.6	246	300	340	
08-Aug-73	740	10.4	8.2	266	320	370	
15-Aug-73	420	7.6	7.5	148	180	220	
22-Aug-73	500	7.5	7.6	185	230	260	
29-Aug-73	700	9.4	8.2	261	320	370	
05-Sep-73	725	7.7	8.2	264	320	360	
12-Sep-73	760	8.4	7.9	258	310	370	
19-Sep-73	810	9.3	7.8	271	330	390	
26-Sep-73	790	7.2	7.7	254	310	360	
04-Oct-73	650	6.5	7.4	180	220	350	
10-Oct-73	800	6.9	7.6	262	320	390	
17-Oct-73	800	9.1	7.4	261	320	380	
24-Oct-73	825	7.5	7.6	271	330	390	
31-Oct-73	900	7.3	7.5	271	330	400	
14-Nov-73	851	7.8	7.5	272	330	370	

Table A-3. Background Water Quality for the Great Miami River Collected by the U. S. Geological Survey Near Hamilton, Ohio, 1963-1973.

Date	Magesium Dissolved (mg/L)	Sodium Dissolved (mg/L)	Potassium Dissolved (mg/L)	Chloride Dissolved (mg/L)	Sulfate Dissolved (mg/L)	Fluoride Dissolved (mg/L)	Silica Dissolved (mg/L)
31-Jul-63				43	150		
07-Aug-63				46	150		
14-Aug-63				41	130		
28-Aug-63				44	120		
05-Sep-63				52	120		
11-Sep-63				53	140		
18-Sep-63				58	120		
24-Sep-63				55	170		
02-Oct-63				60	140		
17-Oct-63				62	160		
23-Oct-63				62	160		
30-Oct-63				60	130		
13-Nov-63				59	180		
11-Dec-63	34	45	5	60	170	0.5	6.4
16-Jan-64	30	60	4.9	75	190	0.7	7.1
17-Feb-64	32	48	4.3	60	170	0.5	5.7
18-Mar-64	20	11	2.5	23	83	0.3	6.7
15-Apr-64	29	16	2.3	26	99	0.1	5.8
20-May-64	33	20	2.9	33	100	0.3	1.5
17-Jun-64	28	21	3.1	30	89	0.4	5.1
15-Jul-64				36	120		
21-Jul-64				40	130		
29-Jul-64				43	130		
05-Aug-64				45	140		
12-Aug-64				44	140		
19-Aug-64				52	150		
26-Aug-64				52	180		
02-Sep-64				56	180		
16-Sep-64				61	230		
23-Sep-64				62	180		
30-Sep-64				62	210		
07-Oct-64				59	200		
14-Oct-64				58	200		
21-Oct-64				58	200		
28-Oct-64				56	200		
04-Nov-64				57	170		
11-Nov-64				50	170		
18-Nov-64				54	180		
16-Dec-64	29	37	3.6	43	120	0.5	6.2
13-Jan-65	32	27	3.2	38	120	0.5	6
17-Feb-65	28	15	2.3	28	96	0.1	6.9
17-Mar-65	30	16	2.2	30	97	0.3	5.8
14-Apr-65	19	8.3	2.3	14	55	0.2	5.8
19-May-65	33	19	2.9	30	100	0.3	2
16-Jun-65	34	29	3.3	40	130	0.4	3.8
07-Jul-65				43	130		
14-Jul-65				37	140		
21-Jul-65				50	160		

Table A-3. Background Water Quality for the Great Miami River Collected by the U. S. Geological Survey Near Hamilton, Ohio, 1963-1973.

Date	Magesium Dissolved (mg/L)	Sodium Dissolved (mg/L)	Potassium Dissolved (mg/L)	Chloride Dissolved (mg/L)	Sulfate Dissolved (mg/L)	Fluoride Dissolved (mg/L)	Silica Dissolved (mg/L)
28-Jul-65				51	150		
04-Aug-65				56	170		
11-Aug-65							
11-Aug-65				58	160		
18-Aug-65				56	170		
24-Aug-65				56	190		
31-Aug-65							
31-Aug-65				54	170		
08-Sep-65				50	150		
15-Sep-65				39	100		
22-Sep-65				38	140		
28-Sep-65				47	170		
06-Oct-65				50	170		
12-Oct-65				43	150		
19-Oct-65				50	130		
27-Oct-65				30	130		
03-Nov-65				42	130		
09-Nov-65				48	150		
17-Nov-65				47	130		
15-Dec-65	31	31	3.4	40	120	0.5	4.5
12-Jan-66	33	18	2.7	30	100	0.4	8.2
16-Feb-66	24	11	2.1	22	79	0.3	6.4
15-Mar-66	34	23	2.6	33	110	0.1	3.6
13-Apr-66	31	26	3	34	120	0.4	2.6
18-May-66	32	17	2.4	26	96	0.4	4
16-Jun-66	33	29	3.4	39	140	0.5	5
12-Jul-66				39	110		
19-Jul-66				32	120		
26-Jul-66				44	150		
02-Aug-66				48	170		
09-Aug-66				46	130		
16-Aug-66				42	110		
23-Aug-66				43	150		
30-Aug-66				44	180		
07-Sep-66				56	170		
14-Sep-66				54	200		
20-Sep-66				52	170		
28-Sep-66				54	140		
05-Oct-66				53	170		
12-Oct-66				58	160		
19-Oct-66				50	150		
25-Oct-66				51	180		
16-Nov-66	31	18	3.1	30	110	0.5	8.2
14-Dec-66	20	7.2	2.8	16	61	0.1	6.9
18-Jan-67	36	29	2.8	38	120	0.4	6
15-Feb-67			0				
15-Mar-67	26	11	2.4	24	71	0.3	6.3
19-Apr-67	30	18	2.5	30	98	0.7	3.2

Table A-3. Background Water Quality for the Great Miami River Collected by the U. S. Geological Survey Near Hamilton, Ohio, 1963-1973.

Date	Magesium Dissolved (mg/L)	Sodium Dissolved (mg/L)	Potassium Dissolved (mg/L)	Chloride Dissolved (mg/L)	Sulfate Dissolved (mg/L)	Fluoride Dissolved (mg/L)	Silica Dissolved (mg/L)
17-May-67	28	8.6	1.8	18	65	0.6	7.7
14-Jun-67	35	25	3.2	36	120	0.3	2.9
05-Jul-67			0	32	100		
26-Jul-67			0	46	150		
01-Aug-67			0	24	62		
08-Aug-67			0	44	140		
16-Aug-67			0	50	160		
23-Aug-67			0	58	180		
30-Aug-67			0	56	190		
07-Sep-67			0	60	230		
13-Sep-67			0	62	200		
19-Sep-67			0	62	220		
28-Sep-67			0	59	170		
04-Oct-67			0	60	170		
11-Oct-67			0	58	150		
18-Oct-67			0	58	180		
25-Oct-67			0	58	170		
01-Nov-67			0	60	180		
08-Nov-67			0	44	130		
14-Nov-67	32	36	4.8	48	150	0.4	7.9
13-Dec-67	19	7.7	2.9	20	60	0.4	6.7
18-Jan-68	32	42	3.3	66	130	0.3	8.6
14-Feb-68	31	21	2.7	34	110	0.2	7
20-Mar-68	35	27	2.7	40	100	0.4	2.4
23-Apr-68	33	22	4.2	36	110	0.3	0.8
15-May-68	31	20	3	32	86	0.4	6
12-Jun-68	30	18	2.8	30	87	0.4	2.3
02-Jul-68			0	30	96		
10-Jul-68			0	40	130		
17-Jul-68			0	40	93		
23-Jul-68			0	28	80		
31-Jul-68			0	28	94		
07-Aug-68			0	28	81		
14-Aug-68			0	24	80		
21-Aug-68			0	34	100		
28-Aug-68			0	42	130		
05-Sep-68			0	44	120		
12-Sep-68			0	42	91		
18-Sep-68			0	48	140		
24-Sep-68			0	46	120		
02-Oct-68			0	50	150		
09-Oct-68			0	50	140		
16-Oct-68			0	52	150		
23-Oct-68			0	56	150		
31-Oct-68			0	57	160		
20-Nov-68	27	15	3.8	28	88	0.4	7.8
18-Dec-68	34	24	2.8	36	120	0.3	7.2
15-Jan-69	36	26	2.8	40	120	0.4	8.4

Table A-3. Background Water Quality for the Great Miami River Collected by the U. S. Geological Survey Near Hamilton, Ohio, 1963-1973.

Date	Magesium Dissolved (mg/L)	Sodium Dissolved (mg/L)	Potassium Dissolved (mg/L)	Chloride Dissolved (mg/L)	Sulfate Dissolved (mg/L)	Fluoride Dissolved (mg/L)	Silica Dissolved (mg/L)
12-Feb-69	27	12	2.4	24	70	0.3	8
12-Mar-69	33	24	2.9	36	110	0.3	4.2
16-Apr-69	31	19	2.7	30	96	0.4	4.4
21-May-69	20	6.5	3	18	47	0.8	7.2
17-Jun-69	27	15	3.1	25	67	0.3	5.4
08-Jul-69			0	25	70		
15-Jul-69			0	30	83		
23-Jul-69			0	19	54		
30-Jul-69			0	27	76		
06-Aug-69			0	40	87		
13-Aug-69			0	15	52		
19-Aug-69			0	32	87		
27-Aug-69			0	42	100		
03-Sep-69			0	24	54		
10-Sep-69			0	50	100		
17-Sep-69			0	52	110		
24-Sep-69			0	46	99		
29-Sep-69			0	55	110		
08-Oct-69			0	52	120		
15-Oct-69			0	58	140	0.6	
22-Oct-69			0	53	120		
29-Oct-69			0				
12-Nov-69			0	57	120		
17-Dec-69			0	36	100		
21-Jan-70			0	90	99		
11-Feb-70			0	38	71	0.4	
11-Mar-70			0	28	75		
15-Apr-70			0	34	80		
20-May-70			0	26	70	0.3	
17-Jun-70			0	34	80		
08-Jul-70			0	38	80		
15-Jul-70			0	37	88		
22-Jul-70			0	54	100		
29-Jul-70			0	52	91		
05-Aug-70			0	44	85		
13-Aug-70			0	54	95	0.6	0
19-Aug-70			0	58	98		
26-Aug-70			0	52	97		
02-Sep-70			0	64	110		
09-Sep-70			0	66	110		
16-Sep-70			0	64	97		
23-Sep-70			0	72	110		
30-Sep-70			0	78	120		
07-Oct-70				80	120		
14-Oct-70				66	96	0.5	
21-Oct-70				62	95		
28-Oct-70				64	110		
11-Nov-70				62	100		

Table A-3. Background Water Quality for the Great Miami River Collected by the U. S. Geological Survey Near Hamilton, Ohio, 1963-1973.

Date	Magesium Dissolved (mg/L)	Sodium Dissolved (mg/L)	Potassium Dissolved (mg/L)	Chloride Dissolved (mg/L)	Sulfate Dissolved (mg/L)	Fluoride Dissolved (mg/L)	Silica Dissolved (mg/L)
16-Dec-70				52	89		
13-Jan-71				50	96		
24-Feb-71				20	36	0.4	
31-Mar-71				44	89		
28-Apr-71				50	100		
26-May-71				40	82	0.4	
30-Jun-71				26	69		
07-Jul-71				36	93		
14-Jul-71				42	86		
21-Jul-71				58	110		
28-Jul-71				42	78		
04-Aug-71				52	97		
11-Aug-71				60	100	1	
18-Aug-71				72	120		
25-Aug-71				80	120		
01-Sep-71				70	110		
08-Sep-71				52	84		
15-Sep-71				60	90		
22-Sep-71				66	95		
06-Oct-71				62	110		
13-Oct-71				72	110	0.8	
20-Oct-71				54	88		
27-Oct-71				64	99		
10-Nov-71				70	110		
15-Dec-71				32	75		
19-Jan-72				50	99		
16-Feb-72				68	75	0.5	
15-Mar-72				38	81		
19-Apr-72				26	59		
17-May-72				18	50	0.3	
21-Jun-72				25	55		
05-Jul-72				44	50		
12-Jul-72				46	82		
19-Jul-72				44	71		
26-Jul-72				58	90		
02-Aug-72				72	98		
09-Aug-72				70	110		
16-Aug-72				72	100	0.6	
23-Aug-72				64	93		
30-Aug-72				56	90		
06-Sep-72				80	110		
13-Sep-72				88	110		
20-Sep-72				61	88		
27-Sep-72				34	56		
04-Oct-72				36	64		
11-Oct-72				44	86	0.4	
18-Oct-72				50	90		
25-Oct-72				62	100		

Table A-3. Background Water Quality for the Great Miami River Collected by the U. S. Geological Survey Near Hamilton, Ohio, 1963-1973.

Date	Magesium Dissolved (mg/L)	Sodium Dissolved (mg/L)	Potassium Dissolved (mg/L)	Chloride Dissolved (mg/L)	Sulfate Dissolved (mg/L)	Fluoride Dissolved (mg/L)	Silica Dissolved (mg/L)
08-Nov-72				29	54		
20-Dec-72				50	58		
17-Jan-73				44	88		
21-Feb-73				40	79	0.4	
21-Mar-73				22	50		
18-Apr-73				24	49		
09-May-73				28	54	0.3	
20-Jun-73				20	40		
05-Jul-73				18	37		
11-Jul-73				34	69		
18-Jul-73				46	78		
25-Jul-73				22	45		
01-Aug-73				39	68		
08-Aug-73				48	78	0.5	
15-Aug-73				22	44		
22-Aug-73				26	46		
29-Aug-73				40	79		
05-Sep-73				40	78		
12-Sep-73				48	88		
19-Sep-73				54	95		
26-Sep-73				54	99		
04-Oct-73				40	64		
10-Oct-73				50	88	0.4	
17-Oct-73				52	84		
24-Oct-73				58	95	1.1	
31-Oct-73				62	96	0	
14-Nov-73				62	100		

Table A-3. Background Water Quality for the Great Miami River Collected by the U. S. Geological Survey Near Hamilton, Ohio, 1963-1973.

Date	Phenols Total (ug/L)	Solids Residue @ 180C Dissolved (mg/L)	Nitrogen Ammonia Dissolved (mg/L)	Nitrogen Nitrate Dissolved (mg/L)	Manganese as Mn (ug/L)	Iron as Fe (ug/L)
31-Jul-63	10	497	0.4	4.9	140	230
07-Aug-63	0	508	1.8	1.4	340	440
14-Aug-63	0	435	1.5	8	230	390
28-Aug-63	0	480	2	2.5	130	340
05-Sep-63	18	513	2.4	1.8	160	230
11-Sep-63	14	527	1.5	2.1	340	300
18-Sep-63	10	519	2.3	1.4	110	280
24-Sep-63	11	558	2.7	0.3	220	230
02-Oct-63	5	570	3.6	0.9	210	260
17-Oct-63	0	595	4.1		210	230
23-Oct-63	6	587	4	0.4	220	210
30-Oct-63	0	570	3.8	0.5	290	270
13-Nov-63	3	594	4.4	1.9	350	400
11-Dec-63	8	583	3.5	6.2	310	1800
16-Jan-64	0	590	4.8	5.2	210	2700
17-Feb-64	1	559	3	5.3	200	1400
18-Mar-64	0	341	0.3	18	10	310
15-Apr-64	0	423	0.5	14	110	620
20-May-64	7	437	0.4	8.5	90	210
17-Jun-64	7	408	0.3	10	290	420
15-Jul-64	0	453	0.7	5.9	160	340
21-Jul-64	5	474	0.8	5.2	100	420
29-Jul-64	0	488	0.9	4.2	220	310
05-Aug-64	1	497	1.1	3.5	150	260
12-Aug-64	0	469	1.5	2.5	200	230
19-Aug-64	0	536	1.8	2.6	180	300
26-Aug-64	0	562	2.5	1.5	280	190
02-Sep-64	17	572	2.1	2.5	200	250
16-Sep-64	9	624	3.2	1.1	340	430
23-Sep-64	0	561	4.1	0.2	310	540
30-Sep-64	8	652	3.7	3.6	280	240
07-Oct-64	18	588	3	1.9	280	220
14-Oct-64	7	591	4.1	1.3	450	380
21-Oct-64	17	596	4.6	2.1	340	270
28-Oct-64	8	580	4	0.7	390	320
04-Nov-64	3	583	4.8	0.9	260	290
11-Nov-64	5	539	3		60	200
18-Nov-64	4	533	3.3	0.1	400	190
16-Dec-64	8	450	1.9	6.2	160	1300
13-Jan-65	2	470	0.7	8.1	160	970
17-Feb-65	11	396	0.6	20	210	600
17-Mar-65	8	417	0.9	20	140	590
14-Apr-65	6	286	0.4	18	20	1400
19-May-65	2	444	0.7	5.9	290	480
16-Jun-65	0	478			120	470
07-Jul-65	4	499	0.7	4.8	220	390
14-Jul-65	6	435	0.4	3.4	480	1100
21-Jul-65	11	538	1	3.9	310	490

Table A-3. Background Water Quality for the Great Miami River Collected by the U. S. Geological Survey Near Hamilton, Ohio, 1963-1973.

Date	Phenols Total (ug/L)	Solids Residue @ 180C Dissolved (mg/L)	Nitrogen Ammonia Dissolved (mg/L)	Nitrogen Nitrate Dissolved (mg/L)	Manganese as Mn (ug/L)	Iron as Fe (ug/L)
28-Jul-65	8	526	1.3	2.9	240	240
04-Aug-65	0	552	1.6	3	390	250
11-Aug-65			1.7			
11-Aug-65	5	542	0.09	2.6	210	540
18-Aug-65	11	559	1.4	2.6	180	260
24-Aug-65		575	2.2	0.8	410	240
31-Aug-65			2.3			
31-Aug-65	0	547	0.13	0.7	300	330
08-Sep-65	8	497	2.2	2	260	180
15-Sep-65	6	409	2.1	2.1	580	540
22-Sep-65	11	466	1	5.6	350	230
28-Sep-65	4	538	2.1	5	310	320
06-Oct-65	6	559	1.8	4		380
12-Oct-65	8	474	1.7	3.7		360
19-Oct-65	14	519	2.4	2.5	280	540
27-Oct-65	2	459	1.1	8.2		920
03-Nov-65	6	529	1.6	9.2		600
09-Nov-65	2	541	2.1	8.7		700
17-Nov-65	20	524	1.4	7.6		760
15-Dec-65	0	458	1.8	6.8		980
12-Jan-66	0	435	1	19		560
16-Feb-66	31	381	0.3	25		440
15-Mar-66	0	469	1.3	12		2100
13-Apr-66	1	456	1.2	5.3		600
18-May-66	0	439	0.5	13		390
16-Jun-66	0	485	1	6.1		620
12-Jul-66	9	474	0.7	8.1		270
19-Jul-66	10	434	1	7.8		480
26-Jul-66	0	554	1.3	5.6		270
02-Aug-66	1	544	1.3	2.5		140
09-Aug-66	0	482	1.6	2.6		110
16-Aug-66	4	436	0.8	5.1		340
23-Aug-66	2	492	1.2	9.3		80
30-Aug-66	9	564	1.6	7.1		70
07-Sep-66	12	546	2.3	3.2		420
14-Sep-66	23	576	2.1	2.4		150
20-Sep-66	13	548	3.2	2		200
28-Sep-66	24	515	2.1	5.7		310
05-Oct-66	4	512	1.7	5.2		80
12-Oct-66	14	546	2.4	5.6		180
19-Oct-66	5	492	1.9	6.7		620
25-Oct-66	0	578	2.4	5.2		280
16-Nov-66	11	484	1	18		100
14-Dec-66	6	326	0.2	19		730
18-Jan-67	23	508	2	10		670
15-Feb-67	11					
15-Mar-67	1	350	0.6	24		
19-Apr-67	2	434	0.7	7.9		

Table A-3. Background Water Quality for the Great Miami River Collected by the U. S. Geological Survey Near Hamilton, Ohio, 1963-1973.

Date	Phenols Total (ug/L)	Solids Residue @ 180C Dissolved (mg/L)	Nitrogen Ammonia Dissolved (mg/L)	Nitrogen Nitrate Dissolved (mg/L)	Manganese as Mn (ug/L)	Iron as Fe (ug/L)
17-May-67	29	378	0.1	16		
14-Jun-67		488	0.9	8		
05-Jul-67		468	0.4	14		
26-Jul-67		494	2.6	2.7		
01-Aug-67		316	0.9	8		
08-Aug-67		506	1.2	9.5		
16-Aug-67		546	1.6	7.4		
23-Aug-67		543	2.7	7.2		
30-Aug-67	2	608	2.4	8.1		
07-Sep-67	0	634	2	7.5		
13-Sep-67	1	584	2.7	4.7		
19-Sep-67		638	0.9	4.6		
28-Sep-67	25	546	2.9	4.5		
04-Oct-67	6	554	2.8	5.2		
11-Oct-67	9	544	2.8	5.4		
18-Oct-67	10	578	3.1	5.4		
25-Oct-67	4	540	2.6	7.2		
01-Nov-67	2	556	3	6.2		
08-Nov-67	10	508	1.7	6.2		
14-Nov-67	1	536	2.1	7.7		
13-Dec-67	4	300	0.37	18		
18-Jan-68	24	586	2.5	9.3		
14-Feb-68	15	456	1.7	13		
20-Mar-68	2	462	0.81	7.1		
23-Apr-68	0	442	0.22	7.1		
15-May-68	5	422	0.67	13		
12-Jun-68	2	412	0.22	6		
02-Jul-68	2	476	0.59	19		
10-Jul-68	3	490	0.66	4.5		
17-Jul-68	2	418	0.74	8.3		
23-Jul-68	4	338	0.3	6.8		
31-Jul-68	5	434	0.59	5.7		
07-Aug-68	7	452	0.59	10		
14-Aug-68	2	404	0.44	9.1		
21-Aug-68	0	494	0.52	8		
28-Aug-68	0	508	1.2	6.4		
05-Sep-68	2	488	1.1	8.5		
12-Sep-68	3	458	1.6	7		
18-Sep-68	14	514	1.5	5.9		
24-Sep-68	3	456	1.2	9.2		
02-Oct-68	11	522	1.8	7.3		
09-Oct-68	3	482	2.5	7.5		
16-Oct-68	2	554	1.5	8.1		
23-Oct-68	2	542	2.5	6.6		
31-Oct-68	14	558	2.4	7.7		
20-Nov-68	5	424	0.96	17		
18-Dec-68	12	488	1.8	11		1100
15-Jan-69	0	506	2.4	13		1

Table A-3. Background Water Quality for the Great Miami River Collected by the U. S. Geological Survey Near Hamilton, Ohio, 1963-1973.

Date	Phenols Total (ug/L)	Solids Residue @ 180C Dissolved (mg/L)	Nitrogen Ammonia Dissolved (mg/L)	Nitrogen Nitrate Dissolved (mg/L)	Manganese as Mn (ug/L)	Iron as Fe (ug/L)
12-Feb-69	0	382	0.37	15		
12-Mar-69	6	454	1.5	10		1400
16-Apr-69	4	432	0.68	11		400
21-May-69	0	284	0.23	23		430
17-Jun-69	0	404	0.31	17		160
08-Jul-69	0	370	0.31	17		1200
15-Jul-69	0	408	0.14	14		120
23-Jul-69	1	342	0.24	15		230
30-Jul-69	3	419	0.12	10		110
06-Aug-69	0	468	0.12	7.7		80
13-Aug-69	2	290	0.32	10		350
19-Aug-69	0	428	0.22	8.6		110
27-Aug-69	2	464	0.54	7.7		190
03-Sep-69	1	258	1	4.6		900
10-Sep-69	0	512	1.2	7.8		300
17-Sep-69	6	496	0.14	6.9		340
24-Sep-69	0	456	0.67	8.6		300
29-Sep-69	3	500	1.7	8.3		430
08-Oct-69		519	2.1	12		
15-Oct-69	0	558	1.8	5.6	100	80
22-Oct-69	20	536	1.3	11		90
29-Oct-69		512	1.9	6.8		
12-Nov-69		560	2.4	12		
17-Dec-69		454	1.7	11		
21-Jan-70		560	2.4	8.4		
11-Feb-70	0	426	0.86	20	30	20
11-Mar-70		410	0.67	23		
15-Apr-70		438	0.64	17		
20-May-70	0	408	0.27	12	10	30
17-Jun-70		440	0.11	14		
08-Jul-70		432	1.3	6		
15-Jul-70	2	442	0.33	10		40
22-Jul-70	0	500	2.2	5.7		40
29-Jul-70		466	1.6	6.7		
05-Aug-70		406	1.3	5		
13-Aug-70	2	476	1.6	3.7	10	60
19-Aug-70	0	458	1.3	4.3		80
26-Aug-70		470	1.3	3.2		
02-Sep-70		494	1.7	1.4		
09-Sep-70	0	502	1.9	2		60
16-Sep-70	2	486	2.1	3		60
23-Sep-70	2	520	2.2	1.7		60
30-Sep-70		526	2.2	4.1		
07-Oct-70	0	544		4.8		
14-Oct-70	4	474		4.4	86	590
21-Oct-70		478		8		50
28-Oct-70		502		6		60
11-Nov-70		502		8		

Table A-3. Background Water Quality for the Great Miami River Collected by the U. S. Geological Survey Near Hamilton, Ohio, 1963-1973.

Date	Phenols Total (ug/L)	Solids Residue @ 180C Dissolved (mg/L)	Nitrogen Ammonia Dissolved (mg/L)	Nitrogen Nitrate Dissolved (mg/L)	Manganese as Mn (ug/L)	Iron as Fe (ug/L)
16-Dec-70		438		10		
13-Jan-71		462		20		
24-Feb-71	2	208		15	35	40
31-Mar-71		446		17		
28-Apr-71		466		6.7		
26-May-71	0	434		13	90	1900
30-Jun-71		340		30		
07-Jul-71		462		23		
14-Jul-71	0	386		8.7		100
21-Jul-71	0	486		33		830
28-Jul-71		344		7		
04-Aug-71		450		6.7		
11-Aug-71	2	486		7.8	110	500
18-Aug-71	0	544		6.3		80
25-Aug-71		552		4.3		
01-Sep-71		506		6.3		
08-Sep-71	3	404		9		1600
15-Sep-71	3	450		8		690
22-Sep-71		488		7.3		
06-Oct-71		500				
13-Oct-71	5	524				
20-Oct-71		434				
27-Oct-71		498				
10-Nov-71		538				
15-Dec-71		384				
19-Jan-72		506				
16-Feb-72	3	456				
15-Mar-72		457				
19-Apr-72		362				
17-May-72	1	330				
21-Jun-72		320				
05-Jul-72		428				
12-Jul-72	0	444				
19-Jul-72	4	428				
26-Jul-72		486				
02-Aug-72		519				
09-Aug-72	1	517				
16-Aug-72	2	533				
23-Aug-72	0	452				
30-Aug-72	0	438				
06-Sep-72	0	520				
13-Sep-72	4	548				
20-Sep-72	0	441				
27-Sep-72	0	301				
04-Oct-72	0	372				
11-Oct-72	3	440				
18-Oct-72	5	442				
25-Oct-72	0	500				

Table A-3. Background Water Quality for the Great Miami River Collected by the U. S. Geological Survey Near Hamilton, Ohio, 1963-1973.

Date	Phenols Total (ug/L)	Solids Residue @ 180C Dissolved (mg/L)	Nitrogen Ammonia Dissolved (mg/L)	Nitrogen Nitrate Dissolved (mg/L)	Manganese as Mn (ug/L)	Iron as Fe (ug/L)
08-Nov-72	0	310				
20-Dec-72	0	361				
17-Jan-73	0	498				
21-Feb-73	10	443				
21-Mar-73	0	308				
18-Apr-73	0	297				
09-May-73	2	332				
20-Jun-73	0	263				
05-Jul-73	2	254				
11-Jul-73	1	399				
18-Jul-73		464				
25-Jul-73		328				
01-Aug-73		414				
08-Aug-73	0	488				
15-Aug-73		290				
22-Aug-73		314				
29-Aug-73		472				
05-Sep-73	0	464				
12-Sep-73	0	466				
19-Sep-73		502				
26-Sep-73		526				
04-Oct-73	0	364				
10-Oct-73	0	494				
17-Oct-73		482				
24-Oct-73	0	514				
31-Oct-73		516				
14-Nov-73		542				

Table A-3. Background Water Quality for the Great Miami River Collected by the U. S. Geological Survey Near Hamilton, Ohio, 1963-1973.

Date	Phosphorus total (mg/L)	Phosphate Total (mg/L)	Arsenic Dissolved (ug/L)	Cadmium Dissolved (ug/L)	Chromium Dissolved (ug/L)	Cobalt Dissolved (ug/L)	Copper Dissolved (ug/L)
31-Jul-63	0.16						
07-Aug-63	0.38						
14-Aug-63	0.17						
28-Aug-63	0.22						
05-Sep-63	0.36						
11-Sep-63	0.26						
18-Sep-63	0.41						
24-Sep-63	0.2						
02-Oct-63	0.32						
17-Oct-63	0.51						
23-Oct-63	0.33						
30-Oct-63	0.32						
13-Nov-63	0.16						
11-Dec-63	0.08						
16-Jan-64	0.28						
17-Feb-64	0.11						
18-Mar-64	0.41						
15-Apr-64	0.56						
20-May-64	0.8						
17-Jun-64	0.66						
15-Jul-64	0.24						
21-Jul-64	0.36						
29-Jul-64	0.27						
05-Aug-64	0.28						
12-Aug-64	0.27						
19-Aug-64	0.28						
26-Aug-64	0.25						
02-Sep-64	0.36						
16-Sep-64	0.44						
23-Sep-64	0.31						
30-Sep-64	0.27						
07-Oct-64	0.28						
14-Oct-64	0.38						
21-Oct-64	0.49						
28-Oct-64	0.64						
04-Nov-64	0.36						
11-Nov-64	0.35						
18-Nov-64	0.47						
16-Dec-64	0.2						
13-Jan-65	0.16						
17-Feb-65	0.15						
17-Mar-65	0.16						
14-Apr-65	0.62						
19-May-65	0.49						
16-Jun-65	0.26						
07-Jul-65	0.42						
14-Jul-65	0.18						
21-Jul-65	0.19						

Table A-3. Background Water Quality for the Great Miami River Collected by the U. S. Geological Survey Near Hamilton, Ohio, 1963-1973.

Date	Phosphorus total (mg/L)	Phosphate Total (mg/L)	Arsenic Dissolved (ug/L)	Cadmium Dissolved (ug/L)	Chromium Dissolved (ug/L)	Cobalt Dissolved (ug/L)	Copper Dissolved (ug/L)
28-Jul-65	0.12						
04-Aug-65	0.21						
11-Aug-65							
11-Aug-65	0.24						
18-Aug-65	0.48						
24-Aug-65	0.34						
31-Aug-65							
31-Aug-65	0.53						
08-Sep-65	0.3						
15-Sep-65	0.2						
22-Sep-65	0.52						
28-Sep-65	0.32						
06-Oct-65	0.12						
12-Oct-65	0.2						
19-Oct-65	0.59						
27-Oct-65	0.11						
03-Nov-65	0.5						
09-Nov-65	0.8						
17-Nov-65	1.3						
15-Dec-65		0.56					
12-Jan-66		0.33					
16-Feb-66	0.29						
15-Mar-66		0.33					
13-Apr-66	0.54						
18-May-66		0.5					
16-Jun-66		0.47					
12-Jul-66	0.94						
19-Jul-66	0.5						
26-Jul-66		0.68					
02-Aug-66	0.51						
09-Aug-66		0.83					
16-Aug-66	0.36						10
23-Aug-66	0.45						30
30-Aug-66	0.96					0	0
07-Sep-66	0.56					0	0
14-Sep-66	1.3					0	10
20-Sep-66	0.26						0
28-Sep-66	0.58					0	0
05-Oct-66	0.8					0	0
12-Oct-66	0.52					0	0
19-Oct-66	0.58					0	0
25-Oct-66	0.93					0	0
16-Nov-66	0.53		10			0	10
14-Dec-66	0.38					0	0
18-Jan-67	0.45					0	10
15-Feb-67							
15-Mar-67	0.5					0	0
19-Apr-67	0.33					0	0

Table A-3. Background Water Quality for the Great Miami River Collected by the U. S. Geological Survey Near Hamilton, Ohio, 1963-1973.

Date	Phosphorus total (mg/L)	Phosphate Total (mg/L)	Arsenic Dissolved (ug/L)	Cadmium Dissolved (ug/L)	Chromium Dissolved (ug/L)	Cobalt Dissolved (ug/L)	Copper Dissolved (ug/L)
17-May-67	0.92					0	30
14-Jun-67	0.61					0	10
05-Jul-67	0.1		10			0	40
26-Jul-67	0.84					0	0
01-Aug-67	0.64		10			10	30
08-Aug-67	0.64		10			0	10
16-Aug-67	0.6		10			0	110
23-Aug-67	0.52		10			0	90
30-Aug-67	0.72					0	40
07-Sep-67	0.68		10			0	40
13-Sep-67	0.58					0	30
19-Sep-67	0.38		10			0	10
28-Sep-67	1.8					0	20
04-Oct-67	0.5					0	20
11-Oct-67	0.72					0	30
18-Oct-67	0.42					0	0
25-Oct-67	0.86					0	10
01-Nov-67	0.32					0	10
08-Nov-67	0.35		10			0	10
14-Nov-67	0.24					0	10
13-Dec-67	0.47					0	0
18-Jan-68	0.31					0	0
14-Feb-68	0.28					0	0
20-Mar-68	0.33					0	20
23-Apr-68	0.31					0	0
15-May-68	0.4					0	20
12-Jun-68	0.66					0	0
02-Jul-68	0.56					0	0
10-Jul-68	0.57					0	10
17-Jul-68	0.92					0	0
23-Jul-68	0.39		20			0	10
31-Jul-68	0.23					0	0
07-Aug-68	0.68		10			0	10
14-Aug-68	0.46		10			10	30
21-Aug-68	0.79		10			0	30
28-Aug-68	0.31					0	20
05-Sep-68	0.46		10			0	10
12-Sep-68	0.99		10			0	10
18-Sep-68	0.35					0	10
24-Sep-68	0.88		10			0	10
02-Oct-68	0.47					0	10
09-Oct-68	0.52		10			0	10
16-Oct-68	0.49					10	20
23-Oct-68	0.8					0	0
31-Oct-68	0.64					0	0
20-Nov-68	0.52		10			0	20
18-Dec-68	0.19					0	0
15-Jan-69	0.2					0	0

Table A-3. Background Water Quality for the Great Miami River Collected by the U. S. Geological Survey Near Hamilton, Ohio, 1963-1973.

Date	Phosphorus total (mg/L)	Phosphate Total (mg/L)	Arsenic Dissolved (ug/L)	Cadmium Dissolved (ug/L)	Chromium Dissolved (ug/L)	Cobalt Dissolved (ug/L)	Copper Dissolved (ug/L)
12-Feb-69	0.3					0	0
12-Mar-69	0.14					0	10
16-Apr-69	0.13					0	0
21-May-69	0.4		10			0	20
17-Jun-69	0.46					0	0
08-Jul-69	1					0	10
15-Jul-69	0.74					0	0
23-Jul-69	0.68					0	20
30-Jul-69	0.92					0	0
06-Aug-69	1.4					0	10
13-Aug-69	1.2					0	10
19-Aug-69	0.88					0	10
27-Aug-69	1.4		10			0	10
03-Sep-69	1.2		10			0	10
10-Sep-69	1.3					0	10
17-Sep-69	0.17		10			0	10
24-Sep-69	1.4					0	10
29-Sep-69	1.1		10			0	10
08-Oct-69	0.96					0	0
15-Oct-69	1.1		10			0	20
22-Oct-69	2.3		10			0	0
29-Oct-69	2.5						
12-Nov-69	2.4					0	0
17-Dec-69	2.4					0	0
21-Jan-70	3.2					0	0
11-Feb-70	1.1					0	10
11-Mar-70	1.6					0	0
15-Apr-70	1.7					0	0
20-May-70	1.7					0	10
17-Jun-70	1.6					0	0
08-Jul-70	3.1					0	0
15-Jul-70	2.6					0	10
22-Jul-70	2.9					0	10
29-Jul-70	3.4					0	0
05-Aug-70	2.3					0	0
13-Aug-70	3.2					0	20
19-Aug-70	3.6					0	10
26-Aug-70	2.4					0	0
02-Sep-70	3.8					0	0
09-Sep-70	2.9					0	10
16-Sep-70	3.5					0	20
23-Sep-70	3.2					0	20
30-Sep-70	2.4					0	0
07-Oct-70	2.3						0
14-Oct-70	4.8						22
21-Oct-70	2.2						48
28-Oct-70	3			18	10		19
11-Nov-70	3.4						0

Table A-3. Background Water Quality for the Great Miami River Collected by the U. S. Geological Survey Near Hamilton, Ohio, 1963-1973.

Date	Phosphorus total (mg/L)	Phosphate Total (mg/L)	Arsenic Dissolved (ug/L)	Cadmium Dissolved (ug/L)	Chromium Dissolved (ug/L)	Cobalt Dissolved (ug/L)	Copper Dissolved (ug/L)
16-Dec-70	2.3						0
13-Jan-71	2.3						0
24-Feb-71	0.34		20	20			44
31-Mar-71	1.6						0
28-Apr-71	1.6						0
26-May-71	1.6						10
30-Jun-71	2.7						0
07-Jul-71	1.7						0
14-Jul-71	1.1						14
21-Jul-71	2.2						2
28-Jul-71	1.2						0
04-Aug-71	3.3						0
11-Aug-71	2.1		10				0
18-Aug-71	2.3						5
25-Aug-71	3						0
01-Sep-71	3						0
08-Sep-71	2.1						3
15-Sep-71	1.9						9
22-Sep-71	3.2						0
06-Oct-71	2.4						0
13-Oct-71	3.2						0
20-Oct-71	2.3						0
27-Oct-71	2.6						0
10-Nov-71	3.2						0
15-Dec-71	4.3						0
19-Jan-72	2.5						0
16-Feb-72	2.8						0
15-Mar-72	1.8						0
19-Apr-72	1.5						0
17-May-72	1.5						0
21-Jun-72	2.8						0
05-Jul-72	2.7						0
12-Jul-72	1.6						0
19-Jul-72	2.1						0
26-Jul-72	2.5						0
02-Aug-72	2.3						0
09-Aug-72	2						0
16-Aug-72	2.5						0
23-Aug-72	2.7						0
30-Aug-72	2.4						0
06-Sep-72	0.9	2.8					
13-Sep-72	0.97	3					
20-Sep-72	0.77	2.4					
27-Sep-72	0.72	2.2					
04-Oct-72	0.72	2.2					
11-Oct-72	0.64	2					
18-Oct-72	0.74	2.3					
25-Oct-72	0.9	2.8					

Table A-3. Background Water Quality for the Great Miami River Collected by the U. S. Geological Survey Near Hamilton, Ohio, 1963-1973.

Date	Phosphorus total (mg/L)	Phosphate Total (mg/L)	Arsenic Dissolved (ug/L)	Cadmium Dissolved (ug/L)	Chromium Dissolved (ug/L)	Cobalt Dissolved (ug/L)	Copper Dissolved (ug/L)
08-Nov-72	0.54	1.6					
20-Dec-72	0.38	1.2					
17-Jan-73	0.67	2.1					
21-Feb-73	0.52	1.6					
21-Mar-73	0.32	1					
18-Apr-73	0.52	1.6					
09-May-73	0.47	1.4					
20-Jun-73	1.4	4.3					
05-Jul-73	0.92	2.8					
11-Jul-73	0.62	1.9					
18-Jul-73	0.61	1.9					
25-Jul-73	0.54	1.6					
01-Aug-73	0.46	1.4					
08-Aug-73	0.56	1.7					
15-Aug-73	0.52	1.6					
22-Aug-73	0.45	1.4					
29-Aug-73	0.56	1.7					
05-Sep-73	0.67	2.1					
12-Sep-73	0.62	1.9					
19-Sep-73	0.65	2					
26-Sep-73	0.73	2.2					
04-Oct-73	0.55	1.7					
10-Oct-73	0.62	1.9					
17-Oct-73	0.69	2.1					
24-Oct-73	0.83	2.5					
31-Oct-73	0.96	3					
14-Nov-73	0.92	2.8					

Table A-3. Background Water Quality for the Great Miami River Collected by the U. S. Geological Survey Near Hamilton, Ohio, 1963-1973.

Date	Lead Dissolved (ug/L)	Nickel Dissolved (ug/L)	Zinc Dissolved (ug/L)	Hydroxide water wh fet field mg/L as OH	Phosphorus Dissolved as P	Cyanide total (mg/L)	CO2 Dissolved (mg/L)
31-Jul-63							
07-Aug-63							
14-Aug-63							
28-Aug-63							
05-Sep-63							
11-Sep-63							
18-Sep-63							
24-Sep-63							
02-Oct-63							
17-Oct-63							
23-Oct-63							
30-Oct-63							
13-Nov-63							
11-Dec-63							
16-Jan-64							
17-Feb-64							
18-Mar-64							
15-Apr-64							
20-May-64							
17-Jun-64							
15-Jul-64							
21-Jul-64							
29-Jul-64							
05-Aug-64							
12-Aug-64							
19-Aug-64							
26-Aug-64							
02-Sep-64							
16-Sep-64							
23-Sep-64							
30-Sep-64							
07-Oct-64							
14-Oct-64							
21-Oct-64							
28-Oct-64							
04-Nov-64							
11-Nov-64							
18-Nov-64							
16-Dec-64							
13-Jan-65							
17-Feb-65							
17-Mar-65							
14-Apr-65							
19-May-65							
16-Jun-65							
07-Jul-65							
14-Jul-65							
21-Jul-65							

Table A-3. Background Water Quality for the Great Miami River Collected by the U. S. Geological Survey Near Hamilton, Ohio, 1963-1973.

Date	Lead Dissolved (ug/L)	Nickel Dissolved (ug/L)	Zinc Dissolved (ug/L)	Hydroxide water wh fet field mg/L as OH	Phosphorus Dissolved as P	Cyanide total (mg/L)	CO2 Dissolved (mg/L)
28-Jul-65							
04-Aug-65							
11-Aug-65							
11-Aug-65							
18-Aug-65							
24-Aug-65							
31-Aug-65							
31-Aug-65							
08-Sep-65							
15-Sep-65							
22-Sep-65							
28-Sep-65							
06-Oct-65							
12-Oct-65							
19-Oct-65							
27-Oct-65							
03-Nov-65							
09-Nov-65							
17-Nov-65							
15-Dec-65				8			
12-Jan-66				32			
16-Feb-66							
15-Mar-66				16			
13-Apr-66							
18-May-66				16			
16-Jun-66				8			
12-Jul-66							
19-Jul-66							
26-Jul-66				8			
02-Aug-66							
09-Aug-66				16			
16-Aug-66	0	0	10				
23-Aug-66	10	0	10				
30-Aug-66	0	0	30				
07-Sep-66	0	0	130				
14-Sep-66	0	0	10				
20-Sep-66							
28-Sep-66	0	20	10				
05-Oct-66	0	10	0				
12-Oct-66	0	0	20				
19-Oct-66	0	30	50				
25-Oct-66	0	40	50				
16-Nov-66	10	10	40				
14-Dec-66	0	0	0				
18-Jan-67	0	10	20				
15-Feb-67							
15-Mar-67	0	0	40				
19-Apr-67	30	10	20				

Table A-3. Background Water Quality for the Great Miami River Collected by the U. S. Geological Survey Near Hamilton, Ohio, 1963-1973.

Date	Lead Dissolved (ug/L)	Nickel Dissolved (ug/L)	Zinc Dissolved (ug/L)	Hydroxide water wh fet field mg/L as OH	Phosphorus Dissolved as P	Cyanide total (mg/L)	CO2 Dissolved (mg/L)
17-May-67	30	0	20				
14-Jun-67	10	50	20				
05-Jul-67	40	20	0				
26-Jul-67	20	30	10				
01-Aug-67	10	20	0				
08-Aug-67	10	40	40				
16-Aug-67	10	80	20				
23-Aug-67	10	50	20				
30-Aug-67	10	60	20				
07-Sep-67	20	50	30				
13-Sep-67	10	40	20				
19-Sep-67	0	50	20				
28-Sep-67	10	50	20				
04-Oct-67	0	9	20				
11-Oct-67	0	70	20		0.72		
18-Oct-67	0	80	20				
25-Oct-67	0	160	50				
01-Nov-67	0	190	70				
08-Nov-67	0	130	30				
14-Nov-67	0	70	50				
13-Dec-67	0	0	0				
18-Jan-68	0	0	0				
14-Feb-68	0	0	0				
20-Mar-68	30	2	250				
23-Apr-68	0	0	0				
15-May-68	20	10	60				
12-Jun-68	0	0	0				
02-Jul-68	0	0	0				
10-Jul-68	0	10	10				
17-Jul-68	0	0	0				
23-Jul-68	0	10	10				
31-Jul-68	0	0	0				
07-Aug-68	0	10	20				
14-Aug-68	0	20	20				
21-Aug-68	10	20	20				
28-Aug-68	10	20	20				
05-Sep-68	0	10	60				
12-Sep-68	0	20	70				
18-Sep-68	0	20	40				
24-Sep-68	0	10	20				
02-Oct-68	20	10	30				
09-Oct-68	0	20	20				
16-Oct-68	0	20	30				
23-Oct-68	0	0	0				
31-Oct-68	0	0	0				
20-Nov-68	20	20	30				
18-Dec-68	0	0	0				
15-Jan-69	0	0	0				

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Table A-3. Background Water Quality for the Great Miami River Collected by the U. S. Geological Survey Near Hamilton, Ohio, 1963-1973.

Date	Lead Dissolved (ug/L)	Nickel Dissolved (ug/L)	Zinc Dissolved (ug/L)	Hydroxide water wh fet field mg/L as OH	Phosphorus Dissolved as P	Cyanide total (mg/L)	CO2 Dissolved (mg/L)
12-Feb-69	0	0	0				
12-Mar-69	0	20	30				
16-Apr-69	0	0	0				
21-May-69	30	20	10				
17-Jun-69	0	0	0				
08-Jul-69	20	10	10				
15-Jul-69	0	0	0				
23-Jul-69	10	10	20				
30-Jul-69	0	0	0				
06-Aug-69	10	20	10				
13-Aug-69	20	10	10				
19-Aug-69	30	20	20				
27-Aug-69	20	10	30				
03-Sep-69	20	10	20				
10-Sep-69	0	30	20				
17-Sep-69	10	30	20				
24-Sep-69	10	30	10				
29-Sep-69	20	20	30				
08-Oct-69	0	0	0				
15-Oct-69	10	0	100				
22-Oct-69	0	0	50				
29-Oct-69	0		0				
12-Nov-69	0	0	0				
17-Dec-69	0	0	0				
21-Jan-70	0	0	0				
11-Feb-70	0	0	80				
11-Mar-70	0	0	0				
15-Apr-70	0	0	0				
20-May-70	0	0	40				
17-Jun-70	0	0	0				
08-Jul-70	0	0	0				
15-Jul-70	0	0	20				
22-Jul-70	0	0	110				
29-Jul-70	0	0	0				
05-Aug-70	0	0	0				
13-Aug-70	20	0	140				
19-Aug-70	0	0	110				
26-Aug-70	0	0	0				
02-Sep-70	0	0	0				
09-Sep-70	0	0	60				
16-Sep-70	0	0	30				
23-Sep-70	0	0	30				
30-Sep-70	0	0	0				
07-Oct-70	0		0				
14-Oct-70	6		0				
21-Oct-70	0		70				
28-Oct-70	9		40				
11-Nov-70	0		0				

Table A-3. Background Water Quality for the Great Miami River Collected by the U. S. Geological Survey Near Hamilton, Ohio, 1963-1973.

Date	Lead Dissolved (ug/L)	Nickel Dissolved (ug/L)	Zinc Dissolved (ug/L)	Hydroxide water wh fet field mg/L as OH	Phosphorus Dissolved as P	Cyanide total (mg/L)	CO2 Dissolved (mg/L)
16-Dec-70	0		0				
13-Jan-71	0		0				
24-Feb-71	60		28			0.02	
31-Mar-71	0		0				
28-Apr-71	0		0				
26-May-71	14		180			0.05	
30-Jun-71	0		0				
07-Jul-71	0		0				
14-Jul-71	0		30				
21-Jul-71	0		80				
28-Jul-71	0		0				
04-Aug-71	0		0				
11-Aug-71	8		70				
18-Aug-71	0		90				
25-Aug-71	0		0				
01-Sep-71	0		0				
08-Sep-71	0		50				
15-Sep-71	0		30				
22-Sep-71	0		0				
06-Oct-71	0		0				
13-Oct-71	0		0			0.01	
20-Oct-71	0		0				
27-Oct-71	0		0				
10-Nov-71	0		0				
15-Dec-71	0		0				
19-Jan-72	0		0				
16-Feb-72	0		0			0.02	
15-Mar-72	0		0				
19-Apr-72	0		0				
17-May-72	0		0				
21-Jun-72	0		0				
05-Jul-72	0		0				
12-Jul-72	0		0				
19-Jul-72	0		0				
26-Jul-72	0		0				
02-Aug-72	0		0				
09-Aug-72	0		0				
16-Aug-72	0		0			0.01	
23-Aug-72	0		0				
30-Aug-72	0		0				
06-Sep-72							
13-Sep-72							
20-Sep-72							
27-Sep-72							
04-Oct-72							6.8
11-Oct-72						0.02	11
18-Oct-72							5.4
25-Oct-72							7.9

Table A-3. Background Water Quality for the Great Miami River Collected by the U. S. Geological Survey Near Hamilton, Ohio, 1963-1973.

Date	Lead Dissolved (ug/L)	Nickel Dissolved (ug/L)	Zinc Dissolved (ug/L)	Hydroxide water wh fet field mg/L as OH	Phosphorus Dissolved as P	Cyanide total (mg/L)	CO2 Dissolved (mg/L)
08-Nov-72							5
20-Dec-72							3.8
17-Jan-73							11
21-Feb-73						0.03	4.8
21-Mar-73							5.6
18-Apr-73							4.1
09-May-73						0.01	5.9
20-Jun-73							5.7
05-Jul-73							6.9
11-Jul-73							4.5
18-Jul-73							4.8
25-Jul-73							7
01-Aug-73							12
08-Aug-73						0.01	3.3
15-Aug-73							9.1
22-Aug-73							9.1
29-Aug-73							3.2
05-Sep-73							3.3
12-Sep-73							6.3
19-Sep-73							8.4
26-Sep-73							9.9
04-Oct-73							14
10-Oct-73						0.01	13
17-Oct-73							20
24-Oct-73							13
31-Oct-73							17
14-Nov-73							17

Table A-4
Background Well Samples
Collected From the Great Miami Aquifer by the U.S. Geological survey in 1982 (Sedam 1984)

Well No.	Spec. Con-ductance (umhos/cm)	pH	Hardness (mg/L)	Ca (mg/L)	Mg (mg/L)	Na (mg/L)	K (mg/L)	Bicarbonate (mg/L)	Alkalinity as CaCO3 (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Silica, Dissolved (mg/L)	Total Doissolved Solids (mg/L)
H-101	775	7.4	390	110	28	13	1.7	330	271	120	34	0.2	11	439
H-102	610	7.4	-	-	-	-	-	290	238	-	-	-	-	-
H-103	650	7.6	304	87	21	12	2.6	310	254	70	21	0.2	9.4	315
H-104	755	7.3	387	110	27	7	0.7	400	328	83	14	0.3	14	-
H-105	790	7.4	-	-	-	-	-	350	287	-	-	-	-	-
H-112	720	7.6	-	-	-	-	-	380	312	-	-	-	-	-
H-113	840	7.8	-	-	-	-	-	510	418	-	-	-	-	-
H-122	775	7.5	899	110	30	10	2.32	380	312	76	34	0.2	10	-
H-123	585	7.6	-	-	-	-	-	360	295	-	-	-	-	-
Avg.	722	7.5	370	104	27	11	1.8	368	302	87	26	0.2	11	377

Well No.	Solids, Sum of Constituents Dissolved (mg/L)	As (ug/L)	Cd (ug/L)	Cr (ug/L)	Co (ug/L)	Fe (ug/L)	Pb (ug/L)	Mn (ug/L)	Hg (ug/L)	Sr (ug/L)	Zn (ug/L)	Gross Alpha (pCi/L)	Gross Beta (pCi/L as Cs-137)	Gross Beta (pCi/L as Sr/Yt-90)	Total Uranium
H-101	480	-	-	-	-	27	-	250	-	-	-	-	-	-	<2.0
H-102	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.4
H-103	376	-	-	-	-	41	-	78	-	-	-	-	-	-	1.4
H-104	454	1	1	20	<1	13	2	1	0.3	1100	9	<13	<6.8	<6.4	0.6
H-105	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.4
H-112	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.4
H-113	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.4
H-122	461	2	1	20	<1	1500	1	190	0.2	370	4	<14	<7.4	<7.0	2.2
H-123	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.4
Avg.	443	1.5	1	20	<1	395	1.5	130	0.3	735	7	<14	<7.1	<6.7	0.8

Note: Metals and radionuclide constituents were analyzed using filtered samples; hence they are reported as dissolved.

Table A-5

Background Groundwater Data Collected in 1986

Well Locations[a]	U-TOTAL ug/L	Sr-90 pCi/L	Tc-99 pCi/L	Th-TOTAL ug/L	Ra-226 pCi/L	RA-228 pCi/L	Ammonia mg/L	Chloride mg/L	Cyanide mg/L	Fluoride mg/L
Type 1 wells										
1A (1059)	0.65	<8.36	<20	<23	0	<.83	<.05	7	<.02	0.3
DH (1058, EM-1)										
RB (1040)										
AL EMR-6	0.41									
Type 2 wells										
State-10 (2105)							<.05	89	<.02	0.6
State-8 (2056)							<.05	88	<.02	0.4
Pallet (2050)										
State-16 (2057)							<.05	4.3	<.02	0.3
12-3 (2123)	0.23	<22	<4.72	<.18		0				
BPH (2104, EM-10, H-101)										
Unknown										
INH	0.29	<4.18	0	<.09	<.2	0	<.05	28	<.02	0.2
H-112							<.05	26	<.02	0.2
H-113							3.2	86	<.02	0.6
H-123							<.05	4.7	<.02	0.2
EMR-7										
EMR-22										

Table A-5
(Continued)

Well Locations[a]	Nitrate mg/L	pH S.U.	Phosphate mg/L	TDS mg/L	Specific Conductance umhos/cm	Sulfate mg/L	Sulfide mg/L	Aluminum mg/L	Barium mg/L
Type 1 wells									
1A (1059)	0.8	7.36	0.1	400	676	62	<.5		
DH (1058, EM-1)									
RB (1040)									
AL (EMR-6)								<.1	0.06
Type 2 wells									
State-10 (2105)	<.10	7.73	0.1	470	781	<1	<.50	<.100	<.100
State-8 (2056)	0.2	7.72	0.1	380	725	<1	<.50	<.100	0.3
Pallet (2050)									
State-16 (2057)	0.4	7.58	0.09	330	575	36	<.50	<.100	<.100
12-3 (2123)									
BPH (2104, EM-10, H-101)									
Unknown									
GMA INH	0.8	7.5	0.12	520	814	110	<.50	<.100	<.100
GMA H-112	2.5	7.12	0.01	390	700	52	<.50		
GMA H-113	<.10		0.17		700	4.4	<.50	<.100	0.54
GMA H-123	0.4		0.04		578	50	<.50	<.100	<.100
GMA EMR-7									
GMA EMR-22									

Table A-5
(Continued)

Well Locations[a]	Calcium mg/L	Iron mg/L	Magnesium mg/L	Manganese mg/L	Potassium mg/L	Silicon mg/L	Sodium mg/L	Strontium mg/L	Vanadium mg/L	Antimony mg/L
Type 1 wells										
1A (1059)										
DH (1058, EM-1)										
RB (1040)										
AL (EMR-6)	85	0.1	28	<.010	14	5.4	12	0.2	<.010	
Type 2 wells										
State-10 (2105)	1.1	0.1	200	<.010	0.5	5.9	180	<.010	<.050	<.010
State-8 (2056)	73	1.4	23	0.02	1.2	5.9	33	0.71	<.050	<.010
Pallet (2050)										
State-16 (2057)	79	0.1	22	0.49	0.9	7.4	4.1	0.24	<.050	<.010
12-3 (2123)										
BPH (2104, EM-10, H-101)										
Unknown										
GMA INH	120	<.100	29	0.04	1.8	5.2	<6.400	0.11	<.050	<.010
GMA H-112										
GMA H-113	87	3	31	0.04	1.5	6.8	42	1.7	<.010	
GMA H-123	82	0.8	22	0.09	1.1	5.1	2.8	0.09	<.010	
GMA EMR-7										
GMA EMR-22										

Table A-5
(Continued)

Well Locations[a]	Arsenic mg/L	Beryllium mg/L	Boron mg/L	Cadmium mg/L	Chromium mg/L	Cobalt mg/L	Copper mg/L	Lead mg/L	Lithium mg/L	Mercury mg/L
Type 1 wells										
1A (1059)										
DH (1058, EM-1)										
RB (1040)										
AL (EMR-6)										
Type 2 wells										
State-10 (2105)	<.010	<.005	0.08	<.005	<.010	<.010	<.010	<.005	<.100	0
State-8 (2056)	<.010	<.005	0.07	<.005	<.010	<.010	<.010	<.005	<.100	0
Pallet (2050)										
State-16 (2057)	<.010	<.005	0.01	<.005	<.010	<.010	<.010	<.005	<.100	0
12-3 (2123)										
BPH (2104)										
Unknown										
GMA INH	<.010	<.005	0.03	<.005	0.01	<.010	<.010	<.005	<.100	0
GMA H-112										
GMA H-113										
GMA H-123										
GMA EMR-7										
GMA EMR-22										

Table A-5
(Continued)

Well Locations[a]	Molybdenum mg/L	Nickel mg/L	Selenium mg/L	Silver mg/L	Thallium mg/L	Tin mg/L	Zinc mg/L	TOC mg/L
Type 1 wells								
1A (1059)								3
DH (1058, EM-1)								
RB (1040)								
AL (EMR-6)								6
Type 2 wells								
State-10 (2105)	<.010	<.030	<.005	<.010	<.010	<.050	0.02	
State-8 (2056)	<.010	<.030	<.005	<.010	<.010	<.050	0.01	3
Pallet (2050)								
State-16 (2057)	<.010	<.030	0.005	<.010	<.010	<.050	0.17	
12-3 (2123)								
BPH (2104, EM-10, H-101)								
Unknown								
GMA INH	<.010	<.030	<.005	<.010	<.010	<.050	4.3	1
GMA H-112								4
GMA H-113								3
GMA H-123								<1.00
GMA EMR-7								
GMA EMR-22								

[a]Identifier on the left is the original well designation; number in parentheses is the new well number assigned during the RI/FS or other associated well number.

Table A-6

Analysis of One Background Sample Collected From Great Miami River (W-1) During the Environmental Survey in 1986 (DPE 1988a)

Constituent	Value	Lab Qualifier
Metals (mg/L)		
Arsenic	< 0.5	
Barium	0.535	
Cadmium	< 0.02	
Chromium	< 0.03	
Lead	< 0.3	
Mercury	< 0.001	
Selenium	< 0.5	
Organics (mg/L)		
1,1,1-trichloroethane (1,1,1-TCA)	< 0.005	
1,1,2,2-tetrachloroethane	< 0.005	
1,1,2-trichlorethane	< 0.005	
1,1-dichloroethane	< 0.005	
1,1-dichloroethene	< 0.005	
1,2-dichloroethane	< 0.005	
1,2-dichloropropane	< 0.005	
2-butanone	< 0.010	
2-chloroethylvinyl ether	< 0.010	
2-hexanone	< 0.010	
4-methyl-2 pentanone	0.001	BJ
Acetone	0.014	B
Benzene	< 0.005	
Bromodichloromethane	< 0.005	
Bromoform	< 0.005	
Bromomethane	< 0.010	
Carbon disulfide	< 0.005	
Carbon tetrachloride	< 0.005	
Chlorobenzene	< 0.005	
Chloroethane	< 0.010	

Table A-6
(Continued)

Constituent	Value	Lab Qualifier
Chloroform	0.002	BJ
Chloromethane	< 0.010	
Cis-1,3-dichloropropene	< 0.005	
Ethyl benzene	< 0.004	
Methylene chloride	0.007	B
Styrene	< 0.005	
Tetrachloroethene	< 0.005	
Toluene	0.003	BJ
Total xylenes	< 0.005	BJ
Trans-1,2-dichloroethene	< 0.005	
Trans-1,3-dichloropropene	< 0.005	
Trichloroethene	< 0.0050	
Vinyl acetate	< 0.010	
Vinyl chloride	< 0.010	
Radionuclides (pCi/L)		
Np-237	< 0.02	
Pu-238	< 0.12	
Pu-239/240	< 0.03	
Pu-241/242	< 0.01	
Th-227	0.08	
Th-228	< 0.03	
Th-230	< 0.02	
Th-232	< 0.02	
Total U	2.0	

[a]Data have not been validated, thus, only the lab qualifiers are present.

[b]Average of two duplicate analyses (1.9, 2.1) μg/L.

Lab Qualifier:

B = The reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL) but greater than or equal to the Instrument Detection Limit (IDL).

J = This concentration is considered an estimated value.

000207

Table A-7

Background Groundwater Quality, Glacial Overburden[a]

Parameter	Average[b]	Standard Deviation[b]	Range[b]		
Radionuclides (pCi/L)					
Cs-137	20 U	-	20 U	-	20 U
Np-237	1 U	-	1 U	-	1 U
Pu-238	1 U	-	1 U	-	1 U
Pu-239/240	1 U	-	1 U	-	1 U
Ra-226	1 U	-	1 U	-	1 U
Ra-228	3.2	0.7	3 U	-	5.2
Ru-106	150 U	-	150 U	-	150 U
Sr-90	5 U	-	5 U	-	5 U
Tc-99	30 U	-	30 U	-	30 U
Th-228	1.1	0.2	1 U	-	1.6
Th-230	1.1	0.3	1 U	-	2
Th-232	1 U	-	1 U	-	1 U
Th-Total[c]	13 U	-	13 U	-	13 U
U-234	1.1	0.3	1 U	-	1.9
U-235/236	1 U	-	1 U	-	1 U
U-238	1.0	0.1	1 U	-	1.5
U-Total[c]	1.6	1.2	1 U	-	5.3
Metals (mg/L)					
Al	0.12	0.00	0.1206	-	0.123
As	0.002	0.00	0.002 U	-	0.003
Ba	0.069	0.022	0.05 U	-	0.112
Cd	0.003	0.002	0.002 U	-	0.007
Ca	96.38	17.41	74.4	-	130
Cr	0.023	0.005	0.02 U	-	0.0345
Cu	0.016	0.010	0.10 U	-	0.044
Fe	0.689	1.345	0.005	-	4.9
Pb	0.003	0.001	0.002 U	-	0.006
Mg	34.28	9.39	20.4	-	47.8
Mn	0.044	0.038	0.003	-	0.1

Table A-7
(Continued)

Parameter	Average[b]	Standard Deviation[b]	Range[b]		
Radionuclides (pCi/L)					
Hg[c]	0.22	0.06	0.2 U	-	0.4
Mo	0.02 U	-	0.02 U	-	0.02 U
Ni	0.02	-	0.02 U	-	0.026
K	8.90	9.07	0.891	-	31.5
Se	0.002 U	-	0.002 U	-	0.002 U
Ag	0.015	0.013	0.01 U	-	0.052
Na	21.33	16.80	5.71	-	56.3
V	0.02	0.00	0.018	-	0.0195
Zn	0.04	0.01	0.0317	-	0.042
General Chemistry (mg/L)					
Ammonia as N	0.18	0.17	0.1 U	-	0.58
Chloride	12.19	12.20	1.4	-	35.7
Conductance[d]	640.3	157.6	470	-	975
Fluoride	0.62	0.34	0.22	-	1.3
Nitrate as N	0.15	0.07	0.1 U	-	0.3
Total phosphorus	0.07	0.04	0.05 U	-	0.18
Sulfate	71.15	49.52	3.24	-	175
Total organic halide	0.05	0.01	0.05 U	-	0.067
Alkalinity as CaCO3	416.3	49.7	334	-	501.1
pH	7.2	-	7	-	7.4
Total dissolved solids[e]	663.40	76.35	441.35	-	986.89

[a]Source of data: "Draft Groundwater Report" (DOE 1990)

[b]Outliers and inconsistent method detection limits (MDLs) are excluded. Nondetects are set equal to the MDLs and included in the calculation of averages and standard deviations. U = Not detected at the MDL shown.

[c]In ug/L.

[d]In umhos/cm.

[e]TDS is calculated based on following assumptions: The mass contributed by radionuclides is negligible. Phosphorus is present as phosphate.

Table A-8

Background Groundwater Quality, Great Miami Aquifer
Dry Fork Background Wells[a]

Parameter	Average[b]	Standard Deviation[b]	Range[b]		
Radionuclides (pCi/L)					
Cs-137	20 U	-	20 U	-	20 U
Np-237	1 U	-	1 U	-	1 U
Pu-238	1 U	-	1 U	-	1 U
Pu-239/240	1 U	-	1 U	-	1 U
Ra-226	1 U	-	1 U	-	1 U
Ra-228	3 U	-	3 U	-	3 U
Ru-106	159 U	-	159 U	-	159 U
Sr-90	5 U	-	5 U	-	5 U
Tc-99	30 U	-	30 U	-	30 U
Th-228	1 U	-	1 U	-	1 U
Th-230	1.1	0.3	1 U	-	2.1
Th-232	1 U	-	1 U	-	1 U
Th-Total[c]	13 U	-	13 U	-	13 U
U-234	1 U	-	1 U	-	1 U
U-235/236	1 U	-	1 U	-	1 U
U-238	1 U	-	1 U	-	1 U
U-Total[c]	1 U	-	1 U	-	1 U
Metals (mg/L)					
Al	0.1 U	-	0.1 U	-	0.1 U
As	0.002	0.001	0.002 U	-	0.004
Ba	0.038	0.004	0.034	-	0.045
Cd	0.005 U	-	0.005 U	-	0.005 U
Ca	89.10	5.43	81.7	-	99.4
Cr	0.021	0.003	0.02 U	-	0.03
Cu	0.016	0.008	0.01 U	-	0.033
Fe	0.015	0.009	0.005 U	-	0.03
Pb	0.002	0.001	0.002 U	-	0.004
Mg	23.20	1.71	20.7	-	26.2
Mn	0.201	0.237	0.001 U	-	0.48

Table A-8
(Continued)

Parameter	Average[b]	Standard Deviation[b]	Range[b]		
Radionuclides (pCi/L)					
Hg[c]	0.2 U	-	0.2 U	-	0.2 U
Mo	0.02 U	-	0.02 U	-	0.02 U
Ni	0.02 U	-	0.02 U	-	0.02 U
K	1.28	0.24	1 U	-	1.7
Se	0.002 U	-	0.002 U	-	0.002 U
Ag	0.012	0.008	0.01 U	-	0.034
Na	3.23	0.59	1.96	-	3.99
V	0.01 U	-	0.01 U	-	0.01 U
Zn	0.17	-	0.17	-	0.17
General Chemistry (mg/L)					
Ammonia as N	0.11	0.03	0.1 U	-	0.2
Chloride	9.20	4.09	3	-	13
Conductance[d]	535.0	108.2	370	-	750
Fluoride	0.25	0.08	0.1	-	0.38
Nitrate as N	4.64	4.87	0.1 U	-	11.4
Total phosphorus	0.08	0.05	0.05 U	-	0.195
Sulfate	29.59	6.80	21	-	39.9
Total organic halide	0.05	-	0.05 U	-	0.05 U
Alkalinity as CaCO3	322.1	24.0	285.2	-	344.3
pH	7.2	-	7.0	-	7.6
Total dissolved solids[e]	499.56	33.71	415.85	-	581.23

[a]Source of data: "Draft Groundwater Report" (DOE 1990)

[b]Outliers and inconsistent MDLs are excluded. Nondetects are set equal to the MDLs and included in the calculation of averages and standard deviations. U = Not detected at the MDL shown.

[c]In ug/L.

[d]In umhos/cm.

[e]TDS is calculated based on following assumptions: The mass contributed by radionuclides is negligible. Phosphorus is present as phosphate.

000211

Table A-9

Background Groundwater Quality, Shandon Background Wells, Great Miami Aquifer[a]

Parameter	Average[b]	Standard Deviation[b]	Range[b]		
Radionuclides (pCi/L)					
Cs-137	20 U	-	20 U	-	20 U
Np-237	1 U	-	1 U	-	1 U
Pu-238	1 U	-	1 U	-	1 U
Pu-239/240	1 U	-	1 U	-	1 U
Ra-226	1.1	0.3	1 U	-	2
Ra-228	3 U	-	3 U	-	3 U
Ru-106	150 U	-	150 U	-	150 U
Sr-90	5 U	-	5 U	-	5 U
Tc-99	30 U	-	30 U	-	30 U
Th-228	1.1	0.2	1 U	-	1.99
Th-230	1 U	-	1 U	-	1 U
Th-232	1 U	-	1 U	-	1 U
Th-Total[c]	13 U	-	13 U	-	13 U
U-234	1 U	-	1 U	-	1 U
U-235/236	1 U	-	1 U	-	1 U
U-238	1 U	-	1 U	-	1 U
U-Total[c]	1.2 U	0.5	1 U	-	3
Metals (mg/L)					
Al	0.11	0.02	0.1 U	-	0.143
As	0.021	0.012	0.004	-	0.042
Ba	0.638	0.104	0.48	-	0.8
Cd	0.005	0.000	0.005 U	-	0.006
Ca	74.55	13.69	30.4	-	89
Cr	0.021	0.000	0.02 U	-	0.03
Cu	0.01 U	-	0.01 U	-	0.01 U
Fe	2.272	0.664	1.6	-	3.55
Pb	0.001	0.005	0.002 U	-	0.015
Mg	26.06	3.54	15.8	-	31.3
Mn	0.047	0.035	0.014	-	0.113

Table A-9
(Continued)

Parameter	Average[b]	Standard Deviation[b]	Range[b]		
Radionuclides (pCi/L)					
Hg[c]	0.26	0.20	0.2 U	-	1
Mo	0.02	0.00	0.02 U	-	0.03
Ni	0.02 U	-	0.02 U	-	0.02 U
K	1.49	0.28	1.13	-	2
Se	0.002 U	-	0.002 U	-	0.002 U
Ag	0.010	0.001	0.01 U	-	0.014
Na	41.09	6.83	28.1	-	48
V	0.014	0.004	0.01 U	-	0.0167
Zn	0.03	0.02	0.01	-	0.052
General Chemistry (mg/L)					
Ammonia as N	3.15	1.14	0.3	-	4.22
Chloride	61.01	11.80	39.5	-	78.9
Conductance[d]	624.2	86.11	450	-	850
Fluoride	0.85	0.22	0.4	-	1.25
Nitrate as N	0.1	-	0.1 U	-	0.1
Total phosphorus	0.10	0.03	0.05 U	-	0.18
Sulfate	3.66	3.25	2 U	-	13.4
Total organic halide	0.05 U	-	0.05 U	-	0.05 U
Alkalinity as CaCO3	387.0	13.8	369.2	-	416.6
pH	6.9	-	6	-	7.6
Total dissolved solids[e]	603.79	24.28	489.87	-	691.77

[a]Source of data: "Draft Groundwater Report" (DOE 1990)

[b]Outliers and inconsistent MDLs are excluded. Nondetects are set equal to the MDLs and included in the calculation of averages and standard deviations. U = Not detected at the MDL shown.

[c]In ug/L.

[d]In umhos/cm.

[e]TDS is calculated based on following assumptions: The mass contributed by radionuclides is negligible. Phosphorus is present as phosphate.

000213

Table A-10

Groundwater Quality
Ross Background Wells, Great Miami Aquifer[a]

Parameter	Average[b]	Standard Deviation[b]	Range[b]		
Radionuclides (pCi/L)					
Cs-137	20 U	-	20 U	-	20 U
Np-237	1 U	-	1 U	-	1 U
Pu-238	1 U	-	1 U	-	1 U
Pu-239/240	1 U	-	1 U	-	1 U
Ra-226	1 0	0.0	1 U	-	1.1
Ra-228	3.1	0.4	3 U	-	4.5
Ru-106	150 U	-	150 U	-	150 U
Sr-90	5 U	-	5 U	-	5 U
Tc-99	30 U	-	30 U	-	30 U
Th-228	1.0	0.0	1 U	-	1.2
Th-230	1.0	0.2	1 U	-	1.7
Th-232	1 U	-	1 U	-	1 U
Th-Total[c]	13 U	-	13 U	-	13 U
U-234	1 U	-	1 U	-	1 U
U-235/236	1 U	-	1 U	-	1 U
U-238	1 U	-	1 U	-	1 U
U-Total[c]	1.0	0.2	1 U	-	2.0
Metals (mg/L)					
Al	-	-	-		-
As	0.106	0.189	0.002 U	-	0.55
Ba	0.051	0.010	0.035	-	0.073
Cd	0.005	0.001	0.005 U	-	0.01
Ca	92.48	8.51	70.2	-	110
Cr	0.021	0.003	0.02 U	-	0.03
Cu	0.047	0.052	0.01 U	-	0.176
Fe	0.028	0.039	0.005 U	-	0.145
Pb	0.002	0.001	0.002 U	-	0.004
Mg	26.00	5.43	17	-	33
Mn	0.004	0.004	0.001 U	-	0.016

Table A-10
(Continued)

Parameter	Average[b]	Standard Deviation[b]	Range[b]		
Radionuclides (pCi/L)					
Hg[c]	0.21	0.04	0.2 U	-	0.4
Mo	0.02	0.02	0.02 U	-	0.092
Ni	0.02	0.00	0.02 U	-	0.024
K	2.62	0.03	2.07	-	3.28
Se	0.002 U	-	0.002 U	-	0.002 U
Ag	0.011	0.005	0.01 U	-	0.033
Na	15.25	3.960	9.41	-	26.7
General Chemistry (mg/L)					
Ammonia as N	0.11	0.03	0.1 U	-	0.2
Chloride	29.14	12.20	7	-	49.5
Conductance[d]	585.8	109.1	400	-	800
Fluoride	0.25	0.06	0.18	-	0.365
Nitrate as N	4.11	3.78	0.28	-	12.4
Total phosphorus	0.05	0.00	0.05 U	-	0.065
Sulfate	47.05	18.15	3.08	-	72
Total organic halide	0.05 U	-	0.05 U	-	0.05 U
Alkalinity as CaCO3	312.6	34.3	236.8	-	363.55
pH	7.1	-	6.64	-	7.7
Total dissolved solids[e]	544.25	45.30	347.44	-	714.95

[a]Source of data: "Draft Groundwater Report (DOE 1990)

[b]Outliers and inconsistent MDLs are excluded. Nondetects are set equal to the MDLs and included in the calculation of averages and standard deviations. U = Not detected at the MDL shown.

[c]In ug/L.

[d]In umhos/cm.

[e]TDS is calculated based on following assumptions: The mass contributed by radionuclides is negligible. Phosphorus is present as phosphate.

Table A-11

Summary Statistics of Radiological Constituents in Background Groundwater in the Glacial Overburden[a]

Radionuclide	Frequency of Detection (detections/ analyses)	Range of Detection (pCi/L)	Dist[b]	Mean[c] (pCi/L)	Std. Dev. (pCi/L)	Variance	95% UCL[d] (pCi/L)	95% UTL[e] (pCi/L)
Ra-228	1/19	5.200 - 5.200	N	1.713	0.846	0.716	2.050	5.200[f]
Th-228	3/27	1.040 - 1.600	N	0.597	0.281	0.079	0.690	1.241
Th-230	2/27	2.000 - 34.800	L	0.620	2.335	5.454	0.819	2.503
Th-Total[g]	1/13	0.003 - 0.003	N	0.002	0.001	0.000	0.003	0.003[f]
U-234	11/27	1.060 - 6.200	L	0.854	2.096	4.393	1.089	2.885
U-238	5/27	1.070 - 3.100	N	0.725	0.577	0.333	0.914	2.047
U-Total[g]	19/27	0.001 - 0.011	L	0.002	0.002	0.000	0.003	0.006

[a]Source of data: "Site-Wide Characterization Report" (DOE 1993a).

[b]Distribution: N = Normal; L = Lognormal; U = Undefined if sample size ≤ 2. If the number of detects ≥ 7 and the frequency of detection ≥ 50%, a probability plot that handles censored data was used in determining the distribution. Otherwise, the distribution was estimated by visual inspection of the raw data, a histogram, and a standard probability plot.

[c]If the distribution is normal, the number of detects ≥ 7, and the frequency of detection ≥ 50%, an arithmetic mean is given. If the distribution is lognormal, the number of detects < 7, or the frequency of detection is < 50%, a geometric mean is given.

[d]If the distribution is normal, the number of detects ≥ 7, and the frequency of detection ≥ 50%, a 95% upper confidence limit (UCL) on the arithmetic mean is given. If the distribution is lognormal, the number of detects < 7, or the frequency of detection is <50%, a 95% UCL on the geometric mean is given.

[e]Upper 95% tolerance level (UTL) for background data with a 95% level of confidence.

[f]When background sample size is one, the actual concentration is given instead of a UTL.

[g]Reported in mg/L.

Table A-12

Summary Statistics of Nonradiological Constituents in Background Groundwater in the Glacial Overburden[a]

Constituent	Frequency of Detection (detections/ analyses)	Range of Detection (mg/L)	Dist[b]	Mean[c] (mg/L)	Std. Dev. (mg/L)	Variance	95% UCL[d] (mg/L)	95% UTL[e] (mg/L)
Aluminum	4/4	0.121 - 0.337	N[f]	0.180	0.105	0.011	0.304	0.720
Arsenic	1/20	0.003 - 0.003	N[f]	0.036	0.048	0.002	0.003[g]	0.003[h]
Barium	2/23	0.003 - 0.003	N	0.074	0.025	0.001	0.083	0.132
Beryllium	3/4	0.001 - 0.002	N[f]	0.001	0.001	0.000	0.002	0.004
Cadmium	4/20	0.003 - 0.007	N	0.003	0.002	0.000	0.004	0.009
Calcium	23/23	74.400 - 130.00	L	98.904	16.615	276.049	105.280	128.017
Chromium	10/23	0.020 - 0.120	N	0.021	0.024	0.001	0.029	0.076
Cobalt	1/4	0.013 - 0.013	N	0.007	0.004	0.000	0.012	0.013[h]
Copper	7/23	0.013 - 0.190	L	0.010	2.538	6.439	0.014	0.046
Iron	17/23	0.005 - 4.900	L	0.443	1.081	1.169	2.541	1.810
Lead	7/23	0.002 - 0.006	N	0.005	4.216	17.777	0.006[g]	0.054
Magnesium	23/23	20.400 - 47.800	L	35.674	9.068	82.222	38.921	56.792
Manganese	17/20	0.003 - 0.220	L	0.051	0.054	0.003	0.130	0.202
Mercury	3/20	0.000 - 0.004	N	0.000	2.334	5.450	0.000	0.001
Molybdenum	1/19	0.020 - 0.020	N	0.013	0.006	0.000	0.015	0.020[h]
Nickel	7/23	0.013 - 0.180	N[f]	0.022	0.035	0.001	0.034	0.103
Potassium	18/20	0.891 - 31.500	L	6.824	7.975	63.593	9.907	25.931
Silver	6/23	0.011 - 0.052	L	0.005	3.950	15.600	0.009	0.050
Sodium	20/20	5.710 - 84.000	N	23.090	20.717	429.174	34.227	59.615

See footnotes at end of table.

Table A-12
(Continued)

Constituent	Frequency of Detection (detections/ analyses)	Range of Detection (mg/L)	Dist[b]	Mean[c] (mg/L)	Std. Dev. (mg/L)	Variance	95% UCL[d] (mg/L)	95% UTL[e] (mg/L)
Vanadium	4/4	0.018 - 0.033	N	0.023	0.007	0.000	0.031	0.058
Zinc	4/4	0.032 - 0.042	L	0.039	0.005	0.000	0.042[g]	0.064
Ammonia	7/19	0.100 - 0.580	L	0.088	2.369	5.613	0.123	0.362
Chloride	21/23	1.400 - 35.700	L	8.809	9.923	98.475	24.717	40.144
Fluoride	23/23	0.200 - 1.350	N	0.713	0.371	0.137	0.948	1.624
Nitrate	14/23	0.037 - 0.300	N	0.128	0.092	0.008	0.161	0.341
Phosphorus (black, white, red)	3/19	0.026 - 0.640	N	0.107	0.158	0.025	0.169	0.488
Sulfate	21/22	3.240 - 239.00	L	72.897	58.859	3464.44	94.491	211.217
Total Kjeldahl Nitrogen	8/9	0.150 - 0.700	N	0.323	0.230	0.053	0.700[g]	0.959
Total Organic Carbon	2/4	3.266 - 4.690	N[f]	2.239	2.090	4.370	4.690[g]	12.995
Total Organic Halides	2/13	0.008 - 0.067	L	0.021	0.017	0.000	0.029	0.066
Total Organic Nitrogen	11/19	0.100 - 0.400	N[f]	0.148	0.113	0.013	0.233	0.403
Acetone	3/3	0.002 - 0.029	N[f]	0.011	0.016	0.000	0.029[g]	0.130
Carbon disulfide	1/1	0.004 - 0.004	U[i]	-	-	-	0.004[g]	-1.000
Methylene chloride	2/3	0.010 - 0.010	N[f]	0.008	0.004	0.000	0.010[g]	0.041
N-Nitrosodiphenylamine	1/1	0.002 - 0.002	U[i]	-	-	-	0.002[g]	-1.000
Phenol	1/1	0.002 - 0.002	U[i]	-	-	-	0.002[g]	-1.000
Phenols	11/19	0.005 - 0.040	L	0.016		0.000	0.029	0.049

[a]Source of data: "Site-Wide Characterization Report" (DOE 1993a).

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Table A-12
(Continued)

[b]Distribution: N = Normal; L = Lognormal; U = Undefined if sample size ≤ 2.
If the number of detects ≥ 7 and the frequency of detection ≥ 50%, a probability plot that handles censored data was used in determining the distribution. Otherwise, the distribution was estimated by visual inspection of the raw data, a histogram, and a standard probability plot.

[c]If the distribution is normal, the number of detects ≥ 7, and the frequency of detection ≥ 50%, an arithmetic mean is given. If the distribution is lognormal, the number of detects < 7, or the frequency of detection is < 50%, a geometric mean is given.

[d]If the distribution is normal, the number of detects ≥ 7, and the frequency of detection ≥ 50%, a 95% upper confidence limit (UCL) on the arithmetic mean is given. If the distribution is lognormal, the number of detects < 7, or the frequency of detection is <50%, a 95% UCL on the geometric mean is given.

[e]Upper 95% tolerance level (UTL) for background data with a 95% level of confidence.

[f]Distribution could not be determined from available data; therefore, a normal distribution was assumed.

[g]If the 95% UCL on the mean exceeds the maximum detected concentration, or if the sample size ≤ 2, the maximum detected concentration is substituted.

[h]When background sample size contains only one detect, this concentration is given instead of a UTL.

[i]Not applicable if sample size ≤ 2.

Table A-13

Radiological Constituents in Background Groundwater of the Great Miami Aquifer[a]

Radionuclide	Frequency of Detection	Range of Detection (pCi/L)	Dist[b]	Mean[c] (pCi/L)	Std. Dev. (pCi/L)	Variance	95% UCL[d] (pCi/L)	95% UTL[e] (pCi/L)
Dry Fork Background								
Th-230	1/13	2.100 - 2.100	N	0.623	0.444	0.197	0.842	2.100[f]
U-Total[g]	7/13	0.000 - 0.000	N	0.000	0.000	0.000	0.000[h]	0.001
Shandon Background								
Ra-226	3/21	1.400 - 2.000	N	0.676	0.453	0.205	0.847	1.749
Ra-228	1/21	4.800 - 4.800	N	1.657	0.720	0.519	1.928	4.800[f]
Tc-99	1/28	36.000 - 36.000	N	15.750	3.969	15.750	17.027	36.000[f]
Th-228	2/28	1.990 - 2.900	N	0.639	0.525	0.276	0.808	1.804
Th-230	1/28	2.500 - 2.500	N	0.571	0.378	0.143	0.693	2.500[f]
U-Total[g]	6/28	0.000 - 0.003	N	0.001	0.001	0.000	0.001	0.002
Dry Fork - Shandon Divide Background								
Ra-226	2/30	1.800 - 2.000	N	0.593	0.356	0.127	0.704	1.384
Th-228	1/33	1.990 - 1.990	N	0.545	0.259	0.067	0.622	1.990[f]
Th-230	1/33	2.100 - 2.100	N	0.548	0.279	0.078	0.631	2.100[f]
U-Total[g]	11/33	0.000 - 0.003	N[i]	0.001	0.001	0.000	0.001	0.002
Ross Background								
Ra-226	1/28	1.100 - 1.100	N	0.521	0.113	0.013	0.558	1.100[f]
Ra-228	5/28	3.100 - 5.500	N	2.007	1.165	1.356	2.382	4.593
Th-228	1/27	1.400 - 1.400	N	0.533	0.173	0.030	0.590	1.400[f]

See footnotes at end of table.

Table A-13
(Continued)

Radionuclide	Frequency of Detection	Range of Detection (pCi/L)	Dist[b]	Mean[c] (pCi/L)	Std. Dev. (pCi/L)	Variance	95% UCL[d] (pCi/L)	95% UTL[e] (pCi/L)
Th-230	4/28	1.000 - 1.700	N	0.629	0.737	0.114	0.737	1.378
Th-Total[g]	2/18	0.002 - 0.002	N	0.002	0.002	0.000	0.002[h]	0.005
U-Total[g]	14/28	0.000 - 0.002	L	0.001	0.001	0.000	0.001	0.001

[a]Source of data: "Site-Wide Characterization Report" (DOE 1993a).

[b]Distribution: N = Normal; L = Lognormal; U = Undefined if sample size ≤ 2.
If the number of detects ≥ 7 and the frequency of detection ≥ 50%, a probability plot that handles censored data was used in determining the distribution. Otherwise, the distribution was estimated by visual inspection of the raw data, a histogram, and a standard probability plot.

[c]If the distribution is normal, the number of detects ≥ 7, and the frequency of detection ≥ 50%, an arithmetic mean is given. If the distribution is lognormal, the number of detects < 7, or the frequency of detection is < 50%, a geometric mean is given.

[d]If the distribution is normal, the number of detects ≥ 7, and the frequency of detection ≥ 50%, a 95% upper confidence limit (UCL) on the arithmetic mean is given. If the distribution is lognormal, the number of detects < 7, or the frequency of detection is <50%, a 95% UCL on the geometric mean is given.

[e]Upper 95% tolerance level (UTL) for background data with a 95% level of confidence.

[f]When background sample size contains only one detect, this concentration is given instead of a UTL.

[g]Units are reported in mg/L.

[h]If the 95% UCL exceeds the maximum detected concentration, or if the sample size ≤ 2, the maximum detected concentration is substituted.

[i]Distribution could not be determined from available data; therefore, a normal distribution was assumed.

000221

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Table A-14

Nonradiological Constituents in Background Groundwater of the Great Miami Aquifer

Chemical	Frequency of Detection	Upper 95% TL for BKG[a] (mg/L)	Range of Detection	Dist[b]	Mean[c] (mg/L)	Upper 95% CI on Mean[d] (mg/L)	Std. Dev.	Variance
Dry Fork Background								
Arsenic	3/13	0.280	0.004 - 0.300	N[e]	0.050	0.093	0.086	0.007
Barium	10/13	0.051	0.034 - 0.045	N[e]	0.035	0.038	0.006	0.000
Calcium	13/13	103.701	81.700 - 110.00	L	91.023	96.595	7.643	58.420
Chromium	3/13	0.030	0.020 - 0.030	N	0.013	0.016	0.006	0.000
Copper	7/13	0.090	0.012 - 0.270	L	0.033	0.080	0.072	0.005
Iron	8/13	0.602	0.009 - 1.380	L	0.216	1.380[f]	0.489	0.239
Lead	2/13	0.037	0.003 - 0.004	L	0.003	0.004[f]	4.410	19.450
Magnesium	13/13	27.957	20.700 - 26.200	N	23.346	24.200	1.727	2.983
Manganese	6/13	1.029	0.002 - 0.480	L	0.011	0.043	15.846	251.080
Molybdenum	1/13	0.010[g]	0.010 - 0.010	N	0.009	0.010[f]	0.002	0.000
Potassium	13/13	2.044	0.801 - 1.700	N	1.270	1.413	0.290	0.084
Silver	2/13	0.061	0.034 - 0.110	L	0.006	0.013	3.906	15.256
Sodium	13/13	4.765	1.960 - 3.990	N	3.243	3.525	0.570	0.325
Ammonia	4/13	0.368	0.100 - 0.400	N	0.098	0.148	0.101	0.010
Chloride	13/13	30.061	1.000 - 20.100	L	9.062	20.100[f]	5.621	31.601
Fluoride	13/13	0.467	0.100 - 0.380	N	0.253	0.293	0.080	0.006
Nitrate	10/13	19.415	0.030 - 14.400	N[e]	5.343	7.948	5.270	27.776
Phosphorus	10/13	0.163	0.018 - 0.195	L	0.062	0.108	0.057	0.003

Refer to notes at end of table.

Table A-14
(Continued)

Chemical	Frequency of Detection	Upper 95% TL for BKG[a] (mg/L)	Range of Detection	Dist[b]	Mean[c] (mg/L)	Upper 95% CI on Mean[d] (mg/L)	Std. Dev.	Variance
Phenols	9/13	0.034	0.007 - 0.030	N	0.012	0.016	0.008	0.000
Sulfate	13/13	60.159	3.240 - 43.700	N	27.988	33.944	12.049	145.180
Total Kjeldahl Nitrogen	6/6	0.578	0.110 - 0.400	N	0.225	0.303	0.095	0.009
Total Organic Nitrogen	9/12	0.312	0.100 - 0.300	N[e]	0.115	0.152	0.072	0.005
Shandon Background								
Aluminum	5/5	0.303	0.082 - 0.182	N[e]	0.137	0.175	0.040	0.002
Arsenic	12/23	0.385	0.004 - 0.260	L	0.058	0.260[f]	0.074	0.006
Barium	25/26	1.047	0.040 - 0.800	N	0.477	0.560	0.249	0.062
Beryllium	3/5	0.004	0.001 - 0.002	N[e]	0.001	0.002	0.001	0.000
Cadmium	5/23	0.007	0.002 - 0.007	N[e]	0.003	0.003	0.002	0.000
Calcium	25/26	136.363	30.400 - 121.00	N	79.643	87.933	24.747	612.427
Chromium	11/26	0.039	0.020 - 0.042	N	0.017	0.020	0.010	0.000
Copper	1/26	0.022[g]	0.022 - 0.022	N	0.006	0.008	0.004	0.000
Iron	26/26	4.131	0.017 - 3.600	N	1.756	2.103	1.036	1.074
Lead	10/26	0.051	0.002 - 0.056	L	0.005	0.008	4.098	16.791
Magnesium	25/26	47.038	15.800 - 41.000	N	27.917	30.712	8.342	69.594
Manganese	23/23	0.265	0.014 - 0.376	L	0.083	0.145	0.084	0.007
Mercury	4/23	0.001	0.000 - 0.006	L	0.000	0.000	2.684	7.204
Molybdenum	6/21	0.029	0.010 - 0.030	N	0.014	0.016	0.007	0.000
Nickel	4/26	0.026	0.021 - 0.026	N	0.014	0.016	0.005	0.000
Potassium	21/23	5.068	0.169 - 13.400	L	2.072	2.802	2.541	6.455

Refer to notes at end of table.

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Table A-14
(Continued)

Chemical	Frequency of Detection	Upper 95% TL for BKG[a] (mg/L)	Range of Detection	Dist[b]	Mean[c] (mg/L)	Upper 95% CI on Mean[d] (mg/L)	Std. Dev.	Variance
Selenium	2/23	0.130	0.006 - 0.016	N[e]	0.028	0.016[f]	0.044	0.002
Silver	5/26	0.014	0.010 - 0.014	N	0.006	0.007	0.004	0.000
Sodium	23/23	100.309	7.600 - 179.00	L	47.797	60.025	32.722	1070.70
Vanadium	5/5	0.034	0.016 - 0.023	N	0.020	0.023	0.003	0.000
Zinc	5/5	0.109	0.020 - 0.057	N	0.045	0.057[f]	0.015	0.000
Ammonia	19/21	7.125	0.300 - 8.000	N	2.810	3.495	1.820	3.312
Chloride	25/25	110.026	2.750 - 100.00	N	55.474	63.618	23.801	566.497
Fluoride	26/26	1.328	0.280 - 1.250	N	0.760	0.843	0.248	0.062
Nitrate	6/26	1.527	0.016 - 2.500	N[e]	0.248	0.435	0.558	0.311
Phosphate	2/2	-1.000	0.100 - 0.560	[h]	[h]	0.560[f]	.	.
Phosphorus	17/19	0.728	0.040 - 1.070	L	0.203	0.483	0.293	0.086
Sulfate	16/26	129.779	2.790 - 197.00	L	28.755	126.631	52.997	2808.64
Total Kjeldahl Nitrogen	11/12	6.630	0.530 - 4.740	N	2.526	3.303	1.500	2.250
Total Organic Carbon	5/5	11.924	1.650 - 6.362	N	3.682	5.552	1.961	3.847
Total Organic Halides	2/19	0.096	0.023 - 0.324	L	0.020	0.030	2.575	6.632
Total Organic Nitrogen	13/17	2.123	0.130 - 2.750	L	0.572	1.525	0.743	0.552
Acetone	3/5	0.011	0.002 - 0.006	N[e]	0.004	0.006	0.002	0.000
Methylene chloride	3/5	0.018	0.007 - 0.008	N[e]	0.006	0.008[f]	0.003	0.000
N-Nitrosodiphenylamine	2/3	0.013	0.003 - 0.003	N[e]	0.004	0.003[f]	0.001	0.000
Phenol	1/3	0.002[g]	0.002 - 0.002	N	0.004	0.002[f]	0.002	0.000
Phenols	9/21	0.061	0.008 - 0.090	N[e]	0.014	0.021	0.020	0.000

Refer to notes at end of table.

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Table A-14
(Continued)

Chemical	Frequency of Detection	Upper 95% TL for BKG[a] (mg/L)	Range of Detection	Dist[b]	Mean[c] (mg/L)	Upper 95% CI on Mean[d] (mg/L)	Std. Dev.	Variance
Toluene	1/5	0.005[g]	0.005 - 0.005	N	0.003	0.004	0.001	0.000
bis(2-Ethylhexyl) phthalate	2/3	0.015	0.002 - 0.003	N	0.003	0.003[f]	0.002	0.000
Dry Fork - Shandon Divide Background								
Aluminum	2/2	-1.000	0.082 - 0.143	[h]	[h]	0.143[f]	.	.
Arsenic	15/30	0.426	0.004 - 0.300	L	0.063	0.300[f]	0.082	0.007
Barium	28/32	1.056	0.034 - 0.800	N[e]	0.357	0.451	0.315	0.099
Beryllium	1/2	-1.00[g]	0.001 - 0.001	[h]	[h]	0.001[f]	.	.
Cadmium	2/30	0.004	0.002 - 0.006	N	0.002	0.002	0.001	0.000
Calcium	31/32	122.960	30.400 - 110.00	N	78.988	84.924	19.807	392.325
Chromium	10/32	0.030	0.020 - 0.030	N	0.014	0.016	0.007	0.000
Copper	7/32	0.032	0.012 - 0.270	L	0.008	0.010	2.407	5.795
Iron	27/32	4.088	0.009 - 3.600	N	1.351	1.721	1.233	1.521
Lead	8/32	0.042	0.003 - 0.056	N[e]	0.012	0.016	0.014	0.000
Magnesium	31/32	36.035	15.800 - 31.300	N	24.127	25.734	5.364	28.772
Manganese	23/30	0.521	0.002 - 0.480	L	0.087	0.480[f]	0.149	0.022
Mercury	3/30	0.001	0.000 - 0.001	N	0.000	0.000	0.000	0.000
Molybdenum	7/30	0.024	0.010 - 0.030	N	0.012	0.014	0.005	0.000
Potassium	29/30	6.816	0.169 - 13.400	N[e]	1.829	2.526	2.246	5.046
Selenium	1/30	0.016[g]	0.016 - 0.016	N[e]	0.032	0.016[f]	0.046	0.002
Silver	4/32	0.052	0.010 - 0.110	N	0.010	0.016	0.019	0.000
Sodium	30/30	148.483	1.960 - 179.00	L	31.693	88.667	36.818	1355.59

Refer to notes at end of table.

Table A-14
(Continued)

Chemical	Frequency of Detection	Upper 95% TL for BKG[a] (mg/L)	Range of Detection	Dist[b]	Mean[c] (mg/L)	Upper 95% CI on Mean[d] (mg/L)	Std. Dev.	Variance
Vanadium	2/2	-1.000	0.016 - 0.017	h	h	0.017[f]	.	.
Zinc	2/2	-1.000	0.020 - 0.052	h	h	0.052[f]	.	.
Ammonia	20/30	6.343	0.100 - 8.000	N	1.799	2.434	2.047	4.191
Chloride	32/32	178.454	1.000 - 100.00	L	49.517	92.195	76.718	5885.66
Fluoride	32/32	1.560	0.100 - 1.250	L	0.634	0.823	0.479	0.230
Nitrate	15/32	12.663	0.016 - 14.400	L	0.199	0.424	12.499	156.218
Phosphate	2/2	-1.000	0.100 - 0.560	h	h	0.560[f]	.	.
Phosphorus	24/28	0.366	0.018 - 0.902	L	0.123	0.188	0.176	0.031
Sulfate	22/32	134.828	2.790 - 197.00	L	34.932	100.285	107.293	11511.9
Total Kjelhahl Nitrogen	15/16	7.737	0.110 - 4.740	L	1.696	4.740[f]	1.724	2.973
Total Organic Carbon	2/2	-1.000	1.650 - 6.362	h	h	6.362[f]	.	.
Total Organic Nitrogen	20/25	1.043	0.100 - 2.750	L	0.354	0.552	0.558	0.311
Acetone	2/2	-1.000	0.003 - 0.006	h	h	0.006[f]	.	.
Methylene chloride	2/2	-1.000	0.007 - 0.008	h	h	0.008[f]	.	.
Phenols	15/30	0.026	0.007 - 0.040	L	0.010	0.014	0.009	0.000
Toluene	1/2	-1.000[g]	0.005 - 0.005	h	h	0.005[f]	.	.
Ross Background								
Arsenic	4/28	0.376	0.300 - 0.550	N[e]	0.088	0.130	0.130	0.017
Barium	24/28	0.079	0.035 - 0.073	N	0.048	0.052	0.014	0.000
Cadmium	1/28	0.010[g]	0.010 - 0.010	N	0.002	0.003	0.002	0.000
Calcium	28/28	111.731	70.200 - 110.00	N	92.714	95.472	8.566	73.376

Refer to notes at end of table.

Table A-14
(Continued)

Chemical	Frequency of Detection	Upper 95% TL for BKG[a] (mg/L)	Range of Detection	Dist[b]	Mean[c] (mg/L)	Upper 95% CI on Mean[d] (mg/L)	Std. Dev.	Variance
Chromium	6/28	0.025	0.010 - 0.030	N	0.013	0.014	0.006	0.000
Copper	16/28	0.154	0.010 - 0.176	N	0.040	0.057	0.051	0.003
Iron	11/28	0.126	0.007 - 0.210	L	0.013	0.021	3.896	15.182
Lead	4/28	0.059	0.003 - 0.080	N[e]	0.016	0.023	0.019	0.000
Magnesium	28/28	37.968	15.700 - 33.000	N	25.734	27.508	5.511	30.373
Manganese	12/28	0.035	0.002 - 0.073	L	0.004	0.006	3.774	14.245
Mercury	2/28	0.000	0.000 - 0.000	N	0.000	0.000	0.000	0.000
Molybdenum	10/28	0.055	0.010 - 0.092	N	0.016	0.022	0.017	0.000
Nickel	3/28	0.022	0.021 - 0.026	N	0.013	0.014	0.004	0.000
Potassium	28/28	3.086	2.070 - 3.280	L	2.596	2.691	0.285	0.081
Silver	1/28	0.033[g]	0.033 - 0.033	N	0.007	0.009	0.006	0.000
Sodium	28/28	28.720	9.410 - 55.000	L	17.303	19.431	8.594	73.857
Ammonia	9/28	0.184	0.100 - 0.200	N	0.077	0.092	0.048	0.002
Chloride	28/28	105.261	1.500 - 120.00	L	27.836	53.412	23.466	550.633
Fluoride	28/28	0.370	0.180 - 0.370	L	0.262	0.283	0.060	0.004
Nitrate	28/28	21.662	0.280 - 24.900	L	5.347	11.799	5.672	32.169
Phosphorus	13/28	0.126	0.010 - 0.299	L	0.029	0.038	2.466	6.079
Sulfate	28/28	131.387	3.080 - 202.00	N[e]	50.091	61.879	36.620	1340.99
Total Kjeldahl Nitrogen	11/12	0.625	0.200 - 0.600	L	0.268	0.420	0.144	0.021
Total Organic Nitrogen	18/28	0.396	0.100 - 0.480	N	0.141	0.178	0.115	0.013
Phenols	19/28	0.032	0.009 - 0.030	N	0.014	0.016	0.008	0.000

Refer to notes at end of table.

000227

Table A-14
(Continued)

[a]Upper 95% tolerance level for background data with a 95% level of confidence.

[b]Distribution: N = Normal; L = Lognormal. If the number of detects ≥ 7 and the frequency of detection ≥ 50%, a probability plot that handles censored data is used in determining the distribution. Otherwise, the distribution is estimated by visual inspection of the raw data, a histogram, and a standard probability plot.

[c]If the distribution is normal or if the distribution is lognormal, the number of detects ≥ 7, and frequency of detection ≥ 50%, an arithmetic mean is given. If the distribution is lognormal and either the number of detects < 7 or the frequency of detection is < 50%, a geometric mean is given.

[d]If the distribution is normal or if the distribution is lognormal, the number of detects ≥ 7, and the frequency of detection ≥ 50%, an arithmetic upper 95% confidence interval (CI) on the mean is given. If the distribution is lognormal and either the number of detects < 7 or the frequency of detection is <50%, a geometric upper 95% CI on the mean is given.

[e]Distribution could not be determined from available data; therefore, a normal distribution was assumed.

[f]If the upper 95% CI on the mean exceeds the maximum detected concentration or if the sample size ≤ 2, the maximum detected concentration is substituted.

[g]When background sample size is one, this concentration is given instead of a UTL. The mean site-related value will be compared with the single background value.

[h]Not applicable if sample size ≤ 2.

Table A-15

Background Water Quality Data for Sampling Point W-1 Collected by the Ohio Environmental Protection Agency

Parameter	Units	Number	Minimum	Maximum	Mean	Standard Deviation
Conductivity	Micromhos	7	612	814	694	66.3
DO	mg/L	6	7.3	10.7	9.08	1.27
pH	SU	7	8.3	9.0	8.56	.227
Residue	mg/L	7	23	86	50.7	21.5
NH3+NH4-	mg/L	2	.060	.110	.085	.035
Total Kjel	mg/L	7	.60	1.20	.771	.206
Phos-Total	mg/L P	7	.20	.45	.344	.084
Cyanide	mg/L	7	.005	.005	.005	.000
Tot Hardness	mg/L	7	296	356	332	21.9
Calcium	mg/L	7	71.0	89.0	82.1	7.01
Magnesium	mg/L	7	27.0	33.0	30.9	2.19
Cadmium	µg/L	7	.2	.2	.200	.000
Chromium	µg/L	7	30	30	30	.000
Copper	µg/L	7	10	10	10	.000
Iron	µg/L	7	570	2520	1394	662
Lead	µg/L	5	2	3	2.60	.54
Nickel	µg/L	7	40	40	40	.00
Zinc	µg/L	3	10	20	13.3	5.77
Phenols	mg/L	7	20	20	20	.000

APPENDIX B

DRILLING LOGS AND WELL CONSTRUCTION INFORMATION

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Monitoring Well	1024
Monitoring Well	1040
Monitoring Well	1065
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Monitoring Well	2036
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(continued)

Monitoring Well	3098
Monitoring Well	3099
Monitoring Well	3100
Monitoring Well	4011
Monitoring Well	4096

NOTE: No geologic logs are available for monitoring wells 1059 and 1060.

MONITORING WELL
1024

5644

	Initial	Date
1st Key In		
2nd Key In		
Verification		

RKA 2/4/87

FERNALD RI/FS

VISUAL CLASSIFICATION OF SOILS

WPK #2318 RG #1

PROJECT NUMBER: 6023.2	PROJECT NAME: FMPC RI/FS	
BORING NUMBER: 88 ~~1224~~ 1024	COORDINATES:	DATE: 10-4-87
ELEVATION:	GWL: Depth 9.3' Date/Time 10-17/1100	DATE STARTED: 10-4-87
ENGINEER/GEOLOGIST: B. Dunning	Depth Date/Time	DATE COMPLETED: 10/16/87
DRILLING METHODS: Cable Tool		PAGE 1 OF 2

DEPTH (FT.)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER (NA)	RECOVERY (NA)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
0				Detailed Continuous Samples were collected on borehole # ~~324~~ 3024 3446 3/6/87. Please refer to that Soil Log for details			
1'							
2'							
3'							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14				Unsuccessful Shelby Tube Attempt.			Attempted to obtain a Shelby Tube from 14'-15.5'. Only recovered 5".
15'							

NOTES: Used a total of 35 gallons of water to drill hole.

000234

402-11-86

5644 MC
RKA 2/4/

	Initial	Date
1st Key In		
2nd Key In		
Final Verification		

WPIC 4/23/88

FERNALD RI/FS

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602	PROJECT NAME: FMPC RI / FS	
BORING NUMBER: ~~124~~ 1024	COORDINATES:	DATE: 10/16 / 87
ELEVATION:	GWL: Depth Date/Time	DATE STARTED: 10-4-87
ENGINEER/GEOLOGIST: B. Dunning	Depth Date/Time	DATE COMPLETED: 10/16 / 87
DRILLING METHODS: Cable Tool		PAGE 2 OF 2

DEPTH (FT.)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER (NA)	RECOVERY (NA)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
				See Well Log # ~~324~~ 3024 for Soil descriptions RWH 2/10/89			
16	ST 07247		= 8"		CL		Shelby Tube: Csg began pulling up after 8" collected
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27				Bottom of Boring = 27'			1st well - Drilling Completed but had to be redrilled to to bentonite pellets setting up & lifting Stainless Steel Csg with 10" Temp. Csg.
28							
29							
30							

NOTES:

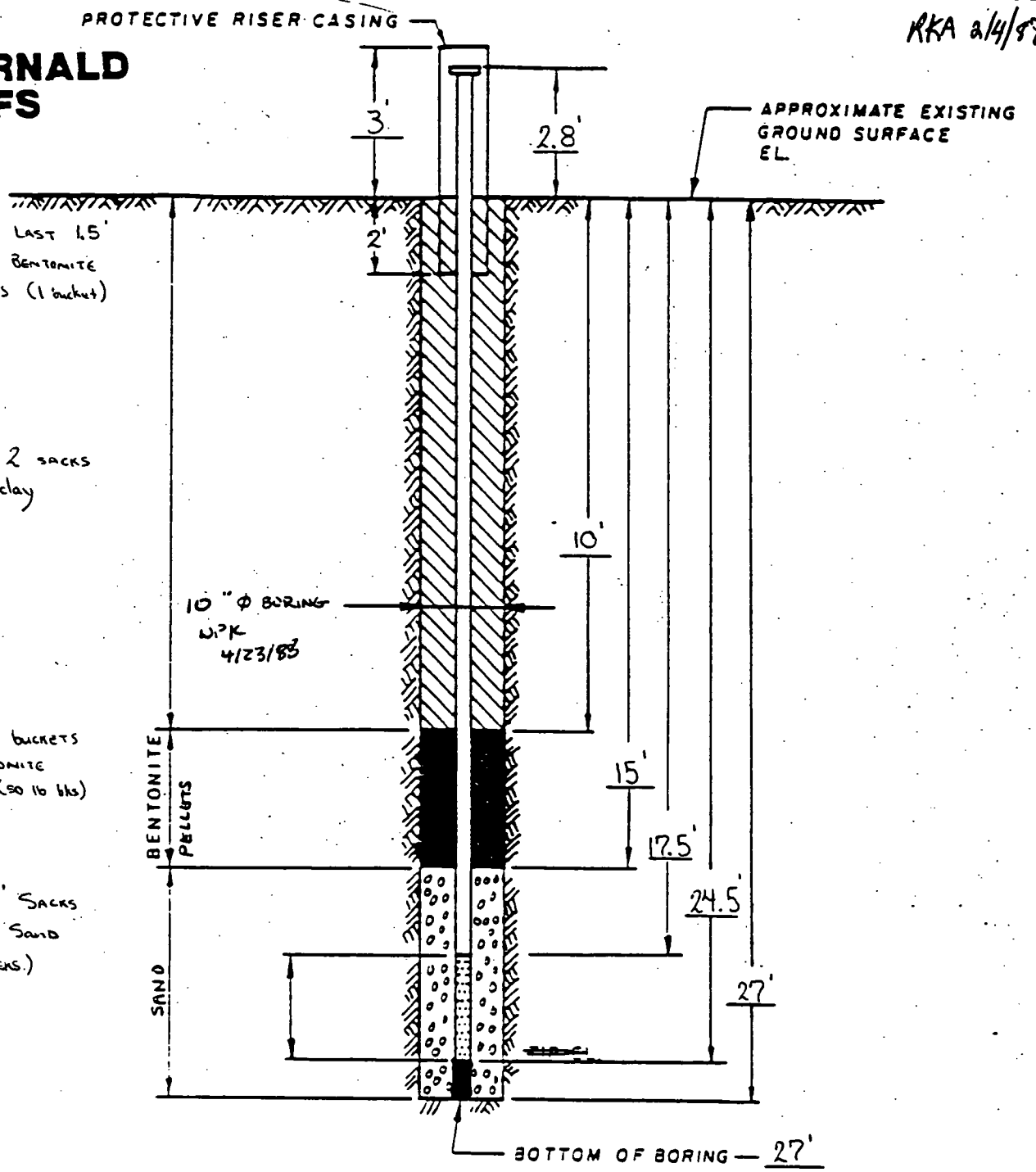
000235

402-11-86

WELL # ~~124~~ 1024 5644 BB

RKA 2/4/89

FERNALD RI/FS



DRAWING NUMBER

CHECKED BY

APPROVED BY

DR... BY

NOTES:

1. RISER PIPE IS 4 IN I.D. SCHEDULE PIPE, THREADED. FLUSH-JOINTED.
2. SCREEN IS 4 IN I.D S.S. PIPE CONTINUOUS SLOT SCREEN (0.010 IN. SLOT SIZE).
3. LOWER END OF SCREEN IS CAPPED.
4. ELEVATION OF WATER LEVEL
5. WATER LEVEL READING ON

INSTALLATION DETAILS
MONITORING WELL ~~124~~ 1024

PREPARED FOR RKA 2/4/89

FMPC RI/FS

000236

5644

FERNALD RI/FS

	Initial	Date
1st Key In		
2nd Key In		
Hard Copy Verification		

BAK

RKA 2/4/89

PIEZOMETER INSTALLATION SHEET

PROJECT NAME FMPC RI/FS FIELD ENG./GEO. B. Dunning DATE 10/18/87
PROJECT NO. 602 CHECKED BY R Galbraith DATE 2/4/89
BORING NO. ~~124~~ 1024 OB 1-5-89
PIEZOMETER NO. NA DATE OF INSTALLATION 10-18-87

BOREHOLE DRILLING

DRILLING METHOD Cable Tool
DRILLING FLUID (S) USED:
FLUID Water FROM 0' TO 27'
FLUID NA FROM NA TO NA

TYPE OF BIT Hammer
CASING SIZE (S) USED: WPK 4/23/88
SIZE 10" FROM Surface TO 27'
SIZE NA FROM NA TO NA

PIEZOMETER DESCRIPTION

TYPE Stainless Steel
DIAMETER OF PERFORATED SECTION 4"
PERFORATION TYPE:
SLOTS ☐ HOLES ☐ SCREEN ☒
AVERAGE SIZE OF PERFORATIONS .010 IN.
TOTAL PERFORATED AREA 7'

RISER PIPE MATERIAL Stainless Steel (316)
RISER PIPE DIAMETERS:
O.D. 4 3/8" I.D. 4"
LENGTH OF PIPE SECTIONS 10'
JOINING METHOD Flush joint thread

PROTECTION SYSTEM

RISER PROTECTIVE PIPE LENGTH 5'
PROTECTIVE PIPE O.D. 10"

OTHER PROTECTION Locking cap with lock.

ITEM	DISTANCE ABOVE/BELOW GROUND SURFACE (FT.)		ELEVATION (FT.) MSL	
TOP OF RISER PIPE	2.8'			
GROUND SURFACE	0.0			
BOTTOM OF PROTECTIVE PIPE	- 2'			
BOREHOLE FILL MATERIALS:				
GROUT/SLURRY	TOP - 0'	BOTTOM 10'	TOP	BOTTOM
BENTONITE	TOP 10'	BOTTOM 15'	TOP	BOTTOM
SAND	TOP 15'	BOTTOM 27'	TOP	BOTTOM
no GRAVEL USED	TOP NA	BOTTOM NA	TOP	BOTTOM
PERFORATED SECTION	TOP 17.5'	BOTTOM 24.5'	TOP	BOTTOM
PIEZOMETER TIP	WPK 4/23/88	27.0' (SILT TRAP)		
BOTTOM OF BOREHOLE	27'			
GWL AFTER INSTALLATION	≈ 9'			

AS THE PIEZOMETER FLUSHED AFTER INSTALLATION? YES ☐ NO ☑
WAS A SENSITIVITY TEST PERFORMED ON THE PIEZOMETER? YES ☐ NO ☑
REMARKS The white out corrections were made by B. Dunning at the time the form was completed. WPK 4/23/88

000237

MONITORING WELL
1040

WEL LOG AND DRILLING REP RT

1040
470766

ORIGINAL
5644

NO CARBON PAPER NECESSARY-
LF-TRANSCRIBING

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Geological Survey
Fountain Square
Columbus, Ohio 43224 Phone (614) 466-5344

COUNTY Butler TOWNSHIP Ross SECTION OF TOWNSHIP OR LOT NUMBER 31

OWNER ~~Bd~~ Foxx Const Co ADDRESS 3031 Laybigh Rd Hamilton, O

LOCATION OF PROPERTY 4210 Morgan Ross Rd

CONSTRUCTION DETAILS

asing diameter 6" Length of casing 55

pe of screen Cook brass 430 Length of screen 5" incl 3' tail ~~pipe s~~

pe of pump

apacity of pump

epth of pump setting

ate of completion

BAILING OR PUMPING TEST
(specify one by circling)

Test rate 20 gpm Duration of test 4 hrs

Drawdown 8 ft Date 5/10/74

Static level (depth to water) 38' ft

Quality (clear, cloudy, taste, odor)

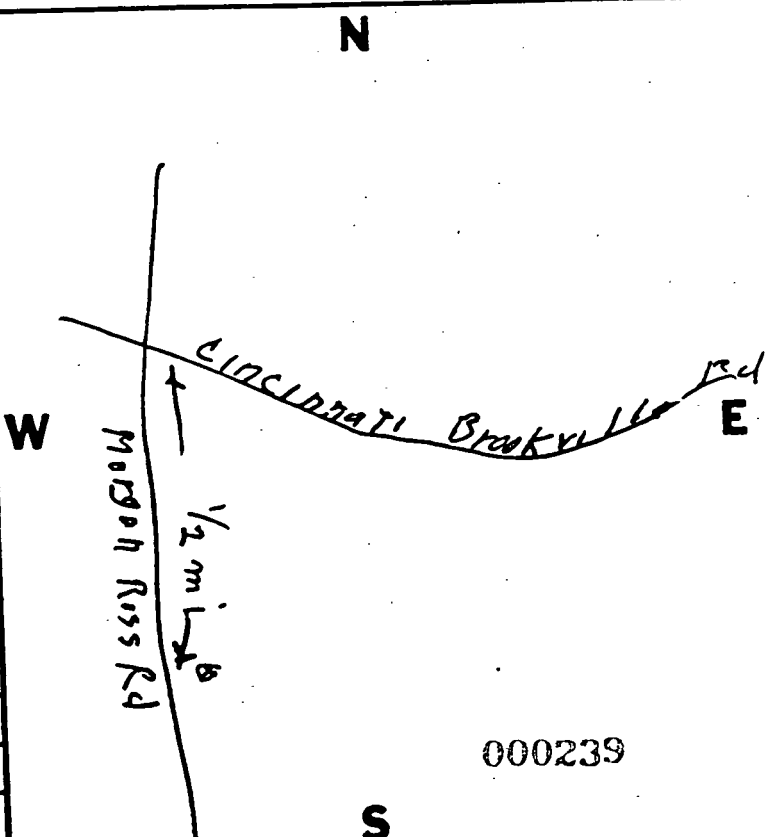
Pump installed by W Crane

WELL LOG*

Formations: sandstone, shale, limestone, gravel, clay	From	To
Yellow clay	0 ft	11 ft
Blue clay	11	40
Sand & gravel	40	45
Blue clay	45	54
Sand & gravel	54	57
Blue clay	57	60

SKETCH SHOWING LOCATION

Locate in reference to numbered state highways, street intersections, county roads, etc.



000239

DRILLING FIRM Wm Crane

ADDRESS Box 33 Shandon O

DATE 7/10/74

SIGNED Wm Crane

*If additional space is needed to complete well log, use next consecutive numbered form.

MONITORING WELL
1065

5644
RKA 2/4/89

FERNALD RI/FS

	Initial	Date
1st Key In		
2nd Key In		
Hard Copy Verification		

4/23/88 WPK

VISUAL CLASSIFICATION OF SOILS

RIG #2

PROJECT NUMBER: 602	PROJECT NAME: FERNALD RI/FS	
BORING NUMBER: ~~165~~ 1065 RB 1-5-89	COORDINATES:	DATE: 10-4-87
ELEVATION:	GWL: Depth Date/Time	DATE STARTED: 10-4-87
ENGINEER/GEOLOGIST: D. OAKLEY	Depth Date/Time	DATE COMPLETED: 10-6-87
DRILLING METHODS: CABLE TOOL		PAGE 1 OF 1

DEPTH (FT)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER (6")	RECOVERY (INCH)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
0							
1				SEE SOIL BORING LOG FOR BORING/WELL NO. 2065 ~~265~~ FOR STATIGRAPHY. RKB 2/6/89 ON this hole.			Drilling only-no samples collected.
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							30 gallons water added to boring while drilling
12							
13							
14				14.0 14.0			
15				BOTTOM OF BORING 14.0'			

NOTES:

DRILLING CO. Pennsylvania Drilling
DRILL RIG Cyclone 42
Driller Harry Dykes
HELPER Tim Harris

BACKGROUND READINGS
HNU - zero
LEL - zero
ALPHA - zero/min
BETA/GAMMA - 40-80/min

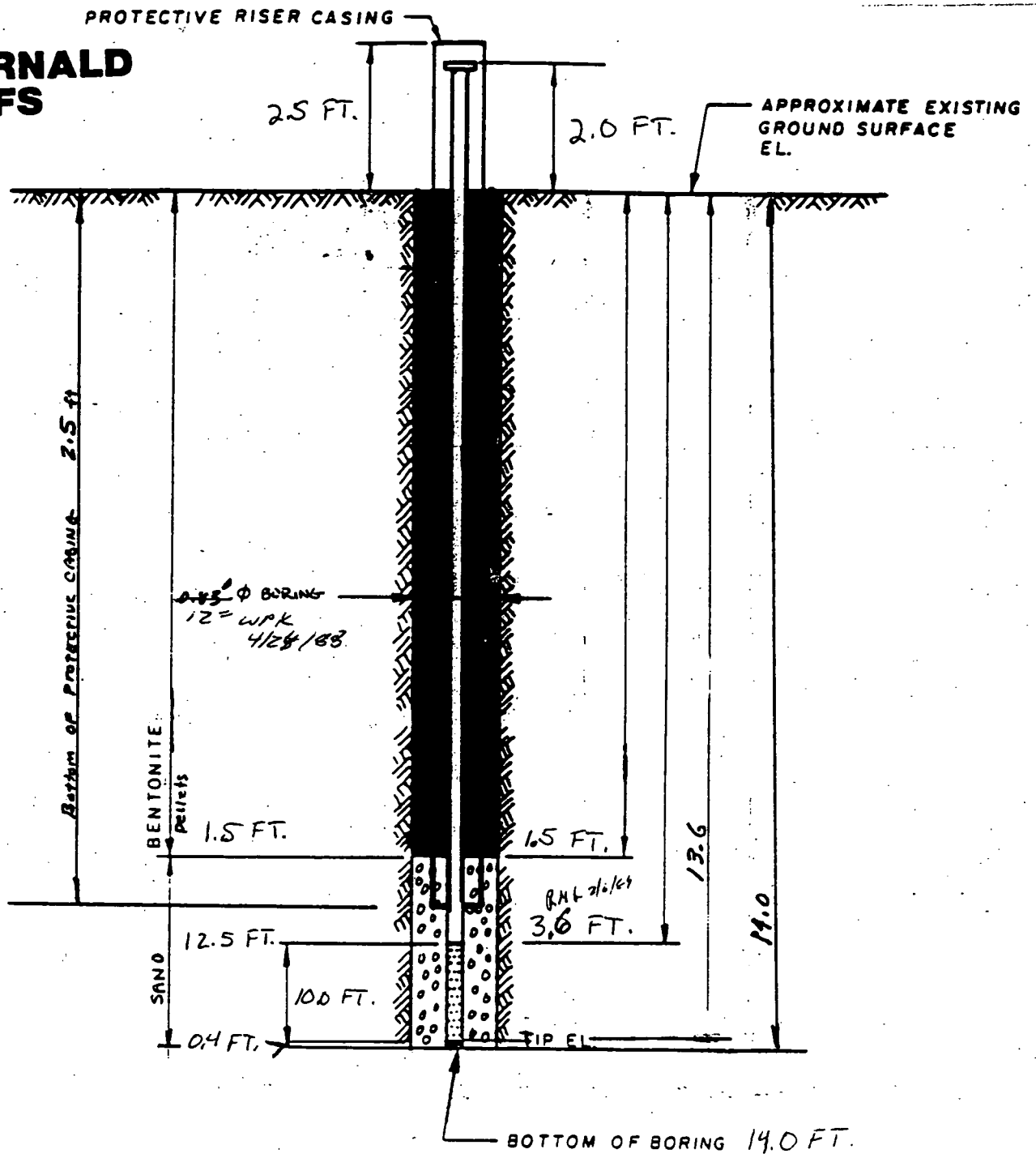
000241

302-11-86

5644

WELL # ~~165~~ 1065 BB 1-5

FERNALD RI/FS



DRAWING NUMBER

CHECKED BY

APPROVED BY

D N DT

NOTES:

1. RISER PIPE IS 4 IN I.D. SCHEDULE [redacted] 5 PIPE, THREADED, FLUSH-JOINTED.
2. SCREEN IS 4 IN I.D. S.S. PIPE CONTINUOUS SLOT SCREEN (0.010 IN. SLOT SIZE).
3. LOWER END OF SCREEN IS CAPPED.
4. ELEVATION OF WATER LEVEL
5. WATER LEVEL READING ON

INSTALLATION DETAILS
MONITORING WELL ~~165~~ 1065 BB 1-5-89

PREPARED FOR

FMPC - RI/FS

This form does not represent the installed monitoring well therefore it has been modified with white out by D. Oakley wpc 4/24/88

000242

FERNALD RI/FS

5644 PAC R&A 2/4/89

	Initial	Date
1st Key In		
2nd Key In		
Hard Copy Verification		

PIEZOMETER INSTALLATION SHEET

PROJECT NAME FERNALD RI/FS
PROJECT NO. 602
BORING NO. ~~165~~ D65 BB 1-5-89
PIEZOMETER NO. ~~165~~ 1065

FIELD ENG./GEO. D. OAKLEY DATE 10-6-87
CHECKED BY: D. HOLEMAN DATE 10-7-87
DATE OF INSTALLATION 10-6-87

BOREHOLE DRILLING

DRILLING METHOD CABLE TOOL
DRILLING FLUID (S) USED:
FLUID WATER FROM 2 FT. TO 14 FT.
FLUID NA FROM NA TO NA

TYPE OF BIT FLAT HEAD
CASING SIZE (S) USED:
SIZE 10 IN. FROM 0 TO 14 FT.
SIZE NA FROM NA TO NA

PIEZOMETER DESCRIPTION

TYPE MONITORING
DIAMETER OF PERFORATED SECTION 4 IN. I.D.
PERFORATION TYPE:
SLOTS ☐ HOLES ☐ SCREEN ☒
AVERAGE SIZE OF PERFORATIONS .010 IN.
TOTAL ~~PERFORATED AREA~~ SCREEN LENGTH 10 FT.

RISER PIPE MATERIAL 316 STAINLESS STEEL
RISER PIPE DIAMETERS:
O.D. 4 3/8 IN. I.D. 4 IN.
LENGTH OF PIPE SECTIONS 5 FT.
JOINING METHOD THREAD AND COUPLE (FLUSH JOINT THREADS)

PROTECTION SYSTEM

RISER PROTECTIVE PIPE LENGTH 5 FT.
PROTECTIVE PIPE Ø.D. 10 IN

OTHER PROTECTION LOCKING CAP AND LOCK.

ITEM	DISTANCE ABOVE/BELOW GROUND SURFACE (FT)		ELEVATION (FT) MSL	
TOP OF RISER PIPE	2.0 FT.			
GROUND SURFACE	0.0			
BOTTOM OF PROTECTIVE PIPE	2.5 FT.			
BOREHOLE FILL MATERIALS:				
GROUT/SLURRY	TOP NA	BOTTOM NA	TOP	BOTTOM
BENTONITE	TOP 0	BOTTOM 1.5 FT.	TOP	BOTTOM
SAND	TOP 1.5 FT	BOTTOM 14 FT.	TOP	BOTTOM
NO GRAVEL USED	TOP NA	BOTTOM NA	TOP	BOTTOM
PERFORATED SECTION	TOP 3.6 FT.	BOTTOM 13.6 FT.	TOP	BOTTOM
PIEZOMETER TIP	~~NA~~ 14.0			
BOTTOM OF BOREHOLE	14.0 FT.			
GWL AFTER INSTALLATION	NONE			

THE PIEZOMETER FLUSHED AFTER INSTALLATION? YES ☐ NO ☒
WAS A SENSITIVITY TEST PERFORMED ON THE PIEZOMETER? YES ☐ NO ☒

000243

REMARKS DRY WELL. NO VOLCLAY NEEDED BECAUSE OF SHALLOW DEPTH.

5644

FERNALD RI/FS

PIEZOMETER INSTALLATION SHEET

PROJECT NAME FERNALD RI/FS FIELD ENG./GEO. L. WILLIE DATE 10-6-87
PROJECT NO. 602 CHECKED BY D. HOLZMAN DATE 10-7-87
BORING NO. 265
PIEZOMETER NO. 265 DATE OF INSTALLATION 10-3-87

BOREHOLE DRILLING

DRILLING METHOD CABLE TOOL	TYPE OF BIT FLATHEAD HAMMER
DRILLING FLUID (S) USED:	CASING SIZE (S) USED: (TEMPORARY)
FLUID WATER FROM 2 FT. TO 64 FT.	SIZE 10 IN. FROM 0 TO 64 FT.
FLUID — FROM — TO —	SIZE — FROM — TO —

PIEZOMETER DESCRIPTION

TYPE MONITORING WELL	RISER PIPE MATERIAL 316 STAINLESS STEEL
DIAMETER OF PERFORATED SECTION 4 IN. ID.	RISER PIPE DIAMETERS:
PERFORATION TYPE:	O.D. 4 3/8 IN. I.D. 4 IN.
SLOTS ☐ HOLES ☐ SCREEN ☑	LENGTH OF PIPE SECTIONS 10 FT.
AVERAGE SIZE OF PERFORATIONS 0.010 IN.	JOINING METHOD THREAD AND COUPLE
TOTAL PERFORATED AREA 15 FT.	(FLUSH JOINT THREADS)

PROTECTION SYSTEM

RISER PROTECTIVE PIPE LENGTH 5 FT.	OTHER PROTECTION LOCKING CAP
PROTECTIVE PIPE O.D. 10 IN.	

ITEM	DISTANCE ABOVE/BELOW GROUND SURFACE (FT)		ELEVATION ( )	
TOP OF RISER PIPE	+ 2.0			
GROUND SURFACE	0.0			
BOTTOM OF PROTECTIVE PIPE	- 2.5 FT.			
BOREHOLE FILL MATERIALS:				
GROUT/SLURRY (VOLCLAY)	TOP 2 FT.	BOTTOM 39.5 FT.	TOP	BOTTOM
BENTONITE Pellets	TOP 39.5 FT.	BOTTOM 44.5 FT	TOP	BOTTOM
SAND	TOP 44.5 FT	BOTTOM 65.0 FT	TOP	BOTTOM
NO GRAVEL USED	TOP NA	BOTTOM NA	TOP	BOTTOM
PERFORATED SECTION	TOP 46.5 FT	BOTTOM 61.5 FT	TOP	BOTTOM
PIEZOMETER TIP	61.5			
BOTTOM OF BOREHOLE	65.0			
GWL AFTER INSTALLATION	—			

WAS THE PIEZOMETER FLUSHED AFTER INSTALLATION? YES ☐ NO ☒
WAS A SENSITIVITY TEST PERFORMED ON THE PIEZOMETER? YES ☐ NO ☒

REMARKS

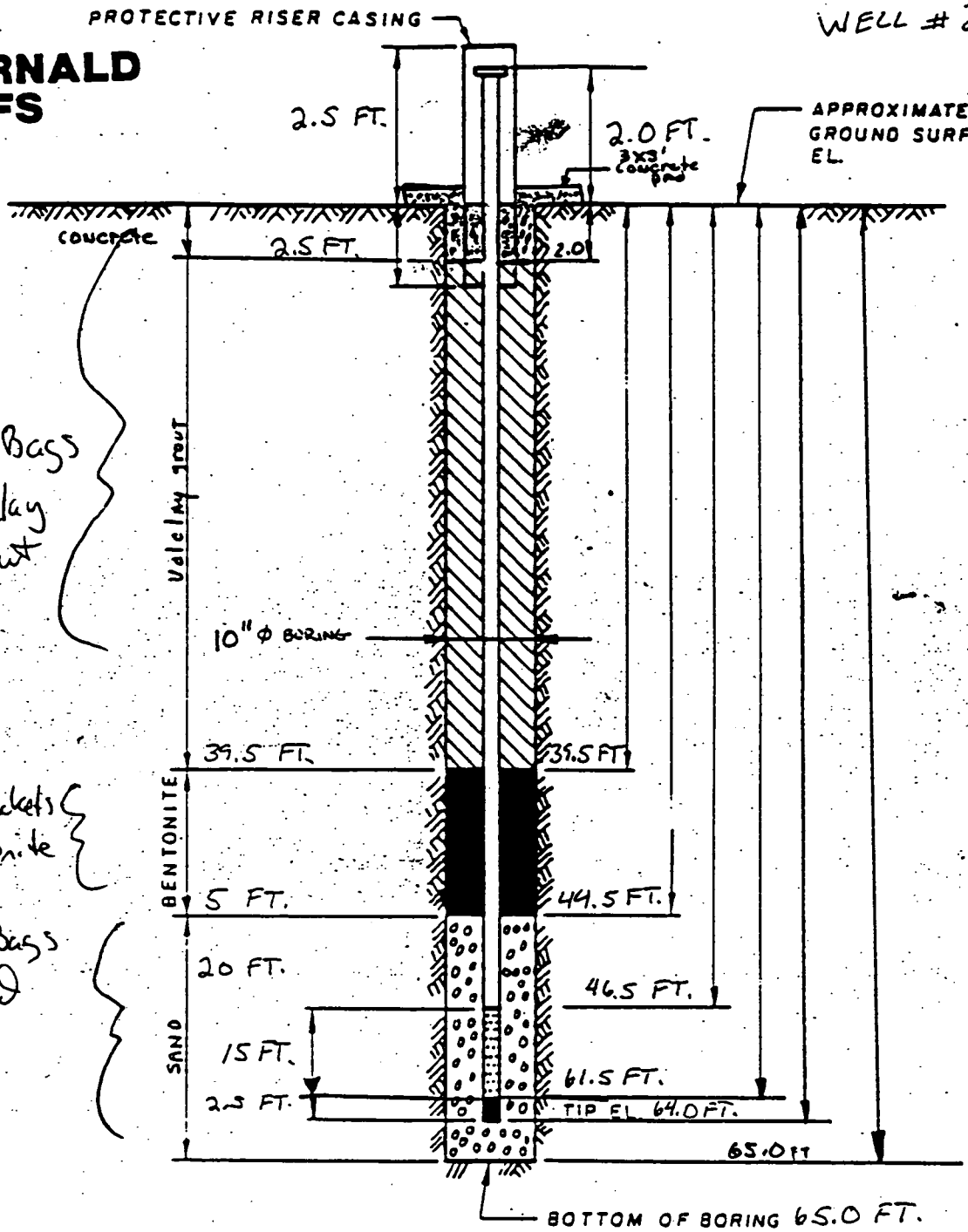
000244

1,000 gallons

5644 #

WELL #265

FERNALD RI/FS



NOTES:

1. RISER PIPE IS 4 IN I.D. SCHEDULE 5 PIPE, THREADED, FLUSH-JOINTED.
2. SCREEN IS 4 IN I.D. S.S. PIPE CONTINUOUS SLOT SCREEN (0.010 IN. SLOT SIZE).
3. LOWER END OF SCREEN IS CAPPED.
4. ELEVATION OF WATER LEVEL
5. WATER LEVEL READING ON

INSTALLATION DETAILS
MONITORING WELL 265

PREPARED FOR
FMPC RI/FS

DRAWING NUMBER

CHECKED BY
APPROVED BY

DRAWN BY DRG

000245

MONITORING WELL
2026

5644

2026
EF
BU-101

WELL LOG AND DRILLING REPORT

ORIGINAL

NO CARBON PAPER NECESSARY— SELF-TRANSCRIBING

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water
65 S. Front St., Rm. 815 Phone (614) 469-2646
Columbus, Ohio 43215

No. 421162

2026

County Butler Township Ross Section of Township 34

Owner Elmer Fletcher Address Ross, O

Location of property Ross, O

CONSTRUCTION DETAILS

Casing diameter 6" Length of casing 73

Type of screen Cook base #30 Length of screen 2

Type of pump

Capacity of pump

Depth of pump setting

Date of completion

BAILING OR PUMPING TEST
(Specify one by circling)

Test Rate 25 G.P.M. Duration of test 4

Drawdown 2 ft. Date 11/4/71

Static level-depth to water 37'6"

Quality (clear, cloudy, taste, odor) clear

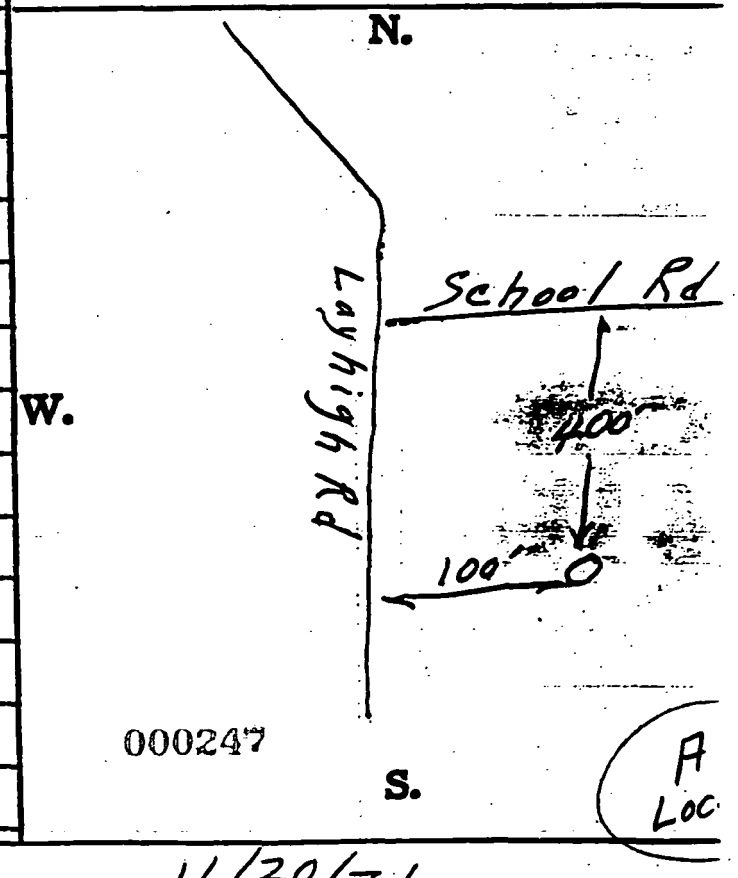
Pump installed by Crane

WELL LOG*

Formations Sandstone, shale, limestone, gravel and clay	From	To
	0 Feet	Ft.
Top soil	0	1
Sand & gravel	1	75

SKETCH SHOWING LOCATION

Locate in reference to numbered State Highways, St. Intersections, County roads, e



000247

Drilling Firm Wm Crane Date 11/20/71

Address Box 33 Shandon, O Signed Wm Crane

*If additional space is needed to complete well log, use next consecutive numbered f

MONITORING WELL
2036

WELL LOG AND DRILLING REPORT

5644 ORIGINAL

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water
1562 W. First Avenue
Columbus, Ohio 43212

PLEASE USE PENCIL OR TYPEWRITER
DO NOT USE INK.

№ 366561

12-5
2036

County Hamilton Township Crosby Section of Township 12

Owner George Fuchs Address [redacted]

Location of property [redacted]

CONSTRUCTION DETAILS

Casing diameter 6" Length of casing 101

Type of screen Cook brass #30 Length of screen 2'

Type of pump Submersible

Capacity of pump 14

Depth of pump setting 100'

Date of completion 4/8/68

BAILING OR PUMPING TEST

Pumping Rate 25 G.P.M. Duration of test 1 hrs.

Drawdown 2 ft. Date 4/8/68

Static level-depth to water 82 ft.

Quality (clear, cloudy, taste, odor) C1

Pump installed by

WELL LOG*

Formations Sandstone, shale, limestone, gravel and clay	From	To
	0 Feet	Ft.
well pit	0	4
Yellow clay	4	12
Blue clay	12	68
Yellow ~~sand~~ clay	68	72
Yellow sand	72	90
Gray sand	90	103
Sand & gravel	103	107

SKETCH SHOWING LOCATION

Locate in reference to numbered State Highways, St. Intersections, County roads, etc.

[redacted]

ing Firm Wm Crane Date 4/24/68

Address Shandon, O Signed Wm Crane 36

*If additional space is needed to complete well log, use next consecutive numbered form.

MONITORING WELL
2043

5644 PA

FERNALD RI/FS

REVIEWED BY QA KG DATE AUG 31 1990

	Initial	Date
1st Key In		
2nd Key In		
Hard Copy Verification		

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602	PROJECT NAME: FMPC RI/FS	
BORING NUMBER: BB 1-5-89 ~~243~~ 2043	COORDINATES: 481760.81N 1377051.91E	DATE: 12/14 & 12/15/87
ELEVATION: 578.26	GWL: Depth – Date/Time –	DATE STARTED: 12/14/87
ENGINEER/GEOLOGIST: B. Dunning	Depth – Date/Time	DATE COMPLETED: 12/16/87
DRILLING METHODS: Cable Tool		PAGE 1 OF 2

DEPTH (Ft.)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER (6")	RECOVERY (Inch)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
0				Refer to sample descriptions from well ~~243~~ 3043 RMG 2/6/89			
3							
5	ST 077955	NA	24"	SHELBY TUBE	CL		(1130)
7							
10	S 07796	12 11 13		Duplicate Sample Taken	CL	1.5	Anu=0 BB=20-40 α=0 (1348)
13							
15	ST 077957	NA	21"	SHELBY TUBE "	CL		(1618)
18							
20							
23							
25							
27							
30							

000251

NOTES:

I.) Background Measurement 12/14 & 12/15/87 = α=0, Anu=0, BB=40-60 c.p.m.

II.) Drilling Contractor: Pennsylvania Drilling
Drilling Personnel.
Driller: Tim Harris
Helper: Craig Coulter

III. WATER USED 12/14 = 13 gal.
" " 12/15 = 80 gal.

5644
FERNALD
RI/FS

REVIEWED BY QA K6 DATE DLG 2/4/99

AUG 07 1991

	Initial	Date
1st Key In		
2nd Key In		
Hard Copy Verification		

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602	PROJECT NAME: FMPC RI/FS	
BORING NUMBER: BB 1-5-89 243 ~~2042~~ 2043	COORDINATES: See p1	DATE: 12/15 & 12/16/87
ELEVATION: See p1	GWL: Depth — Date/Time —	DATE STARTED: 12/14/87
ENGINEER/GEOLOGIST: B. Dunning	Depth — Date/Time —	DATE COMPLETED: 12/16/87
DRILLING METHODS: Cable Tool		PAGE 2 OF 3

DEPTH (Ft.)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER (6")	RECOVERY (Inch)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
30				See Descriptions on Soil log ~~343~~ 3043 RMG 2/6/89			
32							
35							
40							End of Day 12/15/87 Start Day 12/16/87
45							
50							
55							
60							

NOTES:
I.) Background Measurements 12/16/87
Hnu = 0
α = 0
$\beta\gamma$ = 40-50 c.p.m.

II.) Water Used 12/16/87 = 29 g

000252

402-11-86

5644

	Initial	Date
1st Key In		
2nd Key In		
Data Copy Verification		

FERNALD RI/FS

REVIEWED BY QA KG DATE AUG 07 1991

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602	PROJECT NAME: FMPC RI/FS	
BORING NUMBER: ~~343~~ 3043	COORDINATES: See pl	DATE: 12/16/87
ELEVATION: See pl	GWL: Depth 57' Date/Time 12/16/87 2100	DATE STARTED: 12/14/87
ENGINEER/GEOLOGIST: B. Dunning	Depth Date/Time	DATE COMPLETED: 12/16/87
DRILLING METHODS: Cable Tool		PAGE 3 OF 3

DEPTH (Ft)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER (6")	RECOVERY (Inch)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
60				See Soil Descriptions on Log for well ~~343~~ 3043 2/6/89 RMG			
63							
65	S 07798	9 14 17	36"	Duplicate Sample Taken	SW		Hnu = 0 SB = 40-60 cpm. α = 0 (1452)
68							Drilled Well To 69.3'
				69.3 ↑ Bottom of Boring			
70							Had to Drive 10" casing to 73' & keep a full hydrostatic head in it to keep sand from coming into borehole.
75							
80							

NOTES:

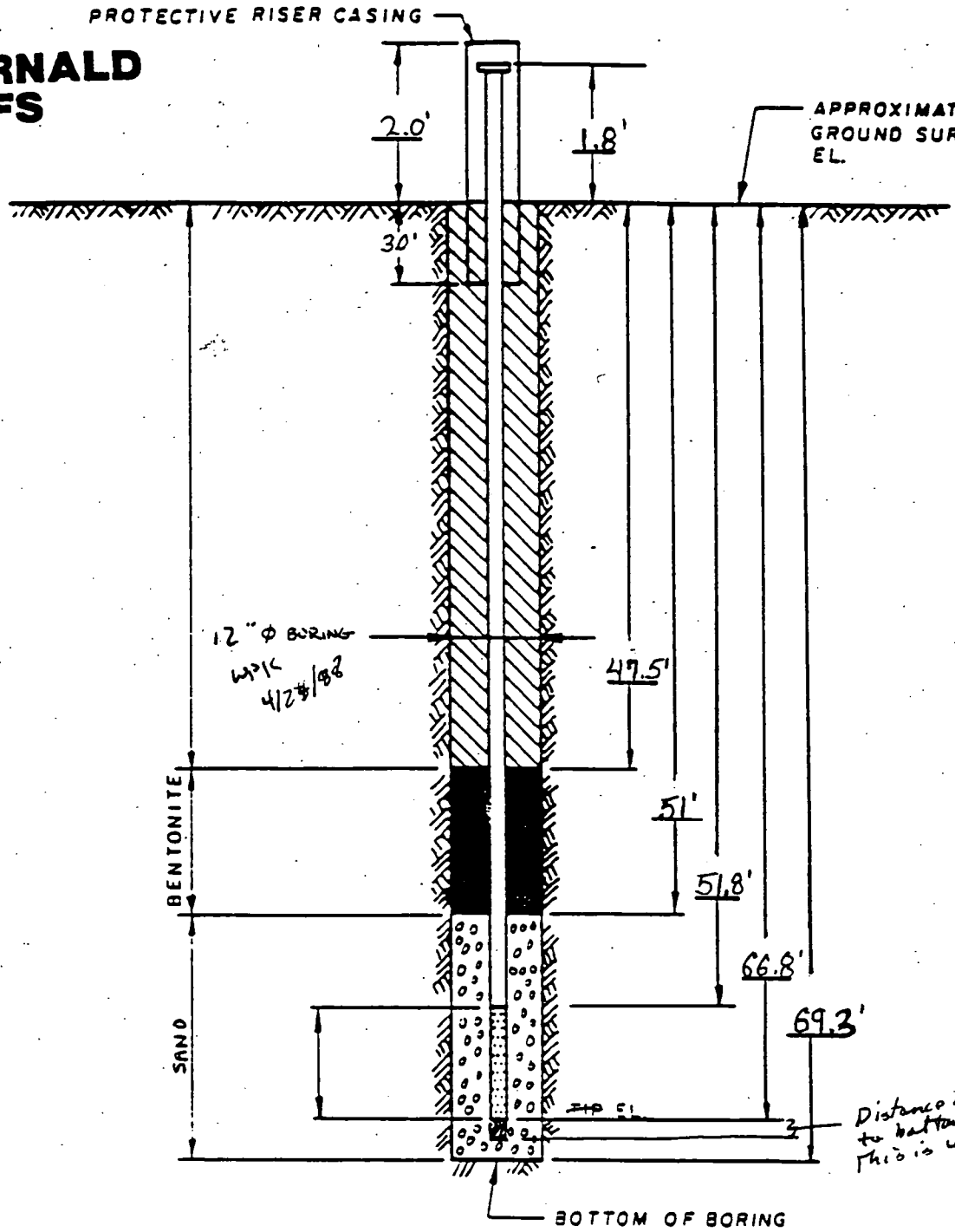
5644

DLG 2/14/19

2043 BB 1-5-89 # 34

Monitor Well ~~243~~

FERNALD RI/FS



Distance not recorded to bottom of the scrp. This is usually 2.5' RWT 2/6/89

DRAWING NUMBER

CHECKED BY

APPROVED BY

DRAWN BY

REVIEWED BY QA

DATE AUG 07 1991

NOTES:

1. RISER PIPE IS 4 IN I.D. SCHEDULE PIPE, THREADED, FLUSH-JOINTED.
2. SCREEN IS 4 IN I.D SS PIPE CONTINUOUS SLOT SCREEN (0.010 IN. SLOT SIZE).
3. LOWER END OF SCREEN IS CAPPED.
4. ELEVATION OF WATER LEVEL
5. WATER LEVEL READING ON

INSTALLATION DETAILS
MONITORING WELL ~~243~~ 2043 RWT 2/6/89

PREPARED FOR

FMPC RI/FS

000254

5644

FERNALD RI/FS

REVIEWED BY QA KG ~~DATE~~ AUG 0 1 1991

DLG 2/21/89

	Initial	Date
1st Key In		
2nd Key In		
Hard Copy Verification		

PIEZOMETER INSTALLATION SHEET

PROJECT NAME FMPC RI/FS FIELD ENG./GEO. B. Dunning DATE 12/18/87
PROJECT NO. 602 T 3.2 CHECKED BY R Galbraith DATE 2/6/89
BORING NO. ~~243~~ 2043 BB 1-5-89
PIEZOMETER NO. NA 2043 DATE OF INSTALLATION 12/18/87

BOREHOLE DRILLING

DRILLING METHOD Cable Tool
DRILLING FLUID (S) USED:
FLUID Water FROM 0 TO 69.2
FLUID NA FROM NA TO NA

TYPE OF BIT Hammer-Type
CASING SIZE (S) USED:
SIZE 10" FROM 0' TO 69.2'
SIZE NA FROM NA TO NA

PIEZOMETER DESCRIPTION

TYPE Stainless Steel
DIAMETER OF PERFORATED SECTION 4" Ø
PERFORATION TYPE:
SLOTS ☐ HOLES ☐ SCREEN ☒
AVERAGE SIZE OF PERFORATIONS 0.01"
TOTAL ~~PERFORATED AREA~~ SCREEN LENGTH 10'. 15' RHG 2/6/89

RISER PIPE MATERIAL Stainless Steel
RISER PIPE DIAMETERS:
O.D. 4 3/8" I.D. 4"
LENGTH OF PIPE SECTIONS 10' & 2½'
JOINING METHOD Flush Joint Threaded

PROTECTION SYSTEM

RISER PROTECTIVE PIPE LENGTH 5 FT
PROTECTIVE PIPE Ø.D. 10 inches

OTHER PROTECTION LOCKING CAP WITH LOCK.

ITEM	DISTANCE ABOVE BELOW GROUND SURFACE (FT)		ELEVATION (FT) MSL	
TOP OF RISER PIPE	+ 1.8 FT		580.06	
GROUND SURFACE	0.0		578.26	
BOTTOM OF PROTECTIVE PIPE	3.0'		575.26	
BOREHOLE FILL MATERIALS:				
GROUT/SLURRY	TOP 0	BOTTOM 47.5'	TOP 578.26	BOTTOM 530.76
BENTONITE	TOP 47.5'	BOTTOM 51'	TOP 530.76	BOTTOM 527.26
SAND	TOP 51.0'	BOTTOM 69.3	TOP 527.26	BOTTOM 508.96
GRAVEL	TOP NA	BOTTOM NA	TOP —	BOTTOM —
PERFORATED SECTION	TOP 51.8	BOTTOM 66.8	TOP 526.46	BOTTOM 511.46
PIEZOMETER TIP	NA		—	
BOTTOM OF BOREHOLE	69.3		508.96	
GWL AFTER INSTALLATION	57.0' TOC WPC 4/24/89		√ Arrible	

WAS THE PIEZOMETER FLUSHED AFTER INSTALLATION? YES ☐ NO ☑
WAS A SENSITIVITY TEST PERFORMED ON THE PIEZOMETER? YES ☐ NO ☑

REMARKS

000255

MONITORING WELL
2050

5644

WE LOG AND DRILLING RF ORT

Pallet Co. 164
Stat 164
641364 ✓
2050

NO CARBON PAPER NECESSARY– ELF-TRANSCRIBING

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water
Fountain Square
Columbus, Ohio 43224

COUNTY HAMILTON TOWNSHIP CROSBY SECTION OF TOWNSHIP 6

OWNER SCHAEFER BOX CO ADDRESS 5537 ST RT 128

LOCATION OF PROPERTY PADDY'S RUN RD AT BUTLER CO LINE

CONSTRUCTION DETAILS

Casing diameter 6" Length of casing 69'6"
Type of screen COOK SS #40 Length of screen 4
Type of pump
Capacity of pump
Depth of pump setting
Date of completion

BAILING OR PUMPING TEST
(specify one by circling)

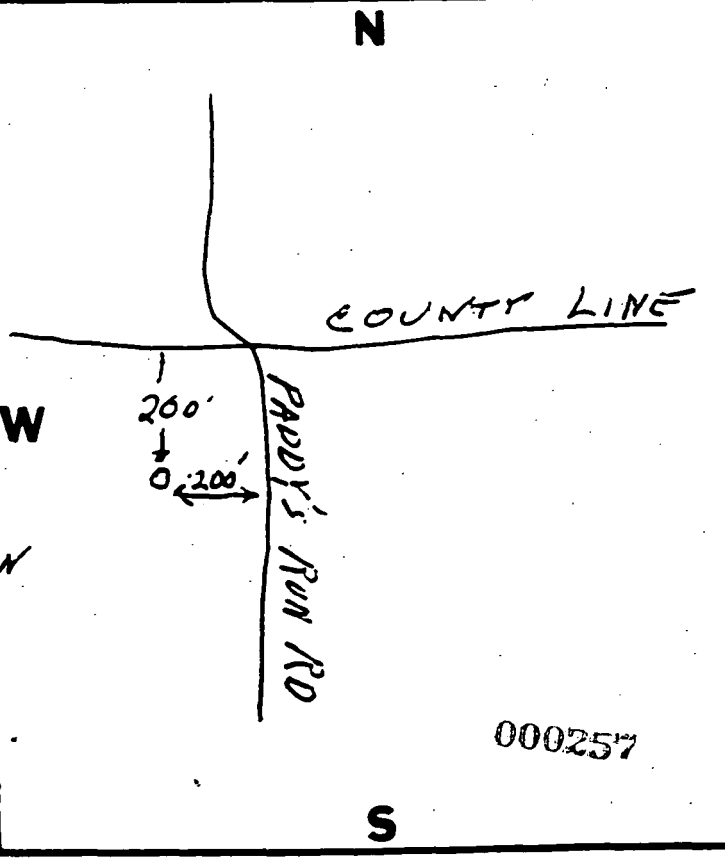
Test rate 80 gpm Duration of test 4 hrs
Drawdown 7 ft Date 8/25/84
Static level (depth to water) 46'4" ft
Quality (clear, cloudy, taste, odor)
Pump installed by

WELL LOG*

Formations: sandstone, shale, limestone, gravel, clay	From	To
FILL	0 ft	1 ft
TOP SOIL	1	5
BROWN CLAY & GRAVEL	5	12
GRAY CLAY & GRAVEL	12	36
VERY DIRTY GRAVEL	36	37
YELLOW CLAY & GRAVEL	37	50
SANDY YELLOW CLAY	50	55
VERY DIRTY GRAY SAND	55	72
SAND & FINE GRAVEL	72	75
SAND	75	78
VERY FINE SAND	78	90
3/4TS OF THIS ON .008 SCREEN AND PAN		
SET SCREEN FROM	69'6"	TO 73'6"
WITH 5" PVC TO 90'		

SKETCH SHOWING LOCATION

Locate in reference to numbered state highways, street intersections, county roads, etc.



000257

DRILLING FIRM WM CRANE CO DATE 9/6/84
ADDRESS BOX 33 SHANDON, O SIGNED WM Crane

*If additional space is needed to complete well log, use next consecutive numbered form.

16

ORIGINAL COPY - ODNR, DIVISION OF WATER, FOUNTAIN SQ., COLS., OHIO 43224

MONITORING WELL
2056

20565644

WELL LOG AND DRILLING REPORT

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water
Fountain Square
Columbus, Ohio 43224

NO CARBON PAPER NECESSARY - SELF-TRANSCRIBING

619130

COUNTY BUTLER TOWNSHIP MORGAN SECTION OF TOWNSHIP 25

OWNER MARY FRANCIS ADDRESS [redacted]

LOCATION OF PROPERTY [redacted]

CONSTRUCTION DETAILS SHANDON, O

Casing diameter 6" Length of casing 72

Type of screen COOK STAINLESS #12 Length of screen 5'

Type of pump SUBMERSIBLE

Capacity of pump 12

Depth of pump setting 70'

Date of completion

BAILING OR PUMPING TEST
(specify one by circling)

Test rate 20 gpm Duration of test 4

Drawdown 4 ft Date 9/23/83

Static level (depth to water) 28' 10"

Quality (clear, cloudy, taste, odor)

Pump installed by

WELL LOG*

Formations: sandstone, shale, limestone, gravel, clay	From	To
TOP SOIL	0 ft	3 ft
SILTY CLAY	3	12
BLUE CLAY	12	60
DIRTY DARK GRAY SAND	60	70
SAME BUT CLEANER	70	77

SKETCH SHOWING LOCATION

Locate in reference to numbered state highways, street intersections, county roads, etc.

[redacted]

DRILLING FIRM WM CRANE CO DATE 9/28/83

ADDRESS BOX 53 SHANDON, O SIGNED [signature]

*If additional space is needed to complete well log, use next consecutive numbered form.

MONITORING WELL
2057

5644

ORIGINAL

WELL LOG AND DRILLING REPORT

2057

PLEASE USE PENCIL OR TYPEWRITER DO NOT USE INK.

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water
1562 W. First Avenue
Columbus 12, Ohio

№ 291492

County Hamilton Township Crosby Section of Township 1

Owner Nu Maid Farms Address Rt #1 Harrison O

Location of property

CONSTRUCTION DETAILS

Casing diameter 6" Length of casing 120'

Type of screen Cook Brass #20 Length of screen 5'

Type of pump

Capacity of pump

Depth of pump setting

Date of completion

BAILING OR PUMPING TEST

Pumping Rate G.P.M. Duration of test hrs.

Drawdown ft. Date 6/4/64

Static level-depth to water 86'6" ft.

Quality (clear, cloudy, taste, odor)

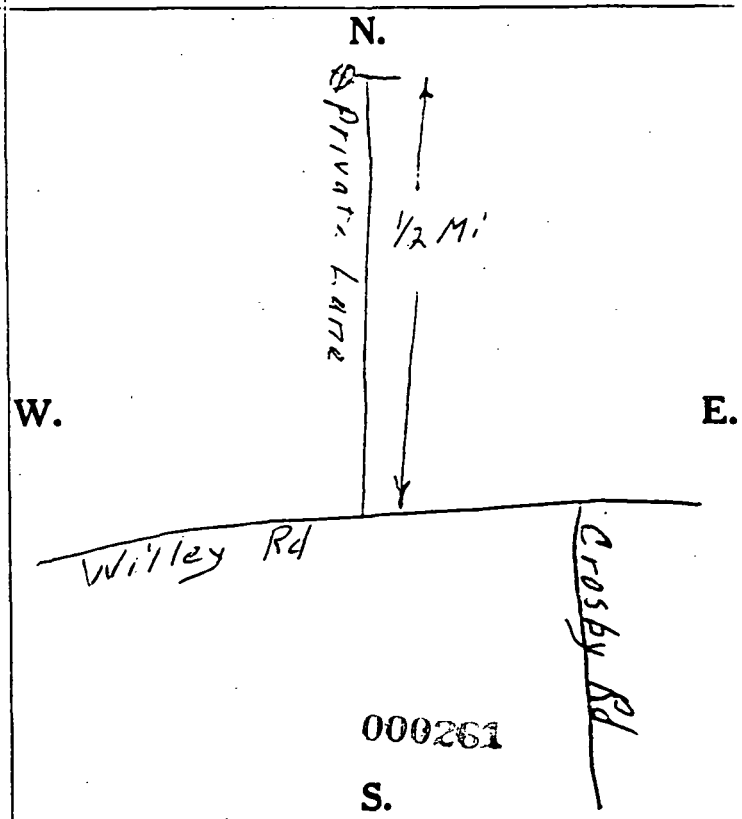
Pump installed by

WELL LOG

Formations Sandstone, shale, limestone, gravel and clay	From	To
	0 Feet	Ft.
Yellow clay	0	12
Blue clay	12	97
Gravel	97	103
Sand	103	125

SKETCH SHOWING LOCATION

Locate in reference to numbered State Highways, St. Intersections, County roads, etc.



000261

See reverse side for instructions

Drilling Firm Wm Crane Date 6/4/64

Address Shandon, O Signed Wm Crane

16

MONITORING WELL
2066

5644

	Initial	Date
1st Key In		
2nd Key In		
Final Verification		

FERNALD RI/FS

REVIEWED BY QA DLG 2/4/88 DATE AUG 0 9 1991

VISUAL CLASSIFICATION OF SOILS

WPIE 11/23/88

RIG #2

PROJECT NUMBER: 602	PROJECT NAME: FERNALD RI/FS		
BORING NUMBER: ~~2066~~ 2066 BB	COORDINATES: 13393.95 N / 13161.02 E	DATE: 8/25/87	
ELEVATION: 578.2 GROUND	GWL: Depth	Date/Time	DATE STARTED: 8/25/87
ENGINEER/GEOLOGIST: D. OAKLEY	Depth	Date/Time	DATE COMPLETED: 8/31/87
DRILLING METHODS: CABLE TOOL			PAGE 1 OF 5

DEPTH (FT)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER (6 IN.)	RECOVERY (IN.)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
1.5	7000	6 6 5	13"	STIFF BROWN SILT, TRACE FINE SAND.	ML		SAMPLE SCANNED - BACKGROUND READINGS
3.0	7001	6 6 6	14"	STIFF BROWN SILTY CLAY, TRACE FINE SAND.	CL		SAMPLE SCANNED - BACKGROUND READINGS
4.5	7002	1 2 3	14"	MEDIUM STIFF REDDISH YELLOW CLAY - TRACE SILT	CL		SAMPLE SCANNED - BACKGROUND READINGS.
				MEDIUM STIFF LIGHT GRAY CLAY TRACE SAND AND SILT	CL		
6.0	7003	1 2 3	17"	MEDIUM STIFF LIGHT GRAY CLAY, TRACE SAND AND SILT.	CL		SAMPLE SCANNED - BACKGROUND READINGS
7.5	7004	1 1 2	14"	SOFT LIGHT YELLOWISH BROWN CLAY	CL		SAMPLE SCANNED - BACKGROUND READINGS 745 8-26-87
				SOFT LIGHT GRAY SILT, TRACE FINE SAND AND CLAY	ML		
9.0	7005	1 3 2	14"	LIGHT YELLOWISH BROWN SILT, SOME CLAY.	ML		SAMPLE SCANNED - BACKGROUND READINGS
				SOFT LIGHT GRAY CLAY, TRACE SILT.	CL		
				MEDIUM STIFF YELLOWISH BROWN CLAY, SOME SILT, TRACE SAND.	CL		
10.5	7006	6 7 10	13"	MEDIUM DENSE YELLOWISH BROWN ~~GRAY~~ COARSE SAND, TRACE GRAVEL AND SILT.	SP		SAMPLES SCANNED - BACKGROUND READINGS
12.0	7007	6 7 11	8"				SAMPLE SCANNED - BACKGROUND READINGS
				VERY STIFF YELLOWISH RED SILT, SOME SAND TRACE CLAY	ML		
				~~VERY STIFF~~ REDDISH BROWN ~~COARSE~~ SAND ~~MEDIUM~~ MED DENSE TRACE ~~TRACE~~ GRAVEL ~~AND~~ SILT.	SP		
13.5	7008	4 16 17	17"	~~SANDY~~ HARD ~~SA~~ GRAY SANDY SILT, TRACE GRAVEL.	ML		PANCAKE - 100-120 COUNTS PER MINUTE. OTHER METER READINGS AT BACKGROUND.
				LENS REDDISH BROWN MEDIUM SAND, TRACE GRAVEL AND SILT.	SP		
15.0	7009	2 5 6	9"	STIFF GRAY SILT, TRACE CLAY	ML		SAMPLE SCANNED - BACKGROUND READINGS
				STIFF DARK GRAY MEDIUM SAND, SOME SILT, TR. GRAVEL	SM		

NOTES:

DRILLER - HARRY DYKES
ASSISTANT - TIM HARRIS
RIG - CYCLONE 42

SAMPLES TAKEN WITH STANDARD SPLIT SPOON SAMPLER - 2.0" OD.

000263

402-11-86

5644

FERNALD RI/FS

REVIEWED BY QA DATE AUG 09 1991

	Initial	Date
1st Key In		
2nd Key In		8/15/86
Hard Copy Verification		

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602	PROJECT NAME: FERNALD RI/FS	
BORING NUMBER: 2006	COORDINATES: see p1	DATE: 8-26-87
ELEVATION: See p1	GWL: Depth Date/Time	DATE STARTED: 8-25-87
ENGINEER/GEOLOGIST: D. OAKLEY	Depth Date/Time	DATE COMPLETED: 8-31-87
DRILLING METHODS: CABLE TOOL		PAGE 2 OF 5

DEPTH 16" -	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER 6" -	RECOVERY (IN)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
16.5	7010	3 6 7	9"	STIFF GRAY CLAY, SOME SILT, TRACE SAND AND GRAVEL.	CL		SAMPLE SCANNED - BACKGROUND READINGS.
18.0	7011	5 7 8	13"				SAMPLE SCANNED - BACKGROUND READINGS
19.5	7012	4 5 9	9"	STIFF GRAY SILT, SOME CLAY, TRACE GRAVEL	ML		SAMPLE SCANNED BACKGROUND READINGS
21.0	7013 7014	11 13 22	15"	HARD GRAY & CLAY AND SILT, TRACE GRAVEL.	CL		SAMPLE SCANNED BACKGROUND READINGS
22.5	7015	8 12 20	13"	HARD GRAY SILTY CLAY, TRACE GRAVEL AND SAND.	CL		SAMPLE SCANNED, BACKGROUND READINGS
24.0	7016 7017	20 15 25	12"				8-27-87 8:00 SAMPLE SCANNED- BACKGROUND READINGS
25.5	7018	9 19 26	13"				SAMPLE SCANNED - BACKGROUND READINGS
27.0	7019	5 26 REF. 50	10"				SAMPLE SCANNED- BACKGROUND READINGS
28.5	7020 7021	7 10 50	16"				SAMPLE SCANNED- BACKGROUND READINGS
30.0	7022 7023	17. 27 40	14"				SAMPLE SCANNED- BACKGROUND READINGS.

NOTES:

DRILLER - HARRY DYMES
ASSISTANT - TIM HARRIS
RIG - CYCLONE 42

SAMPLES TAKEN WITH STANDARD SPLIT SPOON SAMPLER - 2.0" OD

000264

FERNALD RI/FS REVIEWED BY [redacted] DATE AUG 0 9 1991

1st Key In		
2nd Key In		
Hard Copy Verification		

564

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602	PROJECT NAME: FERNALD RI/FS	
BORING NUMBER: 266 2066 BB	COORDINATES: see p1	DATE: 8-27-87
ELEVATION: see p1	GWL: Depth 19.5 Date/Time 8-28-87 8:00	DATE STARTED: 8-25-87
ENGINEER/GEOLOGIST: D. OAKLEY	Depth Date/Time	DATE COMPLETED: 8-31-87
DRILLING METHODS: CABLE TOOL		PAGE 3 OF 5

DEPTH (FT)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER (6 IN)	RECOVERY (IN)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
31.5	7024	13 17 37	13	HARD GRAY CLAY, SOME SILT AND GRAVEL, TRACE SAND.	CL		SAMPLE SCANNED - BACKGROUND READINGS.
				HARD GRAY SILTY CLAY, TRACE GRAVEL AND SAND.	CL		
33.0	7025	5 7 10	10	VERY STIFF GRAY SILTY CLAY, TRACE SAND AND GRAVEL.	CL		SAMPLE SCANNED - BACKGROUND READINGS
34.5	7026	13 16 40	16	VERY DENSE STRONG BROWN SAND, TRACE GRAVEL AND SILT.	SP		SAMPLE SCANNED - BACKGROUND READINGS,
36.0	7027	14 51 REF 20	12	VERY DENSE STRONG BROWN SAND, TRACE GRAVEL.	SP		8-28-87 8:00 SAMPLE SCANNED - BACKGROUND READINGS
40.0							
41.5	7028	30 50 REF	9"	VERY DENSE STRONG BROWN SANDY GRAVEL, TRACE CLAY.	GP		SAMPLE SCANNED, BACKGROUND READINGS
45.0				HARD GRAY SILT, TRACE CLAY AND SAND.	ML		

NOTES:

DRILLER - HARRY DYKES
ASSISTANT - TIM HARRIS
R/6 - CYCLONE 42

SAMPLES TAKEN WITH STANDARD SPLIT SPOON SAMPLER - 2.0" O.D.

000265

5644

FERNALD RI/FS

REVIEWED BY QA LC DATE AUG 09 1991

	Initial	Date
1st Key In		
2nd Key In		8/15/88
Hard Copy Verification		

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602	PROJECT NAME: FERNALD RI/FS	
BORING NUMBER: ~~2660~~ 2066	COORDINATES: See pl	DATE: 8-31-87
ELEVATION: See pl	GWL: Depth 39.45 Date/Time 8:10 8-31-87	DATE STARTED: 8-25-87
ENGINEER/GEOLOGIST: D. OAKLEY	Depth Date/Time 13:00 8-31-87	DATE COMPLETED: 8-31-87
DRILLING METHODS: CABLE TOOL		PAGE 4 OF 5

DEPTH (FT)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER (6 IN)	RECOVERY (IN)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
46.5	7029	18 25 17	17	HARD GRAY SILT, TRACE CLAY AND SAND, LENS GRAY CLAY.	ML		8-31-87 8:10 SAMPLES SCANNED - BACKGROUND READINGS.
50.0							ADDED ~15 GAL. OF WATER TO HOLE.
51.5	7030	4 20 18	16	HARD GRAY CLAY, TRACE SILT	CL		SAMPLE SCANNED - BACKGROUND READINGS
				HARD GRAY SILT, SOME SAND, TRACE CLAY.	ML		IN WATER ?.
55.0							
56.5	7031 7032		18"	VERY STIFF GRAY SILT, SOME SAND, TRACE CLAY.	ML		SAMPLE SCANNED - BACKGROUND READINGS.
				VERY STIFF GRAY CLAY, SOME SAND, TRACE SILT.	CH		
				MEDIUM DENSE ~~SOME~~ GRAY ~~SAND~~, TRACE CLAY, SOME SILT.	SM		WET SAND
60.0							

NOTES:

DRILLER - HARRY DYKES

ASSISTANT - TIM HARRIS

RIG - CYCLONE 42

SAMPLES TAKEN WITH STANDARD SPLIT SPOON SAMPLER - 2.0" O.D.

000266

402-11-86

5644

White correction was made by D. Oakley at the time this form was completed. WPK 4/24/89

FERNALD RI/FS

REVIEWED BY QA [illegible] DATE AUG 09 1991

	Initial	Date
1st Key In		
2nd Key In	[illegible]	8/15/88
Hard Copy Verification		

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602	PROJECT NAME: FERNALD RI/FS		
BORING NUMBER: ~~206~~ 2066 BB 1-5-89	COORDINATES: See pl	DATE: 8-31-87	
ELEVATION: See pl	GWL: Depth 52.5 Date/Time 8/31/87 14:25	DATE STARTED: 8-25-87	
ENGINEER/GEOLOGIST: D. OAKLEY	Depth 51.65 Date/Time 8/31/87 14:45	DATE COMPLETED: 8-31-87	
DRILLING METHODS: CABLE TOOL		PAGE 5 OF 5	

DEPTH (FT)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER (6 IN)	RECOVERY (IN)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
	7033	6	18	MEDIUM DENSE GRAY SAND, SOME SILT, TRACE CLAY			
	7034	6					
61.5		10		VERY STIFF GRAY CLAY, TRACE SAND AND SILT.			
62.0							
63.0				63.0' TD			NEW TD 9-9-87

NOTES:

DRILLER - HARRY DYKES
ASSISTANT - TIM HARRIS
RIG - CYCLONE 42

SPLIT SPOON SAMPLES TAKEN WITH STANDARD TUBE - 2.0" OD

000267

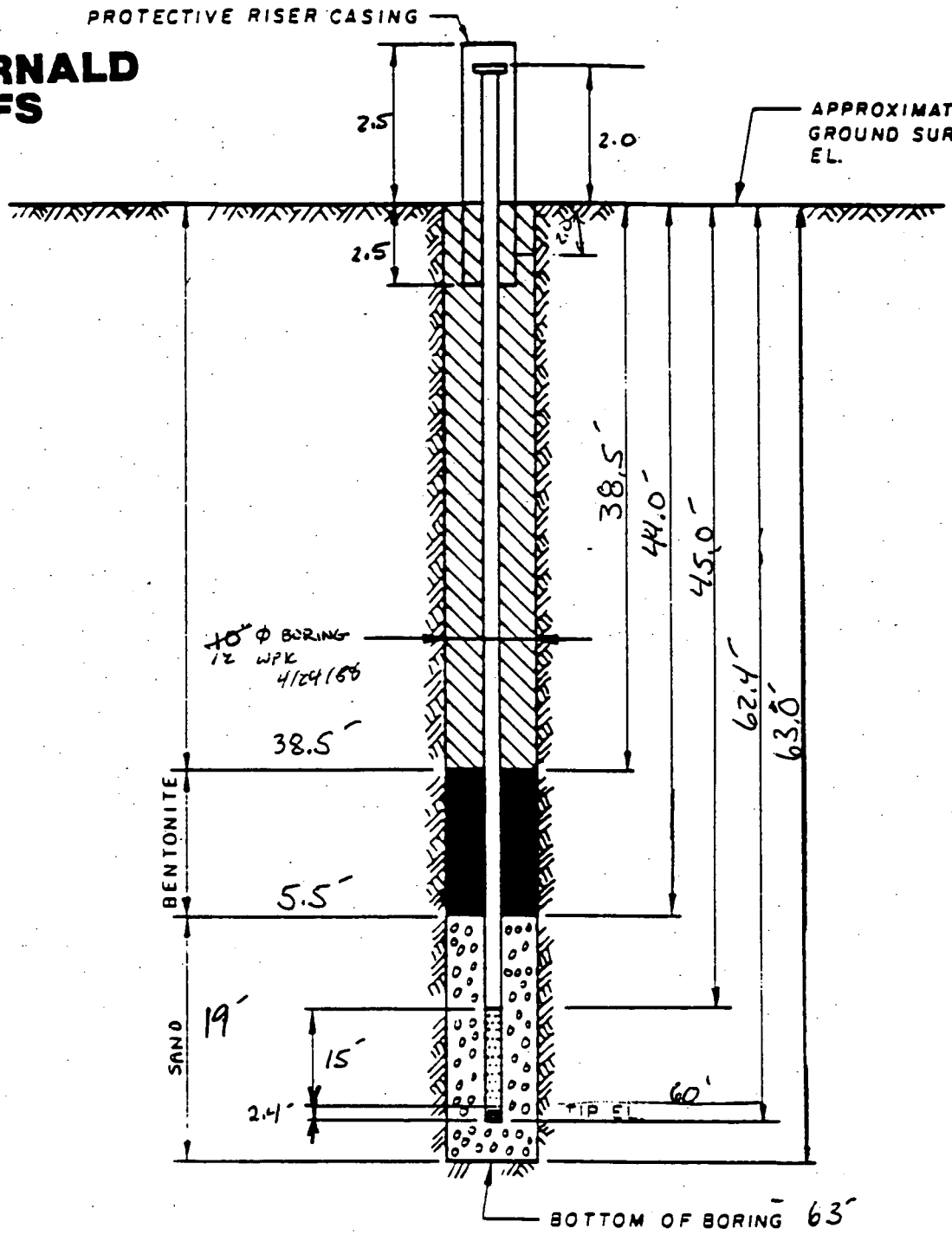
402-11-86

5644

REVIEWED BY QA LG DATE AUG 09 1989 DLG 8/4/89

WELL #~~266~~ 2066 BB1

FERNALD RI/FS



DRAWING NUMBER

CHECKED BY / APPROVED BY

D130

DRAWN BY

NOTES:

1. RISER PIPE IS 4 IN I.D. SCHEDULE PIPE, THREADED, FLUSH-JOINTED.
2. SCREEN IS 4 IN I.D SS PIPE CONTINUOUS SLOT SCREEN (0.010 IN. SLOT SIZE).
3. LOWER END OF SCREEN IS CAPPED.
4. ELEVATION OF WATER LEVEL
5. WATER LEVEL READING ON

while out correction was made by D Dudley at the time this form was completed.

WPK 4/24/86

INSTALLATION DETAILS
MONITORING WELL ~~266~~ 2066 BB

PREPARED FOR 1-5-89

FMPC RI/FS

000268

5644

	Initial	Date
1st Key In		
2nd Key In		
Hard Copy Verification		

DLG 2/4/89

FERNALD RI/FS

REVIEWED BY QA DATE AUG 0 0 1989

PIEZOMETER INSTALLATION SHEET

PROJECT NAME FERNALD RI/FS FIELD ENG./GEO. D. OAKLEY DATE 9-23-87
PROJECT NO. 602 CHECKED BY R Galbraith DATE 2/7/89
BORING NO. ~~2066~~ 2066 BB 1-5-89
PIEZOMETER NO. ~~2066~~ 2066 DATE OF INSTALLATION 8-31-87

BOREHOLE DRILLING

DRILLING METHOD CABLE TOOL
DRILLING FLUID (S) USED:
FLUID WATER FROM 5 TO 62'
FLUID NA FROM NA TO NA

TYPE OF BIT FLAT HEAD HAMMER
CASING SIZE (S) USED: TEMPORARY
SIZE 12" FROM 0 TO 60'
SIZE NA FROM NA TO NA

PIEZOMETER DESCRIPTION

TYPE STAINLESS STEEL (316)
DIAMETER OF PERFORATED SECTION 4" ID
PERFORATION TYPE:
SLOTS ☐ HOLES ☐ SCREEN ☒
AVERAGE SIZE OF PERFORATIONS .01 INCH
TOTAL ~~PERFORATED AREA~~ SCREEN LENGTH 15'

RISER PIPE MATERIAL STAINLESS STEEL (316)
RISER PIPE DIAMETERS:
O.D. 4 3/8" I.D. 4"
LENGTH OF PIPE SECTIONS 10 FT.
JOINING METHOD THREAD AND COUPLE (FLUSH JOINT THREADED)

PROTECTION SYSTEM

RISER PROTECTIVE PIPE LENGTH 5 FT.
PROTECTIVE PIPE ~~I.D.~~ O.D. 10 INCHES

OTHER PROTECTION LOCKABLE CAP AND LOCK

ITEM	DISTANCE ABOVE/BELOW GROUND SURFACE (FT)		ELEVATION (FT) MSL	
TOP OF RISER PIPE	2.0 FT.		580.2	
GROUND SURFACE	0.0		578.2	
BOTTOM OF PROTECTIVE PIPE	2.5 FT.		575.7	
BOREHOLE FILL MATERIALS:				
GROUT/SLURRY (VOLCLAY)	TOP 2'	BOTTOM 38.5	TOP 576.2	BOTTOM 539.7
BENTONITE PELLETS	TOP 38.5	BOTTOM 44.0'	TOP 539.7	BOTTOM 534.2
SAND	TOP 44.0	BOTTOM 63'	TOP 534.2	BOTTOM 515.2
NO ~~GRAVEL~~ USED	TOP NA	BOTTOM NA	TOP NA	BOTTOM NA
PERFORATED SECTION	TOP 45'	BOTTOM 60'	TOP 533.2	BOTTOM 518.2
PIEZOMETER TIP	62 (SILT TRAP)		515.8	
BOTTOM OF BOREHOLE	63'		515.2	
GWL AFTER INSTALLATION	39'		537.2	

AS THE PIEZOMETER FLUSHED AFTER INSTALLATION? YES ☐ NO ☒
WAS A SENSITIVITY TEST PERFORMED ON THE PIEZOMETER? YES ☐ NO ☒

000269

REMARKS WELL TO BE DEVELOPED LATER.

White out corrections were made by D. Oakley at the time this form was completed.

MONITORING WELL
2096

5644

FERNALD RI/FS

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602 3.2	PROJECT NAME: FERNALD RI/FS	
BORING NUMBER: ~~2096~~ 2096	COORDINATES:	DATE: 08-19-88
ELEVATION: 580.0 FT.	GWL: Depth Date/Time	DATE STARTED: 08-11-88
ENGINEER/GEOLOGIST: M. SLUSARSKI	Depth Date/Time	DATE COMPLETED: 08-19-88
DRILLING METHODS: CABLE TOOL		PAGE 1 OF 1

DEPTH (FT)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER (NA)	RECOVERY (NA)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
				* SEE VISUAL CLASSIFICATION OF SOILS FOR BORING # ~~4096~~ 4096 FOR DESCRIPTION OF SAMPLES OVER INTERVAL 0.0 FT - 74.0 FT			
15							
30							
45							
60							
75				74.0 BOTTOM OF BORE HOLE @ 74.0 FT. BORE HOLE WAS DRILLED TO 79.0 FT. FILL RELOWER TO COLLAPSE ON ROCK TO 72.7 FT			

NOTES: Coordinates: Not Available
Rig Type: Cable
Driller: Dave Newman
Assistant: Craig Gaertz

* Indicates Undisturbed Sample
X = 0.5 cm
Y = 0.5 cm

000271

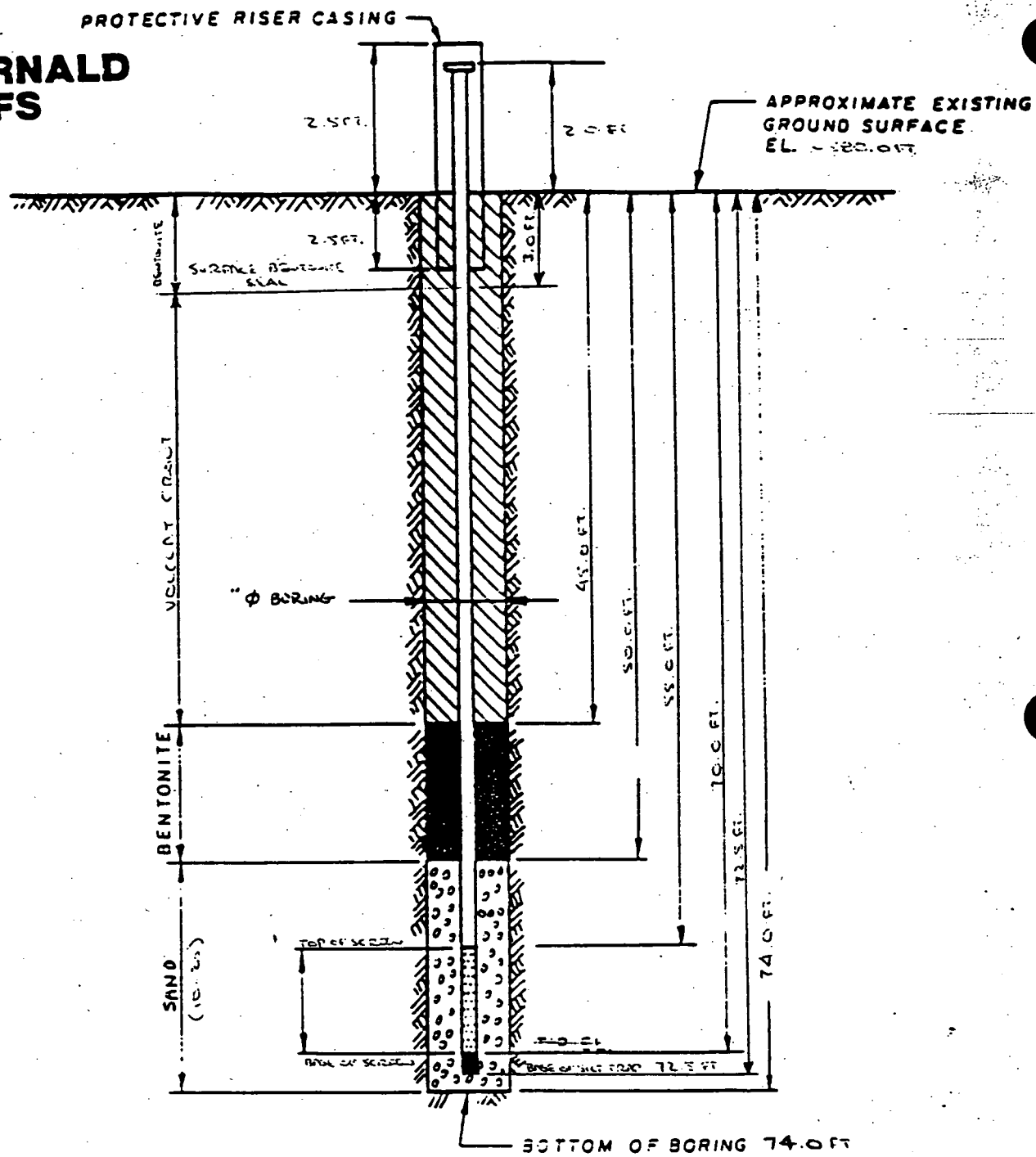
402-11-86

5644

DA 2/19/89

BORING #296

FERNALD RI/FS



DRAWING NUMBER

CHECKED BY

APPROVED BY

DRAWN BY

NOTES:

1. RISER PIPE IS 4 IN 10 SCHEDULE PIPE, THREADED, FLUSH-JOINTED.
2. SCREEN IS 4 IN I.D SS PIPE CONTINUOUS SLOT SCREEN (0.010 IN SLOT SIZE).
3. LOWER END OF SCREEN IS CAPPED.
4. ELEVATION OF WATER LEVEL
5. WATER LEVEL READING ON

MATERIALS USED:

10-20 SAND (100LB SACKS) : 12 SACKS
VOLCLAY GROUT (50 LB BAGS) : 10 BAGS
BENTONITE PELLETS (BUCKETS) : 8 BUCKETS

WATER ADDED TO HOLE : 350 GALLONS

INSTALLATION DETAILS
MONITORING WELL
08-19-88
PREPARED FOR
BORING # 296
2096
MLS 10-07-88

000272

5644

FERNALD RI/FS

PIEZOMETER INSTALLATION SHEET

PROJECT NAME FERNALD RI/FS FIELD ENG./GEO. M. SLUSARSKI DATE 08-19-88
PROJECT NO. 602 3.2 CHECKED BY R Galbraith DATE 2/7/89
BORING NO. 2096 MWS 10-07-88
PIEZOMETER NO. 2096 MWS 10-07-88 DATE OF INSTALLATION 08-18-88 TO 08-19-88

BOREHOLE DRILLING

DRILLING METHOD CABLE TOOL	TYPE OF BIT HAMMER
DRILLING FLUID (S) USED:	CASING SIZE (S) USED:
FLUID _____ FROM 0.0 FT TO 74.0 FT.	SIZE 10" ID FROM 0.0 FT. TO 75.0 FT.
FLUID _____ FROM _____ TO _____	SIZE _____ FROM _____ TO _____

PIEZOMETER DESCRIPTION

TYPE MONITORING WELL	RISER PIPE MATERIAL STAINLESS STEEL
DIAMETER OF PERFORATED SECTION 4 IN ID	RISER PIPE DIAMETERS:
PERFORATION TYPE:	O.D. 4 3/8 IN. I.D. 4 IN.
SLOTS ☐ HOLES ☐ SCREEN ☒	LENGTH OF PIPE SECTIONS 2 FT, 5 FT, 10 FT.
AVERAGE SIZE OF PERFORATIONS 0.010 IN	JOINING METHOD SCREW TYPE FLUSH
TOTAL PERFORATED AREA 10.0 FT.	JOINT THREADED

PROTECTION SYSTEM

RISER PROTECTIVE PIPE LENGTH 5.0 FT	OTHER PROTECTION LOCKING CAP
PROTECTIVE PIPE O.D. 10 3/4 IN.	

ITEM	DISTANCE ABOVE/BELOW GROUND SURFACE (FT)		ELEVATION ( )	
TOP OF RISER PIPE	2.0			
GROUND SURFACE	0.0			
BOTTOM OF PROTECTIVE PIPE	2.5			
BOREHOLE FILL MATERIALS:	SURFACE BENTONITE PLUG TOP: 0.0	BOTTOM: 3.0		
GROUT/SLURRY (NEAT)	TOP 3.0	BOTTOM 45.0	TOP	BOTTOM
BENTONITE	TOP 45.0	BOTTOM 50.0	TOP	BOTTOM
SAND (10-20)	TOP 50.0	BOTTOM 72.5	TOP	BOTTOM
GRAVEL	TOP [redacted]	BOTTOM [redacted]	TOP	BOTTOM
PERFORATED SECTION	TOP 55.0	BOTTOM 70.0	TOP	BOTTOM
PIEZOMETER TIP	72.5			
BOTTOM OF BOREHOLE	74.0			
GWL AFTER INSTALLATION				

AS THE PIEZOMETER FLUSHED AFTER INSTALLATION? YES ☐ NO ☒
WAS A SENSITIVITY TEST PERFORMED ON THE PIEZOMETER? YES ☐ NO ☒

000273

REMARKS OPEN HOLE INTERVAL FROM 74.0 FT TO 72.5 FT. WAS ALLOWED TO COLLAPSE ON ITSELF. THREE BUCKETS (3) OF BENTONITE PELLETS WERE USED TO PROVIDE A SURFACE SEAL AND PACKING MATERIAL AROUND THE PROTECTIVE CASING.

MONITORING WELL
2098

5644 DLS 2/5/89

FERNALD RI/FS

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602 3.2	PROJECT NAME: FERNALD RI/FS	
BORING NUMBER: ~~398~~ 2098 MLS 10-07-88	COORDINATES: N 483385.79 E 1386326.37	DATE: 09-11-88
ELEVATION: 550.0 FT (547.4 ground)	GWL: Depth Date/Time	DATE STARTED: 09-07-88
ENGINEER/GEOLOGIST: M. SLUSARSKI	Depth Date/Time	DATE COMPLETED: 09-11-88
DRILLING METHODS: CABLE TOOL		PAGE 1 OF 2

DEPTH (FT.)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER ( )	RECOVERY ( )	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
				* SEE VISUAL CLASSIFICATION OF SOILS FOR BORING #398 FOR DESCRIPTION OF SAMPLES			
5							
10	10332 1025 09-08-88			* DUPLICATE/TRIPLICATE SAMPLES COLLECTED OVER INTERVAL 10.5 - 12.0 FT @ 1025 ON 09-08-88			
15							
20							
25							

NOTES: CONTRACTOR: PENN DRILL
RIG: BUCYRUS - ERIE
DRILLER: DAVE NEWMAN
ASSISTANT: BOB JOHNSON
WATER LEVEL IN BORING #398: 32.2 FT @ 0800 ON 09-09-88
WATER ADDED TO HOLE: 300 GALLONS

BACKGROUND LEVELS: α = 0.5 CPM
β = 40-60 CPM
LEL O_2 = 0 PPM LEL
20.6 % O_2

000275

5644

DHA 2/6/89

FERNALD RI/FS

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602 3.2	PROJECT NAME: FERNALD RI/FS	
BORING NUMBER: ~~298~~ 2098	COORDINATES: See P1	DATE: 09-11-88
ELEVATION: 550.0 FT. See pl	GWL: Depth Date/Time	DATE STARTED: 09-07-88
ENGINEER/GEOLOGIST: M. SWIOREKI	Depth Date/Time	DATE COMPLETED: 09-11-88
DRILLING METHODS: CABLE TOOL		PAGE 2 OF 2

DEPTH (FT.)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER ( )	RECOVERY ( )	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
35							
40							
45				BOTTOM OF BORING @ 46.0 FT. 09-09-88			
50							

NOTES:

MATERIALS USED IN WELL INSTALLATION:

10 20 SAND (100 LB SACKS): 13 SACKS

VOLCLAY GROUT (50 LB BAGS): 6 BAGS

BENTONITE PELLETS: 5 BUCKETS

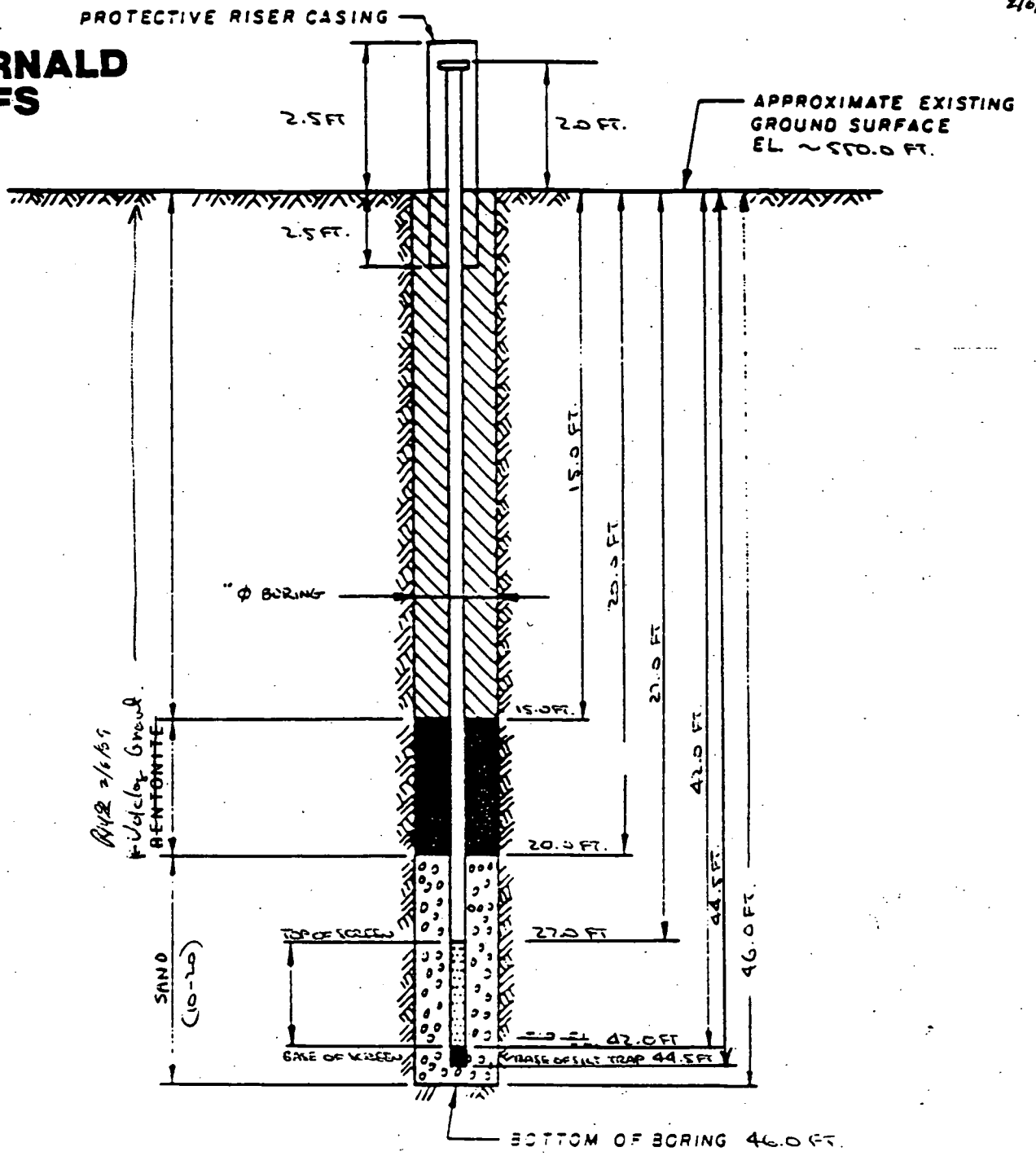
000275

DH 2/5/89

5644

BORING #~~298~~ 2078 ~~1012~~ 2/6/6

FERNALD RI/FS



NOTES:

1. RISER PIPE IS 4 IN 10 SCHEDULE PIPE, THREADED. FLUSH-JOINTED.
2. SCREEN IS 4 IN 1.0 SS PIPE CONTINUOUS SLOT SCREEN (0.010 IN SLOT SIZE).
3. LOWER END OF SCREEN IS CAPPED.
4. ELEVATION OF WATER LEVEL
5. WATER LEVEL READING ON 32.2 FT IN BORING #398 ON 09-09-88

INSTALLATION DETAILS
MONITORING WELL

PREPARED FOR
BORING ~~#298~~ 09-11-88
2078 MLS

MATERIAL USED:

10-20 SAND (100 LB. SACKS): 13 SACKS FROM 44.5 FT TO 20.0 FT
FLUIDIZED GROUT (50 LB BAGS): 6 BAGS FROM 15.0 FT TO SURFACE
BENTONITE PELLETS: 5 BUCKETS TOTAL, 4 BUCKETS FROM 20.0 FT TO 15.0 FT AND 1 BUCKET AT SURFACE AROUND PROTECTIVE CASING

WATER ADDED TO BOREHOLE: 320 GALLONS

000277

DRAWING NUMBER
CHECKED BY
APPROVED BY
DRAWN BY MLS

5644

FERNALD RI/FS

DH 2/9/89

	TCP	Date
1st Key In	TPC	11/28/89
2nd Key In		
Hard Copy Verification		

PIEZOMETER INSTALLATION SHEET

PROJECT NAME FERNALD RI/FS
FIELD ENG./GEO. M. SLUSARSKI
DATE 09-11-88
PROJECT NO. 602 3.2
CHECKED BY R Galbraith
DATE 2/7/89
BORING NO. ~~2098~~ 2098 RMG 2/6/89
PIEZOMETER NO. ~~2098~~ 2098 RMG 2/6/89
DATE OF INSTALLATION 09-10-88 TO 09-11-88

BOREHOLE DRILLING

DRILLING METHOD CABLE TOOL
TYPE OF BIT HAMMER
DRILLING FLUID (S) USED:
FLUID WATER FROM 0.0 FT TO 46.0 FT
FLUID _____ FROM _____ TO _____
CASING SIZE (S) USED:
SIZE 10" ID FROM 0.0 FT TO 45.0 FT
SIZE _____ FROM _____ TO _____

PIEZOMETER DESCRIPTION

TYPE MONITORING WELL
DIAMETER OF PERFORATED SECTION 4" ID
PERFORATION TYPE:
SLOTS ☐ HOLES ☐ SCREEN ☒
AVERAGE SIZE OF PERFORATIONS 0.010 IN.
TOTAL PERFORATED AREA 15.0 FT.
RISER PIPE MATERIAL STAINLESS STEEL
RISER PIPE DIAMETERS:
O.D. 4 3/8 IN. I.D. 4.0 IN
LENGTH OF PIPE SECTIONS 2.0 FT, 5.0 FT, 10.0 FT.
JOINING METHOD SCREW TYPE FLUSH JOINT THREADED

PROTECTION SYSTEM

RISER PROTECTIVE PIPE LENGTH 5.0 FT.
PROTECTIVE PIPE O.D. 10 3/4 IN.
OTHER PROTECTION LOCKING CAP

ITEM	DISTANCE ABOVE/BELOW GROUND SURFACE (FT.)		ELEVATION (ft)	
TOP OF RISER PIPE	2.0		549.4	
GROUND SURFACE	0.0		547.4	
BOTTOM OF PROTECTIVE PIPE	2.5		544.9	
BOREHOLE FILL MATERIALS:				
GROUT/SLURRY (VOLCLAY)	TOP 0.0 FT.	BOTTOM 15.0 FT.	TOP 547.4	BOTTOM 532.4
BENTONITE	TOP 15.0 FT.	BOTTOM 20.0 FT.	TOP 532.4	BOTTOM 527.4
SAND (10-20)	TOP 20.0 FT.	BOTTOM 44.5 FT.	TOP 527.4	BOTTOM 503.4
GRAVEL	TOP NA	BOTTOM NA	TOP NA	BOTTOM NA
PERFORATED SECTION (15.0 FT)	TOP 27.0 FT.	BOTTOM 42.0 FT.	TOP 520.4	BOTTOM 505.4
PIEZOMETER TIP	44.5 FT		502.9	
BOTTOM OF BOREHOLE	46.0 FT.		501.4	
GWL AFTER INSTALLATION				

WAS THE PIEZOMETER FLUSHED AFTER INSTALLATION? YES ☐ NO ☒
IS A SENSITIVITY TEST PERFORMED ON THE PIEZOMETER? YES ☐ NO ☒

000278

REMARKS OPEN HOLE INTERVAL OF BOREHOLE BELOW 44.5 FT WAS ALLOWED TO COLLAPSE ON ITSELF. ONE (1) BUCKET OF BENTONITE PELLETS WAS POURED AROUND THE PROTECTIVE CASING TO SERVE AS PACKING AND SEALING MATERIAL AT THE SURFACE

MONITORING WELL
2104

5644

2104

ORIGINAL

WELL LOG AND DRILLING REPORT

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water
1562 W. First Avenue
Columbus, Ohio 43212

PLEASE USE PENCIL OR TYPEWRITER
DO NOT USE INK

№ 366564

2104

County Hamilton Township Crosby Section of Township 6

Owner Best Panel Homes Address Harrison O Rt 1

Location of property Box 11301 Paddy's Run Rd

CONSTRUCTION DETAILS

Casing diameter 6" Length of casing 84

Type of screen Cook brass #12 Length of screen 4

Type of pump

Capacity of pump

Depth of pump setting

Date of completion

BAILING OR PUMPING TEST

Pumping Rate G.P.M. Duration of test hrs.

Drawdown ft. Date 4/16/68

Static level-depth to water 62 ft.

Quality (clear, cloudy, taste, odor)

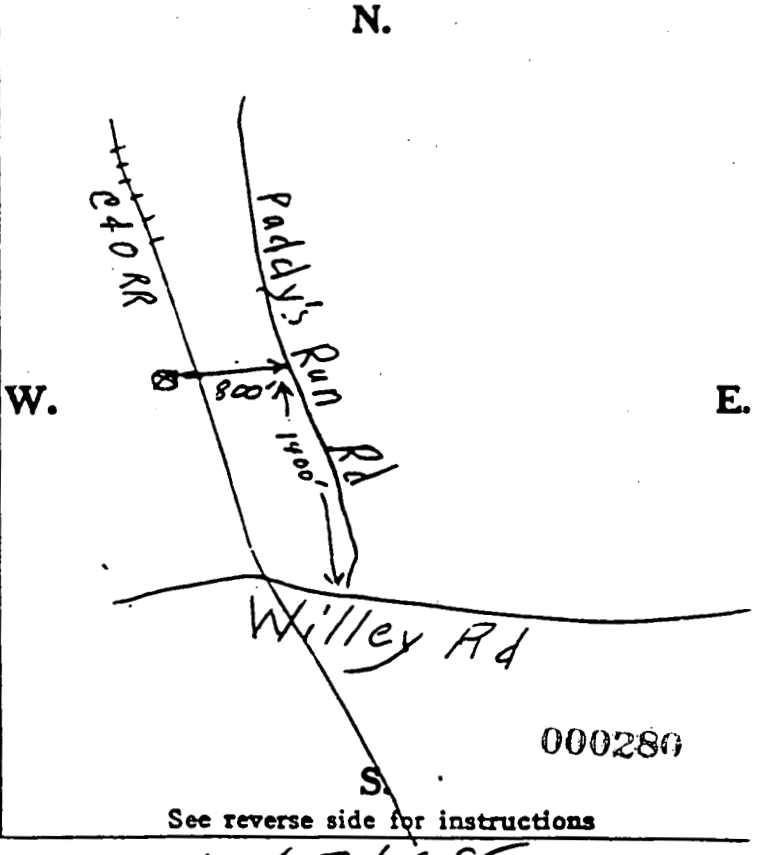
Pump installed by

WELL LOG*

Formations Sandstone, shale, limestone, gravel and clay	From	To
	0 Feet	Ft.
Gravel	0	1
Yellow clay	1	14
Blue clay	14	32
Yellow clay	32	36
~~Gray sand~~		
Dirty yellow sand	36	56
Dirty gray sand #12	56	90

SKETCH SHOWING LOCATION

Locate in reference to numbered State Highways, St. Intersections, County roads, etc.



000280

See reverse side for instructions

Drilling Firm Wm Crane Date 11/5/68

Address Shandon O Signed [illegible]

*If additional space is needed to complete well log, use next consecutive numbered form

MONITORING WELL
2105

2105 5644

ORIGINAL

WELL LOG AND DRILLING REPORT

NO CARBON PAPER NECESSARY - SELF-TRANSCRIBING

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Geological Survey
Fountain Square
Columbus, Ohio 43224 Phone (614) 466-5344

470772
(2105)

COUNTY Butler TOWNSHIP Morgan SECTION OF TOWNSHIP OR LOT NUMBER 25

OWNER Dale Kramer ADDRESS Shandon, Ohio

LOCATION OF PROPERTY Shandon, O

CONSTRUCTION DETAILS

Casing diameter 6" Length of casing 76'

Type of screen Cook brass #12 Length of screen 4'

Type of pump

Capacity of pump

Depth of pump setting

Date of completion

BAILING OR PUMPING TEST
(specify one by circling)

Test rate 20 gpm Duration of test 4 hrs

Drawdown 5 ft Date 6/21/74

Static level (depth to water) 19' ft

Quality (clear, cloudy, taste, odor) Clear

Pump installed by

WELL LOG*

Formations: sandstone, shale, limestone, gravel, clay	From	To
Brown sand & clay	0 ft	10 ft
Blue clay	10	58
Sandy clay	58	72
Dirty fine sand	72	80

SKETCH SHOWING LOCATION

Locate in reference to numbered state highways, street intersections, county roads, etc.

[redacted]

DRILLING FIRM Wm Crane DATE 7/11/74

ADDRESS Box 33 Shandon, O SIGNED [signature]

(10)

MONITORING WELL
2121

5644200 [illegible]

THE MIAMI CONSERVANCY DISTRICT
COMPUTATION SHEET

SUBJECT GROUNDWATER DATA

LITSCHGI

PAGE 1
Sta. NO. 5317011
Quad. Shandon
Aerial Photo: 27 2/14/76

COMPUTED BY PMP DATE 10-12-76 CHECKED BY RJW

Well No. BU-9 County Butler Township Ross Section 33 T3N R2E
River Mile MIA Tributary Dry Run Subarea River Basin Great Miami
Lat Long State Coord. Zone S; x 1,389,280 y 486,770
Location: 2 ft. North of house. @ ¢. 100' E. of 4126 Dry Run Drive. 2nd from N. end of street. 1st street West of Dry Run on Rt. 126, 1/2 mi. west of Ross

Elevation of MP 562.23 ~~Elev.~~ ALT Land Surface 561.5 Land Surface Corr. -0.73
MP Top of casing
WELL:
Total Depth* [redacted] Depth Cased* Drilling Method Cable Bedrock Depth*
Casing Type Steel Diameter 6" Screen
Pump Intake Setting* Gravel Pack
Pump Capacity Pump Type Submersible Hp
Date Drilled 1975 By: Bill Crane
Owner: Carl Litschgi, 4126 Dry Run Dr.
AQUIFER CHARACTERISTICS:
Material Origin
Permeability gpd/ft² Special Cap. Storage Coeff.
REMARKS: Do not read if not home

*Feet below land surface. Need ALLEN WRENCH

Water Level								Well Log			
Date	Time	Tape	Cut	Depth, B.M.P. ft.			Sea L. Elev. ft.	Depth from ft.	Depth to ft.	Description	
76-10-12	1522	47.00	-4.30	43.70						water surface	
76-10-12		71.3	10.7	72.0						Bottom of well	
840417		38.00	-1.27							Water surface	
840501	1222	36.50	-.27							" "	

PUNCHED 10/7/15 ATN

000284

MONITORING WELL
2122

5644 .00 series

THE MIAMI CONSERVANCY DISTRICT
COMPUTATION SHEET

SUBJECT GROUNDWATER DATA

PAGE 1

Mc Donald

Sta. NO. 5318014

QUADRANGLE Shandon

COMPUTED BY RJS DATE 10-8-76 CHECKED BY RJW

AIR PHOTO 27 - 2/14/76

Well No. [redacted] County Butler Township Ross Section 33 T3N R2E
River Mile MIA Tributary Subarea River Basin Gr. Miami
Lat Long State Coord. Zone S: x 1,388,700 y 485,460
Location: [redacted] ℄ casing 1.6' S. of drive way, 15.2' east of house. 1st house (2nd Lot) north of Cincinnati - Brookville Rd (Rt. 126) on west side street. 2nd Street west of Dry Run bridge.

Elevation of MP 554.98 Elev. Land Surface 554.81 Land Surface Corr. -0.17
MP Top of casing
WELL:
Total Depth* [redacted] Depth Cased* Drilling Method Bedrock Depth*
Casing Type Steel Diameter 6 Screen
Pump Intake Setting* Gravel Pack
Pump Capacity Pump Type Submersible Hp
Date Drilled By:
Owner: Mc Donald, 4279 JENNIFER DR., ROSS, OH.
AQUIFER CHARACTERISTICS:
Material Origin
Permeability gpd/ft² Special Cap. Storage Coeff.
REMARKS: 1/4" Allen wrench
LL 46714

*Feet below land surface.

Water Level									Well Log	
Date	Time	Tape	Cut	Depth, B.M.P. ft.	Sea L. Elev. ft.	Depth from ft.	Depth to ft.	Description		
761008	1100	37.00	[redacted]	[redacted]	519.54			Water surface		
761008				61.41	493.57			Bottom of well		
840501	1230	27.50	1.52					Water surface		

PUNCHED 5/22/84 RJW

000286

MONITORING WELL
2123

WELL LOG AND DRILLING REPORT

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water
1562 W. First Avenue
Columbus, Ohio

PLEASE USE PENCIL OR TYPEWRITER. DO NOT USE INK.

2123 5644
12-3
No. 227445

County Hamilton Township Crosby Section of Township 12

Owner Everett Buskirk Address [redacted]

Location of property [redacted]

CONSTRUCTION DETAILS	BAILING OR PUMPING TEST
Casing diameter 5" Length of casing 103	Pumping rate ..... G.P.M. Duration of test ..... hrs.
Type of screen crk 18 Length of screen 2	Drawdown ..... ft. Date .....
Type of pump	Developed capacity .....
Capacity of pump	Static level—depth to water 69 ft.
Depth of pump setting	Pump installed by .....
Date of completion	

WELL LOG

Formations Sandstone, shale, limestone, gravel and clay	From	To
TOP SOIL	0 Feet	4 Ft.
SAND gravel	4	20
CLAY	20	55
CLAY AND SAND	55	87
FINE SAND	87	98
gravel	98	103

SKETCH SHOWING LOCATION

Locate in reference to numbered State Highways, St. Intersections, County roads, etc.

[redacted]

Drilling Firm Ernest Wilson Date Oct 28 1960

Address 900 Mill St Hamilton O Signed Ernest Wilson

MONITORING WELL
2728

FERNALD
RI/FS

5644

VISUAL CLASSIFICATION OF SOILS

100365

PROJECT NUMBER 602.3.22	PROJECT NAME FEMP RI/FS EWMF		
BORING NUMBER 2728	COORDINATES:	DATE 1-15-92	
ELEVATION: ≈593.5 ft	GWL: Depth 73.8 ft Date/Time	DATE STARTED 1-15-92	
ENGINEER/GEOLOGIST P. CASSEDAY	Depth Date/Time	DATE COMPLETED:	
DRILLING METHODS CABLE TOOL		PAGE 1 OF ~~15~~ 17	

DEPTH (Ft)	SAMPLE TYPE & NO	BLOWS ON SAMPLER PER 1 6 in	RECOVERY (IN)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS Background βγ = 60 cpm
0	100365 1-15-92 9:20 (ARCHIVE)	2	6	VERY SOFT, (10 YR, 4/2) DARK GRAYISH BROWN SILTY CLAY. MINOR SAND SOME ORGANIC MATERIAL (ROOTS). SLIGHTLY MOIST. NON VERY PLASTIC	CL	0.5	βγ = 0 cpm α = NA. HNU = 0 ppm
	100366 1-15-92 9:20 (ARCHIVE)	6	6	VERY STIFF, (10 YR, 5/6) YELLOWISH BROWN CLAY. SLIGHTLY PLASTIC, SLIGHTLY MOIST LITTLE SILT, NO SAND.	CL	2.5	βγ = 0 cpm α = NA HNU = 0 ppm
1	1-15-92 9:20	9	0 NR	NR	NA	NA	βγ = 0 cpm α = NA HNU = 0 ppm
	1-15-92 9:20	10	0 NR	NR NR	NA	NA	βγ = 0 cpm α = NA HNU = 0 ppm
2	100366 1-15-92 9:35 (ARCHIVE)	5	6	SAA	CL	2.75	βγ = 0 cpm α = NA HNU = 0 ppm
3	100367 1-15-92 9:35 (ARCHIVE)	7	3	SAA	CL	2.5	βγ = 0 cpm α = NA HNU = 0 ppm

NOTES DRILLER - PENNSYLVANIA DRILLING
JOE BARILE - DRILLER
RICK PIERCE - HELPER

SAA - SAME AS ABOVE
NR - NO RECOVERY
NA - NOT APPLICABLE

Please note: Sample numbers 100311 100312 were not used for this well

SAMPLE TECH - CHRIS JOHNSON

000290

402-11-86

5644

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602.3.22	PROJECT NAME: FEMP RI/FS EWMF		
BORING NUMBER: 2728	COORDINATES:	DATE	1-15-92
ELEVATION:	GWL: Depth Date/Time	DATE STARTED:	1-15-92
ENGINEER/GEOLOGIST: P. CASSEDAY	Depth Date/Time	DATE COMPLETED:	
DRILLING METHODS: CABLE TOOL		PAGE 2	OF ~~15~~ 17

CM 2/3/92

DEPTH (FT)	SAMPLE TYPE & NO	BLOWS ON SAMPLER PER 6 in.	RECOVERY (IN)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
3	1-15-92 9:35	11	0	NR	NA	NA	βγ = 0 cpm α = NA Hnu = 0 ppm
	1-15-92 9:35	13	0	NR	NA	NA	βγ = 0 cpm α = NA Hnu = 0 ppm
4	1-15-92 100367 9:45	17	6	CM 2/3/92 MEDIUM STIFF, ~~VERY DENSE~~ (2.5Y, 6/6) OLIVE YELLOW SILTY CLAY WITH SOME GRAVEL PIECES. SLIGHTLY MOIST, PLASTIC.	CL	1.5	βγ = 0 cpm α = NA Hnu = 0 ppm
	1-15-92 9:45 100367	19	6	SAA	CL	1.5	βγ = 0 cpm α = NA Hnu = 0 ppm
5	1-15-92 9:45 100368	31	6	CM 2/3/92 HARD, ~~VERY DENSE~~ (2.5Y, 6/6) OLIVE YELLOW CLAY WITH MORE EXTENSIVELY INTERSPERSED GRAVEL THAN 4'-5'. SLIGHTLY MOIST, SLIGHTLY PLASTIC	CL	>4.0	βγ = 0 cpm α = NA Hnu = 0 ppm
	1-15-92 9:45 100368	41	2	SAA	CL	>4.0	βγ = 0 cpm α = NA Hnu = 0 ppm

NOTES: DRILLER - PENNSYLVANIA DRILLING
JOE BARILE - DRILLER
RICK PIERCE - HELPER

SAA - SAME AS ABOVE
NA - NOT APPLICABLE
NR - NO RECOVERY

SAMPLE TECH - CHRIS JOHNSON

402-11-66

FERNALD RI/FS

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602.3.22	PROJECT NAME: FEMP RI/FS EWMF		
BORING NUMBER: 2728	COORDINATES:		DATE: 1-15-92
ELEVATION:	GWL: Depth	Date/Time	DATE STARTED: 1-15-92
ENGINEER/GEOLOGIST: P. Casseday	Depth	Date/Time	DATE COMPLETED:
DRILLING METHODS: CABLE TOOL			PAGE 3 OF ~~15~~ 17

DEPTH (Ft)	SAMPLE TYPE & NO	BLOWS ON SAMPLER PER 6 in.	RECOVERY (IN)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
6	1-15-92 ~~1-15-92~~ 100369 9:50	PL 1-15 50/5	6	CH 2/3/92 HARD, ~~VERY DENSE~~ (2.5Y, 6/4) LIGHT YELLOWISH BROWN CLAY WITH GRAVEL. SOME DARK MOTTLING. LITTLE SILT OR SAND. SLIGHTLY MOIST. INCREASING PLASTICITY	CL	>4.0	ATTEMPTED GEOCHEM. INSUFFICIENT RECOVERY SO BOTTLED AND ARCHIVED. βγ = 0 cpm α = NA HNu = 0 ppm
	1-15-92 9:50	NA	NR	NR	NA	NA	βγ = NA α = NA HNu = NA
7	1-15-92 9:50	NA	NR	NR	NA	NA	βγ = NA α = NA HNu = NA
	1-15-92 9:50	NA	NR	NR	NA	NA	βγ = NA α = NA HNu = NA
8	1-15-92 1310 100370	10	6	CH 2/3/92 MEDIUM STIFF, ~~DENSE~~ (2.5Y, 5/3) LIGHT OLIVE BROWN SILTY CLAY WITH NUMEROUS CHERT FRAGMENTS. LITTLE SAND. SLIGHTLY MOIST, LOW PLASTICITY.	CL	0.75	βγ = 0 cpm α = NA HNu = 0 ppm
	1-15-92 1310 100370	15	6	SAA, ONLY HARD.	CL	>4.0	βγ = 0 cpm α = NA HNu = 0 ppm
9							

NOTES:
DRILLER - PENNSYLVANIA DRILLING
JOE BARILE - DRILLER
RICK PIERCE - HELPER

SAA - SAME AS ABOVE
NR - NO RECOVERY
NA - NOT APPLICABLE

SAMPLE TECH - CHRIS JOHNSON

402-11-86

5644

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602.3.22	PROJECT NAME: FEMP RI/FS EWMF		
BORING NUMBER: 2728	COORDINATES:		DATE 1-15-92
ELEVATION:	GWL: Depth	Date/Time	DATE STARTED: 1-15-92
ENGINEER/GEOLOGIST: P. CASSIDAY	Depth	Date/Time	DATE COMPLETED:
DRILLING METHODS: CABLE TOOL			PAGE 4 OF ~~15~~ 17

DEPTH (FT)	SAMPLE TYPE & NO	BLOWS ON SAMPLER PER 6 IN	RECOVERY (IN)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
9	1-15-92 1310 100376	32	6	~~MEDIUM~~ PC 1-15 HARD ~~DENSE~~ (2.5Y, 5/3) LIGHT OLIVE BROWN SILTY CLAY WITH MUCH FRAGMENTED CHERT & LIMESTONE. LITTLE SAND. SLIGHTLY MOIST, LOW PLASTICITY CB 2/3/92	CL	>4.0	βγ = 0 cpm α = NA HNU = 0 ppm
	1-15-92 1310	50	0 ~~NR~~ CB 2/3/92	NR	NA	NA	βγ = NA α = NA HNU = NA
10	~~210~~ PC 1-15 1-15-92 1415 100377	SHELBY TUBE ATTEMPTED	6	(2.5Y 5/4) LIGHT OLIVE BROWN SILTY CLAY WITH (5Y, 5/2) OLIVE GRAY MOTTLING. SLIGHTLY MOIST LOTS OF INTERSPERSED GRAVEL, SOME QUITE LARGE. LOW PLASTICITY	CL	NA	SHELBY TUBE 18'-12' INSUFFICIENT RECOVERY SAMPLE PULLED AND ARCHIVED. CALLED CATE GRUBE. INFORMED NOT TO ATTEMPT ANOTHER SHELBY UNTIL WE REACH SOFTER MATERIAL.
			6	SAA	CL	NA	
11			0	NR	NA	NA	βγ = 0 cpm α = NA HNU = 0 ppm
	RAD SCREEN PC 1-15 ~~100376~~ 100377		0	NR	NA	NA	
12							

NOTES

DRILLER - PENNSYLVANIA DRILLING

JOE BARILE - DRILLER

RICK PIERCE - HELPER

SAMPLE TECH - CHRIS JOHNSON

SAA - SAME AS ABOVE

NR - NO RECOVERY

NA - NOT APPLICABLE

402-11-86

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602.3.22	PROJECT NAME: EEMP RI/FS EWMF		
BORING NUMBER: 2728	COORDINATES:	DATE: 1-15-92	
ELEVATION:	GWL: Depth / Date/Time	DATE STARTED: 1-15-92	
ENGINEER/GEOLOGIST: P. CASSEDAY	Depth / Date/Time	DATE COMPLETED:	
DRILLING METHODS: CABLE TOOL		PAGE 5 OF 15	

DEPTH (FT)	SAMPLE TYPE & NO	BLOWS ON SAMPLER PER 1" 6/in.	RECOVERY (IN)	DESCRIPTION (CJ 2/3/92)	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS (CJ 2/3/92)
12 STURBED BOTTOM	1-15-92 1435 100377	21	6	HARD ~~VERY DENSE~~ (5Y, 5/2) OLIVE GRAY SILTY CLAY, WITH NUMEROUS ROCK FRAGMENTS. LITTLE SAND. Brown MOTTLING, SLIGHTLY MOIST, LOW PLASTICITY.	CL	>4.0	βγ = 0 cpm α = NA HNu = 0 ppm
		31	6	SAA	CL	>4.0	βγ = 0 cpm α = NA HNu = 0 ppm
13		33	6	SAA	CL	>4.0	βγ = 0 cpm α = NA HNu = 0 ppm
		39	0	NR	NA	NA	βγ = ~~0~~ PC NA MS α = NA HNu = NA
14 TOTAL U/γ SPEC RAD SCREEN	1-15-92 1500 100378	10	6	VERY STIFF, ~~VERY DENSE~~ (5Y, 5/1) GRAY CLAY WITH NUMEROUS GRAVEL PIECES. PLASTIC AND SLIGHTLY MOIST, WITH LITTLE TO NO SILT OR SAND (CJ 02/03/92)	CL	3.0	βγ = 0 cpm α = NA HNu = 0 ppm
	1-15-92 1500	25	0	NR	NA	NA	βγ = NA α = NA HNu = NA
15							

NOTES: PENNSYLVANIA DRILLING
JOE BARILE - DRILLER
RICK PIERCE - HELPER

SAA - SAME AS ABOVE
NR - NO RECOVERY
NA - NOT APPLICABLE

SAMPLE TECH - CHRIS JOHNSON

402-11-86

5644

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602.3.22	PROJECT NAME: FEMP RI/FS EWMF		
BORING NUMBER: 2728	COORDINATES:		DATE: 1-15-92
ELEVATION:	GWL: Depth	Date/Time	DATE STARTED: 1-15-92
ENGINEER/GEOLOGIST: R.P. Cussedy	Depth	Date/Time	DATE COMPLETED:
DRILLING METHODS: CABLE TOOL			PAGE 6 OF ~~15~~ 17

BJ 2/3/92

DEPTH (Ft)	SAMPLE TYPE & NO	BLOWS ON SAMPLER PER 6 in	RECOVERY (in)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
15	1-15-92 1500	30	0	NR	NA	NA	βγ = NA α = NA HNU = NA
	1-15-92 1500	35	0	NR	NA	NA	βγ = NA α = NA HNU = NA
16	1-15-92 1530 100379	13	6	VERY ~~STIFF~~, ~~VERY DENSE~~ (5Y, 5/1) GRAY CLAY WITH NUMEROUS GRAVEL PIECES, SOME LARGE, MOIST AND PLASTIC (BJ 2/3/92)	CL	3.5	βγ = 0 cpm α = NA ATTEMPTED GEOCHEM SAMPLE INSUFFICIENT RECOVERY BOTRED & ARCHIVED. HNU = 0 ppm
	1-15-92 1530	20	PC 1-15 ~~N~~ 0	NR	NA	NA	βγ = NA α = NA HNU = NA
17	1-15-92 1530	25	0	NR	NA	NA	βγ = NA α = NA HNU = NA
	1-15-92 1530	50/4	0	NR	NA	NA	βγ = NA α = NA HNU = NA
18							

ARCHIVE

NOTES
PENNSYLVANIA DRILLING
JOE BARICE - DRILLER
RICK PIERCE - HELPER

SAA - SAME AS ABOVE
NA - NOT APPLICABLE
NR - NO RECOVERY

SAMPLE TECH - CHRIS JOHNSON

402-11-66

RI/FS

VISUAL CLASSIFICATION OF SOILS

5644

PROJECT NUMBER: 602.3.22	PROJECT NAME: FEMP RI/FS EWMF		
BORING NUMBER: 2728	COORDINATES:		DATE 1-15-92
ELEVATION:	GWL: Depth	Date/Time	DATE STARTED: 1-15-92
ENGINEER/GEOLOGIST: P. Casseday	Depth	Date/Time	DATE COMPLETED:
DRILLING METHODS: Cable Tool			PAGE 7 OF ~~15~~ 17

CB 2/3/92

DEPTH (Ft)	SAMPLE TYPE & NO	BLOWS ON SAMPLER PER 6 in	RECOVERY (IN)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
18	1-15-92 1600 100379	4	6	STIFF, MEDIUM DENS. (5Y, 5/1) GRAY CLAY WITH NUMEROUS INTERSPERSED GRAVEL MOIST AND PLASTIC. LITTLE SILT AND SAND.	CL	2.0	βr = 0 cpm α = NA HNu = 0 ppm
Archive	1-15-92 1600 100379	6	6	SAA	CL	1.5	βr = 0 cpm α = NA HNu = 0 ppm
19	1-15-92 1600 100379	11	6	SAA	CL	1.5	βr = 0 cpm α = NA HNu = 0 ppm
	1-15-92 1600 100379	13	2	SAA	CL	1.5	βr = 0 cpm α = NA HNu = 0 ppm
20	1-15-92 1656 100380	4	4	STIFF, MEDIUM DENSE (5Y, 5/1) GRAY CLAY WITH GRAVEL. LITTLE SILT, NO SAND. VERY PLASTIC AND SLIGHTLY MOIST.	CL	2.0	βr = 0 cpm α = NA HNu = 0 ppm NOTE: SHELBY TUBE DRIVEN 20-23 NO RECOVERY - SO SAMPLED 20-22 AND SHELBY AGAIN AT 22-25
Archive	1-15-92 1656	6	0	NR	NA	NA	βr = NA α = NA HNu = NA
21							

NOTES

Driller - Pennsylvania Drilling
Joe Barile - Driller
Rick Pierce - Assistant

Sample Tech - Chris Johnson

NA - Not Applicable
SAA - Same as Above
NR - No Recovery

-02-11-86

FERNALD
RI/FS 005644

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602.3.22	PROJECT NAME: FEMP RI/FS EWMF		
BORING NUMBER: 2728	COORDINATES:	DATE: 1-15-92	
ELEVATION:	GWL: Depth / Date/Time	DATE STARTED: 1-15-92	
ENGINEER/GEOLOGIST: P. Casseday	Depth / Date/Time	DATE COMPLETED:	
DRILLING METHODS: Cable Tool		PAGE 8 OF ~~15~~ 17	

CJ 2/3/92

DEPTH (Ft)	SAMPLE TYPE & NO	BLOWS ON SAMPLER PER 6 in	RECOVERY (IN)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
21	1-15-92 1656	18	0	NR	NA	NA	βγ : NA α = NA HNu = NA
	1-15-92 1656	15	0	NR	NA	NA	βγ = NA α = NA HNu = NA
1-92 22	1-21-92 1050 100381		27	MEDIUM STIFF (5Y, 5/1) GRAY CLAY WITH GRAVEL. SOME SILT, NO SAND. VERY PLASTIC AND MOIST	CL	KD 02/3/92	ATTEMPTED TO PUSH SHELBY TUBE 22.0'-25.0' βγ = 0cpm α = NA HNu = 0ppm
	RAD SCREEN TOP 100382	SHELBY TUBE PUSHED					
23	RAD SCREEN BOTTOM 100383					NA	
24							

NOTES:
PENNSYLVANIA DRILLING
JOE BARILE - DRILLER
RICK PIERCE - HELPER

SAMPLE TECH - CHRIS JOHNSON

SAA - SAME AS ABOVE
NA - NOT APPLICABLE
NR - NO RECOVERY

402-11-86

FERNALD
RI/FS

VISUAL CLASSIFICATION OF SOILS

5644

PROJECT NUMBER: 602.3.22	PROJECT NAME: FEMP RI/FS EWMF		
BORING NUMBER: 2728	COORDINATES:	DATE 1-21-92	
ELEVATION:	GWL: Depth Date/Time	DATE STARTED: 1-15-92	
ENGINEER/GEOLOGIST: P. CASSEDAY	Depth Date/Time	DATE COMPLETED:	
DRILLING METHODS: CABLE TOOL		PAGE 9 OF 17	

CJ 2/3/92

DEPTH (FT)	SAMPLE TYPE & NO	BLOWS ON SAMPLER PER 6 IN.	RECOVERY (IN)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
24	1-21-92 1050 100381 RS TOP 100382 RS BOTTOM 100383	SHELBY TUBE PUSHED		MEDIUM STIFF (2.5Y, 5/1) GRAY CLAY AND GRAVEL MIX. SOME SILT, NO SAND. PLASTIC AND MOIST	CL	NA	
25	1-21-92 1315 100384	8	6	VERY STIFF, ~~MEDIUM DENSE~~ (2.5Y, 4/2) DARK GRAYISH BROWN CLAY MIXED WITH GRAVEL, SOME SILT, NO SAND. SLIGHTLY MOIST PLASTIC.	CL	3.0	βγ = 0 cpm α = NA HNu = 0 ppm
		14	6	SAA	CL	3.5	βγ = 0 cpm α = NA HNu = 0 ppm
26		16	3	SAA	CL	>4.0	βγ = 0 cpm α = NA HNu = 0 ppm
		20	0	NR	NA	NA	βγ = NA α = NA HNu = NA
27							

NOTES:

PENNSYLVANIA DRILLING
JOE BARILE - DRILLER
RICK PIERCE - HELPER

SAMPLE TECH - CHRIS JOHNSON

SAA - SAME AS ABOVE
NA - NOT APPLICABLE
NR - NO RECOVERY

402-11-86

RI/FS

5644

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602.3.22	PROJECT NAME: FEMP RI/FS EWMF		
BORING NUMBER: 2728	COORDINATES:		DATE 1-21-92
ELEVATION:	GWL: Depth	Date/Time	DATE STARTED: 1-15-92
ENGINEER/GEOLOGIST: P. CASSEDAY	Depth	Date/Time	DATE COMPLETED:
DRILLING METHODS: CABLE TOOL			PAGE 10 OF ~~15~~ 17

DEPTH (Ft.)	SAMPLE TYPE & NO	BLOWS ON SAMPLER PER 6 in.	RECOVERY (IN)	DESCRIPTION (CB 2/3/92)	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS (CB 2/3/92)
27	1-21-92 1335 100384	7	6	~~DENSE~~, VERY STIFF (2.5Y, 4/2) DARK GRAYISH BROWN CLAY WITH INTERMIXED GRAVEL, LITTLE SILT, NO SAND. MOIST AND PLASTIC.	CL	3.0	βγ = 0 cpm α = NA HNU = 0 ppm
		19	6	SAA	CL	3.5	βγ = 0 cpm α = NA HNU = 0 ppm
28		29	0	NR	NA	NA	βγ = NA α = NA HNU = NA
		40	0	NR	NA	NA	βγ = NA α = NA HNU = NA
29	1-21-92 1413 100385	14	6	DENSE, VERY STIFF (2.5Y, 4/2) DARK GRAYISH BROWN CLAY WITH VARIOUS PIECES OF GRAVEL INTERSPERSED; SOME SILT, NO SAND, MOIST AND PLASTIC	CL	3.0	ATTEMPT GEOCHEM SLEEVE SAMPLE 29'-31'. INSUFFICIENT RECOVERY SAMPLE ARCHIVED βγ = 0 cpm α = NA HNU = 0 ppm
	1-21-92 1413	25	0	NR	NA	NA	βγ = NA α = NA HNU = NA
30							

ARCHIVE

NOTES

PENNSYLVANIA DRILLING
JOE BARILE - DRILLER
RICK PIERCE - HELPER

SAA - SAME AS ABOVE
NR - NO RECOVERY
NA - NOT APPLICABLE

SAMPLE TECH - CHRIS JOHNSON

402-11-88

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602.3.22	PROJECT NAME: FEMP RI/FS EWMF		
BORING NUMBER: 2728	COORDINATES:	DATE 1-21-92	
ELEVATION:	GWL: Depth Date/Time	DATE STARTED: 1-15-92	
ENGINEER/GEOLOGIST: P. Casseday	Depth Date/Time	DATE COMPLETED:	
DRILLING METHODS: Cable Tool		PAGE 11 OF ~~15~~ 17	

DEPTH (FT)	SAMPLE TYPE & NO	BLOWS ON SAMPLER PER 6 IN	RECOVERY (IN)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS (CH 2/3/92)
30	1-21-92 1413	38	0	NR	NA	NA	βγ = NA α = NA HNU = NA
	1-21-92 1413	20	0	NR	NA	NA	βγ = NA α = NA HNU = NA
31	1-21-92 1535 100386	7	6	CH 2/3/92 STIFF ~~VERY DENSE~~ (2.5Y, 4/2) DARK GRAYISH BROWN CLAY WITH SILT, SAND AND GRAVEL INTERMIXED. MOIST AND VERY PLASTIC.	CL	2.5	βγ = 0 cpm α = NA HNU = 0 ppm
		27	6	SAA - SAND ENCOUNTERED IN SHOE (BASE OF TILL)	CL	2.5	βγ = 0 cpm α = NA HNU = 0 ppm SAND ENCOUNTERED - BASE OF TILL
32		40	0	NR			βγ NA α = NA HNU = NA
		50/2	0	NR			βγ = NA α = NA HNU = NA
33							

NOTES

PENNSYLVANIA DRILLING
JOE BARILE - DRILLER
RICK PIERCE - HELPER

SAA - SAME AS ABOVE
NR - NO RECOVERY
NA - NOT APPLICABLE

SAMPLE TECH. CHRIS JOHNSON

402-11-86

5644

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602.3.22	PROJECT NAME: FEMP RI/FS EWMF		
BORING NUMBER: 2728	COORDINATES:		DATE 1-21-92 / 1-22-92
ELEVATION:	GWL: Depth	Date/Time	DATE STARTED: 1-15-92
ENGINEER/GEOLOGIST: P. CASSEDAY	Depth	Date/Time	DATE COMPLETED:
DRILLING METHODS: CABLE TOOL			PAGE 12 OF ~~15~~ 17

DEPTH (Ft)	SAMPLE TYPE & NO	BLOWS ON SAMPLER PER 6 in.	RECOVERY (IN)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS (CB 2/3/92)
~~33~~							
34							
35	1-21-92 1700	50/.2	0	NR	NA	NA	HNu = NA α = NA βγ = NA
36							
37							
38							
39							
40	1-22-92 1015 100387	11 12 11	18	CB 2/3/92 ~~STIFF~~, MEDIUM DENSE (10YR, 3/6) DARK YELLOWISH BROWN CLAYEY SILT. NO SAND SOME SMALL GRAVEL PIECES. FAIRLY WELL SORTED. MOIST	ML	NA ~~2.0~~ CB 2/3/92	HNu = 0ppm α = NA βγ = 0 ppm CB 2/3/92
41							
42							
43							
44							
45	1-22-92 1025 100388	5 7 12	18	CB 2/3/92 STIFF, ~~MEDIUM DENSE~~ (2.5Y 4/2) DARK GRAYISH BROWN CLAY WITH GRAVEL, SOME SILT, MOIST OVERLYING A ~~MEDIUM STIFF~~ MEDIUM DENSE (7.5YR, 4/6) STRONG BROWN CLAYEY SILT WITH INTERSPERSED SAND AND GRAVEL; MOIST	CL ML	1.5 0.5	~~HNu = 0ppm~~ α = NA βγ = 0 ppm CB 2/3/92
46							
47							
~~48~~							

NOTES

DRILLING - PENNSYLVANIA DRILLING
JOE BARILE - DRILLER
RICK PIERLE - HELPER

SAA - SAME AS ABOVE
NR - NO RECOVERY
NA - NOT APPLICABLE

SAMPLE TECH - CHRIS JOHNSON

402-11-86

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602.3.22	PROJECT NAME: FEMP RI/FS EWMF		
BORING NUMBER: 2728	COORDINATES:		DATE 1-22-92
ELEVATION:	GWL: Depth	Date/Time	DATE STARTED: 1-15-92
ENGINEER/GEOLOGIST: P. GASSEDAY	Depth	Date/Time	DATE COMPLETED:
DRILLING METHODS: CABLE TOOL			PAGE 13 OF ~~15~~ 17

DEPTH (FT.)	SAMPLE TYPE & NO	BLOWS ON SAMPLER PER 6 IN.	RECOVERY (IN.)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
48							
49							
50				CB 2/3/92			
51	1-22-92 8 1325 100389	8 6	18	~~SOFT~~, MEDIUM DENSE (10YR, 5/6) YELLOWISH BROWN SAND. SOME SILT AND GRAVEL. POORLY SORTED ~~AND GRAVEL~~. MOIST CB 2/5/92	SW ~~SP~~	NA ~~0.5~~ CB 2/3/92	HNu = 0 ppm α = NA β γ = 0 cpm
52							
53							
54							
55				CB 2/3/92			
56	1-22-92 12 1400 100390	32 42	18	~~VERY SOFT~~ VERY DENSE (10YR, 6/6) BROWNISH YELLOW SAND WITH MUCH GRAVEL. POORLY ~~GRADED~~ ~~AND~~ SORTED WITH APPRECIABLE SILT CB 2/5/92 MOIST	SW ~~GM~~	NA ~~0.25~~ CB 2/3/92	HNu = 0 ppm α = NA β γ = 0 cpm
57							
58							
59							
60				CB 2/3/92 CB 2/5/92			
61	1-22-92 13 1425 100391	30 50/2	14	VERY ~~SOFT~~, DENSE (10YR, 5/4) YELLOWISH BROWN SILTY GRAVEL OVERLAIN BY A ~~SOFT~~, VERY DENSE, POORLY SORTED (10YR, 6/6) BROWNISH YELLOW GRAVELLY SAND. BOTH ARE MOIST	GM SP	NA ~~<0.25~~ CB 2/3/92 NA	HNu = 0 ppm α = NA β γ = 0 cpm
62							
63							

NOTES

DRILLER - PENNSYLVANIA DRILLING
JOE BARILE - DRILLER
RICK PIERCE - HELPER
CHRIS JOHNSON - SAMPLE TECH

SAA - SAME AS ABOVE
NA - NOT APPLICABLE
NR - NO RECOVERY

402-11-86

5644

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602.3.22	PROJECT NAME: FEMP RI/FS EWMF		
BORING NUMBER: 2728	COORDINATES:		DATE 1-22-92 / 1-23-92
ELEVATION:	GWL: Depth	Date/Time	DATE STARTED: 1-15-92
ENGINEER/GEOLOGIST: P. CASSEDAY	Depth	Date/Time	DATE COMPLETED:
DRILLING METHODS: CABLE TOOL			PAGE 14 OF 17

DEPTH (FT)	SAMPLE TYPE & NO	BLOWS ON SAMPLER PER 6 IN	RECOVERY (IN)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
63							
64							
65	1-22-92 1615 100372	50/4	6	CW 2/3/92 ~~SOFT~~, VERY DENSE (2.5Y, 5/6) LIGHT OLIVE BROWN SANDY GRAVEL. POORLY SORTED ~~AND GRADED~~. SOME SILT AND LITTLE TO NO CLAY ~~MOIST~~ SLIGHTLY MOIST PL 1-22	2/6/92 GW ~~GP~~	NA ~~0.25~~ CW 2/3/92	HNu = 0 ppm α = NA βγ = 0 cpm
66							
67							
68							
69							
70	1-22-92 1650 100373	50/6	6	CW 2/3/92 ~~SOFT~~ VERY DENSE (2.5Y, 4/4) OLIVE BROWN SANDY GRAVEL. POORLY SORTED ~~AND GRADED~~ WITH LITTLE TO NO SILT OR CLAY. SLIGHTLY MOIST	GW ~~GP~~	NA ~~0.25~~ CW 2/3/92	HNu = 0 ppm α = NA βγ = 0 cpm
71							
72							
73							
74							
75	1-23-92 920 100374	35 45 35	8	CW 2/3/92 ~~VERY SOFT~~, VERY DENSE (2.5Y, 5/3) LIGHT OLIVE BROWN SANDY GRAVEL. POORLY SORTED ~~AND GRADED~~ WITH LITTLE TO NO SILT OR CLAY. WET (HIT WATER TABLE)	GW ~~GP~~	NA ~~0.25~~ CW 2/3/92	HNu = 0 ppm α = NA βγ = 0 cpm
76							
77							
78							

NOTES

PENNSYLVANIA DRILLING
JOE BARILE - DRILLER
RICK PIERCE - HELPER

SAMPLE TECH - CHRIS JOHNSON

SAA - SAME AS ABOVE
NA - NOT APPLICABLE
NR - NO RECOVERY

-02-11-86

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602.3.22	PROJECT NAME: FEMP RI/FS EWMF		
BORING NUMBER: 2728	COORDINATES:		DATE 1-23-92
ELEVATION:	GWL: Depth	Date/Time	DATE STARTED: 1-15-92
ENGINEER/GEOLOGIST: P. CASSEDAY	Depth	Date/Time	DATE COMPLETED:
DRILLING METHODS: CABLE TOOL			PAGE 15 OF ~~15~~ 17

DEPTH (FT)	SAMPLE TYPE & NO	BLOWS ON SAMPLER PER 6 IN.	RECOVERY (IN)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
78							
79							
80				CW 2/3/92			
81	1-23-92 1350 100395	35 18 16	12 CW 2/3/92	~~VERY SOFT~~, DENSE (2.5Y, 5/2) GRAYISH BROWN GRAVEL WITH SAND. POORLY SORTED ~~AND GRADED~~, WITH LITTLE TO NO CLAY OR SILT. WET	GW ~~GP~~	NA ~~<0.25~~ CW 2/3/92	HNu = 0 ppm α = NA βγ = 0 cpm
82							
83							
84							
85				CW 2/3/92			
86	1-23-92 1520 100396	45 41 35	12	~~VERY SOFT~~, VERY DENSE (5Y, 5/1) GRAY CLAYEY SANDY GRAVEL. POOR SORTING ~~AND GRADING~~. SOME SILT. WET. PETROLEUM ODOR FROM CLAYS WITHIN SAMPLE. CW 2/3/92	GC	NA ~~<0.25~~ CW 2/3/92	HNu = 1.0 ppm α = NA βγ = 0 cpm
87							* HNu HIT - PETROLEUM ODOR FROM SAMPLE.
88							
89							
90				CW 2/3/92			
91	1-23-92 1640 100397	17 16 14	18	~~VERY SOFT~~, MEDIUM DENSE (5Y, 5/1) GRAY SANDY GRAVEL WITH A LENS OF CLAY POORLY SORTED ~~AND GRADED~~. WET. PETROLEUM ODOR IN CLAY LENS. CW 2/3/92	GC	NA ~~<0.25~~ CW 2/3/92	HNu = 1.0 ppm α = NA βγ = 0 cpm
92				BOTTOM OF BORE HOLE - 92.0 ft Bottom of Sampling - 91.5 ft			PETROLEUM ODOR AGAIN
93							

NOTES: PENNSYLVANIA DRILLING
JOE BARILE - DRILLER
RICK PIERCE - HELPER

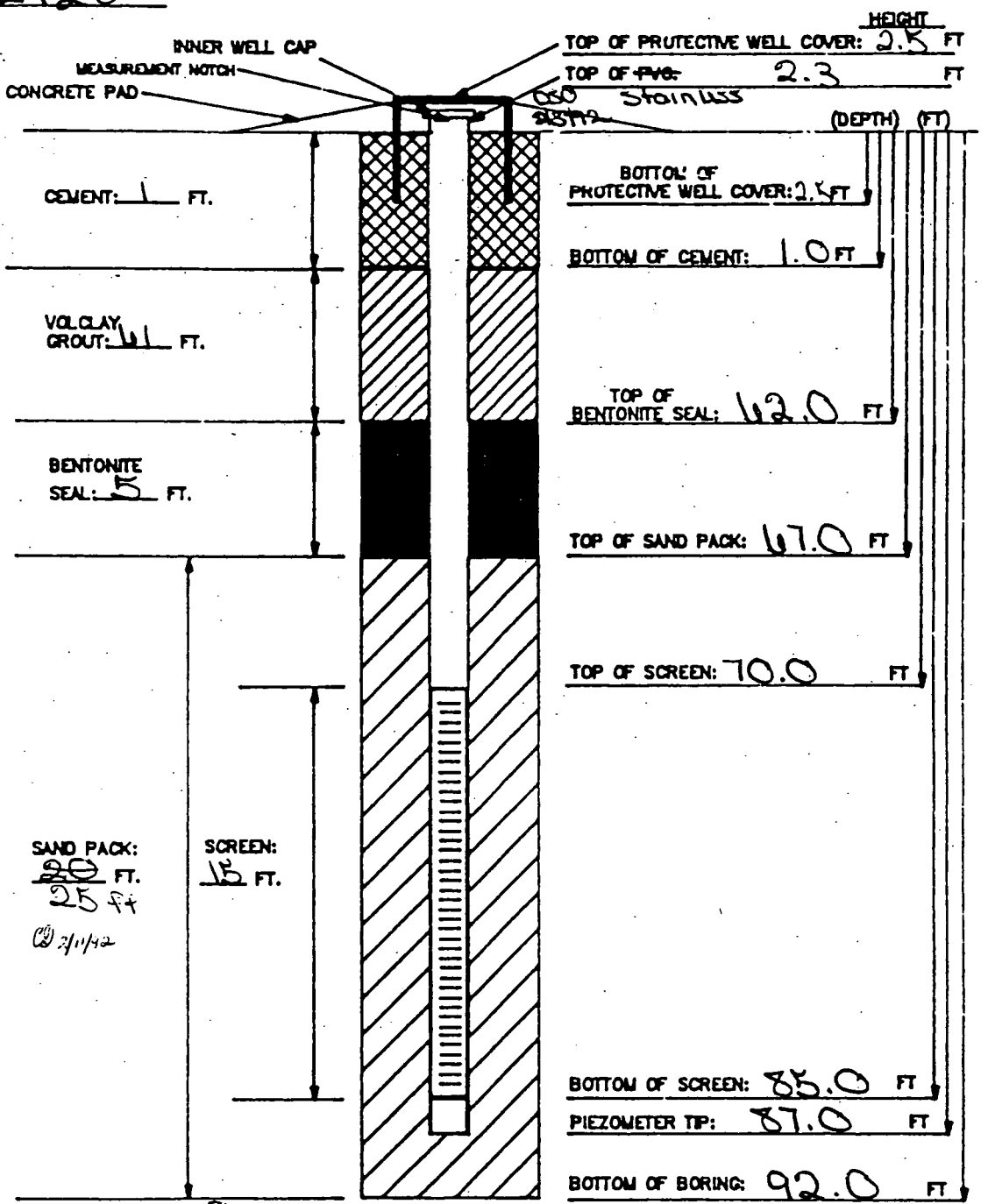
SAA - SAME AS ABOVE
NR - NO RECOVERY
NA - NOT APPLICABLE

SAMPLE TECH - CHRIS JOHNSON

FERNALD RI/FS

INSTALLATION DIAGRAM
MONITORING WELL NO. 2728

INSTALLATION DATE: 1/30/92



BOREHOLE DIAMETER: 10 INCHES

MATERIALS USED:
SAND TYPE AND QUANTITY: 17 bag
BENTONITE PELLETS (5-GALLON BUCKETS): 4
BAGS OF VOLCLAY GROUT: 15 bag
AMOUNT OF CEMENT:
AMOUNT OF WATER USED: 600 gallons
OTHER:

NOTES:
1) RISER PIPE IS 2-INCH SCHEDULE 40 PVC PIPE, FLUSH-THREADED JOINTS.
2) SCREEN IS 2-INCH I.D. SCHEDULE 40 PVC PIPE WITH 0.020-INCH SLOTS.
3) LOWER END OF SCREEN IS CAPPED WITH AN END CAP OR THREADED SUMP.
4) WATER DEPTH/DATE: 73.8 ft
5) TOP OF PVC IS SECURED WITH EXPANDABLE RUBBER PLUG AND PADLOCK.
6) PARENTHESES INDICATE DEPTH BELOW GROUND LEVEL.

TASK: 3.22 GEOLOGIST/ENGINEER: D. O'Brien

FERNALD 5644
RI/FS

PIEZOMETER INSTALLATION SHEET

PROJECT NAME Fernald RI/FS Flume FIELD ENG./GEO. D. O'Brien DATE 11/30/9
PROJECT NO. 602.3.22 CHECKED BY CBuke DATE 02/11/92
BORING NO. 2728
PIEZOMETER NO. DATE OF INSTALLATION 11/30/92

BOREHOLE DRILLING

DRILLING METHOD Cable Tool	TYPE OF BIT Churn Bit
DRILLING FLUID(S) USED:	CASING SIZE (S) USED:
FLUID H_2O FROM 0 TO 92.0	SIZE 10 3/4 o.d. FROM 0 TO 92.0
FLUID NA FROM NA TO NA	SIZE NA FROM NA TO NA

PIEZOMETER DESCRIPTION

TYPE Monitoring Well	RISER PIPE MATERIAL 316 stainless steel
DIAMETER OF PERFORATED SECTION 4.0 in	RISER PIPE DIAMETERS:
PERFORATION TYPE:	O.D. 4 3/8 in. I.D. 4.0 in
SLOTS ☐ HOLES ☐ SCREEN ☒	LENGTH OF PIPE SECTIONS 7 10's, 1 17ft screen, 2 5ft RCW
AVERAGE SIZE OF PERFORATIONS 0.010	JOINING METHOD flush joint threaded
TOTAL PERFORATED AREA 15ft.	

PROTECTION SYSTEM

RISER PROTECTIVE PIPE LENGTH 5.0 ft	OTHER PROTECTION hinged locking cap
PROTECTIVE PIPE O.D.	

ITEM	DISTANCE ABOVE/BELOW GROUND SURFACE (ft)		ELEVATION ( )	
TOP OF RISER PIPE	2.3ft			
GROUND SURFACE	0.0			
BOTTOM OF PROTECTIVE PIPE	2.5ft			
BOREHOLE FILL MATERIALS: Cement GROUT/SLURRY	Top 0 TOP 1	Bottom 1 BOTTOM 67	TOP	BOTTOM
BENTONITE	TOP 62	BOTTOM 67	TOP	BOTTOM
SAND	TOP 67	BOTTOM 92	TOP	BOTTOM
GRAVEL	TOP ~~67~~ NA 11/30/92	BOTTOM ~~92~~ NA 11/30/92	TOP	BOTTOM
PERFORATED SECTION	TOP 70	BOTTOM 85	TOP	BOTTOM
PIEZOMETER TIP	87			
BOTTOM OF BOREHOLE	92			
GWL AFTER INSTALLATION	73.8			

WAS THE PIEZOMETER FLUSHED AFTER INSTALLATION? YES ☐ NO ☒
WAS A SENSITIVITY TEST PERFORMED ON THE PIEZOMETER? YES ☐ NO ☒

REMARKS

409-11-86

MONITORING WELL
3024

Black Ink corrections and White out corrections were made by Brad Dunning while the log was being completed. WPK 4/29/88

5644

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DAC RKA 2/5/

FERNALD RI/FS

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602	PROJECT NAME: FMPC RI/FS	
BORING NUMBER: ~~3~~24 3024 BB	COORDINATES: N 482477.17 E 1378902.73	DATE: 9-14-87
ELEVATION: 579.9 ground	GWL: Depth — Date/Time —	DATE STARTED: 9-14-87 @ 1330
ENGINEER/GEOLOGIST: B. Dunning	Depth — Date/Time —	DATE COMPLETED: 10/3/87
DRILLING METHODS: CABLE Tool - Split Spoon Samples		PAGE 1 OF 11

DEPTH (Ft.)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER 6"	RECOVERY (Inches)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
.5 1.0'	S 07089	5 11 10	12"	Medium stiff, yellowish-brown clay with some sand, MOIST	CL		Background Gas $\gamma\beta$ = 40-60 α = 0 hnu = 0 Sample Caught (1345)
2' 3'	S 07090	12 17 19	24"	Stiff, dark yellowish-brown silty sand with some fine gravel MOIST	SM		Background Levels (1400)
4'	S 07091	12 25 32	18	Medium dense dark yellowish-brown silty sand with some gravel MOIST	SP		Background Levels (1440)
				4.3' Coarse Gravel - grayish-brown	GW		
5' 6'	S 07092	22 12 15	14"	Medium dense dark yellowish-brown silty sandy gravel, MOIST.	GC		Background Levels (1445)
				5.5' Stiff yellowish-brown silty clay, MOIST	CL		
7'	S 07093	10 21 23	16"	Dense yellowish-brown silty gravel grading downward to a:	GC		Background Levels (1545)
				7' Hard dark gray clay with a trace of coarse sand and gravel MOIST 7'	CL	4.5	
8' 9'	S 07095	16 19 23	12"	Very stiff gray clay with a trace of fine gravel (slightly damp) MOIST.	CL	4.0	Background Levels End of Day 9-14-87 (1625)
10'	S 07096	6 11 15	6"	Medium dense, grayish-brown gravel MOIST.	GC		Start of Day 9-15-87 gravel is actually very loosely consolidated Background (0830)
11' 12'	S 07097	4 5 8	12"	Medium stiff olive-gray clay with a trace of fine gravel, MOIST.	CL	1.0	Background Lost entire first sample and had to use spring catcher (0935)
13	S 07098	6 11 17	18"		CL	.75	Background
				13.2' Loose gray, fine sand, MOIST. 13.2.	SM		(0942)
14' 15'	S 07100	2 2 3	18"	Soft olive-gray clay with a trace of fine gravel, MOIST.	CL	.50	Background (1030)

NOTES: Background Levels 9-14-87 $\gamma\beta$ = 40-140 cpm α = 0 hnu = 0

Background Levels 9-15-87 $\gamma\beta$ = 40-80 cpm α = 0 hnu = 0

Used 40 gallons of H_2O 9-14-87

000308

402-11-86

5644
FERNALD
RI/FS

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VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602	PROJECT NAME: FMPC RI/FS TASK 3.2	
BORING NUMBER: ~~324~~ 3024	COORDINATES: See p1	DATE: 9-15 & 9-16-87
ELEVATION: See p1	GWL: Depth 17.2 Date/Time 9-15 @ 1450	DATE STARTED: 9-14-87
ENGINEER/GEOLOGIST: B. Dunning	Depth 11.3 Date/Time 9-15/1600	DATE COMPLETED: 10-3-87
DRILLING METHODS: CABLE TOOL		PAGE 2 OF 11

DEPTH (FT.)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER 6"	RECOVERY (Inch)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
15							
16'	S 07101	6 6 9	18"	Soft, olive gray clay with a trace to some sand and gravel, MOIST	CL	.50	Background Levels (1040)
17'	S 07102	2 3 12	6"			.50	Background Levels (1350)
18'				18.2' Soft olive gray clay, MOIST. 18.2'		.50	
19'	S 07103	20 45 40	18"	Very dense gray fine gravel MOIST	GP		Background levels (1355)
20'	S 07104	46 30 27	18"	18.8 Dark yellowish-brown coarse sand 18.8	SW	–	Background
				Very dense gray coarse gravel, MOIST Wet	GP	–	End of Day 9-15-87 (1530)
21'				21.5			Start Day 9-16-87
22'	S 07105	16 33 47	18"	21.8 Very dense gray fine to medium sand MOIST 21.8	SC	–	Sand is actually Medium dense
				22 Hard olive-gray clay, trace of gravel MOIST. 22	CL	>4.0	(0905)
23'	S 07106	14 16 22	18"	Dense gray unconsolidated gravel, MOIST. grading downwards to a:	GW		Background
				23.5 Hard gray clay, some gravel MOIST 23.5			(1005)
24' 25'	S 07107	20 50 (3")	12"	Medium dense grayish-brown fine to medium sand with trace of large quatz rock fragments Wet	SP		Background Split Spoon jammed with large rock (1420)
26' 27'	S 07108	8 18 30	18"	Hard, dark gray olive-gray clay with some sand and fine gravel	CL	>4.5	Background (1440)
				27.5 Very stiff, grayish-brown silty clay 27.5	ML	3.5	Background
28	S 07110	35 52 30	18"	28 Very hard, gray clay 28	CL	>4.5	(1500)
29' 30'	S 07111	46 50 –	12"	Very stiff, gray clay with twig-like fragments ?? and a trace of gravel	CL		Background End Day 9-16-87 (1520)

NOTES: Background levels 9-15-87 $\gamma\beta$ = 40-80 cpm α = 0 $h_{\gamma\beta}$ = 0

Background Levels 9-16-87 $\gamma\beta$ = 40-80 cpm α = 0 $h_{\gamma\beta}$ = 0

Water level 9-15-87 @ 1600 was 11.3'
" " 9-16-87 @ 0800 " 9.3'

There appears to be a substantial aquafer at 18'-21.5'

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FERNALD RI/FS

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602	PROJECT NAME: FMPC RI/FS	
BORING NUMBER: ~~3247~~ 3024	COORDINATES: see p1	DATE: 9-17-87
ELEVATION: see p1	GWL: Depth 41.2 Date/Time 9-17-87 @ 1730	DATE STARTED: 9-14-87
ENGINEER/GEOLOGIST: B. Dunning	Depth — Date/Time —	DATE COMPLETED: 10-3-87
DRILLING METHODS: CABLE TOOL		PAGE 3 OF 11

DEPTH (Ft.)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER 6"	RECOVERY (Inch)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
30'							Start Day 9-17-87
31'	S 07112	12 20 24	6"	Stiff olive gray clay with a trace of fine gravel moist	CL	2.0	Background Levels (1045)
32'	S 07113	10 11 16	18"	Very stiff gray clay with trace of gravel, moist			Background Levels - (B.G.) (1050)
33'							
34'	S 07114	10 25 37	24"	33.7 Stiff gray clay moist 33.7 34 Very stiff olive-yellow clay moist 34' Very dense yellow-brownish sand moist		1.5 4.0	B.G. (1105)
35'	S 07115	23 33 36	12"	Very dense yellowish-brown Sand moist.	SW	–	B.G. Sand is moist, but not saturated. (1400)
36'							
37'	S 07116	50 – –	9"	37' Medium stiff brownish-yellow silt clayey moist 37'	SM	–	B.G. (1530)
38'	S 07117	9 24 42	13"	Very dense yellowish-brown, well sorted, fine grain sand Moist, but basically dry.			B.G. Very friable Sand Actually (1555)
39'							
40'					SW	–	Begin catching 5' Samples. Loose Unconsolidated Sand
41'							
42'							
43'							
44'							
45'	S 07118	25 43 45	18"				B.G. Sample 44'-45.5' End Day 9-17-87 1715

NOTES: Background Levels for 9-17-87 γB = 40-60 cpm, α = 0 hnu = 0

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FERNALD RI/FS

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VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602	PROJECT NAME: FMPC RI/FS	
BORING NUMBER: 3024	COORDINATES: see p7	DATE: 9-18-87
ELEVATION: see p1	GWL: Depth Date/Time	DATE STARTED: 9-14-87
ENGINEER/GEOLOGIST: B. Dunning	Depth Date/Time	DATE COMPLETED: 10-3-87
DRILLING METHODS: Cable Tool		PAGE 4 OF 11

DEPTH (Ft.)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER 6"	RECOVERY (Inch)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
45'	07118	36 43 45	18"	SAND - As Described above	SW		End Day 9-17-87 (1715)
46' 47' 48' 49' 50'				Very dense yellowish-brown well sorted fine grain sand moist.	SW	-	Start Day 9-18-87
51'	S 07119	15 20 21	18"	Dense yellowish-brown, well sorted, damp, but not wet sand			B.G. Loose unconsolidated Sand (1345)
52' 53' 54' 55'							
56'	S 07120	13 27 (4"> 50	12"	55.8 Loose grayish-brown coarse sand, moist 55.8 / 56.1 Hard gray clay moist. 56.1	CL		B.G. (1415)
57' 58'	S 07121	13 23 43	12"	Very dense gray, salt & pepper looking, medium to coarse grain sand with trace of fine gravel. moist	SW		B.G. Sand is actually loose & unconsolidated. (1440)
59' 60'							

NOTES:

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FERNALD RI/FS

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602	PROJECT NAME: FMPC RI/FS	
BORING NUMBER: ~~1-5-9324~~ 3024	COORDINATES: see p1	DATE: 9-19-87
ELEVATION: see p1	GWL: Depth 51.6 Date/Time 9-19/1030	DATE STARTED: 9-14-87
ENGINEER/GEOLOGIST: B. Dunning	Depth 62.6 Date/Time 9-19/1730	DATE COMPLETED: 10-3-87
DRILLING METHODS:		PAGE 5 OF 11

DEPTH (FT.)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER 6"	RECOVERY (Inch)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
60'							
61'	S 07122	13 25 28	18"	Very dense, dark gray coarse sand with some fine gravel WET	SW		Background End of 9-18-87 (1515)
62'							~~End~~ Start of 9-19-87
63'							
64'	S 07123	6 3 3	14"	Loose gray, lightly salt & peppered looking fine to coarse grain sand with a trace of gravel WET	SW		Borehole drilled down to 70'. Blow sand came up hole to 63' where this sample was taken. B.G. Levels (1545)
65'							
66'	S None	5 2 2	0"	Sand pump indicates very loose, grayish-brown unconsolidated sand, WET	SM ?		Blow Sand coming into hole. Could not obtain a sample even with catcher End Day 9-19-87
67'							Start. Day 9-20-87
68'							
69'							
70'							10" Temporary Casing driven to 80' to cut off blow sand.
71'	S 07124	6 14 21	12"	Dense, gray coarse sand with some fine & coarse gravel. Wet	SP		Background Levels Only (1000)
72'							
73'							Bailer - Sand Pump bringing up large cobbles ie. 1½" x 2½" large - Diameter - ± 1½"
74'							
75'							

NOTES: Background Levels 9-19-87 γB = 40-80 α = 0 hnu = 0
" " 9-20-87 γB = 40-70 α = 0 hnu = 0

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402-11-86

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FERNALD RI/FS

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VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602	PROJECT NAME: FMPC RI/FS	
BORING NUMBER: ~~9324~~ 3024	COORDINATES: See p.	DATE: ~~9-19-87~~ & 9-20
ELEVATION: See p.	GWL: Depth 61.5' Date/Time 9-20/0900	DATE STARTED: 9-14-87
ENGINEER/GEOLOGIST: B. Dunning	Depth Date/Time	DATE COMPLETED: 10-3-87
DRILLING METHODS: Cable Tool		PAGE 6 OF 11

DEPTH (1 Ft.) 75'	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER (6")	RECOVERY (Ft.)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
76'	S 07125	16 31 46	14"	Very dense grayish-brown gravel (Color: 2.5 Y, 5/2) and Coarse Sand SEE Remarks →	GP		Background levels (B.G.) (1140)
77' 78' 79'							Sand pump collecting large carbonate cobbles & gravel rocks with fossil Inclusions.
80' 81'	S 07126	2 6 16	18"	Medium dense, gray, very coarse grain sand with some fine gravel 80.8 80.8	SW		Background levels (1350)
				Medium dense grayish-brown fine gravel with some coarse gravel	GW		
82' 83' 84' 85'							Drove 10" Temporary Casing to 90'. Sand Pump bringing up fine to coarse gravel
86'	S 07127	20 50 (3")>50	12"	Very dense, dark gray, sandy gravel with fine to coarse sand (Color: 2.5 Y, N4/) & large cobbles ie. 1" x 2" x 1½".	GP		Large rock jammed in Split Spoon. Actually a loose gravel. Background levels (1600)
87' 88' 89' 90'							

NOTES: Background levels 9-20-87 : $\gamma\beta$ = 40-75 cpm. α = 0, hnu = 0

000313

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RKA 2/4/87

FERNALD RI/FS

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602	PROJECT NAME: FMPC RI/FS	
BORING NUMBER: BB 1-3-9 3024 3024	COORDINATES: see p. 1	DATE: 9-20 & 9/21/87
ELEVATION: see p. 1	GWL: Depth 52' Date/Time 9-20/1400	DATE STARTED: 9-14-87
ENGINEER/GEOLOGIST: B. Dunning	Depth 52' Date/Time 9-21/0730	DATE COMPLETED: 10-3-87
DRILLING METHODS: Cable Tool		PAGE 7 OF 11

DEPTH (FT.) 90'	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER (6")	RECOVERY (")	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
91'		2 2 5 3 8 4	0"	Sand Pump collecting fine grain Sand	SW		Lost Sample both times even with Catcher In.
92'							End 9-20-87 Start 9-21-87
93'				93 ? — — — ? — — — ?	?		Approximate depth of material change.
94'							
95'				Very Dark Gray, fine gravel with coarse sand (10YR 3/1)	GW		
96'	S 07128	18 29 36	24"	95.5 Dense gray fine to coarse gravel (2.5 Y N5) 95.5	GW GM		Background levels 1350
				96.25 Very dense, grayish-brown silty sand moist. 96.25 (Color: 2.5 Y, 5/2)			
97'							
98'							Sand pump quit sucking up sand. Sample Taken.
99'							
100'	S 07129	17 ~~13~~ 20	18"	Very Stiff, dark gray clay moist (Color: 5 Y, 4/1)	CL	3.5	Background levels (1500)
101'							
102'				— — ? — — ? — — ? — —	?		
103'							
104'							
105'							

NOTES: Background Levels 9-21-87 $\gamma\beta$ = 40-80 cpm, α = 0, hnu = 0.

000314

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FERNALD RI/FS

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VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602	PROJECT NAME: FMPC RI/FS	
BORING NUMBER: ~~3024~~ 3024	COORDINATES: See p1	DATE: 9-22-87
ELEVATION: See p1	GWL: Depth 52' Date/Time 9-21/1700	DATE STARTED: 9-14-87
ENGINEER/GEOLOGIST: B. Dunning	Depth 64.5' Date/Time 9-22/1550	DATE COMPLETED: 10-3-87
DRILLING METHODS: Cable Tool	92' 9-22/1715	PAGE 8 OF 11

DEPTH (FT.)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER 6"	RECOVERY (Inch)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
105'							
106'	S 07130	6 7 14	6"	Medium dense, grayish-brown fine grain, well graded, silty Sand (Color: 2.5 Y, 5/2)	SM		Background levels (1620)
107'							End 9-21-87
108'							
109'							
110'							
111'	S 07131	6 10 11	12"	111.4' Soft, dark gray silty clay (Color: 5Y, 4/2) 111.4'	CL		Background levels (1035)
112'						~~.95~~ .5	
113'							Picking Up clay On hammer 113'-115'
114'							
115'				Medium Stiff, Olive-Gray Clay (5Y, 4/2) 115.5'			
116'	S 07132	9 14 18	18"	Very Stiff, olive gray clay (Color: 5Y, 4/2)	CL	.75 3.5	Background levels (1338)
117'							Casing Driven Down To 120'
118'							
119'							
120'							

NOTES: Background Levels 9-22-87: $\gamma\beta$ = 40-80 cpm, α = 0, hnu = 0

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FERNALD RI/FS

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602	PROJECT NAME: FMPC RI / FS	
BORING NUMBER: BB 1-5-59 324 3024	COORDINATES: see p1	DATE: 9/22 & 9/23/87
ELEVATION: see p1	GWL: Depth 64.5' Date/Time 9-22/1550	DATE STARTED: 9-14-87
ENGINEER/GEOLOGIST: B. Dunning	Depth 92' Date/Time 9-22/1715	DATE COMPLETED: 10-3-87
DRILLING METHODS: CABLE TOOL	75' 9-23/1750	PAGE 9 OF 11

DEPTH (Ft.)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER 6"	RECOVERY (Inch)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
120'							
121'	S 07133	2 3 6	18"	Medium Stiff, gray (5Y, 5/1) to Olive gray (5Y, 5/2) clay with some fine gravel wet	CL		Moderately gravelly Sand. Background levels (1650)
122'							End Day 9-22-87 Start Day 9-23-87
123'				123.5'			
124'							Noticed Sand & Gravel On Sticking On Hammer
125'							
126'	S 07134	27 17 10	6"	Medium Dense, Olive-~~Gray~~-Brown, fine to coarse gravel wet (Color: 2.5Y, 4/4)	GP		Scanned - Background Readings Only (1025)
127'							
128'							
129'							
130'							
131'	S 07135	18 33 19	5"	Very Dense, Olive-Brown Fine Gravel (Color: 2.5Y, 4/4) wet	GW		Background levels. Spoon Plugged with light Olive-brown carbonate rock fragment (25Y, 5/4) (1108)
132'							132' Drilling became more difficult Lithology Change
133'							
134'							Drilled Down To 135' & Sand blew In To 124'
135'							Drive 10" Cog to 140'

NOTES: Water Level checked at 1550, 9-22-87 when temporary Casing was at 121'.

Background Levels 9-23-87: $\gamma\beta$ = 40-120 cpm hnu = 0, α = 0

Smelled Some Brackish, Semi-Petroliferous odor observed at 125

Hole Monitored with LLE & hnu. No Readings Detected.

000319

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FERNALD RI/FS

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VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602	PROJECT NAME: FMPC RI/FS	
BORING NUMBER: BB 5-3 ~~3-24~~ 3024	COORDINATES: See P1	DATE: 9-24-87 / 9-29-87
ELEVATION: See P1	GWL: Depth 66.4' Date/Time 9-24/1245	DATE STARTED: 9-14-87
ENGINEER/GEOLOGIST: B. Dunning	Depth 58.5 Date/Time 9/29/0900	DATE COMPLETED: 10-3-87
DRILLING METHODS: CABLE TOOL		PAGE 10 OF 11

DEPTH (Ft.)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER (6")	RECOVERY (In.)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
135'							End Day 9-23-87
136'		#1 #2 11 5 13 7 14 10	0"				Start Day 9-24-87 Attempted twice to obtain sample.
137'							Sand Pump indicates Fine Sand
138'							
139'							Drilled Down to 140', but sand blew in to 135'. Drive Csg to 145'
140'		#1					
141'	S 07136	50-(4") #2 45 (3")-50	12"	Very Dense, very dark grayish-brown sand & fine gravel wet (Color: 2.5 Y, 3/2)	SW		B.G. Felt we hit a Rock (1115)
142'							
143'							Hammer Driving Hard Feels like we were pounding a large rock.
144'							
145'							End Day 9/24
146'	S 07137	38 (3") 50	12"	Very Dense, very dark brownish-gray sand with fine gravel, generally as above (Color: 2.5 Y, 3/2) wet	SP		Start Day 9/29 Background - Scanned. (1050)
147'							
148'							
149'							
150'							

NOTES: Water level with Csg at 145' 9-24 @ 1245 = 66.4'
" " " " " " 9-29 @ 58.5' after well sitting 4 days

Background Levels 9/29/87: $\gamma\beta$ = 60-120
α = 0
hnu = 0

000317

402-11-86

5644

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2nd Key In		
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KKD 2/4/89

FERNALD RI/FS

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602	PROJECT NAME: FMPC RI/FS	
BORING NUMBER: BB ~~3224~~ 3024	COORDINATES: See p1	DATE: 9-29-87
ELEVATION: See p1	GWL: Depth 60.7 Date/Time 9-29/1615	DATE STARTED: 9-14-87
ENGINEER/GEOLOGIST: B. Dunning	Depth 58.6 Date/Time 9-30/1340	DATE COMPLETED: 10-3-87
DRILLING METHODS: Cable Tool		PAGE 11 OF 11

DEPTH (Ft.)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER (6")	RECOVERY (in.)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
150							
151'	S 07138	20 37 (4")50	14"	Medium Dense, Gray Silty Sand grading downwards into: (Color 2.5 Y, N5/) 150.6 150.6	SM		Scanned - Background levels (1415)
				Very Dense, black fine gravel wet (Color: 2.5 Y, N2/)	GW		
152'							
153'							
154'							
155'							BOB.
156'	S 07139	7 22 45	18"	Very Dense, Dark gray coarse Sand w/ some fine gravel wet (Color: 5 Y, 4/1)			Scanned - Background levels (1540)
157'				Bottom of Borehole (10") = 155' Bottom of last Split Spoon = 156.5'			
158'							
159'							
160'							

NOTES: Blow Sand coming into hole with Csg @ 150'. to a depth of 147'
10" Csg Driven to 155' to obtain 150-151.5' Split Spoon Sample.

Used a total of 500 gallons to Drill Entire Well.

000318

5644

White out corrections were made by Brad Dunning at the time the form was completed.
WPK 4/23/88

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DMC
KKA 2/4/5

FERNALD RI/FS

PIEZOMETER INSTALLATION SHEET

PROJECT NAME FMPC RI/FS FIELD ENG./GEO. B. Dunning DATE 10/16/87
PROJECT NO. 602 CHECKED BY RM Zollinger DATE 2/6/89
BORING NO. BB1589 ~~324~~ 3024
PIEZOMETER NO. ~~324~~ 3024 DATE OF INSTALLATION 10-3-87

BOREHOLE DRILLING

DRILLING METHOD Cable Tool
DRILLING FLUID (S) USED:
FLUID H_2O FROM 0 TO 155'
FLUID NA FROM NA TO NA

TYPE OF BIT Hammer
CASING SIZE (S) USED:
SIZE 10" FROM 0' TO 155'
SIZE NA FROM NA TO NA

PIEZOMETER DESCRIPTION

TYPE Stainless Steel MONITORING WELL
DIAMETER OF PERFORATED SECTION 4"
PERFORATION TYPE:
SLOTS ☐ HOLES ☐ SCREEN ☒
AVERAGE SIZE OF PERFORATIONS .010"
TOTAL ~~PERFORATED AREA~~ SCREEN LENGTH 10'

RISER PIPE MATERIAL Stainless Steel (316)
RISER PIPE DIAMETERS:
O.D. 4 3/8" I.D. 4"
LENGTH OF PIPE SECTIONS 10'
JOINING METHOD Flush Joint Threaded

PROTECTION SYSTEM

RISER PROTECTIVE PIPE LENGTH 5'
PROTECTIVE PIPE ~~Ø~~ I.D. 10"

OTHER PROTECTION LOCKING CAP AND LOCK

ITEM	DISTANCE ABOVE/BELOW GROUND SURFACE (Ft.)		ELEVATION (FT) MSL	
TOP OF RISER PIPE	+ 2.4'		582.3	
GROUND SURFACE	0.0		579.9	
BOTTOM OF PROTECTIVE PIPE	- ~~2.4~~ 2.6' RMZ 2/6/89		577.3	
BOREHOLE FILL MATERIALS:				
GROUT/SLURRY	TOP 0	BOTTOM 80'	TOP 579.9	BOTTOM 497.3
BENTONITE	TOP 80'	BOTTOM 92'	TOP 497.3	BOTTOM 485.3
SAND	TOP 92	BOTTOM 110'	TOP 485.3	BOTTOM 467.3
BENTONITE PELLETS	TOP 110'	BOTTOM 125'	TOP 467.3	BOTTOM 452.3
PERFORATED SECTION	TOP 97.5'	BOTTOM 107.5'	TOP 482.4	BOTTOM 472.4
PIEZOMETER TIP	~~NA~~ ~110'		467.3	
BOTTOM OF BOREHOLE	~~155.5~~ 155.0' WPK 4/24/88		422.3	
GWL AFTER INSTALLATION	58'		521.9	

000319

WAS THE PIEZOMETER FLUSHED AFTER INSTALLATION? YES ☐ NO ☑
WAS A SENSITIVITY TEST PERFORMED ON THE PIEZOMETER? YES ☐ NO ☑

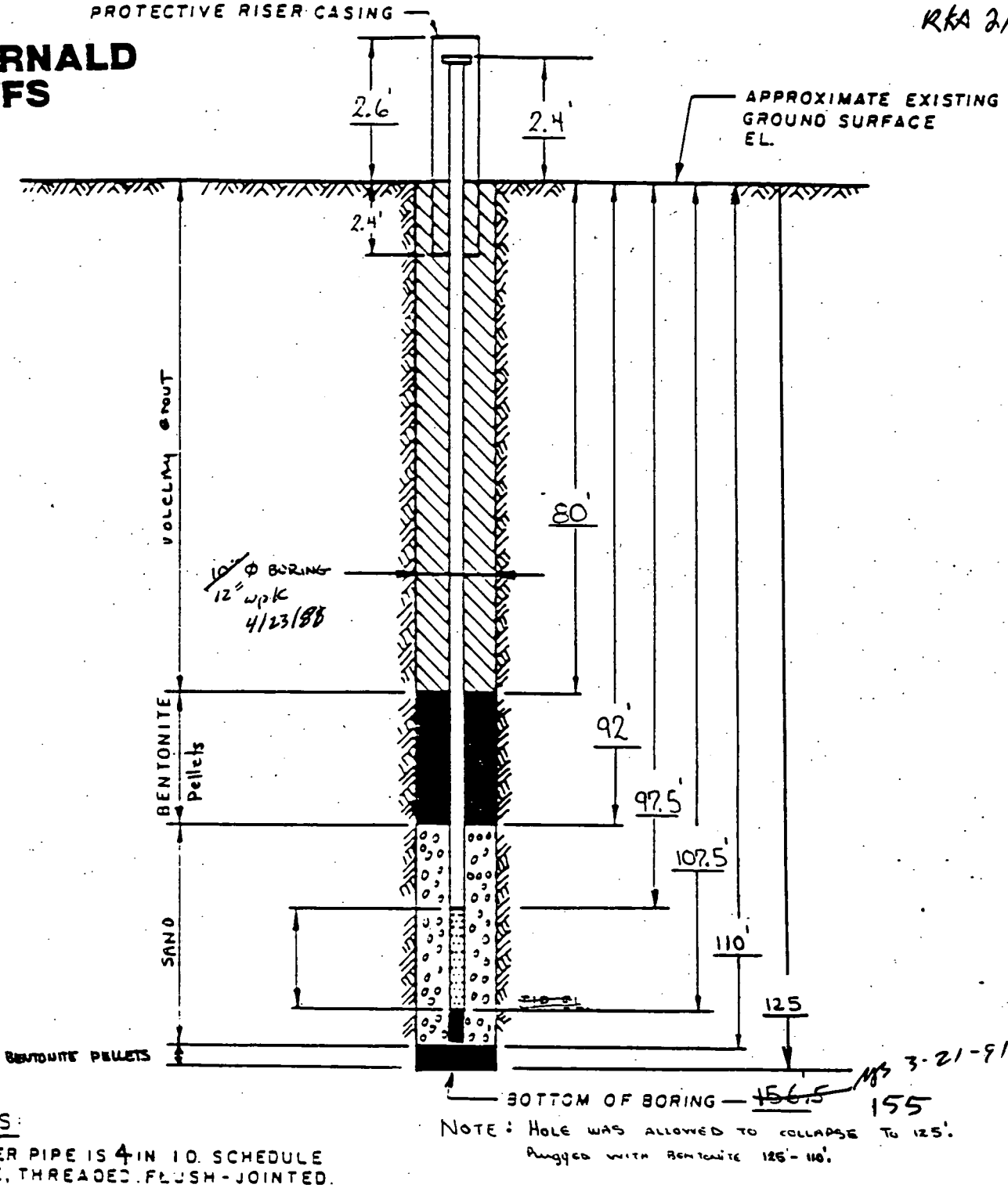
REMARKS Hole was drilled to 155' to clearly define stratigraphy. Casing was pulled up to 125' and sand-hole was allowed to collapse in. The well was then plugged from 125' to 110' with bentonite to insure that no communication through "Blue Clay" was present. Well was then set from 110'.

5644

WELL # ~~324~~ 3024 OB#-5-

RKA 2/4/89

FERNALD RI/FS



NOTE: HOLE WAS ALLOWED TO COLLAPSE TO 125'. Plugged with Bentonite 125'-110'.

NOTES:

1. RISER PIPE IS 4 IN I.D. SCHEDULE PIPE, THREADED, FLUSH-JOINTED.
2. SCREEN IS 4 IN I.D SS PIPE CONTINUOUS SLOT SCREEN (0.010 IN. SLOT SIZE).
3. LOWER END OF SCREEN IS CAPPED.
4. ELEVATION OF WATER LEVEL
5. WATER LEVEL READING ON

white out corrections were made by B. Dunning at the time the form was completed

WPK
4/23/88

INSTALLATION DETAILS
MONITORING WELL ~~324~~ 3024 RMG 2/6/89

PREPARED FOR

FMPC RI/FS

DRAWING NUMBER

CHECKED BY

APPROVED BY

DR BY

000320

MONITORING WELL
3043

White correction was made by Brad Dunning at the time this form was completed. DG 2/4/89 5644 WPC

FERNALD RI/FS

REVIEWED BY QA DG DATE AUG 16 1991

4/23/88 WPC RIG # 1

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602	PROJECT NAME: FMPC RI/FS		Task 3.2
BORING NUMBER: BB 1-5-87 ~~343~~ 3043	COORDINATES: N 481 770.91 E 1377600.55	DATE: 12/4/87	
ELEVATION: 570.50 Conc.	GWL: Depth Date/Time	DATE STARTED: 12/4/87	
ENGINEER/GEOLOGIST: B. Dunning	Depth Date/Time	DATE COMPLETED: 12/9/87	
DRILLING METHODS: Cable Tool		PAGE 1 OF 9	

DEPTH FT.	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER 6"	RECOVERY (Inch)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
1	S 0 7 6 1 4	2 6 7	12"	Very soft, very dark grayish-brown clay (2.5 Y, 3/2). Silty & Dry with rootlets	OL	<.5	Hnu = 0 α = 0 γB = 20-40 cpm. Time Sample Collected (0800)
2	S 0 7 6 1 5	5 7 8	12"	Very stiff, grayish-brown clay (2.5 Y, 5/2) Damp	CL	3.5	Hnu = 0 α = 0 γB = 20-50 cpm (0810)
3 4	S 0 7 6 1 6	11 11 14	12"	Stiff, light olive-brown clay. (2.5 Y, 4/4) with a trace of very fine gravel. Damp	CL	2.0	Hnu=0 α = 0 γB = 20-50 cpm. (0835)
5 6	S 0 7 6 1 7	9 11 10	15"	Soft, light olive-brown clay (2.5 Y, 5/6) Silty. & Damp	CL	.50	Hnu=0 α = 0 γB = 20-40 cpm. (0840)
7	S 0 7 6 1 8	8 11 7	9"	Very soft, light olive-brown clay (2.5 Y, 5/6) Fair amount of moisture noted.	CL	<.25	Hnu=0 α = 0 γB = 20-40 cpm. (0850)
8 9	S 0 7 6 1 9	10 10 10	18"		CL		a/a (1055)
10	S 0 7 6 2 0	7 8 11	18"	Medium stiff, olive-yellow clay (2.5 Y, 6/8) Damp 10' 10'; Stiff Olive-brown clay (2.5 Y, 4/4) Moist 10.5' 10.5'	CL	1.0	a/a (1105)
11 12	S 0 7 6 2 1	12 11 13	18"	Medium stiff, light olive-brown clay (2.5 Y, 5/6) Dry 11' 11'; Stiff, dark grayish-brown clay (2.5 Y, 4/2) 11.7'	CL	1.5	Hnu=0 α = 0 γB = 20-50 cpm. (1120)
13	S 0 7 6 2 2	3 7 4	18"	Medium dense, light olive brown silty sand (2.5 Y, 5/6) Damp 12.5' 12.5'; Medium dense, grayish-brown sand (2.5 Y, 5/2) 13'; Medium dense, light olive-brown sand (2.5 Y, 5/6)	SM; SC; SP		Hnu=0 α = 0 γB = a/a (1130)
14 15	S 0 7 6 2 3	11 13 17	18"	Very stiff, dark gray clay (5 Y, 4/1) with a trace of fine gravel Damp	CL	2.0	Hnu=0 α=0 γB = a/a (1140)

NOTES:

I.) Drilling Contractor : Pennsylvania Drilling
DRILLER : Tim Harris
HELPER : Craig Coulter

II.) Background Measurements
A.) Hnu = 0 B) α = 0 C) γB = 40-60 cpm.

III. WATER USED 12/4
20 gallons.

000322

IV. a/a = As Above

V) Samples via Munsell Colors, ASTM

402-11-88

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FERNALD RI/FS

DG 2/4/89

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VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602	PROJECT NAME: FMPC RI/FS		TASK 3.2
BORING NUMBER: 88-5-89 ~~3143~~ 3043	COORDINATES: See p1		DATE: 12/4 & 12/5/87
ELEVATION: See p1	GWL: Depth	Date/Time	DATE STARTED: 12/4/87
ENGINEER/GEOLOGIST: B. Dunning	Depth	Date/Time	DATE COMPLETED: 12/9/87
DRILLING METHODS: Cable Tool			PAGE 2 OF 9

DEPTH (Ft.)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER 6"	RECOVERY (Inch)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
15							
16	S 0 7 6 2 4	7 8 12	18"	Stiff, dark grayish-brown (2.5Y, 4/2) clay. Slightly silty. Dry	CL	1.5	Hnu = 0 α = 0 γβ = 20-60 c.p.m. (1540)
17	S 0 7 6 2 5	7 8 11	12"	17.5' 17.5'			Hnu = 0 α = 0 γβ = 20-60 c.p.m. (1550)
18				Medium dense, dark gray sand (5Y, 4/1), silty with some gravel	SP	–	
19	S 0 7 6 2 6	5 9 9	18"	Stiff, olive gray clay (5Y, 5/2) with a trace of gravel. Dry	CL	1.55	End of Day 12-4-87 Start Day 12-5-87 Hnu = 0 α = 0 γβ = 50 c.p.m. (0830)
20	S 0 7 6 2 7	14 22 27	15"				Hnu = 0 α = 0 γβ = 40-60 c.p.m. (0841)
21							
22	S 0 7 6 2 8	8 11 16	6"	Medium dense, olive gray clayey gravel (5Y, 5/2), with some coarse gravel and rock fragments. Moist	GC	–	Hnu = 0 α = 0 γβ = 40-60 c.p.m. (0944)
23	S 0 7 6 2 9	15 37 29	18"	Hard, dark gray clay (5Y, 4/1) with a trace of fine to coarse gravel Damp.	CL	4.5+	Hnu = 0 α = 0 γβ = 20-50 (0950)
24							
25	S 0 7 7 7 0	17 22 31	18"	Stiff, gray clay (5Y, 5/1) with a trace of gravel. Dry 25.3' 25.3'		1.5	Hnu = 0 α = 0 γβ = 20-40 c.p.m. (1024)
26	S 0 7 7 7 1	17 24 30	6"	Very dense, gray to dark gray gravel (5Y, 5/1 to 4/1), clayey in parts. Wet.	GC	–	a/a (1035)
27				27.5' 27.5'			
28	S 0 7 7 7 2	5 17 17	18"	Stiff, dark gray clay (5Y, 4/1) with a trace of gravel	CL	1.5-2.0	a/a (1045)
29	S 0 7 7 7 3	4 11 17	15"	Stiff, dark gray clay (2.5Y, N/4) with a trace of gravel	CL	1.5	a/a (1400)
30							

NOTES: 1.) Background Readings for 12/5/87
4) Hnu = 0
2) α = 0
3.) γβ = 20-60 c.p.m.

II.) Water Used 12/5/87 = 37 gallons

III.) a/a = as above

000323

402-11-86

FERNALD RI/FS

REVIEWED BY QA KG DATE AUG 16 1991

DLG 5644 2/4/89

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VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602	PROJECT NAME: FMPC RI / FS	
BORING NUMBER: BO 5-89 ~~3475~~ 3043	COORDINATES: See #1	DATE: 12/5/87 & 12/7/87
ELEVATION: See #1	GWL: Depth Date/Time	DATE STARTED: 12/4/87
ENGINEER/GEOLOGIST: B. Dunning	Depth Date/Time	DATE COMPLETED: 12/9/87
DRILLING METHODS: Cable Tool		PAGE 3 OF 10

DEPTH (Ft.)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER 6"	RECOVERY (Inch)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
30							
31	S 0774	10 13 18	18"	Medium stiff, dark gray clay (2.5 Y, N 4/) with a trace of fine gravel.	CL	.75	Hnu = 0 α = 0 γβ = 40-60 c.p.m. (1405)
32	S 0775	10 14 17	16"	32' Very stiff, dark yellowish-brown clay (10 YR, 4/4) 32'	CL	3.75	Hnu = 0 α = 0 γβ = 40-60 c.p.m. (1420)
33	S 0776	11 14 15	18"	33' 33.2 Dark gray, dense, fine gravel (2.5 Y, N 4) 33.2 33'	GW		Hnu = 0 α = 0 γβ = 40-60 c.p.m. (1440)
34				Medium dense, yellowish-brown sand (10 YR, 5/8) with a trace of fine gravel. Dry.			
35							
36				Upper Sand & Gravel contact @ 33.2 Ft.			Began collecting 5' Sample
37							
38							
39							
40				Very dense, multicolored brown, 40.5 loose, fine gravel 40.5			
41	S 0777	10 22 33	18"	Very dense, yellowish-brown sand (10 YR, 5/6) with a trace of fine gravel. Dry			Hnu = 0 α = 0 γβ = 40-60 c.p.m. (1657)
42							
43							
44							
45							

NOTES:
I.) Background Measurements 12/7/87
Hnu = 0
α = 0
γβ = 20-60 c.p.m.

II.) Water Used 12/7/87 = 23 gallons

000324

402-11-86

5644 206

FERNALD RI/FS

REVIEWED BY QA KC DATE AUG 16 1991

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VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602	PROJECT NAME: FMPC RI/FS		
BORING NUMBER: BO 1-5-91 ~~343~~ 3043	COORDINATES: Incpl	DATE: 12/9/87	
ELEVATION: Incpl	GWL: Depth / Date/Time	DATE STARTED: 12/4/87	
ENGINEER/GEOLOGIST: B. Dunning	Depth / Date/Time	DATE COMPLETED: 12/9/87	
DRILLING METHODS: Cable Tool		PAGE 4 OF 9	

DEPTH (Ft.)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER (6")	RECOVERY (Inch)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS (12-7-87)
45							
46	S 0 7 7 8	11 28 30	16"	Very dense, yellowish-brown sand (10YR 5/6). Damp	SW		Hnu = 0 α = 0 γB = 20-50 c.p.m. 0940
47							
48							
49							
50	S 0 7 7 9	12 22 26	18"	Dense, yellowish-brown sand as above. Damp but not saturated.	SW		Hnu = 0 α = 0 γB = 30 c.p.m. 1006
51							
52							
53							
54							
55	S 0 7 7 8 0	12 23 29	18"	56' Very dense, dark grayish-brown (2.5Y, 4/2) sand gray sand fairly moist 56'	SW		Hnu = α = γB = 1032
56							
57							
58							
59							
60							

gray

NOTES: Background Measurements for 12/8/87
1.) Hnu = 0
2.) α = 0
3.) γB = 20-50 c.p.m.

000325

402-11-86

FERNALD RI/FS

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VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602	PROJECT NAME: FMPC RI/FS		
BORING NUMBER: ~~343~~ 3043 BB 1-5-89	COORDINATES:	DATE: 12/7/87	
ELEVATION:	GWL: Depth Date/Time	DATE STARTED: 12/4/87	
ENGINEER/GEOLOGIST: B. Dunning	Depth Date/Time	DATE COMPLETED: 12/9/87	
DRILLING METHODS: Cable Tool		PAGE 5 OF 9	

DEPTH	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER 6"	RECOVERY (")	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
60							
61	S 0 7 7 8 1	9 17 26	16"	Dense, dark grayish-brown (2.5Y, 4/2) sand w/some fine gravel Moist, but questionable about being wet.	SW		Hnu = 0 α = 0 γβ = 40-50 c.p.m. 1108
62							
63							
64							
65	S 0 7 7 8 2	9 14 17	18"	Dense, dark grayish-brown (10 YR, 4/2) coarse sand. Appears wet. 66.2	SW		Hnu = 0 α = 0 γβ = 40-60 c.p.m. 1316
66				Dense, olive-gray (5Y, 4/2) fine sandy gravel	GW		
67							
68							
69							
70	S 0 7 7 8 3	50 50/4"	10"+	Very dense, dark grayish-brown sand (2.5Y, 4/2) WET	SW		Hnu = 0 α = 0 γβ = 40-60 c.p.m. 1456
71				Very dense, dark gray (5Y, 4/1) clayey gravel	GC		
72							
73							
74							
75							

NOTES:

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402-11-86

5644
FERNALD RI/FS

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VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602	PROJECT NAME: FMPC RI/FS		
BORING NUMBER: ~~3443~~ 3043 BB 1-5-89	COORDINATES: See PI	DATE: 12/7 & 12/8/87	
ELEVATION: See PI	GWL: Depth 78' Date/Time 12/8/87 - 0800	DATE STARTED: 12/4/87	
ENGINEER/GEOLOGIST: B. Dunning	Depth Date/Time	DATE COMPLETED: 12/9/87	
DRILLING METHODS: Cable Tool		PAGE 6 OF 9	

DEPTH (Ft.)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER (6")	RECOVERY (Inch)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
75							
76	S 0 7 7 8 4	19 39 50	18"	Very dense, very dark gray sand with some fine to coarse gravel (5Y, 3/1)	SP		Hnu = 0 α = 0 γβ = 40 c.p.m. 1621
77							Had to drive casing to 80' in order to obtain 75-76.5 & 80-81.5' Samples
78							
79							
80	S 0 7 7 8 5	10 13 18	14"	Dense, multicolored (brown, grays, white, black) loose poorly graded fine to coarse gravel	GP		Hnu = 0 α = 0 γβ = 40 c.p.m. 1648
81							
82							End of Day 12/7/87 Start Day 12/8/87
83							
84							
85	S 0 7 7 8 6	18 39 50/2"	18"	multicolored gravel, gen a/a	GW		Hnu = 0 α = 0 γβ = 30 c.p.m. 0845
86				Very dense, dark gray silty to clayey gravel (5Y, 4/1)	GM		
87							
88							
89							
90							

NOTES: Background 12/8/87

Hnu = 0

α = 0

γβ = 30 - 60 c.p.m.

000327

402-11-88

FERNALD RI/FS

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VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602-3-2	PROJECT NAME: FMPC RI/FS	
BORING NUMBER: BB 1-5-87 3143 3043	COORDINATES: see pl	DATE: 12/8/87
ELEVATION: see pl	GWL: Depth Date/Time	DATE STARTED: 12/4/87
ENGINEER/GEOLOGIST:	Depth Date/Time	DATE COMPLETED: 12/9/87
DRILLING METHODS:		PAGE 7 OF 9

DEPTH (Ft.) 90'	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER (6")	RECOVERY (Inch)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
91	S 0 7 7 8 7	7 17 29	16"	Dense, dark grayish-brown (2.5Y, 4/2) sand with some fine gravel	SW		Hnu = 0 α = 0 γB = 40 c.p.m. 1006
92							
93							
94							
95	S 0 7 7 8 8	17 25 35	18"	Very dense, dark grayish-brown (2.5Y, 4/2) sand	SW		Hnu = 0 α = 0 γB = 40-50 c.p.m. 1113
96							
97							
98				WET			
99							
100	S 0 7 7 8 9	23 35 38		Very dense, dark grayish-brown sand (a/a). 100.8			Hnu = 0 α = 0 γB = 40-60 c.p.m. 1187
101				Very dense, dark grayish-brown silty sand. (2.5Y, 4/2)			
102							
103							
104							
105							

NOTES:

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FERNALD RI/FS

REVIEWED BY QA [illegible] DATE AUG 1 [illegible]

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VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602	PROJECT NAME: FMPC RI/FS TASK 3.2	
BORING NUMBER: BB 1-5-89 ~~3-43~~ 3043	COORDINATES: Sept	DATE: 12/8/87
ELEVATION: Earth	GWL: Depth 68' Date/Time 12-8-87/0730	DATE STARTED: 12/4/87
ENGINEER/GEOLOGIST: B.D.	Depth Date/Time	DATE COMPLETED: 12/9/87
DRILLING METHODS: Cable Tool		PAGE 8 OF 9

DEPTH (Ft.)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER (6")	RECOVERY (Inch)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
105							
106							While sandpumping the 105-106.5 sample was missed. Loose sand
107							
108	S 0 7 9 0	20 37 44	18"	Very dense, dark gray sand. (5Y, 4/1) silty with a trace of clay.	SM		Hnu = 0 α = 0 γB = 40 c.p.m. (1417)
109							
110							10" Casing had to be drove down to 120 Ft. inorder to obtain 115' Split Spoon sample Blow Sand.
111							
112							
113							
114							
115	S 0 7 9 1	1 2 9	12"	Medium dense, bluish-green type of sand (No Muncell color chart correlation). Silty and slightly clayey.			Hnu = 0 α = 0 γB = 30 c.p.m. (1657)
116							
117							Split Spoon began to sink once it was on bottom. (Strap line depth.) 116.5' End of Day 12/8/87 Start of Day 12/9/87
118							
119	S 0 7 9 2	7 4 12	18"	Medium dense, bluish-green sand with some gravel. very clayey.	SC		Hnu = 0 α = 0 γB = 30-40 c.p.m. (1055)
120							

NOTES: I) Background Measurements 12/9/87 No Water added to hole 12/8 or 12/9

1.) Hnu = 0

2.) α = 0

3.) γB = 20-50 c.p.m.

000329

402-11-86

FERNALD RI/FS

DLG 5647
2/4/89

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VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602	PROJECT NAME: FMPC RI/FS TASK 8.2	
BORING NUMBER: BB 3043	COORDINATES:	DATE: 12/9/87
ELEVATION:	GWL: Depth 56.7' Date/Time 12-17-87/1000	DATE STARTED: 12/4/87
ENGINEER/GEOLOGIST: B. Dunning	Depth Date/Time	DATE COMPLETED: 12/9/87
DRILLING METHODS: Cable Tool		PAGE 9 OF 9

DEPTH (Ft.)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER (6")	RECOVERY (Inch)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
120				120' Medium dense, bluish-green to dark olive-gray clayey gravel. (5Y, 3/2). 120'	GC		Could not get below casing depth without blow sand coming into borehole (120'-) Had to catch sample @ 119'.
121							
122							
123							
124							
125	S 0 7 9 3	2 2 3	18"	Loose, olive-gray silty sand 125.6' (5Y, 5/2) 125.6'			Hnu = 0 α = 0 γβ = 40 cpm. (1336)
126				Soft, "blue-gray" clay. (No Munsell color correlation) closest correlation ≈ (5Y, 4/1).		<1.0	
127							
128				— Bottom of Borehole @ 126.5' —			
129							
130							
131							
132							
133							
134							
135							

NOTES: Total Water Added To Well To Drill. = 80 gallons

000330

402-11-86

5644

FERNALD RI/FS

REVIEWED BY QA DATE AUG 16 1991

	Initial	Date
1st Key In		
2nd Key In		
Hard Copy Verification		

PIEZOMETER INSTALLATION SHEET

PROJECT NAME FMPC RI/FS FIELD ENG./GEO. B. Dunning DATE 12/11/87
PROJECT NO. 602 Task 3.2 CHECKED BY R. Galbraith DATE 2/6/89
BORING NO. ~~345~~ 3043 AB 1-5-89
PIEZOMETER NO. NA 3043 DATE OF INSTALLATION 12/10/87

BOREHOLE DRILLING

DRILLING METHOD Cable Tool
DRILLING FLUID (S) USED:
FLUID Water FROM 0 TO 126.5'
FLUID NA FROM NA TO NA

TYPE OF BIT Hammer - Type
CASING SIZE (S) USED:
SIZE 10" FROM 0' TO 125'
SIZE NA FROM NA TO NA

PIEZOMETER DESCRIPTION

TYPE Stainless Steel
DIAMETER OF PERFORATED SECTION 4" Ø
PERFORATION TYPE:
SLOTS ☐ HOLES ☐ SCREEN ☒
AVERAGE SIZE OF PERFORATIONS 0.01"
TOTAL ~~PERFORATED AREA~~ SCREEN LENGTH 10'

RISER PIPE MATERIAL Stainless Steel
RISER PIPE DIAMETERS:
O.D. 4 3/8" I.D. 4"
LENGTH OF PIPE SECTIONS 10' & 2½'
JOINING METHOD Flush Joint Threaded

PROTECTION SYSTEM

RISER PROTECTIVE PIPE LENGTH 5 Ft.
PROTECTIVE PIPE Ø.D. 10 Inches

OTHER PROTECTION LOCKING CAP WITH LOCK

ITEM	DISTANCE ABOVE BELOW GROUND SURFACE (FT)		ELEVATION (FT) MSL	
TOP OF RISER PIPE	+ 2.5'		580.2	
GROUND SURFACE	0.0		577.7	
BOTTOM OF PROTECTIVE PIPE	2.4'		575.3	
BOREHOLE FILL MATERIALS:	(Surface)			
GROUT/SLURRY	TOP 0'	BOTTOM 94'	TOP 577.7	BOTTOM 483.7
BENTONITE	TOP 94'	BOTTOM 98'	TOP 483.7	BOTTOM 479.7
SAND	TOP 98'	BOTTOM 120'	TOP 479.7	BOTTOM 457.7
GRAVEL	TOP NA	BOTTOM NA	TOP N/A	BOTTOM N/A
PERFORATED SECTION	TOP 107.6'	BOTTOM 117.6'	TOP 470.0	BOTTOM 460.1
PIEZOMETER TIP	120'		457.7	
BOTTOM OF BOREHOLE	~~120'~~ 126.5 RWG 2/6/89		451.2	
GWL AFTER INSTALLATION	56.7' TOC WPK 2/24/89		521.0	

WAS THE PIEZOMETER FLUSHED AFTER INSTALLATION? YES ☐ NO ☑
WAS A SENSITIVITY TEST PERFORMED ON THE PIEZOMETER? YES ☐ NO ☑

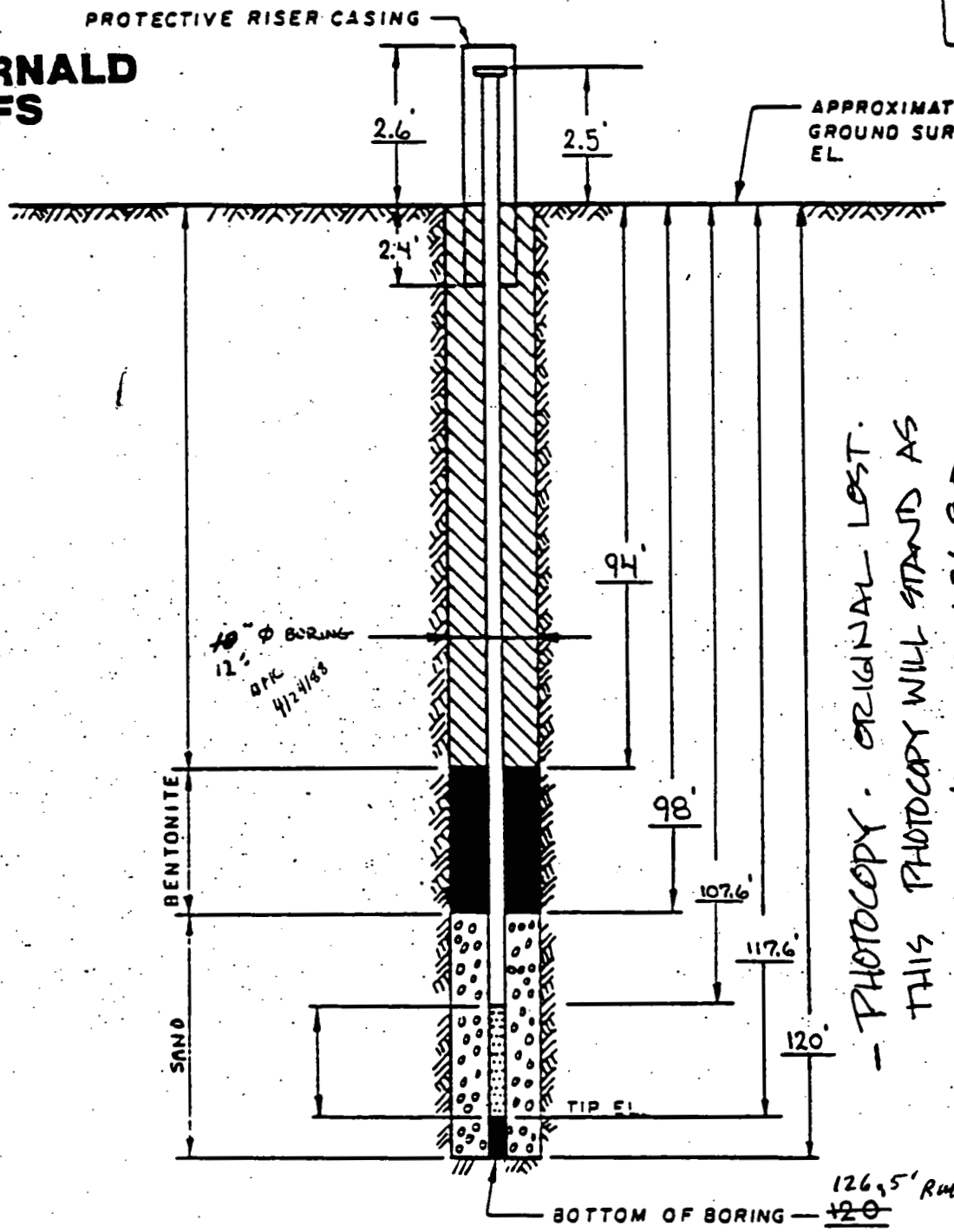
REMARKS This well was drilled to a total depth of 126.5' ~~thus~~ penetrating ~~into~~ the "Blue Clay". It was allowed to collapse to 120' and the well was completed from that depth. 2/6/89

000331

REVIEWED BY QA 66 DATE AUG 1 6 1991 5644 # 3 BOREHOLE - MONITOR WE

FERNALD RI/FS

343 3043 BB 1-



- PHOTOCOPY. ORIGINAL LOST. THIS PHOTOCOPY WILL STAND AS THE ORIGINAL. MR 1-21-90

NOTES:

1. RISER PIPE IS 4 IN I.D. SCHEDULE PIPE, THREADED, FLUSH-JOINTED.
2. SCREEN IS 4 IN I.D SS PIPE CONTINUOUS SLOT SCREEN (0.010 IN. SLOT SIZE).
3. LOWER END OF SCREEN IS CAPPED.
4. ELEVATION OF WATER LEVEL
5. WATER LEVEL READING ON

NOTE: Well was drilled to 126.5' to tag the "Blue clay" then allowed to collapse in to 120'.

INSTALLATION DETAILS
MONITORING WELL ~~343~~ 3043

PREPARED FOR BB 1-5-89

FMPC RI/FS

DRAWING NUMBER

DRAWN BY

CHECKED BY

APPROVED BY

000332

MONITORING WELL
3063

WELL LOG AND DRILLING REPORT

5644
3063

ORIGINA

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water
Fountain Square
Columbus, Ohio 43224

NO CARBON PAPER NECESSARY– SELF-TRANSCRIBING

512160

COUNTY Butler TOWNSHIP Ross SECTION OF TOWNSHIP 33

OWNER James Dill ADDRESS [redacted]

LOCATION OF PROPERTY [redacted]

CONSTRUCTION DETAILS

Casing diameter 6" Length of casing 77'

Type of screen Cock brass 3C Length of screen 3'

Type of pump

Capacity of pump

Depth of pump setting

Date of completion

BAILING OR PUMPING TEST
(specify one by circling)

Test rate 2.5 gpm Duration of test 4

Drawdown 2' ft Date 7/23/77

Static level (depth to water) 47'1"

Quality (clear, cloudy, taste, odor)

Pump installed by

WELL LOG*

Formations: sandstone, shale, limestone, gravel, clay	From	To
Yellow clay & gravel	0 ft	9 ft
Dirty gravel	9	20
Sand & gravel	20	42
Fine sandrock	42	58
Sand & gravel	58	80

SKETCH SHOWING LOCATION

Locate in reference to numbered state highways, street intersections, county roads, etc.

[redacted]

DRILLING FIRM Wm Crane DATE 11/24/77

ADDRESS Box 33 Shandon, O SIGNED [signature]

*If additional space is needed to complete well log, use next consecutive numbered form.

MONITORING WELL
3096

FERNALD RI/FS

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602 32	PROJECT NAME: FERNALD RI/FS	
BORING NUMBER: 396	COORDINATES:	DATE: 08-10-88
ELEVATION: 580.0FT	GWL: Depth Date/Time	DATE STARTED: 08-02-88
ENGINEER/GEOLOGIST: M SLUGARSKI	Depth Date/Time	DATE COMPLETED: 08-10-88
DRILLING METHODS: CABLE TOOL		PAGE 1 OF 1

DEPTH (FT.)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER ( )	RECOVERY ( )	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
				* SEE VISUAL CLASSIFICATION OF SOILS FOR BORING #496 FOR DESCRIPTION OF SAMPLES			
10							
20							
30							
40							
50							

NOTES: CONTRACTOR: PENNDRILL
RIG: BUCYRUS - ERIE
DRILLER: DAVE NEWMAN
ASSISTANTS: RICK BRANNAN, CRAIG COULTER

* SAMPLES ALSO SHELBY TUBE WERE COLLECTED FOR ARCHIVE PURPOSES

BACKGROUND LEVELS: HNU: 0PPM
α = 0-5CPM
β = 20-70CPM
LEL O_2 = 0 PPM LEL
20.6% O_2

WATER ADDED TO HOLE: 1000 GALLONS

000336

5644

FERNALD
RI/FS

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602 3.2	PROJECT NAME: FERNALD RI/FS	
BORING NUMBER: 396	COORDINATES:	DATE: 08-10-88
ELEVATION: 583.0 FT.	GWL: Depth Date/Time	DATE STARTED: 08-02-88
ENGINEER/GEOLOGIST: M. SLUSARSKI	Depth Date/Time	DATE COMPLETED: 08-10-88
DRILLING METHODS: CABLE TOOL		PAGE 2. OF 3

DEPTH (FT.)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER (6")	RECOVERY (")	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
70							
80							
90							
100				SHELBY TUBE PUSHED FROM 104.7 TO 106.7 FT. RECOVERED 2.0 FT. @ 1700 ON 08-06-88 — 104.7			
110				SPLIT SPOON SAMPLES COLLECTED OVER INTERVAL 106.0 FT TO 111.0 FT — 112.0 FT.			

NOTES: TOP OF UPPER CLAY LAYER : 104.7 FT.
BASE OF UPPER CLAY LAYER : [redacted] 112.0 FT

000337

FERNALD RI/FS

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602 3.2	PROJECT NAME: FERNALD RI/FS	
BORING NUMBER: 396	COORDINATES:	DATE: 08-10-88
ELEVATION: 580.0 FT.	GWL: Depth Date/Time	DATE STARTED: 08-02-88
ENGINEER/GEOLOGIST: M. SLUSARSKI	Depth Date/Time	DATE COMPLETED: 08-10-88
DRILLING METHODS: CABLE TOOL		PAGE 3 OF 3

DEPTH (FT.)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER (6")	RECOVERY ( )	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
130				SHELBY TUBE PUSHED FROM 131.5 FT TO 137.5 FT. NO "CLAY" RECOVERED. A REPRESENTATIVE SAMPLE OVER THE INTERVAL 131.5 FT TO 137.5 FT. WAS COLLECTED.			
140				BASE OF BOREHOLE @ 140.0 FT.			

NOTES: BOREHOLE WAS ALLOWED TO COLLAPSE OUTSIDE FROM 140.0 FT TO 134 FT.

5644

FERNALD RI/FS

PIEZOMETER INSTALLATION SHEET

PROJECT NAME FERNALD RI / FS
PROJECT NO. 602 3.2
BORING NO. 396
PIEZOMETER NO. 396

FIELD ENG./GEO. M SLUSARSKI DATE 08-10-88
CHECKED BY DATE
DATE OF INSTALLATION 08-08-88 TO 08-10-88

BOREHOLE DRILLING

DRILLING METHOD CABLE TOOL
DRILLING FLUID (S) USED:
FLUID WATER FROM 0.0 FT TO 140.0 FT
FLUID FROM TO

TYPE OF BIT HAMMER
CASING SIZE (S) USED:
SIZE 10" ID FROM 0.0 FT. TO 140.0 FT.
SIZE FROM TO

PIEZOMETER DESCRIPTION

TYPE MONITORING WELL
DIAMETER OF PERFORATED SECTION 4" ID
PERFORATION TYPE:
SLOTS ☐ HOLES ☐ SCREEN ☒
AVERAGE SIZE OF PERFORATIONS 0.010 IN.
TOTAL PERFORATED AREA 10.0 FT.

RISER PIPE MATERIAL STAINLESS STEEL
RISER PIPE DIAMETERS:
O.D. 4 3/8 IN. I.D. 4 IN.
LENGTH OF PIPE SECTIONS 10 FT, 2 FT.
JOINING METHOD SCREW TYPE FLUSH JOINT THREADED

PROTECTION SYSTEM

RISER PROTECTIVE PIPE LENGTH 5.0 FT.
PROTECTIVE PIPE O.D. 10 3/4 IN.

OTHER PROTECTION LOCKING CAP

ITEM	DISTANCE ABOVE/BELOW GROUND SURFACE (FT)		ELEVATION ( )	
TOP OF RISER PIPE	2.0 FT.			
GROUND SURFACE	0.0			
BOTTOM OF PROTECTIVE PIPE	2.5 FT.			
BOREHOLE FILL MATERIALS:				
GROUT/SLURRY (VOLCLAY)	TOP 0.0 FT.	BOTTOM 112.0 FT	TOP	BOTTOM
BENTONITE	TOP	BOTTOM	TOP	BOTTOM
SAND (10-20)	TOP 112.0 FT	BOTTOM 124.0 FT	TOP	BOTTOM
GRAVEL (4-30)	TOP 124.0 FT	BOTTOM 134.5 FT.	TOP	BOTTOM
PERFORATED SECTION	TOP 128.0 FT.	BOTTOM 118.0 FT.	TOP	BOTTOM
PIEZOMETER TIP	130.2 FT.			
BOTTOM OF BOREHOLE	140.0 FT.			
GWL AFTER INSTALLATION				

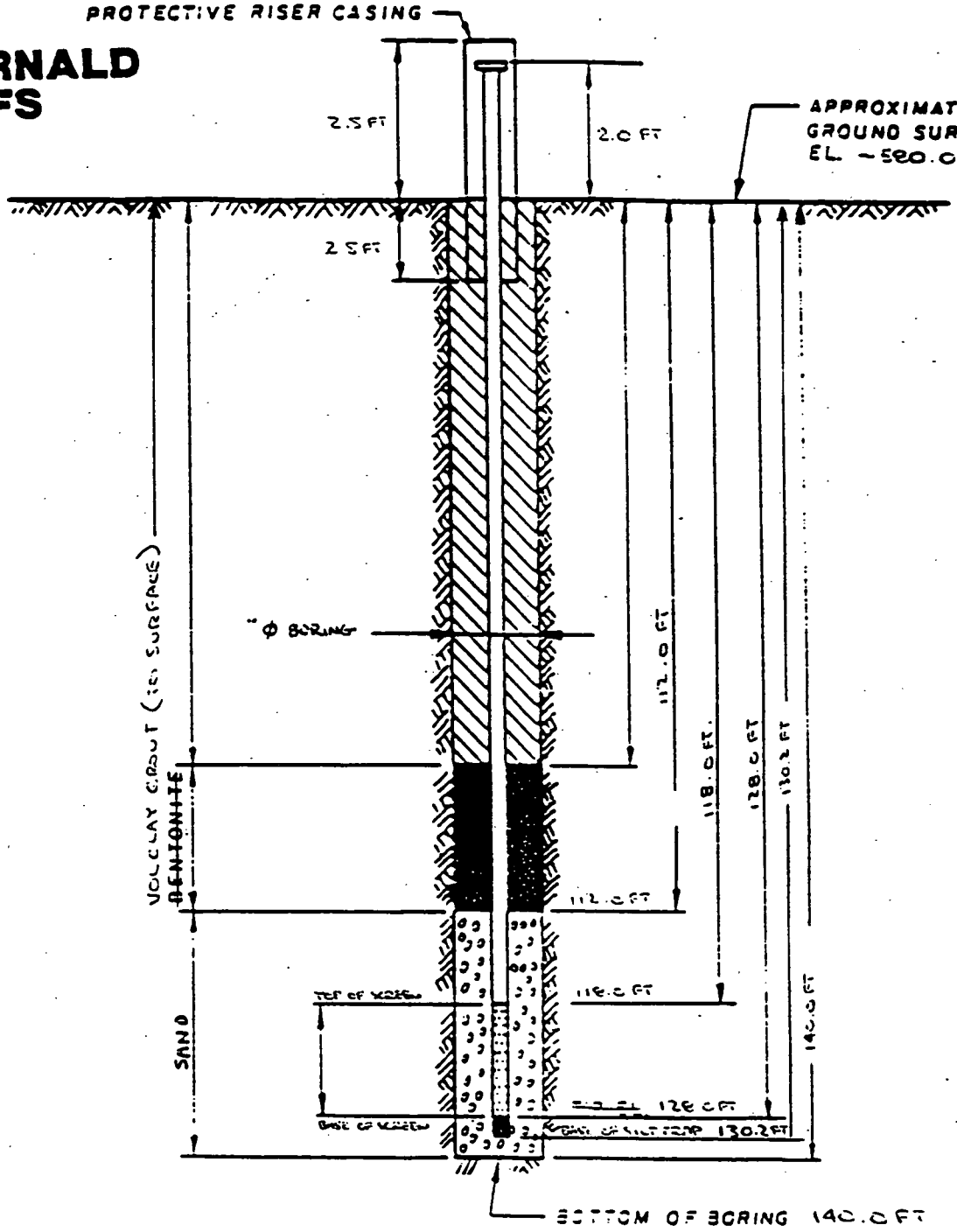
000339

WAS THE PIEZOMETER FLUSHED AFTER INSTALLATION? YES ☐ NO ☒
WAS A SENSITIVITY TEST PERFORMED ON THE PIEZOMETER? YES ☐ NO ☒

REMARKS OPEN HOLE INTERVAL FROM 140.0 FT TO 134.5 FT WAS ALLOWED TO COLLAPSE ON ITSELF. ONE BUCKET OF BENTONITE PELLETS WERE POURED AROUND THE PROTECTIVE CASING TO SERVE AS PACKING AND SEALING MATERIAL AT THE SURFACE

BORING #396

FERNALD RI/FS



DRAWING NUMBER

CHECKED BY

APPROVED BY

DRAWN BY MLS

NOTES:

1. RISER PIPE IS 4 IN 10 SCHEDULE PIPE, THREADED, FLUSH-JOINTED.
2. SCREEN IS 4 IN 10 SS PIPE CONTINUOUS SLOT SCREEN (0.010 IN SLOT SIZE).
3. LOWER END OF SCREEN IS CAPPED.
4. ELEVATION OF WATER LEVEL: 61.2 FT. ON 08-06-88 @ 1000
5. WATER LEVEL READING ON 60.5 FT ON 08-01-88 @ 0740
   59.1 FT ON 08-08-88 @ 0725

INSTALLATION DETAILS
MONITORING WELL

PREPARED FOR
BORING #396 08-10-88

MATERIALS USED:

4 30 SAND (80 LB SACKS): 2 SACKS @ BASE OF HOLE (134.5 FT) TO 124.0 FT (OPEN HOLE ALLOWED TO COLLAPSE TO 134.5 FT)
10-20 SAND (100 LB SACKS): 8 SACKS FROM 124.0 FT TO 112.0 FT
VOLCLAY GROUT (50 LB BAGS): 34 BAGS FROM 112.0 FT TO SURFACE
BENTONITE PELLETS: 1 BUCKET AS PACKING AND SEALING MATERIAL AROUND PROTECTIVE CASING
WATER ADDED TO HOLE DURING DRILLING: 1000 GALLONS

5644

MONITORING WELL
3098

FERNALD RI/FS

5644 DH 3/5/89

	Initial	Date
1st Key In	MB	9/20
2nd Key In		9/22
Hard Copy Verification		

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602	PROJECT NAME: FMPC RI/FS	
BORING NUMBER: 398 3098 MLS 10-07-88	COORDINATES: N 483386.93 E 1386314.65	DATE: 8/22/88
ELEVATION: 546.8	GWL: Depth 31.45 Date/Time 8-31-88 @ 0940	DATE STARTED: 8-22-88
ENGINEER/GEOLOGIST: B. Dunning	Depth 31.15 Date/Time 9-2-88 @ 1000	DATE COMPLETED: 8-30-88
DRILLING METHODS: CABLE TOOL		PAGE 1 OF 8

DEPTH (FEET)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER (6 INCH)	RECOVERY (INCHES)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
1	1 0 2 6 7	2 9 12	18"	STIFF BROWNISH YELLOW CLAY (10 YR, 6/6) DRY	CL	1.5	γB = 40 c.p.m. Hnu = 0 0835
2	1 0 2 6 8	9 11 11	15"	VERY STIFF YELLOWISH BROWN CLAY (10 YR, 5/6) DRY WITH SOME CARBONATE ALLUVIUM ROCK FRAGMENTS		2.5	γB = 40 c.p.m. Hnu = 0 0840
3 4	1 0 2 6 9	8 9 11	10"	MEDIUM STIFF YELLOWISH BROWN CLAY (10 YR, 5/6) DRY		1.0	γB = 40 c.p.m. Hnu = 0 0845
5	1 0 2 7 0	8 8 9	14"	HARD DARK YELLOWISH BROWN CLAY (10 YR, 4/4) DRY		4.5+	γB = 40 c.p.m. Hnu = 0 0850
6 7	1 0 2 7 1	11 10 13	16"	HARD DARK YELLOWISH BROWN CLAY (10 YR, 4/6) DRY		4.5+	γB = 40 c.p.m. Hnu = 0 0855
8 9	1 0 2 7 2	10 12 11	16"	LITHOLOGY AS ABOVE		4.5+	γB = 40 c.p.m. Hnu = 0 0900
10	1 0 2 7 3	8 18 17	18"	HARD DARK YELLOWISH BROWN CLAY (10 YR, 6/4) GRADING DOWNWARD INTO 10' STIFF YELLOW SILTY SAND (10 YR, 7/6) 10'		2.0	γB = 20 c.p.m. Hnu = 0 1426
11 12	1 0 2 7 4	17 21 43	18"	VERY DENSE YELLOWISH BROWN FINE SAND (10 YR, 5/4) DRY	SM		γB = 40-60 c.p.m. Hnu = 0 1445
13	1 0 2 7 5	21 50/4"	8"	VERY DENSE YELLOWISH BROWN SAND (10 YR, 5/4) WITH SOME MODERATELY LARGE ROCK FRAGMENTS DRY			γB = 40-60 c.p.m. Hnu = 0 * DETECTED GASEOUS ODOR & FAIRLY STRONG 1450
14 15	1 0 2 7 6	30 23 17	18"	13.5' DENSE BROWNISH YELLOW SANDY GRAVEL (10 YR, 6/6) DRY 13.5'	GM		γB = 40-60 c.p.m. Hnu = 0 1655

NOTES:

1.) BACKGROUND LEVELS FOR 8-22-88 : γB = 40-60 c.p.m. (BETA-GAMMA)
Hnu = 0

000342

2.) USED APPROXIMATELY 140 GALLONS OF WATER TO DRILL HOLE. 8/22/88

3.) USED A TOTAL OF 300 GALLONS OF WATER TO DRILL HOLE PRIOR TO CONTACTING WATER TABLE.

402-11-86

5644

DA 2/15/89

	Initial	Date
1st Key In	MB	9/20
2nd Key In	[illegible]	9/[illegible]
Hard Copy Verification		

FERNALD RI/FS

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602 Task 3.2	PROJECT NAME: FMPC RI/FS	
BORING NUMBER: ~~398~~ 3098 MLS 10-07-88	COORDINATES: see pl	DATE: 8/23 & 8/24/88
ELEVATION: see pl	GWL: Depth – Date/Time –	DATE STARTED: 8/22/88
ENGINEER/GEOLOGIST: B. Dunning	Depth – Date/Time –	DATE COMPLETED: 8/30/88
DRILLING METHODS: Cable Tool		PAGE 2 OF 8

DEPTH (FEET)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER (6 INCHES)	RECOVERY (INCH)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
16	1 0 2 7 7	30 41 50/4	15"	Very Dense, Light Yellowish Brown sandy Gravel (10 YR, 6/4) Poorly Sorted with carbonate Rock Fragment Jamming Spoon Dry	GP		γB = 60 c.p.m. Hnu = 0 1705
17							End Of Day 8-22-88 Begin Day 8-23-88
18							
19							Stop Drilling 8-23-88 Due To Rain Begin Day 8-24-88
20							
21	1 0 2 7 8	30 31 50	18"	Very Dense, Light Yellowish Brown Poorly Sorted sandy Gravel (10 YR, 6/4) Dry	GP		γB = 60 c.p.m. Hnu = 0 0830
22							
23							
24							
25							
26	1 0 2 7 9	21 24 40	18"	Very Dense Dark Yellowish Brown Sandy Gravel Becoming increasingly Sandy with gravel decreasing in size (10 YR, 4/4) Moist	GP		γB = 40 c.p.m. Hnu = 0 0952
27							
28							
29							
30							

NOTES: 1.) Background Levels For 8-23-88 : γB = 40-60 c.p.m. Hnu = 0

2.) Background Levels For 8-24-88 : γB = 70 c.p.m. Hnu = 0

3.) Used Approximately 160 Gallons of Water 8/23 & 8/24/88.

000343

5644 2/5/89

	Initial	Date
1st Key In		9/20
2nd Key In		9/22
Hard Copy Verification		

FERNALD RI/FS

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602	PROJECT NAME: FMPC RI/FS	
BORING NUMBER: ~~398~~ 3098 MLS 10-07-88	COORDINATES: see p1	DATE: 8/24/88
ELEVATION: see p1	GWL: Depth – Date/Time –	DATE STARTED: 8/22/88
ENGINEER/GEOLOGIST: B. Dunning	Depth – Date/Time –	DATE COMPLETED: 8/30/88
DRILLING METHODS: Cable Tool		PAGE 3 OF 8

DEPTH (FEET)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER (6 INCHES)	RECOVERY (INCHES)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
30							
31	1 0 3 1 5	13 23 21	14"	Dense, yellowish brown sand with some gravel (10 YR, 5/8). Moist	SP		γβ = 60 Hnu = 0 1362
32							
33							
34							
35	1 0 3 1 6	8 13 17	18"+	MEDIUM DENSE, DARK GRAYISH BROWN SAND (10 YR, 4/2) WET	SW		γβ = 60 c.p.m Hnu = 0 2 bottles 1457
36							
37							
38							
39							
40	1 0 3 1 7	7 13 16	15"	MEDIUM DENSE, VERY DARK GRAYISH BROWN SAND (10 YR, 3/2) WITH A TRACE OF SOME GRAVEL WET	SW		γβ = 60 c.p.m. Hnu = 0 1551
41							
42							
43							
44							
45							

NOTES: BACKGROUND LEVELS 8-24-88: γβ = 60-80 c.p.m. Hnu = 0

000344

5644

DA 2/5/89

	Initial	Date
1st Key In	MB	9/90
2nd Key In	[illegible]	9/90
Hard Copy Verification		

FERNALD RI/FS

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602 TASK 3.2	PROJECT NAME: FMPC RI/FS	
BORING NUMBER: ~~3098~~ 3098 MLS 10-61-88	COORDINATES: see pl	DATE: 8-24-88 & 8-25-88
ELEVATION: see pl	GWL: Depth 36.3 Date/Time 8-25 @ 0700	DATE STARTED: 8-22-88
ENGINEER/GEOLOGIST: B. Dunning	Depth — Date/Time 8-25 @ 1200	DATE COMPLETED: 8-30-88
DRILLING METHODS: CABLE TOOL		PAGE 4 OF 8

DEPTH (FEET)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER 6" Inches	RECOVERY (Inches)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
45							
46	1 0 3 1 8	5 5 11	18" +	MEDIUM DENSE DARK GRAYISH BROWN SAND (2.5 Y, 4/2) WITH A TRACE OF GRAVEL WET	SW		γB = 50 c.p.m. Hnu = 0 1620
47							
48							
49							End of Day 8-24-88 Start Day 8-25-88
50				DENSE DARK GRAYISH BROWN SAND (2.5Y 4/2)	SW		
51	1 0 3 1 9	8 18 21	18" +	DENSE MULTI-COLORED FINE GRAVEL	GW		γB = 50 c.p.m. Hnu = 0 0865
52				DENSE LIGHT OLIVE BROWN SILTY SAND (2.5 Y, 5/6) WITH TR GRAVEL WET	SM		
53							
54							
55							
56	1 0 3 2 0	19 21 25	14"	DENSE DARK GRAYISH BROWN fine gravel (2.5 Y, 4/2) WELL SORTED WITH LITTLE TO NO FINES WET			γB = 50 c.p.m. Hnu = 0 1945
57							
58							
59							
60							

NOTES: Background Levels for 8-24-88 : γB = 60-80 c.p.m.
Hnu = 0

Background Levels for 8-25-88 : γB = 60-80 c.p.m.
Hnu = 0

000345

5644

	Initial	Date
1st Key In	MR	9/20
2nd Key In		9/22
Hard Copy Verification		

FERNALD RI/FS

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602	PROJECT NAME: FMPC RI / FS	
BORING NUMBER: ~~3B~~ 3098 MLS 10-07-88	COORDINATES: see pl	DATE: 8-29-88
ELEVATION: see pl	GWL: Depth — Date/Time —	DATE STARTED: 8-22-88
ENGINEER/GEOLOGIST: B. Dunning	Depth — Date/Time —	DATE COMPLETED: 8-30-88
DRILLING METHODS: CABLE TOOL		PAGE 5 OF 8

DEPTH (FT.)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER (6 INCHES)	RECOVERY (INCHES)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
60							
61	1 0 3 2 1	3 6 8	8"	MEDIUM DENSE GRAY, GRAYISH BROWN & BROWN FINE GRAVEL (2.5Y, 4/2; N 6/ & 10 YR, 5/3) WET	GW		Hnu = 0 βB = 50 c.p.m. 1120
62							END OF DAY 8-25-88 START OF DAY 8-29-88
63							
64							
65	1 0 3 2 2	10 23 48	18"	VERY DENSE, ~~DARK~~ BROWN SAND (10YR, 5/3) GRADING DOWNWARD INTO	SW		Hnu = 0 βB = 20-40
66				66 VERY DENSE DARK YELLOWISH BROWN FINE SAND WITH SOME GRAVEL (10 YR, 4/4) WET	SM		1038
67							
68							
69							
70	1 0 3 2 3	12 21 25	18"+	DENSE GRAYISH BROWN SANDY GRAVEL (10 YR, 5/2) GRADING DOWNWARD TO	GW		Hnu = 0 βB = 40 c.p.m.
71				70.5 DENSE DARK YELLOWISH BROWN SAND (10YR, 4/4)	SW		1110
72				71 DENSE DARK GRAYISH BROWN SANDY GRAVEL (10 YR, 4/2) WITH SOME ½" GRAVEL COBBLES WET	GP		
73							
74							
75							

NOTES: BACKGROUND LEVELS FOR 8-29-88 : Hnu = 0
βB = 40-60 c.p.m.

000346

5644
FERNALD
RI/FS

DA 2/5/89

	Initial	Date
1st Key In		
2nd Key In		
Hard Copy Verification		

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602	PROJECT NAME: FMPC RI/FS	
BORING NUMBER: ~~3098~~ 3098 MLS 10-07-88	COORDINATES: see p1	DATE: 8-29 & 830-88
ELEVATION: see p1	GWL: Depth - Date/Time -	DATE STARTED: 8-22-88
ENGINEER/GEOLOGIST: B. Dunning	Depth - Date/Time -	DATE COMPLETED: 8-30-88
DRILLING METHODS: CABLE TOOL		PAGE 6 OF 8

DEPTH (FEET)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER (6 INCHES)	RECOVERY (INCH)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
75							
76	1 0 3 2 4	20 36 54	18"+	VERY DENSE DARK BROWN SANDY FINE GRAVEL (10 YR, 3/3) WET	GW		BB = 40-60 c.p.m. Hnu = 0 1340
77							
78							ENCOUNTERED BLOW SAND WHICH MADE DRILLING LOWER DIFFICULT
79							
80	1 0 3 2 5	9 12 15	18"	MEDIUM DENSE BROWN SAND (10 YR, 4/3) 80.7 GRADING DOWNWARDS INTO A GRAVELY SAND (OR WITH SOME GRAVEL WET	SW / SP		BB = 20-40 c.p.m. Hnu = 0 1515
81							
82							
83							
84							
85	1 0 3 2 6	24 30 47	18"	VERY DENSE VERY DARK GRAYISH BROWN SAND (10 YR, 3/2) WET	SW		BB = 40 c.p.m. Hnu = 0 1711
86							
87							END OF DAY 8-29-88 START OF DAY 8-30-88 ENCOUNTERED HARD-SLOW DRILLING.
88							
89							
90							

NOTES: Background Levels 8/29/88 : BB = 60-80 c.p.m. Hnu = 0
8/30/88 : BB = 60-80 c.p.m. Hnu = 0

5644 DH 2/5/89

	Initial	Date
1st Key In	MB	9/6
2nd Key In	[illegible]	9/6
Hard Copy Verification		

FERNALD RI/FS

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602	PROJECT NAME: FMPC RI/FS	
BORING NUMBER: ~~398~~ 3098 MLS 10-07-88	COORDINATES: see p1	DATE: 8-30-88
ELEVATION: see p1	GWL: Depth — Date/Time —	DATE STARTED: 8-22-88
ENGINEER/GEOLOGIST: B. Dunning	Depth — Date/Time —	DATE COMPLETED: 8-30-88
DRILLING METHODS: CABLE TOOL		PAGE 7 OF 8

DEPTH (FEET)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER (6 INCHES)	RECOVERY (INCHES)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
90							
91	1 0 3 2 7	4 7 14	18"	MEDIUM DENSE BROWN - DARK BROWN COARSE SAND (10 YR, 4/3) TERMINATED WITH A ½" x 1" CARBONATE ROCK FRAGMENT WET	SW		γB = 40 c.p.m. Hnu = 0 0953
92							
93							
94							
95	1 0 3 2 8	26 30 34	18"	VERY DENSE DARK BROWN SAND (10 YR, 3/3) WITH SOME FINE TO MEDIUM SIZE GRAVEL WET	SP		γB = 20 c.p.m. Hnu = 0 1005
96							
97							
98							
99							
100	1 0 3 2 9	15 16 9	16"	MEDIUM DENSE BROWN MEDIUM GRAIN - COARSE GRAIN SAND (10YR, 4/3) GRADING DOWNWARDS INTO AN OLIVE GRAY TO OLIVE POORLY SORTED SANDY GRAVEL (5Y, 4/2 to 4/4) CARBONATE SAND & GRAVEL WET (100.7) (100.7)	SW / GP		γB = 40 c.p.m. Hnu = 0 1355
101							
102							
103							
104							
105							

NOTES: BACKGROUND LEVELS FOR 8-30-88 : γB = 60-80 c.p.m.
Hnu = 0

000348

5644

FERNALD RI/FS

DH 2/5/89

	Initial	Date
1st Key In	MB	2/10
2nd Key In		
Hard Copy Verification		

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602	PROJECT NAME: FMPC RI/FS	
BORING NUMBER: ~~5~~3098 HLS 10-01-88	COORDINATES: see p1	DATE: 8-30-88
ELEVATION: see p1	GWL: Depth 31.45 Date/Time 8-31-88 @ 0940	DATE STARTED: 8-22-88
ENGINEER/GEOLOGIST: B. DUNNING	Depth – Date/Time –	DATE COMPLETED: 8-30-88
DRILLING METHODS: CABLE TOOL		PAGE 8 OF 8

DEPTH (FEET)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER (6 INCHES)	RECOVERY (INCHES)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
105							
106	1 0 3 3 0	50 65/6	14"	VERY DENSE BROWN WELL SORTED SAND (10 YR, 5/3) WITH A VERY PALE BROWN FOSSILIFEREOUS CARBONATE ROCK JAMMING THE SPLIT SPOON (10 YR, 7/4) WET	SW GP		βB = 20-40 c.p.m. Hnu = 0 1508
107							
108							
109							
110	1 0 3 3 1	50/4	14"	VERY DENSE BROWN SAND AS ABOVE WITH YELLOW CLAYEY GRAVEL (10 YR, 7/6) WET	SW GC		βB = 40 c.p.m. Hnu = 0 1554
111							
112				WELL DRILLED TO A TOTAL DEPTH OF 111.5 FEET			Brad Dunning
113							
114							
115							
116							
117							
118							
119							
120							

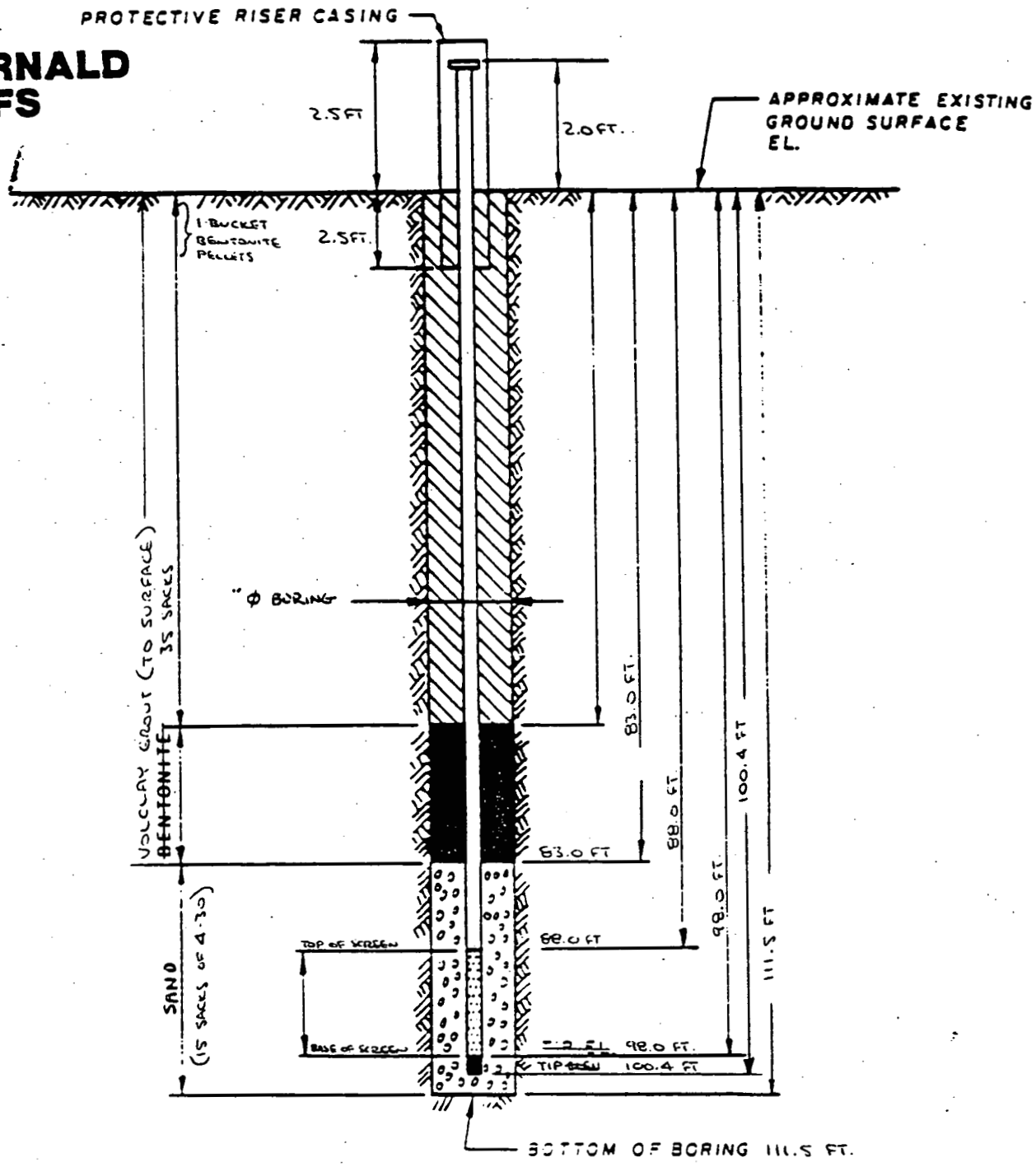
NOTES: BACKGROUND LEVELS FOR 8-30-88: βB = 60-80 c.p.m.
Hnu = 0

000343

DH 2/6/89

5644

FERNALD RI/FS



NOTES:

1. RISER PIPE IS 4 IN I.D SCHEDULE PIPE, THREADED, FLUSH-JOINTED.
2. SCREEN IS 4 IN I.D SS PIPE CONTINUOUS SLOT SCREEN (0.010 IN SLOT SIZE).
3. LOWER END OF SCREEN IS CAPPED.
4. ELEVATION OF WATER LEVEL
5. WATER LEVEL READING ON

INSTALLATION DETAILS
MONITORING WELL

PREPARED FOR 3098

1 BUCKET OF BENTONITE PELLETS WAS USED AT THE SURFACE AROUND THE PROTECTIVE CASING TO SERVE AS A SEAL

DRAWING NUMBER

CHECKED BY

APPROVED BY

DRAWN BY

000350

5644

FERNALD RI/FS

DH 2/5/89

		Date
	RDC	11/13/89
Key In		
Hard Copy Verification		

PIEZOMETER INSTALLATION SHEET

PROJECT NAME FMPC RI/FS FIELD ENG./GEO. B. Dunning DATE 9/7/88
PROJECT NO. 602 TASK 3.2 CHECKED BY R Gilbraith DATE 2/7/89
BORING NO. 598 3098 MLS 10-07-88
PIEZOMETER NO. _____ DATE OF INSTALLATION 9/2/88

BOREHOLE DRILLING

DRILLING METHOD Cable Tool	TYPE OF BIT Flat Head Hammer-Type
DRILLING FLUID (S) USED:	CASING SIZE (S) USED:
FLUID Fresh Water FROM 0 Ft TO 110 Ft.	SIZE 10 Inch FROM 0 Ft. TO 110 Ft.
FLUID _____ FROM _____ TO _____	SIZE _____ FROM _____ TO _____

PIEZOMETER DESCRIPTION

TYPE ~~Flush~~ ~~Threaded~~ MLS 10-07-88 Monitoring Well	RISER PIPE MATERIAL Stainless Steel
DIAMETER OF PERFORATED SECTION 4 Inch O.D.	RISER PIPE DIAMETERS:
PERFORATION TYPE:	O.D. 4 3/8 Inch I.D. ~~3~~ 4 Inch
SLOTS ☐ HOLES ☐ SCREEN ☒	LENGTH OF PIPE SECTIONS 90 Ft. (10 Ft. Sections)
AVERAGE SIZE OF PERFORATIONS .01 Inch	JOINING METHOD Flush Threaded
TOTAL PERFORATED AREA 10 Ft.	

PROTECTION SYSTEM

RISER PROTECTIVE PIPE LENGTH 5 Pipe	OTHER PROTECTION ~~(None)~~ MLS 10-07-88
PROTECTIVE PIPE O.D. 10 3/4 Inch MLS 10-07-88	Locking Cap & Vented Cover MLS 10-07-88

ITEM	DISTANCE ABOVE/BELOW GROUND SURFACE (Ft) MLS 10-07-88		ELEVATION (~~MSL~~)	
TOP OF RISER PIPE	+ 2.0 Ft		548.8	
GROUND SURFACE	0.0		546.8	
BOTTOM OF PROTECTIVE PIPE	- 2.5 Ft.		544.3	
BOREHOLE FILL MATERIALS:		MLS 10-07-88		
GROUT/SLURRY	TOP - 1.0 Ft.	BOTTOM ~~85~~ 83 Ft.	TOP 545.8	BOTTOM 463.8
BENTONITE	TOP NA	BOTTOM NA	TOP NA	BOTTOM NA
SAND	TOP MLS 10-07-88 ~~85~~ 81.6 Ft.	BOTTOM MLS 10-07-88 102.4 Ft.	TOP 463.8	BOTTOM 444.4
GRAVEL	TOP MLS 10-07-88 NA	BOTTOM NA	TOP NA	BOTTOM NA
PERFORATED SECTION	TOP MLS 10-07-88 ~~90~~ 88.4 Ft.	BOTTOM MLS 10-07-88 ~~100~~ 98.4 Ft.	TOP	BOTTOM
PIEZOMETER TIP				
BOTTOM OF BOREHOLE	MLS 10-07-88 ~~100.4 Ft.~~ 111.5 Ft (Drilled to 110 Ft.)			
GWL AFTER INSTALLATION	31.15 Ft.			

S THE PIEZOMETER FLUSHED AFTER INSTALLATION? YES ☐ NO ☑
..AS A SENSITIVITY TEST PERFORMED ON THE PIEZOMETER? YES ☐ NO ☑

REMARKS _____

000351

MONITORING WELL
3099

5644
3099

WELL LOG AND DRILLING REPORT

634852

NO CARBON PAPER NECESSARY— SELF-TRANSCRIBING

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water
Fountain Square
Columbus, Ohio 43224

COUNTY BUTLER TOWNSHIP ROSS SECTION OF TOWNSHIP 33

OWNER BOB JAMES ADDRESS [redacted]

LOCATION OF PROPERTY [redacted]

CONSTRUCTION DETAILS

Casing diameter 6 Length of casing 58

Type of screen SS #18 Length of screen 3

Type of pump

Capacity of pump

Depth of pump setting

Date of completion

BAILING OR PUMPING TEST (specify one by circling)

Test rate 15 gpm Duration of test 4

Drawdown 4'0" ft Date 11/6/86

Static level (depth to water) 26'10"

Quality (clear, cloudy, taste, odor)

Pump installed by

WELL LOG*

Formations: sandstone, shale, limestone, gravel, clay	From	To
CRETE PIT	0 ft	6 ft
SAND + GRAVEL	6	28
COARSE SAND	28	61

SKETCH SHOWING LOCATION

Locate in reference to numbered state highways, street intersections, county roads, etc.

[redacted]

DRILLING FIRM WM CRANE CO. DATE 2/18/86

ADDRESS Box 33 SHANDON O. SIGNED [illegible]

*If additional space is needed to complete well log, use next consecutive numbered form.

ORIGINAL COPY ODNR DIVISION OF WATER FOUNTAIN SQ COLS OHIO 43224

MONITORING WELL
3100

X= 1,339,700
Y= 487,400 ±2.0'

WELL LOG AND DRILLING REPORT

5644
3100
No 95444

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water
Columbus, Ohio

County Butler 9 Township Ross 17 Section of Township or Lot Number 34

Owner Paul A Young Funeral Home Address Mt Healthy O.

Location of property N.E. of Venice on Hamilton Cleves Rd

CONSTRUCTION DETAILS

Casing diameter 4" Length of casing 46'
Type of screen Miami brass #30 Length of screen 3'
Type of pump
Capacity of pump
Depth of pump setting

PUMPING TEST

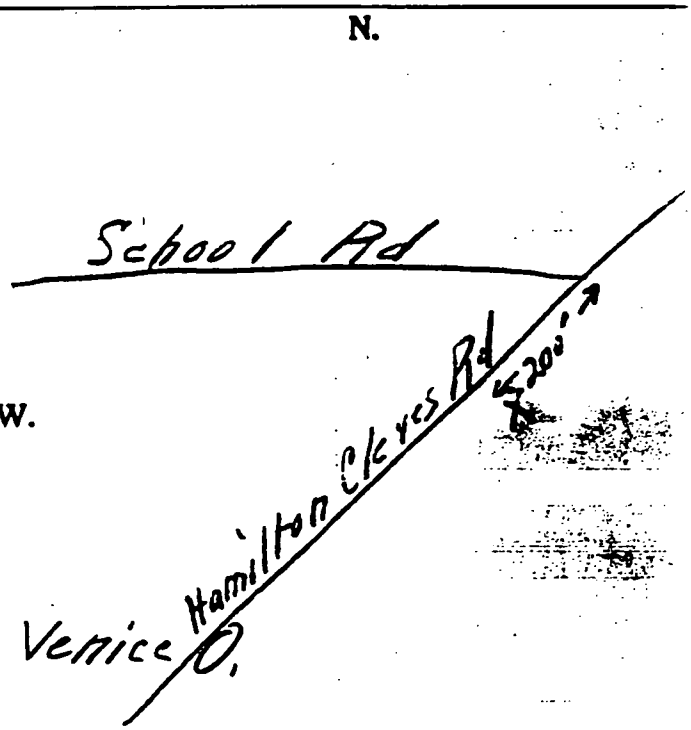
Pumping rate / G.P.M. Duration of test
Drawdown ft. Date
Developed capacity
Static level—depth to water 34'6" 11/20/52
Pump installed by /

WELL LOG

Formations Sandstone, shale, limestone, gravel and clay	From	To
	0 Feet	Ft.
Basement	0	6'
Sand & gravel	6	49'
3		

SKETCH SHOWING LOCATION

Locate in reference to numbered State Highways, St. Intersections, County roads, etc



See reverse side for instructions

Drilling Firm Wm Crane Date 11/20/52
Address Shandon O. Signed [signature]

000355

MONITORING WELL
4011

5644

FERNALD
RI/FS

	Field Check	1st Key In	2nd Key In	Hard Copy Verification
Date	9/20/90			
Initial	E.T.			

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER 602.3.2.1	PROJECT NAME FMPC RI\FS		
BORING NUMBER 4011	COORDINATES		DATE 8-21-90
ELEVATION	GWL: Depth	Date/Time	DATE STARTED: 8-21-90
ENGINEER/GEOLOGIST M. GARMAN	Depth	Date/Time	DATE COMPLETED: 9-13-90
DRILLING METHODS CABLE TOOL			PAGE 1 OF 6

DEPTH (FT)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER (6 IN)	RECOVERY (IN)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY TEST	NA WELL CONSTRUCTION	REMARKS
0				SEE VISUAL CLASSIFICATION LOGS FOR MW 3011 0.0 - 150.0 FT				
10								
20								
30								
40								
50								
60								
70								
80								
90								
100								
110								
120								
130								
140								
150								

NOTES.

Drilling Contractor PENNSYLVANIA DRILLING

Drilling Equipment CYCLONE 43

Driller: CRAIG COULTER

ASST: CHRIS COULTER

BACKGROUND:

HNU = 0 ppm

α = 0 cpm

γB = 20 - 100 cpm

000357

2438-3-90

5644
FERNALD
RI/FS

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602.3.2.1	PROJECT NAME: FMPC RI/FS		
BORING NUMBER: 4011	COORDINATES	DATE	8-26-90
ELEVATION:	GWL: Depth / Date/Time	DATE STARTED:	8-21-90
ENGINEER/GEOLOGIST: M. GARMAN	Depth / Date/Time	DATE COMPLETED:	9-13-90
DRILLING METHODS: CABLE TOOL		PAGE	2 OF 6

DEPTH (FT)	SAMPLE TYPE & NO	BLOWS ON SAMPLER PER (6 IN)	RECOVERY (IN)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	NA WELL CONSTRUCTION	REMARKS
150	32893 8-26 1140	50 50/5in —	10	VERY DENSE (10YR, 4/1) DARK GRAY SILTY WELL GRADED SAND, WET.	SM	NA		HNU = 0 α = 0 γB = 80 cpm
151								
152								
153								
154								
155	32894 8-27 1030	12 13 11	18	MEDIUM DENSE (2.5Y, N4/0) DARK GRAY WELL GRADED SAND. TRACE SILT. TRACE MEDIUM TO COARSE GRAVEL. WET.	SW	NA		HNU = 0 α = 0 γB = 80 cpm
156								
157								
158								
159								
160	32895 8-27 1125	17 24 41	18	VERY DENSE (2.5Y, N4/0) DARK GRAY GRAVELLY WELL GRADED SAND. TRACE SILT. WET.	SW	NA		HNU = 0 α = 0 γB = 60 cpm
161								
162								
163								
164								
165								

you can DISREGARD ENTERING THE "N" FOR THESE E.T. 9-20-90

NOTES.

Drilling Contractor PENNSYLVANIA DRILLING

Drilling Equipment CYCLONE 43

Driller: ~~GRAIG COULTER~~ MG 8-26-90 ALLEN REBOLD

ASST: CHRIS COULTER

BACKGROUND:
HNU = 0 PPM
α = 0 cpm
γB = 30-100 cpm

FERNALD
RI/FS

5644

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602.3.2.1	PROJECT NAME: FMPC RI\FS		
BORING NUMBER: 4011	COORDINATES		DATE 8-27-90
ELEVATION:	GWL: Depth	Date/Time	DATE STARTED: 8-21-90
ENGINEER/GEOLOGIST: M. GARMAN	Depth	Date/Time	DATE COMPLETED: 9-13-90
DRILLING METHODS: CABLE TOOL			PAGE 3 OF 6

DEPTH (FT)	SAMPLE (TYPE & NO.)	BLOWS ON SAMPLER PER (6/IN)	RECOVERY (IN)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	NA WELL CONSTRUCTION	REMARKS
165	32896 8-27 1552	12 19 18	18	DENSE (10YR, 4/1) DARK GRAY SILTY FINE TO MEDIUM GRAINED SAND. WET.	SM	NA		HNU = 0 α = 0 γB = 90cpm
166								
167								
168								
169								
170	32897 8-27 1649	17 22 38	18	VERY DENSE (10YR, 4/1) DARK GRAY WELL GRADED SAND. TRACE FINE GRAVEL. TRACE SILT. WET.	SW	NA		HNU = 0 α = 0 γB = 80cpm
171								
172								
173								
174								
175	32898 8-28 1517	14 50/6in —	12	VERY DENSE (10YR, 4/1) DARK GRAY WELL GRADED SAND. TRACE SILT. TRACE FINE GRAVEL. WET.	SW	NA		HNU = 0 α = 0 γB = 80cpm
176								
177								
178								
179								
180								

NOTES.

Drilling Contractor: PENNSYLVANIA DRILLING

Drilling Equipment: CYCLONE 43

Driller: ~~CRAIG COULTER~~ ALLEN REBOLD AG 8-27-90

ASST.: CHRIS COULTER

BACKGROUND:
HNU = 0 ppm
α = 0 cpm
γB = 30 - 100 cpm

000359

5644

FERNALD
RI/FS

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602.3.2.1	PROJECT NAME: FMPC RI\FS		
BORING NUMBER: 4011	COORDINATES		DATE 8-28-90
ELEVATION:	GWL: Depth	Date/Time	DATE STARTED: 8-21-90
ENGINEER/GEOLOGIST: M. GARMAN	Depth	Date/Time	DATE COMPLETED: 9-13-90
DRILLING METHODS: CABLE TOOL			PAGE 4 OF 6

DEPTH (FT)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER (6 IN)	RECOVERY (IN)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (PSI)	NA WELL CONSTRUCTION	REMARKS
180	32899	19		VERY DENSE (10YR, 4/1) DARK GRAY WELL GRADED SAND. TRACE SILT. TRACE FINE GRAVEL. WET.	SW	NA		HNU = 0
181	8-28 1612	36 52	18					α = 0
								γB = 90 cpm
182								
183								
184								
185	33075	16		VERY DENSE (2.5Y, N4/0) DARK GRAY WELL GRADED SAND. SOME SILT. WET.	SW	NA		HNU = 0
186	9-05 1450	24 32	18 K					α = 0
								γB = 90 cpm
187								
188								
189								
190	33076	19		VERY DENSE (10YR, 4/1) DARK GRAY WELL GRADED SAND. SOME COARSE GRAVEL AND COBBLES. TRACE SILT. WET.	SW	NA		HNU = 0
191	9-05 1550	22 50	18					α = 0
								γB = 100 cpm
192								
193	33077	100/2IN.		VERY DENSE (10YR, 4/1) DARK GRAY SHALE BEDROCK. TRACE SILT. DRY.	NA	NA		HNU = 0
194	9-06 1615	– –	1					α = 0
								γB = 60 cpm
195				BOTTOM OF BOREHOLE - 193.0 FT BEDROCK				

NOTES. TOTAL U sample #5 WMCO-32892 IT - none sent

Drilling Contractor PENNSYLVANIA DRILLING

Drilling Equipment CYCLONE 43

Driller: ALLEN REBOLD \ CRAIG COULTER

Asst. CHRIS COULTER

BACKGROUND:

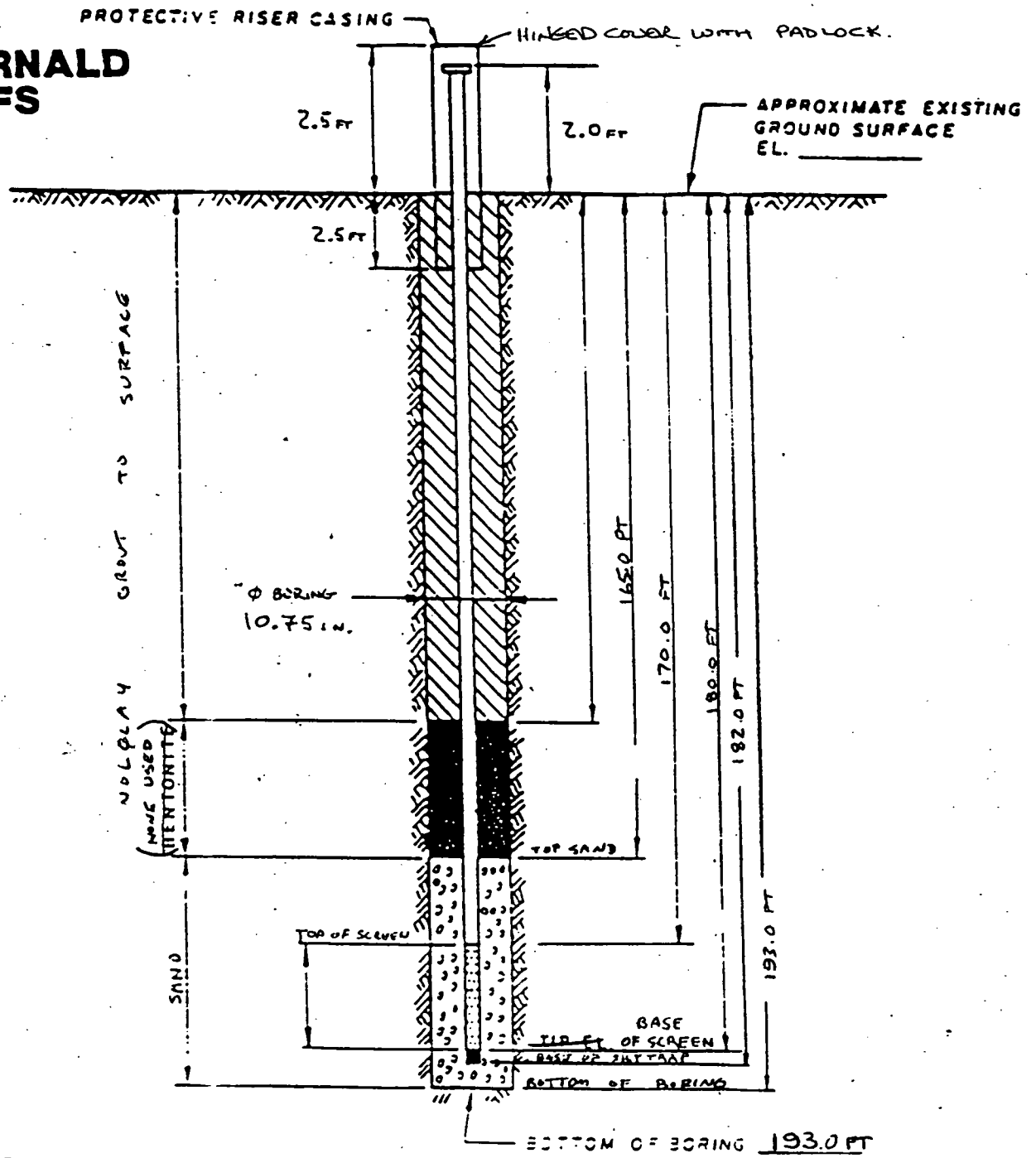
HNU = 0 ppm

α = 0 cpm

γB = 40-100 cpm

000360

FERNALD RI/FS



DRAWING NUMBER

DRAWN BY	CHECKED BY	APPROVED BY
MG 9-12-90		

NOTES:

1. RISER PIPE 154.0 IN I.D SCHEDULE PIPE, THREADED, FLUSH-JOINTED.
2. SCREEN 154.0 IN I.D SS PIPE CONTINUOUS SLOT SCREEN (0.010 IN SLOT SIZE).
3. LOWER END OF SCREEN IS CAPPED. (WITH WELDED SILTTRAP)
4. ELEVATION OF WATER LEVEL 69.80 @ T.O.C.
5. WATER LEVEL READING ON 9-13-90

MATERIALS USED DURING WELL INSTALLATION:

11 80LB. BAGS OF 10/20 SAND
38 50LB. BAGS OF VOLCLAY GROUT
3 5 GAL. BUCKETS OF BENTONITE PELLETS
2000 GALLONS OF WATER USED DURING GROUTING AND DRILLING PROCEDURES
SS PIPE SECTIONS: 1-10 FT. SCREEN WITH 2.0 FT. WELDED SILT TRAP. 17-10 FT. SECTIONS, 1-2.0 FT SECTION STAINLESS STEEL RISER.

INSTALLATION DETAILS
MONITORING WELL #4011

PREPARED FOR
FERNALD RI/FS

000361

5644

FERNALD RI/FS

PIEZOMETER INSTALLATION SHEET

PROJECT NAME FMPC RI/FS
PROJECT NO. 602 3.2.1
BORING NO. 4011
PIEZOMETER NO. 4011

FIELD ENG./GEO. M. GARMAN DATE 9-7-90
CHECKED BY E. TROLLINGER DATE 9-20-90
DATE OF INSTALLATION 9-13-90

BOREHOLE DRILLING

DRILLING METHOD CABLE TOOLS
DRILLING FLUID (S) USED:
FLUID H_2O FROM 0 FT TO 193.0 FT
FLUID — FROM — TO —

TYPE OF BIT HAMMER
CASING SIZE (S) USED:
SIZE ~~10~~ 8.0 IN ID FROM 0 FT TO 193.0 FT
SIZE — FROM — TO —

PIEZOMETER DESCRIPTION

TYPE MONITORING WELL
DIAMETER OF PERFORATED SECTION 4.0 IN ID.
PERFORATION TYPE:
SLOTS ☐ HOLES ☐ SLOTTED SCREEN ☒
AVERAGE SIZE OF PERFORATIONS 0.010 IN.
TOTAL PERFORATED AREA 10.0 FT

RISER PIPE MATERIAL 316 STAINLESS STEEL
RISER PIPE DIAMETERS:
O.D. 4 3/8 IN. I.D. 4 IN.
LENGTH OF PIPE SECTIONS 10 FT
JOINING METHOD THREADED - FLUSH JOINTED

PROTECTION SYSTEM

RISER PROTECTIVE PIPE LENGTH 5 FT
PROTECTIVE PIPE O.D. 10.75 IN.

OTHER PROTECTION HINGED, LOCKING LID COVER WITH PADLOCK

ITEM	DISTANCE ABOVE/BELOW GROUND SURFACE (FT)		ELEVATION ( )	
TOP OF RISER PIPE	+ 2.0			
GROUND SURFACE	0.0			
BOTTOM OF PROTECTIVE PIPE	- 2.5			
BOREHOLE FILL MATERIALS:				
100% CLAY GROUT / ~~SLURRY~~	TOP 0.0	BOTTOM 165.0	TOP	BOTTOM
BENTONITE NONE USED	TOP NA	BOTTOM NA	TOP	BOTTOM
SAND 10/20	TOP 165.0	BOTTOM 193.0	TOP	BOTTOM
GRAVEL NONE USED	TOP NA	BOTTOM NA	TOP	BOTTOM
PERFORATED SECTION	TOP 170.0	BOTTOM 180.0	TOP	BOTTOM
PIEZOMETER TIP	182.0			
BOTTOM OF BOREHOLE	193.0			
GWL AFTER INSTALLATION	69.8 FT FROM TOC. ~~NOT MEASURED~~			

WAS THE PIEZOMETER FLUSHED AFTER INSTALLATION? YES ☐ NO ☒
WAS A SENSITIVITY TEST PERFORMED ON THE PIEZOMETER? YES ☐ NO ☒

REMARKS 3 BUCKETS BENTONITE ADDED IN AND AROUND PROTECTIVE WELL COVER.

000382

MONITORING WELL
4096

FERNALD RI/FS REVIEWED BY QA KS DATE AUG 2 7 1991

Dat 2/5/89

5644

	Initial	Date
1st Key In	TSF	9/8/88
2nd Key In	[illegible]	9/13
Hard Copy Verification		

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602 32	PROJECT NAME: FERNALD RI/FS	
BORING NUMBER: 4096 MLS 10-01-88	COORDINATES: N476552.30 E1377207.31	DATE: 07-26-88
ELEVATION: 580.0 FT. 579.4 FT	GWL: Depth Date/Time	DATE STARTED: 06-21-88
ENGINEER/GEOLOGIST: M. SLUSARSKI	Depth Date/Time	DATE COMPLETED: 07-26-88
DRILLING METHODS: CABLE TOOL		PAGE 1 OF 14

DEPTH (FT.)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER 1 6 IN	RECOVERY (IN.)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
1	10175 1053 06-21	2 3 6	12	STIFF YELLOW-BROWN (10YR 6/3) SILTY CLAY, ROOTLETS, DRY	CL	1.5	HNU = 0 α = 0-5 CPM γ = 40-60 CPM ON SURFACE
2 3	10176 1100 06-21	6 10 11	12	HARD YELLOW-BROWN (10YR 5/4) SILTY CLAY, DRY	CL	>4.0	HNU = 0 α = 0-5 CPM γ = 40-50 CPM
4	10177 1107 06-21	10 13 15	12	HARD YELLOW-BROWN (10YR 5/3) SILTY CLAY, TRACE OF FINE GRAVEL, DRY	CL	>4.0	HNU = 0 α = 0-5 CPM γ = 50-60 CPM
5 6	10178 1110 06-21	20 25 30	14	VERY STIFF, YELLOW-BROWN (10YR 5/3) SILTY CLAY, TRACE FINE GRAVEL, TRACE COARSE GRAVEL (~1.0 IN), DRY	CL	2.5	HNU = 0 α = 0-5 CPM γ = 50-60 CPM
7	10179 1117 06-21	23 21 22	18	VERY STIFF, YELLOW-BROWN (10YR 5/3) SILTY CLAY, TRACE FINE GRAVEL, TRACE COARSE GRAVEL (~1.0 IN), DAMP	CL	2.5	HNU = 0 α = 0-5 CPM γ = 40 CPM
8 9	10180 1530 06-21	2 6 10	12	VERY STIFF, MOTTLED YELLOW-BROWN-GREY (10YR 5/4 - 10YR 5/1), SILTY CLAY, TRACE FINE GRAVEL, DAMP	CL	2.5	HNU = 0 α = 0-5 CPM γ = 30-40 CPM
10	10181 1545 06-21	2 8 9	14	VERY STIFF, YELLOW-BROWN (10YR 5/4) SILTY CLAY, TRACE FINE GRAVEL, DAMP	CL	2.5	HNU = 0 α = 0-5 CPM γ = 30 CPM
11 12	10182 1638 06-21	9 13 15	18	VERY STIFF, YELLOW-BROWN (10YR 5/4) SILTY CLAY, TRACE FINE GRAVEL, DAMP.	CL	3.0	HNU = 0 α = 0-5 CPM γ = 30-40 CPM
13	10183 0831 06-22	3 3 8	12	STIFF, YELLOW-BROWN (10YR 5/4) SILTY CLAY, TRACE FINE GRAVEL, DAMP	CL	1.5	HNU = 0 α = 0-5 CPM γ = 30-40 CPM
14	10184 0850 06-22	2 3 7	12	STIFF, YELLOW-BROWN (10YR 5/4) SILTY CLAY, TRACE FINE GRAVEL, DAMP	CL	1.5	HNU = 0 α = 0-5 CPM γ = 30-40 CPM

NOTES:
CONTRACTOR: PENNDRILL
RIG: BUCYRUS-ERIE
DRILLER: DAVE NEWMAN
ASSISTANT: BOB JOHNSON

SAMPLES COLLECTED AS PER ASTM STANDARD PENETRATION TEST
COLORS IDENTIFIED USING MUNSELL COLOR CHART
BACKGROUND LEVELS: HNU = 0 α = 0-5 CPM γ = 40-60 CPM
LEL O_2 = 0 PPM LEL = 20.6% O_2

WATER ADDED TO HOLE: 1200 GALLONS

000364

402-11-86

5644

FERNALD RI/FS REVIEWED BY QA KG DATE AUG 27 1991

TSF (10185) DM 2/4/89

	Initial	Date
1st Key In	TSF	9/9/89
2nd Key In		9/13
Hard Copy Verification		

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602.32	PROJECT NAME: FERNALD RI/FS	
BORING NUMBER: ~~490~~ 4096 MLS 10-07-88	COORDINATES: N 476552.3 E 1377207.31	DATE: 07-26-88
ELEVATION: ~~580.0 FT~~ 579.4 FT MLS 10-07-88	GWL: Depth Date/Time	DATE STARTED: 06-21-88
ENGINEER/GEOLOGIST: M. SLUSARSKI	Depth Date/Time	DATE COMPLETED: 07-26-88
DRILLING METHODS: CABLE TOOL		PAGE 2 OF 14

DEPTH (FT.)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER (6")	RECOVERY (")	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
16	10185 0910 06-22	8 9 11	14	STIFF, YELLOW-BROWN (10YR 5/4) — GREY (10YR 5/1) MOTTLED, SILTY CLAY, TRACE FINE GRAVEL, DAMP	CL	1.5	HNU = 0 α = 0-5 CPM γ = 30-40 CPM
17	10186 0956 06-22	6 9 12	12	17.5	CL	1.5	HNU = 0 α = 0-5 CPM γ = 30-40 CPM
18	10187 1016 06-22	3 8 9	12	VERY STIFF, GREY (5Y 4/1) SILTY CLAY, TRACE FINE GRAVEL, DAMP	CL	2.0	HNU = 0 α = 0-5 CPM γ = 20-30 CPM
20	10188 1124 06-22	4 6 11	12	STIFF, GREY (5Y 4/1) SILTY CLAY SOME FINE GRAVEL, TRACE SAND, DAMP	CL	1.5	HNU = 0 α = 0-5 CPM γ = 20-30 CPM
21 22	10189 1136 06-22	6 8 11	12	VERY STIFF, GREY (5Y 4/1) SILTY CLAY, SOME FINE GRAVEL, TRACE COARSE GRAVEL (.5-1.0), DAMP	CL	2.0	HNU = 0 α = 0-5 CPM γ = 20-30 CPM
23 24	10190 1345 06-22	9 12 15	12	STIFF, GREY, (5Y 4/1) SILTY CLAY, SOME FINE GRAVEL, TRACE COARSE GRAVEL (.5-1.0), DAMP	CL	1.5	HNU = 0 α = 0-5 CPM γ = 20-30 CPM
25	10191 1404 06-22	10 12 12	12	STIFF, GREY, (5Y 4/1) SILTY CLAY, SOME FINE GRAVEL, TRACE COARSE GRAVEL (.5-1.0), DAMP	CL	1.5	HNU = 0 α = 0-5 CPM γ = 20-30 CPM
26 27	10192 1447 06-22	8 17 21	14	STIFF, GREY, (5Y 4/1) SILTY CLAY, SOME FINE GRAVEL, TRACE COARSE GRAVEL (.5-1.0), DAMP	CL	1.5	HNU = 0 α = 0-5 CPM γ = 20-30 CPM
28	10193 1509 06-22	9 20 17	12	STIFF, GREY (5Y 4/1), FINE SANDY CLAY SOME SILT, SOME FINE GRAVEL, TRACE COARSE GRAVEL (.5-1.0 in) DAMP — 28.0; STIFF, GREY (5Y 4/1) SILTY CLAY, SOME FINE GRAVEL, TRACE COARSE GRAVEL (0.5-1.0 in) DAMP — 28.5	CL	1.5	HNU = 0 α = 0-5 CPM γ = 20-30 CPM
29	10194 1533 06-22	6 17 40	14	HARD, YELLOW-BROWN (10YR 4/4) SILTY CLAY, SOME FINE TO MEDIUM GRAVEL (0.25-0.5 in) WOOD FRAGMENTS, DRY — 29.5; DENSE, YELLOW-BROWN (10YR 5/6), FINE-MEDIUM WELL GRADED SAND, SOME SILT, TRACE FINE GRAVEL, DRY — 29.8	CL / SW	1.5 / N/A	HNU = 0 α = 0-5 CPM γ = 20-30 CPM

NOTES:

* BASE OF TILL @ 29.8 FT.

000365

402-11-86

FERNALD RI/FS

REVIEWED BY QA [illegible] DATE AUG 27 1991

Dt 7/5/89

	Initial	Date
1st Key In	TSF	9/8/89
2nd Key In	[illegible]	9/13
Hard Copy Verification		

5644

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602 3.2	PROJECT NAME: FERNALD RI/FS	
BORING NUMBER: # ~~490~~ 4096 (REV 10-01-88)	COORDINATES: N 476552.3 E 1377207.31 (REV 10-07-90)	DATE: 07-26-88
ELEVATION: ~~580.0~~ FT 579.4 FT (REV 10-01-88)	GWL: Depth Date/Time	DATE STARTED: 06-21-88
ENGINEER/GEOLOGIST: M. SLUSARSKI	Depth Date/Time	DATE COMPLETED: 07-26-88
DRILLING METHODS: CABLE TOOL		PAGE 3 OF 14

DEPTH (FT.)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER (6")	RECOVERY (")	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
31							
32							
33							
34							
35	10195	16		VERY DENSE, YELLOW-BROWN (10YR 5/4)			HNU = 0
36	0905 06-23	53 54	14	POORLY GRADED, FINE SAND, DRY	SP	N/A	α = 0-5 CPM β = 20-30 CPM
37							
38							
39							
40	10196	11		DENSE, YELLOW-BROWN (10YR 5/4)			HNU = 0
41	0925 06-23	16 21	14	POORLY GRADED, FINE SAND, DRY	SP	N/A	α = 0-5 CPM β = 20-30 CPM
42							
43							
44							

NOTES:

000366

402-11-86

5644

FERNALD RI/FS REVIEWED BY QA VLG DATE AUG 27 1991

Dt 2/5/89

	Initial	Date
1st Key In	TSF	9/8/89
2nd Key In		9/13
Hard Copy Verification		

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602 3.2	PROJECT NAME: FERNALD RI/FS	
BORING NUMBER: # 4096	COORDINATES: N476552.3 E1377207.31	DATE: 07-26-88
ELEVATION: 580.5 ft 579.4 ft	GWL: Depth Date/Time	DATE STARTED: 06-21-88
ENGINEER/GEOLOGIST: M. SLUSARSKI	Depth Date/Time	DATE COMPLETED: 07-26-88
DRILLING METHODS: CABLE TOOL		PAGE 4 OF 14

DEPTH (FT.)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER (6 IN.)	RECOVERY (IN.)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
46	10197 0955 06-23	17 16 17	12	DENSE, YELLOW-BROWN (10YR 5/4) POORLY GRADED FINE SAND, TRACE FINE GRAVEL, DRY	SP	N/A	HNU = 0 α = 0-5 CPM γ = 20-30 CPM
47							
48							
49							
50	10198 1054 06-23	5 17 30	12	DENSE, YELLOW-BROWN (10YR 5/4) WELL GRADED GRAVELLY SAND, DRY	SW	N/A	HNU = 0 α = 0-5 CPM γ = 20-30 CPM
51							
52							
53							
54							
55	10199 1124 06-23	7 17 18	12	DENSE, BROWN-GREY (10YR 5/2) POORLY GRADED FINE SAND, DRY	SP	N/A	HNU = 0 α = 0-5 CPM γ = 20-30 CPM
56							
57							
58							
59							

NOTES:

000367

402-11-86

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FERNALD RI/FS

REVIEWED BY QA K6 DATE AUG 2 7 1991

	Initial	Date
1st Key In	TSF	8/8/89
2nd Key In	[illegible]	[illegible]
Hard Copy Verification		

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602 3.2	PROJECT NAME: FERNALD RI/FS	
BORING NUMBER: 4096	COORDINATES: N476552.3 E1377207.31	DATE: 07-26-88
ELEVATION: 580.0 FT 579.4 FT	GWL: Depth Date/Time	DATE STARTED: 06-21-88
ENGINEER/GEOLOGIST: M. SLUSARSKI	Depth Date/Time	DATE COMPLETED: 07-26-88
DRILLING METHODS: CABLE TOOL		PAGE 5 OF 14

DEPTH (FT.)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER (6 in.)	RECOVERY (in.)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
61	10200 0920 07-06	4 8 12	12	MEDIUM DENSE, GREY-BROWN (10YR 4/2) POORLY GRADED, FINE SAND, WET	SP	N/A	HNU = 0 α = 0-5 CPM γ = 20-30 CPM
62							
63							
64							
65	10201 0948 07-06	8 17 31	14	DENSE, GREY-BROWN (10YR 4/2) POORLY GRADED, FINE SAND, WET	SP	N/A	HNU = 0 α = 0-5 CPM γ = 20-30 CPM
66							
67							
68							
69							
70	10202 0830 07-07	5 8 13	18	MEDIUM DENSE, GREY-BROWN (10YR 4/2) POORLY GRADED, FINE SAND, TRACE FINE ~~SAND~~ GRAVEL, WET	SP	N/A	HNU = 0 α = 0-5 CPM γ = 20-30 CPM
71							
72							
73							
74							

NOTES:

000368

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FERNALD RI/FS

REVIEWED BY QA KG DATE AUG 27 1991

DH 8/5/89

	Initial	Date
1st Key In	TSF	9/8
2nd Key In		
Hard Copy Verification		

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602 3.2	PROJECT NAME: FERNALD RI/FS	
BORING NUMBER: ~~#496~~ 4096	COORDINATES: N476552.3 E1377207.31	DATE: 07-26-89
ELEVATION: ~~580.0 FT~~. 579.4 FT	GWL: Depth Date/Time	DATE STARTED: 06-21-88
ENGINEER/GEOLOGIST: M. SLUSARSKI	Depth Date/Time	DATE COMPLETED: 07-26-89
DRILLING METHODS: CABLE TOOL		PAGE 6 OF 14

DEPTH (FT)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER (6")	RECOVERY (%)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
76	10203 0938 07-07	15 21 22	10	DENSE, GREY-BROWN (10YR 4/2) WELL GRADED, GRAVELLY FINE SAND, WET	SW	N/A	HNU = 0 α = 0-5 CPM γ = 20-30 CPM
77							
78							
79							
80	10204 1431 07-07	7 10 13	10	MEDIUM DENSE, GREY-BROWN (10YR 4/2) WELL GRADED, GRAVELLY SAND, WET	SW	N/A	HNU = 0 α = 0-5 CPM γ = 20-30 CPM
81							
82							
83							
84							
85	10205 1656 07-07	8 9 12	12	MEDIUM DENSE, GREY-BROWN (10YR 4/2) WELL GRADED, GRAVELLY SAND, WET	SW	N/A	HNU = 0 α = 0-5 CPM γ = 20-30 CPM
86							
87							
88							
89							

NOTES:

000369

402-11-86

5644

FERNALD RI/FS

REVIEWED BY QA 46 DATE AUG 2 7 1991

	Initial	Date
1st Key In	TSF	9/9/88
2nd Key In		9/13
Hard Copy Verification		

Dat 2/5/87

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602 3.2	PROJECT NAME: FERNALD RI/FS	
BORING NUMBER: #490 4096 MLS 10-17-88	COORDINATES: N476552.3 E1377207.31 MLS 10-17-88	DATE: 07-26-88
ELEVATION: 579.4 FT MLS 10-17-88	GWL: Depth Date/Time	DATE STARTED: 06-21-88
ENGINEER/GEOLOGIST: H. SLUSARSKI	Depth Date/Time	DATE COMPLETED: 07-26-88
DRILLING METHODS: CABLE TOOL		PAGE 7 OF 14

DEPTH (FT.)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER (6")	RECOVERY (%)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
91	10206 0910 07-09	17 31 42	18	VERY DENSE, GREY-BROWN (10YR 4/2) POORLY GRADED SAND, TRACE FINE GRAVEL, WET	SP	N/A	HNU = 0 "BLOW SAND" α = 0-5 CPM γ = 20-30 CPM
92							
93							
94							
95	10207 1145 07-09	41 30 35	14	VERY DENSE, GREY-BROWN (10YR 4/2) POORLY GRADED FINE SAND, TRACE FINE GRAVEL, WET	SP	N/A	HNU = 0 α = 0-5 CPM γ = 20-30 CPM
96							
97							
98							
99							
100	10208 1425 07-09	17 36 50	18	VERY DENSE, GREY-BROWN (10YR 4/2) POORLY GRADED FINE SAND, TRACE FINE GRAVEL, WET	SP	N/A	HNU = 0 α = 0-5 CPM γ = 20-30 CPM
101							
102							
103							
104							

NOTES:

000370

05644

FERNALD RI/FS

REVIEWED BY QA KB DATE AUG 27 1991

	Initial	Date
1st Key In		
2nd Key In		
Hard Copy Verification		

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602 3:2	PROJECT NAME: FERNALD RI/FS	
BORING NUMBER: ~~#496~~ 4096	COORDINATES: N 476552.3 E 1377207.31	DATE: 07-26-88
ELEVATION: ~~580.0~~ FT. 579.4 FT.	GWL: Depth Date/Time	DATE STARTED: 06-21-88
ENGINEER/GEOLOGIST: M. SLUSARSKI	Depth Date/Time	DATE COMPLETED: 07-26-88
DRILLING METHODS: CABLE TOOL		PAGE 8 OF 14

DEPTH (FT.)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER (6 in.)	RECOVERY (in.)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
106	10209 1554 07-09	28 24 9	18	VERY DENSE, GREY-BROWN (10YR4/2) POORLY GRADED FINE SAND, TRACE FINE GRAVEL, WET 106.3	SP	N/A	HNU = 0 α = 0-5CPM γ = 20-30CPM
107 108 109 110				STIFF, GREY (10YR4/1) CLAY, ORGANIC FRAGMENTS, TRACE SILT, DAMP	CL	1.5	
111	10210 0820 07-10	5 17 22	14	VERY STIFF, GREY (10YR 4/1) CLAY TRACE SILT, DAMP	CL	3.0	HNU = 0 α = 0-5CPM γ = 20-30CPM
112 113 114 115				114.0			
116	10211 1005 07-10	5 14 21	10	DENSE, GREY-BROWN (10YR 4/2) POORLY GRADED FINE SAND, WET	SP	N/A	HNU = 0 α = 0-5CPM γ = 20-30CPM
117 118 119							

NOTES: WATER LEVEL 07-10-88 @ 0812 : 58.6FT

FERNALD RI/FS REVIEWED BY QA _____ DATE AUG 27 1991

	Initial	Date
1st Key In	TSF	9/9/88
2nd Key In		9/13
Hard Copy Verification		

5644

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602 3.2	PROJECT NAME: FERNALD RI/FS	
BORING NUMBER: ~~4098~~ 4096	COORDINATES: N 476552.3 E 1377207.31	DATE: 07-26-88
ELEVATION: ~~580.0 FT~~ 579.4 FT	GWL: Depth Date/Time	DATE STARTED: 06-21-88
ENGINEER/GEOLOGIST: M. SLUSARSKI	Depth Date/Time	DATE COMPLETED: 07-26-88
DRILLING METHODS: CABLE TOOL		PAGE 9 OF 14

DEPTH (FT.)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER (6 IN.)	RECOVERY (IN.)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
121	10212 1445 07-10	10 21 47	12	DENSE, GREY-BROWN (10YR 4/2) POORLY GRADED FINE SAND, WET	SP	N/A	HNU = 0 α = 0-5 CPM γ = 20-30 CPM
122							
123							
124							
125	10213 1650 07-12	11 19 24	14	DENSE, GREY-BROWN (10YR 4/2) POORLY GRADED FINE SAND, WET	SP	N/A	HNU = 0 α = 0-5 CPM γ = 20-30 CPM
126							
127							
128							
129							
130	10214 0810 07-13	9 10 14	14	MEDIUM DENSE, GREY-BROWN (10YR 4/2) POORLY GRADED FINE SAND, SOME SILT, WET 131.3	SP	N/A	HNU = 0 α = 0-5 CPM γ = 20-30 CPM
131							
132				STIFF, GREY-BROWN (10YR 4/1) SILTY CLAY, LAMINATED, DK GREY ORGANIC STREAKS, VARVES, DAMP	CL	1.5	
133				BASE OF "BLUE CLAY" 133.8			
134				MEDIUM DENSE, GREY-BROWN (10YR 4/2) POORLY GRADED FINE SAND, TRACE FINE GRAVEL, WET 134.1	SP	N/A	
				MEDIUM DENSE, YELLOW-BROWN (10YR 4/2) POORLY GRADED FINE SAND, WET 134.5			

NOTES:

SAMPLES WERE COLLECTED AND ARCHIVED FOR FUTURE REFERENCE OVER THE INTERVAL 131.5 FT. TO 134.5 FT. NO SAMPLE NUMBERS WERE ASSIGNED, HOWEVER, THE BORING NUMBER, SAMPLE INTERVAL LOCATION, DATE, AND TIME WERE RECORDED. PHOTOGRAPHS OF THE INTERVAL 133.0 FT TO 134.5 FT. WERE TAKEN.

5644

FERNALD RI/FS

REVIEWED BY QA 66 DATE AUG 27 1991

	Initial	Date
1st Key In	TSF	9/9/89
2nd Key In		9/13
Hard Copy Verification		

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602 3.2	PROJECT NAME: FERNALD RI/FS	
BORING NUMBER: ~~4491~~ 4096	COORDINATES: N476552.3 E1377207.31	DATE: 07-26-89
ELEVATION: ~~520.0 ft~~ 579.4 ft	GWL: Depth Date/Time	DATE STARTED: 06-21-89
ENGINEER/GEOLOGIST: M. SLUSARSKI	Depth Date/Time	DATE COMPLETED: 07-26-89
DRILLING METHODS: CABLE TOOL		PAGE 10 OF 14

DEPTH (FT.)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER 6 (")	RECOVERY (")	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
136	10215 1350 07-13	9 28 31	18	VERY DENSE, GREY-BROWN (10YR4/2) POORLY GRADED FINE SAND, WET 136.0	SP	N/A	HNU = 0 α = 0-5 CPM γ = 20-30 CPM
137				VERY DENSE, YELLOW-BROWN (10YR4/2) POORLY GRADED FINE SAND, WET	SP	N/A	
138							
139							
140	10216 1430 07-13	6 11 23	18	MEDIUM DENSE, GREY-BROWN (10YR4/2) POORLY GRADED SAND, TRACE FINE GRAVEL, WET 141.0	SP	N/A	HNU = 0 α = 0-5 CPM γ = 20-30 CPM
141				MEDIUM DENSE, YELLOW-BROWN (10YR4/2) WELL GRADED GRAVELLY SAND, WET	SW	N/A	
142							
143							
144							
145	10217 1625 07-13	15 18 22	10	DENSE, GREY-BROWN (10YR4/2) WELL GRADED GRAVELLY SAND, WET	SW	N/A	HNU = 0 α = 0-5 CPM γ = 20-30 CPM
146							
147							
148							
149							

NOTES:

564

	Initial	Date
1st Key In	TSF	9/9/88
2nd Key In	[illegible]	9/13
Hard Copy Verification		

FERNALD RI/FS REVIEWED BY QA [illegible] DATE AUG 27 1991

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602 3.2	PROJECT NAME: FERNALD RI/FS	
BORING NUMBER: ~~4096~~ 4096	COORDINATES: N 476552.3 E 1377720.731	DATE: 07-26-88
ELEVATION: ~~580.0 FT~~ 579.4 FT	GWL: Depth Date/Time	DATE STARTED: 06-21-88
ENGINEER/GEOLOGIST: M. SLUSARSKI	Depth Date/Time	DATE COMPLETED: 07-26-88
DRILLING METHODS: CABLE TOOL		PAGE 11 OF 14

DEPTH (FT.)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER (6 IN.)	RECOVERY (IN.)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
151	10218 1705 07-13	22 21 15	10	DENSE, GREY-BROWN, (10YR 4/2) WELL GRADED GRAVELLY SAND, WET	SW	N/A	HNU = 0 α = 0-5 CPM γ = 20-30 CPM
152							
153							
154							
155	10219 0921 07-14	60+/5"	5	VERY DENSE, GREY-BROWN (10YR 4/2) WELL GRADED GRAVEL-SAND-SILT MIXTURE, WET	GM	N/A	HNU = 0 α = 0-5 CPM γ = 20-30 CPM
156							
157							
158							
159							
160	10220 1002 07-14	6 8 6	12	MEDIUM DENSE, GREY-BROWN (10YR 4/2) POORLY GRADED SAND, SOME FINE GRAVEL, WET	SP	N/A	HNU = 0 α = 0-5 CPM γ = 20-30 CPM
161							
162							
163							
164							

NOTES:

5644

FERNALD RI/FS

REVIEWED BY QA KG DATE AUG 2 7 1991

DA 2/6/89

	Initial	Date
1st Key In	TSF	9/9/88
2nd Key In	[illegible]	9/15
Hard Copy Verification		

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602 3.2	PROJECT NAME: FERNALD RI/FS	
BORING NUMBER: ~~4096~~ 4096	COORDINATES: N476552.3 E1377207.31	DATE: 07-26-88
ELEVATION: ~~580.0 FT.~~ 579.4 FT.	GWL: Depth Date/Time	DATE STARTED: 06-21-88
ENGINEER/GEOLOGIST: M. SLUSARSKI	Depth Date/Time	DATE COMPLETED: 07-26-88
DRILLING METHODS: CABLE TOOL		PAGE 12 OF 14

DEPTH (FT.)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER 6 (2")	RECOVERY (%)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
166	10221 1010 07-19	12 15 13	4	MEDIUM DENSE, GREY-BROWN (10YR 4/2) POORLY GRADED FINE SAND, TRACE FINE GRAVEL, WET	SP	N/A	HNU = 0 α = 0-5 CPM γ = 20-30 CPM
167							
168							
169							
170	10222 1052 07-19	6 11 21	14	DENSE, YELLOW-BROWN (10YR 4/3) POORLY GRADED FINE SAND, SOME FINE GRAVEL, WET 171.3	SP	N/A	HNU = 0 α = 0-5 CPM γ = 20-30 CPM
171							
172				VERY SOFT, YELLOW-BROWN (10YR 4/3) SILTY CLAY, TRACE SAND, WET	CL	0.25	
173							
174							
175	10223 1414 07-19	9 24 27	16	VERY DENSE, YELLOW-BROWN (10YR 4/3) POORLY GRADED SAND, SOME FINE GRAVEL, WET			HNU = 0 α = 0-5 CPM γ = 20-30 CPM
176							
177							
178							
179							

NOTES:

000375

FERNALD RI/FS

REVIEWED BY QA DATE AUG 2 7 1991

	Initial	Date
1st Key In	TSF	9/9/88
2nd Key In		9/13
Hard Copy Verification		

5644

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602 3.2	PROJECT NAME: FERNALD RI/FS	
BORING NUMBER: # 4096	COORDINATES: N 476552.3 E 1377207.31	DATE: 07-26-88
ELEVATION: 579.4 FT	GWL: Depth Date/Time	DATE STARTED: 06-21-88
ENGINEER/GEOLOGIST: M. SUSARSKI	Depth Date/Time	DATE COMPLETED: 07-26-88
DRILLING METHODS: CABLE TOOL		PAGE 13 OF 14

DEPTH (FT.)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER (6")	RECOVERY (")	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
181	10224 1618 07-19	18 31 30	10	VERY DENSE, GREY-BROWN (10YR 4/2) POORLY GRADED SAND, SOME FINE GRAVEL, WET	SP	N/A	HNU = 0 α = 0-5 CPM γ = 20-30 CPM
182							
183							
184							
185	10225 1705 07-19	15 16 21	10	DENSE, GREY-BROWN (10YR 4/2) POORLY GRADED SAND, SOME FINE GRAVEL, WET. 186.0	SP	N/A	HNU = 0 α = 0-5 CPM γ = 20-30 CPM
186				DENSE, GREY-BROWN (10YR 4/2), SILTY SAND, SAND-SILT MIXTURE, WET	SM	N/A	
187							
188							
189							
190	10226 0745 07-21	50+/4	4	VERY DENSE, YELLOW-BROWN (2.5Y 5/4) COARSE GRAVEL (~1.0-1.5 IN) - SAND-SILT MIXTURE, WET	GM	N/A	HNU = 0 α = 0-5 CPM γ = 20-30 CPM
191							
192							
193							
194							

NOTES:

5644

FERNALD RI/FS

REVIEWED BY QA _____ DATE AUG 27 1991

	Initial	Date
1st Key In	TJF	9/9/89
2nd Key In		9/13
Hard Copy Verification		

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 602 3.2	PROJECT NAME: FERNALD RI/FS	
BORING NUMBER: #496 4096	COORDINATES: N 476552.3 E 1377207.31	DATE: 07-26-88
ELEVATION: 580.0 FT. 579.4 FT	GWL: Depth Date/Time	DATE STARTED: 06-21-88
ENGINEER/GEOLOGIST: M. SLUSARSKI	Depth Date/Time	DATE COMPLETED: 07-26-88
DRILLING METHODS: CABLE TOOL		PAGE 14 OF 14

DEPTH (FT)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER 6 (IN.)	RECOVERY (IN)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
196				NO RECOVERY OF SAMPLE FROM INTERVAL 195.0 FT TO 196.5 FT ON 2 ATTEMPTS			
197							
198				BEDROCK PENETRATED @ 198.5 FT			
199	10227 1800 07-21	50+/3	3	U. DENSE, GREY (10 YR 5/1) SHALEY LIMESTONE INTERVAL SAMPLED: 198.5 FT TO 198.8 FT.			HNU=0 α: 0-5 CPM γ: 20-30 CPM
200							
201							
202							
203							
204							
205							
206							
207							
208							
209							

NOTES: MATERIALS USED IN WELL COMPLETION/INSTALLATION: 2 - 80LB. SACKS. 4-30 SAND
7 - 100 LB. SACKS 10-20 SAND
VOLCLAY GROUT

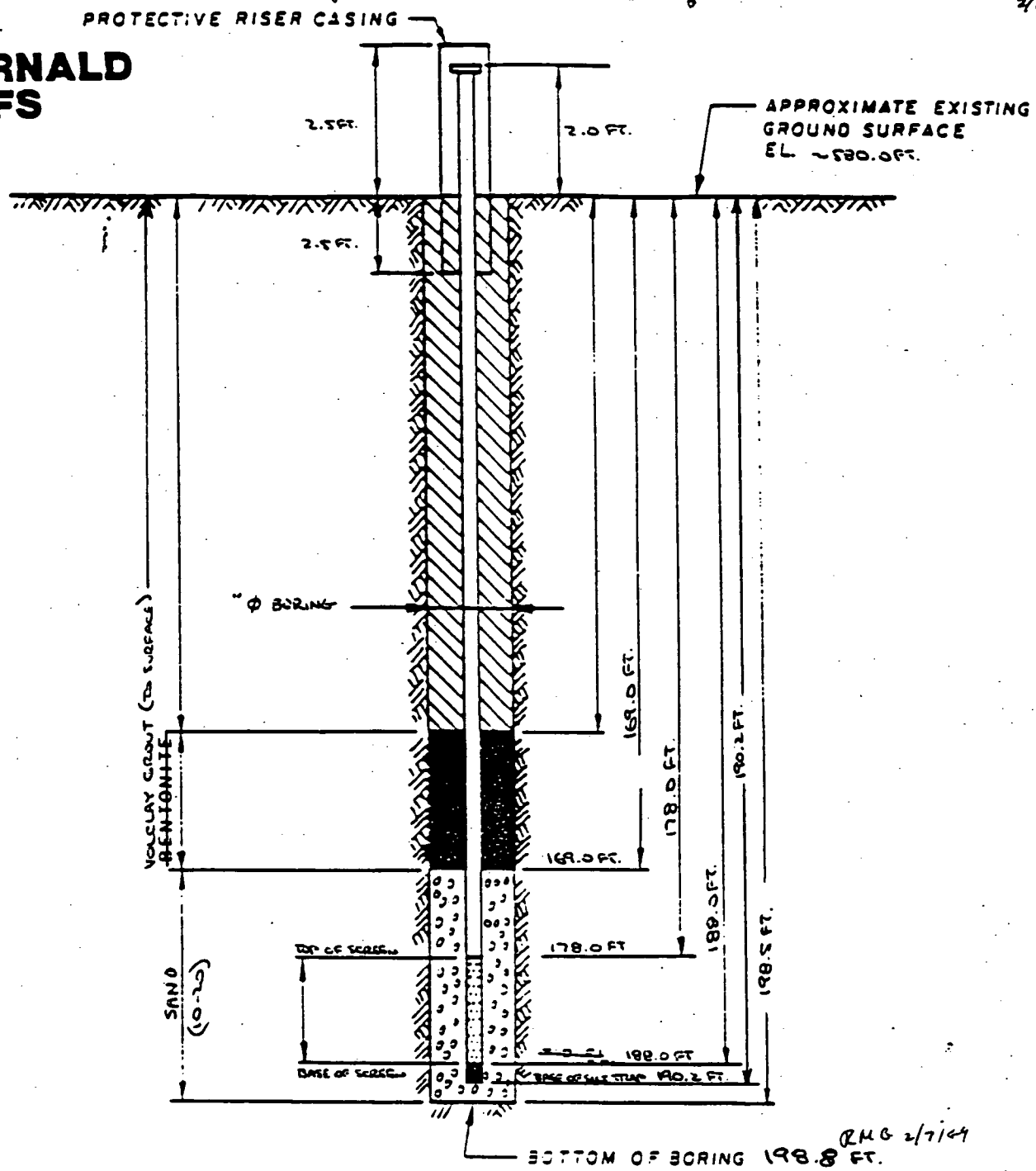
000377

REVIEWED BY QA 166 DATE AUG 2 7 1991

5644

Boring #496 4096 RH 2/6/

FERNALD RI/FS



RMG 2/7/94

DRAWING NUMBER

CHECKED BY

APPROVED BY

DRAWN BY MLS

NOTES:

1. RISER PIPE IS 4 IN ID SCHEDULE PIPE, THREADED, FLUSH-JOINTED.
2. SCREEN IS 4 IN I.D SS PIPE CONTINUOUS SLOT SCREEN (0.010 IN. SLOT SIZE).
3. LOWER END OF SCREEN IS CAPPED.
4. ELEVATION OF WATER LEVEL
5. WATER LEVEL READING ON

MATERIALS USED:

4-30 SAND (80 LB SACKS): 2 SACKS @ BASE OF HOLE TO 190.0 FT.

10-20 SAND (100 LB SACKS): 7 SACKS TO 169.0 FT.

VOLCLAY GROUT (50 LB BAGS): 34 BAGS TO SURFACE

BENTONITE PELLETS: 1 BUCKET AS PACKING AND SEALING MATERIAL AROUND PROTECTIVE CASING

WATER ADDED TO HOLE DURING DRILLING: 1200 GALLONS

INSTALLATION DETAILS
MONITORING WELL

PREPARED FOR

Boring #496 07-26-88
4096

MLS 10-07-88

000378

5644

FERNALD RI/FS

REVIEWED BY QA DATE AUG 27 1991

	Initial	Date
1st Rev/In		
2nd Rev/In		
3rd Rev/In		

PIEZOMETER INSTALLATION SHEET

PROJECT NAME FERNALD RI/FS
PROJECT NO. 602 7.2
BORING NO. 4096
PIEZOMETER NO. 4096

FIELD ENG./GEO. M. SLUSARSKI DATE 07-26-88
CHECKED BY R Galbraith DATE 2/7/89
DATE OF INSTALLATION 07-22-88 TO 07-26-88

BOREHOLE DRILLING

DRILLING METHOD CABLE TOOL
DRILLING FLUID (S) USED:
FLUID WATER FROM 0.0 FT TO 198.8 FT.
FLUID ____ FROM ____ TO ____

TYPE OF BIT HAMMER
CASING SIZE (S) USED:
SIZE 10" ID FROM 0.0 FT. TO 120.0 FT.
SIZE 8" ID FROM 120.0 FT TO 200.0 FT.

PIEZOMETER DESCRIPTION

TYPE MONITORING WELL
DIAMETER OF PERFORATED SECTION 4" I.D.
PERFORATION TYPE:
SLOTS ☐ HOLES ☐ SCREEN ☒
AVERAGE SIZE OF PERFORATIONS 0.010 IN
TOTAL PERFORATED AREA 10.0 FT.

RISER PIPE MATERIAL STAINLESS STEEL
RISER PIPE DIAMETERS:
O.D. 4 7/8 IN I.D. 4 IN
LENGTH OF PIPE SECTIONS 10 FT, 2 FT.
JOINING METHOD SCREW TYPE FLUSH JOINT THREADED

PROTECTION SYSTEM

RISER PROTECTIVE PIPE LENGTH 5 FT
PROTECTIVE PIPE O.D. 10 3/4 IN.

OTHER PROTECTION LOCKING CAP

ITEM	DISTANCE ABOVE/BELOW GROUND SURFACE (FT.)		ELEVATION (FT)	
TOP OF RISER PIPE	2.0		581.4	
GROUND SURFACE	0.0		579.4	
BOTTOM OF PROTECTIVE PIPE	2.5 FT		576.9	
BOREHOLE FILL MATERIALS:				
GROUT/SLURRY (VOLCLAY)	TOP 0.0 FT.	BOTTOM 169.0 FT.	TOP 579.4	BOTTOM 410.4
BENTONITE	TOP NA	BOTTOM NA	TOP NA	BOTTOM NA
SAND (10-20)	TOP 169.0 FT.	BOTTOM 190.0 FT.	TOP 410.4	BOTTOM 389.4
GRAVEL (4-30)	TOP 190.0 FT.	BOTTOM 192.0 FT.	TOP 389.4	BOTTOM 387.4
PERFORATED SECTION	TOP 178.0 FT.	BOTTOM 188.0 FT.	TOP 401.4	BOTTOM 391.4
PIEZOMETER TIP	190.2 FT.		389.2	
BOTTOM OF BOREHOLE	198.8 FT. RMG 2/7/89		380.6	
GWL AFTER INSTALLATION				

WAS THE PIEZOMETER FLUSHED AFTER INSTALLATION? YES ☐ NO ☒
WAS A SENSITIVITY TEST PERFORMED ON THE PIEZOMETER? YES ☐ NO ☒

REMARKS OPEN HOLE SECTION OF BOREHOLE BELOW 192.0 FT WAS ALLOWED TO COLLAPSE ON ITSELF. ONE BUCKET OF BENTONITE PELLETS WERE POURED AROUND THE PROTECTIVE CASING TO SERVE AS PACKING AND SEALING MATERIAL AT THE SURFACE.

000370

APPENDIX C

RADIOLOGICAL DATA

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FOOTNOTES FOR APPENDIX C TABLES

(1) Units:
Picocuries per liter (pCi/L) was the primary unit used to quantify all radionuclides. Total uranium and total thorium are presented in units of μg/L.

(2) Radiological Validation Qualifiers:

- These data meet all requirements of the indicated analytical support level (ASL).
- J These data should be considered an estimate on the basis of laboratory quality control results.
- R These data are considered unreliable/unusable for any quantitative purpose.
- N These data had problems noted with standards or tracers that cause some doubt as to the quality of the data for specific isotopes.
- NV These data were not validated.
- U These data were not detected at levels up to the corresponding limit of detection.

Note: Laboratory qualifiers are not presented in this appendix. Laboratory qualifiers are addressed during the validation process and are reflected in the validation qualifiers.

(3) QA Type:
QA Type refers to the number of replicate samples taken from a location during the sampling event.

- N One sample set was obtained.
- D Duplicate sample sets were obtained.
- T Triplicate sample sets were obtained.

(4) Analytical Support Levels (ASLs):
The validation of analytical data is correlated to ASLs A through E defined in the SCQ; these FEMP-specific ASLs are analogous to the EPA's Analytical Levels 1 through 5. The ASLs are assigned depending on the intended use of the data and the quality control methods required. The ASL for most of the radionuclides was EPA Level 5.

(5) Area:
Area refers to the tributary section of the Great Miami Aquifer.

- D Dry Fork section of the Great Miami Aquifer
- R Ross section of the Great Miami Aquifer
- S Shandon section of the Great Miami Aquifer

FOOTNOTES FOR APPENDIX C TABLES
(continued)

(6) Data Types:

Validated Data:	Data that have been through the validation process and are of known quality based on the ASL specified.
High Nondect Data:	Nondect data that have unusually high detection limits. Refer to Section 4.2.2.
Result Outlier:	A result that has been deemed "suspect". Refer to Section 4.2.3.
Sample Outlier:	A sample that has several result outliers. Refer to Section 4.2.3.
Suspect Well Data:	Data from a well that is "suspect"; e.g. uranium data from the FEMP glacial overburden wells; radiological data from well 2098.
Rejected Data:	Data that have been identified through validation as being either unreliable or unusable.
Nonvalidated Data:	Data that have not been through the validation process.

(7) Statistics were not calculated for gross alpha and gross beta. There was one unfiltered result for each of these constituents in the glacial overburden. The Great Miami Aquifer, Great Miami River, and Paddys Run samples were not analyzed for gross alpha or gross beta.

(8) All nondetect data (data with a U qualifier) listed in these tables are the actual results reported by the laboratories. For statistical computations, nondetect data were set equal to one-half of the detection limit. Nondetect data can also be referred to by using a < symbol.

Table C-1
Validated Unfiltered Radiological Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	ASL
1024	04/21/88	3106	Cesium-137	9.2517	UJ	N	5
1024	07/26/88	3376	Cesium-137	10.286	UJ	N	5
1024	11/02/88	3657	Cesium-137	7.8103	UJ	N	5
1040	08/25/88	3572	Cesium-137	8.4696	UJ	N	5
1040	12/07/88	3778	Cesium-137	12.561	UJ	N	5
1040	03/15/89	3964	Cesium-137	11.313	UJ	N	5
1059	08/18/88	3562	Cesium-137	10.7	UJ	N	5
1059	12/06/88	3751	Cesium-137	10.56	UJ	N	5
1059	03/14/89	3981	Cesium-137	8.2452	UJ	N	5
1060	08/04/88	3398	Cesium-137	11.172	UJ	N	5
1060	10/25/88	3695	Cesium-137	10.024	UJ	N	5
1065	04/14/88	3136	Cesium-137	7.0969	UJ	N	5
1065	05/04/93	112013	Cesium-137	10.5	UJ	N	C
1065	05/04/93	112014	Cesium-137	10.135	UJ	N	C
1065	05/04/93	112013	Gross Alpha	9	UJ	N	C
1065	05/04/93	112013	Gross Beta	5.03	UJ	N	C
1024	07/26/88	3376	Neptunium-237	0.19	UJ	N	5
1024	11/02/88	3657	Neptunium-237	0.043	J	N	5
1040	05/21/88	3218	Neptunium-237	0.25	J	N	5
1040	08/25/88	3572	Neptunium-237	0.21	UJ	N	5
1059	05/12/88	3188	Neptunium-237	0.16	J	N	5
1059	08/18/88	3562	Neptunium-237	0.19	UJ	N	5
1059	12/06/88	3751	Neptunium-237	0.204	UJ	N	5
1060	06/02/88	3255	Neptunium-237	0.18	UJ	N	5
1060	08/04/88	3398	Neptunium-237	0.21	UJ	N	5
1060	10/25/88	3695	Neptunium-237	0.18	UJ	N	5
1024	07/26/88	3376	Plutonium-238	0.021	UJ	N	5
1024	11/02/88	3657	Plutonium-238	0.052	UJ	N	5
1040	05/21/88	3218	Plutonium-238	0.17	UJ	N	5
1040	08/25/88	3572	Plutonium-238	0.17	UJ	N	5
1040	12/07/88	3778	Plutonium-238	0.0383	UJ	N	5
1040	03/15/89	3964	Plutonium-238	0.0651	UJ	N	5
1059	05/12/88	3188	Plutonium-238	0.11	UJ	N	5
1059	08/18/88	3562	Plutonium-238	0.029	UJ	N	5
1059	12/06/88	3751	Plutonium-238	0.0514	UJ	N	5
1059	03/14/89	3981	Plutonium-238	0.0536	UJ	N	5
1060	08/04/88	3398	Plutonium-238	0.024	UJ	N	5
1060	10/25/88	3695	Plutonium-238	0.045	UJ	N	5
1065	05/04/93	112014	Plutonium-238	0.1231	UJ	N	C
1065	05/04/93	112013	Plutonium-238	0.08855	J	N	C
1024	04/21/88	3106	Plutonium-239/240	1	U	N	5
1024	07/26/88	3376	Plutonium-239/240	0.021	UJ	N	5
1024	11/02/88	3657	Plutonium-239/240	0.052	UJ	N	5
1024	01/22/89	3847	Plutonium-239/240	1	U	N	5
1040	05/21/88	3218	Plutonium-239/240	0.17	UJ	N	5
1040	05/21/88	3219	Plutonium-239/240	1	U	D	5
1040	08/25/88	3572	Plutonium-239/240	0.17	UJ	N	5
1040	12/07/88	3778	Plutonium-239/240	0.0383	UJ	N	5
1040	03/15/89	3964	Plutonium-239/240	0.0651	UJ	N	5
1059	05/12/88	3188	Plutonium-239/240	0.11	UJ	N	5

Table C-1 (Continued)
Validated Unfiltered Radiological Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	ASL
1059	05/12/88	3189	Plutonium-239/240	1	U	D	5
1059	08/18/88	3562	Plutonium-239/240	0.029	UJ	N	5
1059	12/06/88	3751	Plutonium-239/240	0.0514	UJ	N	5
1059	03/14/89	3981	Plutonium-239/240	0.0536	UJ	N	5
1060	06/02/88	3255	Plutonium-239/240	0.41	UJ	N	5
1060	08/04/88	3398	Plutonium-239/240	0.024	UJ	N	5
1060	10/25/88	3695	Plutonium-239/240	0.045	UJ	N	5
1060	02/01/89	3888	Plutonium-239/240	1	U	N	5
1065	04/14/88	3136	Plutonium-239/240	1	U	N	5
1065	01/22/89	3860	Plutonium-239/240	1	UJ	N	5
1065	05/04/93	112014	Plutonium-239/240	0.1231	UJ	N	C
1065	05/04/93	112013	Plutonium-239/240	0.1063	U	N	C
1024	04/21/88	3106	Radium-226	0.3	UJ	N	5
1024	07/26/88	3376	Radium-226	0.37	UJ	N	5
1024	11/02/88	3657	Radium-226	0.6	UJ	N	5
1024	01/22/89	3847	Radium-226	1	U	N	5
1024	04/12/93	GW930412-6	Radium-226	0.9	J	N	3
1040	05/21/88	3218	Radium-226	0.29	J	N	5
1040	05/21/88	3219	Radium-226	1	J	D	5
1040	08/25/88	3572	Radium-226	0.63	J	N	5
1040	12/07/88	3778	Radium-226	0.502	J	N	5
1040	03/15/89	3964	Radium-226	0.266	J	N	5
1040	09/28/93	30928U1040-03	Radium-226	0.6	UJ	N	3
1059	05/12/88	3188	Radium-226	0.3	J	N	5
1059	05/12/88	3189	Radium-226	1	U	D	5
1059	08/18/88	3562	Radium-226	0.44	UJ	N	5
1059	12/06/88	3751	Radium-226	0.14	UJ	N	5
1059	03/14/89	3981	Radium-226	0.138	J	N	5
1059	09/29/93	30929U1059-03	Radium-226	0.6	UJ	N	3
1060	06/02/88	3255	Radium-226	0.29	J	N	5
1060	08/04/88	3398	Radium-226	0.2	J	N	5
1060	10/25/88	3695	Radium-226	0.55	UJ	N	5
1060	02/01/89	3888	Radium-226	1	U	N	5
1065	04/14/88	3136	Radium-226	0.8	UJ	N	5
1065	01/22/89	3860	Radium-226	1	U	N	5
1065	05/04/93	112014	Radium-226	0.0911	UJ	N	C
1065	05/04/93	112013	Radium-226	0.128	UJ	N	C
1024	04/21/88	3106	Radium-228	2.2	UJ	N	5
1024	07/26/88	3376	Radium-228	2.1	J	N	5
1024	11/02/88	3657	Radium-228	5.2	J	N	5
1024	01/22/89	3847	Radium-228	3.4	UJ	N	5
1024	04/12/93	GW930412-6	Radium-228	1.7	U	N	3
1040	05/21/88	3218	Radium-228	4.5	-	N	5
1040	05/21/88	3219	Radium-228	3	U	D	5
1040	08/25/88	3572	Radium-228	2.2	UJ	N	5
1040	12/07/88	3778	Radium-228	2	UJ	N	5
1040	03/15/89	3964	Radium-228	2.76	UJ	N	5
1040	09/28/93	30928U1040-03	Radium-228	1.7	U	N	3
1059	05/12/88	3188	Radium-228	2.2	J	N	5
1059	05/12/88	3189	Radium-228	3	UJ	D	5

Table C-1 (Continued)
Validated Unfiltered Radiological Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	ASL
1059	08/18/88	3562	Radium-228	1.9	UJ	N	5
1059	12/06/88	3751	Radium-228	2.07	UJ	N	5
1059	03/14/89	3981	Radium-228	2.78	UJ	N	5
1059	09/29/93	30929U1059-03	Radium-228	1.5	U	N	3
1060	06/02/88	3255	Radium-228	1.8	UJ	N	5
1060	08/04/88	3398	Radium-228	1.7	UJ	N	5
1060	10/25/88	3695	Radium-228	1.9	UJ	N	5
1060	02/01/89	3888	Radium-228	3.2	UJ	N	5
1065	04/14/88	3136	Radium-228	2	UJ	N	5
1065	01/22/89	3860	Radium-228	3.1	UJ	N	5
1065	05/04/93	112014	Radium-228	2.92	UJ	N	C
1065	05/04/93	112013	Radium-228	1.46	UJ	N	C
1024	04/21/88	3106	Ruthenium-106	76.229	UJ	N	5
1024	07/26/88	3376	Ruthenium-106	96.124	UJ	N	5
1024	11/02/88	3657	Ruthenium-106	90.832	UJ	N	5
1040	08/25/88	3572	Ruthenium-106	60.906	UJ	N	5
1040	12/07/88	3778	Ruthenium-106	85.401	UJ	N	5
1040	03/15/89	3964	Ruthenium-106	82.153	UJ	N	5
1059	08/18/88	3562	Ruthenium-106	109.15	UJ	N	5
1059	12/06/88	3751	Ruthenium-106	79.803	UJ	N	5
1059	03/14/89	3981	Ruthenium-106	78.092	UJ	N	5
1060	08/04/88	3398	Ruthenium-106	78.536	UJ	N	5
1060	10/25/88	3695	Ruthenium-106	89.277	UJ	N	5
1065	04/14/88	3136	Ruthenium-106	69.293	UJ	N	5
1065	05/04/93	112014	Ruthenium-106	131.3	UJ	N	C
1065	05/04/93	112013	Ruthenium-106	150	UJ	N	C
1024	04/21/88	3106	Strontium-90	1.2	UJ	N	5
1024	07/26/88	3376	Strontium-90	1.1	UJ	N	5
1024	11/02/88	3657	Strontium-90	1.2	UJ	N	5
1040	05/21/88	3218	Strontium-90	1.1	UJ	N	5
1040	08/25/88	3572	Strontium-90	1.1	UJ	N	5
1040	12/07/88	3778	Strontium-90	1.41	UJ	N	5
1040	03/15/89	3964	Strontium-90	0.996	UJ	N	5
1059	05/12/88	3188	Strontium-90	1	UJ	N	5
1059	08/18/88	3562	Strontium-90	1	UJ	N	5
1059	12/06/88	3751	Strontium-90	1.07	UJ	N	5
1059	03/14/89	3981	Strontium-90	1.17	UJ	N	5
1060	06/02/88	3255	Strontium-90	0.81	UJ	N	5
1060	08/04/88	3398	Strontium-90	1.1	UJ	N	5
1060	10/25/88	3695	Strontium-90	1.3	UJ	N	5
1065	04/14/88	3136	Strontium-90	2	J	N	5
1065	05/04/93	112014	Strontium-90	1.82	U	N	C
1065	05/04/93	112013	Strontium-90	0.807	UJ	N	C
1024	04/21/88	3106	Technetium-99	15.1	UJ	N	5
1024	07/26/88	3376	Technetium-99	13.4	UJ	N	5
1024	11/02/88	3657	Technetium-99	23.5	UJ	N	5
1024	01/22/89	3847	Technetium-99	30	U	N	5
1024	06/26/89	66420	Technetium-99	22.98	UJ	N	5
1024	11/21/89	66650	Technetium-99	20.3	UJ	N	5
1024	04/12/93	GW930412-6	Technetium-99	30	J	N	3

Table C-1 (Continued)
Validated Unfiltered Radiological Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	ASL
1040	05/21/88	3218	Technetium-99	16.4	UJ	N	5
1040	05/21/88	3219	Technetium-99	30	U	D	5
1040	08/25/88	3572	Technetium-99	49.3	J	N	5
1040	12/07/88	3778	Technetium-99	17.58	UJ	N	5
1040	03/15/89	3964	Technetium-99	21.14	UJ	N	5
1040	09/28/93	30928U1040-03	Technetium-99	13.1	U	N	3
1059	05/12/88	3188	Technetium-99	16	UJ	N	5
1059	05/12/88	3189	Technetium-99	30	U	D	5
1059	08/18/88	3562	Technetium-99	8.2	UJ	N	5
1059	12/06/88	3751	Technetium-99	19.44	UJ	N	5
1059	03/14/89	3981	Technetium-99	22.36	UJ	N	5
1059	09/29/93	30929U1059-03	Technetium-99	12.2	U	N	3
1060	06/02/88	3255	Technetium-99	15.47	UJ	N	5
1060	08/04/88	3398	Technetium-99	11.5	UJ	N	5
1060	10/25/88	3695	Technetium-99	19.3	UJ	N	5
1060	02/01/89	3888	Technetium-99	30	U	N	5
1060	12/18/89	66832	Technetium-99	19.78	UJ	N	5
1065	04/14/88	3136	Technetium-99	13.1	UJ	N	5
1065	01/22/89	3860	Technetium-99	30	U	N	5
1065	12/13/89	66834	Technetium-99	24.25	UJ	N	5
1065	05/04/93	112014	Technetium-99	10.86	UJ	N	C
1065	05/04/93	112013	Technetium-99	10.67	UJ	N	C
1024	07/26/88	3376	Total Thorium	2.9	UJ	N	5
1024	11/02/88	3657	Total Thorium	1.9	UJ	N	5
1024	01/22/89	3847	Total Thorium	3	U	N	5
1040	08/25/88	3572	Total Thorium	2.5	UJ	N	5
1040	12/07/88	3778	Total Thorium	1.74	UJ	N	5
1059	08/18/88	3562	Total Thorium	3.1	J	N	5
1059	12/06/88	3751	Total Thorium	1.52	UJ	N	5
1060	10/25/88	3695	Total Thorium	1.9	UJ	N	5
1060	02/01/89	3888	Total Thorium	3	U	N	5
1065	05/04/93	112014	Total Thorium	0.92	UJ	N	C
1065	05/04/93	112013	Total Thorium	1.116	UJ	N	C
1024	04/21/88	3106	Thorium-228	1	U	N	5
1024	07/26/88	3376	Thorium-228	0.32	UJ	N	5
1024	11/02/88	3657	Thorium-228	0.23	J	N	5
1024	01/22/89	3847	Thorium-228	1	U	N	5
1024	06/26/89	66420	Thorium-228	1.62	-	N	5
1024	11/21/89	66650	Thorium-228	1.39	J	N	5
1024	04/12/93	GW930412-6	Thorium-228	0.1	UJ	N	3
1040	05/21/88	3218	Thorium-228	0.54	J	N	5
1040	05/21/88	3219	Thorium-228	1	U	D	5
1040	08/25/88	3572	Thorium-228	0.28	UJ	N	5
1040	12/07/88	3778	Thorium-228	0.192	UJ	N	5
1040	03/15/89	3964	Thorium-228	0.623	UJ	N	5
1059	05/12/88	3188	Thorium-228	0.25	J	N	5
1059	05/12/88	3189	Thorium-228	1	U	D	5
1059	08/18/88	3562	Thorium-228	0.34	J	N	5
1059	12/06/88	3751	Thorium-228	0.168	UJ	N	5
1059	03/14/89	3981	Thorium-228	0.726	UJ	N	5

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Table C-1 (Continued)
Validated Unfiltered Radiological Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	ASL
1060	06/02/88	3255	Thorium-228	0.75	J	N	5
1060	08/04/88	3398	Thorium-228	0.87	J	N	5
1060	10/25/88	3695	Thorium-228	0.33	J	N	5
1060	02/01/89	3888	Thorium-228	1	U	N	5
1060	12/18/89	66832	Thorium-228	0.594	J	N	5
1065	04/14/88	3136	Thorium-228	1	U	N	5
1065	01/22/89	3860	Thorium-228	1.2	UJ	N	5
1065	12/13/89	66834	Thorium-228	1.04	J	N	5
1065	05/04/93	112014	Thorium-228	0.3489	UJ	N	C
1065	05/04/93	112013	Thorium-228	0.1676	UJ	N	C
1024	04/21/88	3106	Thorium-230	1	U	N	5
1024	07/26/88	3376	Thorium-230	0.9	J	N	5
1024	11/02/88	3657	Thorium-230	0.23	J	N	5
1024	01/22/89	3847	Thorium-230	1	U	N	5
1024	06/26/89	66420	Thorium-230	2.02	-	N	5
1024	04/12/93	GW930412-6	Thorium-230	0.1	UJ	N	3
1040	05/21/88	3218	Thorium-230	0.5	J	N	5
1040	05/21/88	3219	Thorium-230	1	U	D	5
1040	08/25/88	3572	Thorium-230	0.54	J	N	5
1040	12/07/88	3778	Thorium-230	0.192	UJ	N	5
1040	03/15/89	3964	Thorium-230	0.623	UJ	N	5
1040	09/28/93	30928U1040-03	Thorium-230	0.2	UJ	N	3
1059	05/12/88	3188	Thorium-230	0.85	J	N	5
1059	05/12/88	3189	Thorium-230	1	U	D	5
1059	08/18/88	3562	Thorium-230	0.22	J	N	5
1059	12/06/88	3751	Thorium-230	0.168	UJ	N	5
1059	03/14/89	3981	Thorium-230	0.726	UJ	N	5
1059	09/29/93	30929U1059-03	Thorium-230	0.2	UJ	N	3
1060	06/02/88	3255	Thorium-230	0.44	J	N	5
1060	08/04/88	3398	Thorium-230	0.76	J	N	5
1060	10/25/88	3695	Thorium-230	0.22	J	N	5
1060	02/01/89	3888	Thorium-230	1	U	N	5
1060	12/18/89	66832	Thorium-230	0.346	UJ	N	5
1065	04/14/88	3136	Thorium-230	1	U	N	5
1065	01/22/89	3860	Thorium-230	1.2	UJ	N	5
1065	12/13/89	66834	Thorium-230	0.631	UJ	N	5
1065	05/04/93	112014	Thorium-230	0.1057	J	N	C
1065	05/04/93	112013	Thorium-230	0.3656	U	N	C
1024	07/26/88	3376	Thorium-232	0.32	UJ	N	5
1024	11/02/88	3657	Thorium-232	0.21	UJ	N	5
1024	04/12/93	GW930412-6	Thorium-232	0.1	UJ	N	3
1040	05/21/88	3218	Thorium-232	0.17	UJ	N	5
1040	08/25/88	3572	Thorium-232	0.28	UJ	N	5
1040	12/07/88	3778	Thorium-232	0.192	UJ	N	5
1040	09/28/93	30928U1040-03	Thorium-232	0.1	UJ	N	3
1059	05/12/88	3188	Thorium-232	0.2	J	N	5
1059	08/18/88	3562	Thorium-232	0.34	J	N	5
1059	12/06/88	3751	Thorium-232	0.168	UJ	N	5
1059	09/29/93	30929U1059-03	Thorium-232	0.1	UJ	N	3
1060	06/02/88	3255	Thorium-232	0.21	J	N	5

Table C-1 (Continued)
Validated Unfiltered Radiological Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	ASL
1060	10/25/88	3695	Thorium-232	0.21	UJ	N	5
1065	05/04/93	112014	Thorium-232	0.09533	UJ	N	C
1065	05/04/93	112013	Thorium-232	0.1213	UJ	N	C
1040	05/21/88	3218	Total Uranium	0.1	UJ	N	5
1040	05/21/88	3219	Total Uranium	1	U	D	5
1040	08/25/88	3572	Total Uranium	0.1	UJ	N	5
1040	12/07/88	3778	Total Uranium	0.1	UJ	N	5
1040	03/15/89	3964	Total Uranium	0.1	UJ	N	5
1040	09/28/93	30928U1040-03	Total Uranium	0.1	U	N	3
1059	05/12/88	3188	Total Uranium	0.1	UJ	N	5
1059	05/12/88	3189	Total Uranium	1	U	D	5
1059	08/18/88	3562	Total Uranium	0.756	J	N	5
1059	12/06/88	3751	Total Uranium	0.851	J	N	5
1059	03/14/89	3981	Total Uranium	0.735	J	N	5
1059	09/29/93	30929U1059-03	Total Uranium	1	-	N	3
1060	06/02/88	3255	Total Uranium	1.5	-	N	5
1060	08/04/88	3398	Total Uranium	1	J	N	5
1060	10/25/88	3695	Total Uranium	0.476	J	N	5
1060	02/01/89	3888	Total Uranium	1	J	N	5
1060	12/18/89	66832	Total Uranium	0.1	UJ	N	5
1040	05/21/88	3218	Uranium-234	0.16	J	N	5
1040	05/21/88	3219	Uranium-234	1	U	D	5
1040	08/25/88	3572	Uranium-234	1.1	-	N	5
1040	12/07/88	3778	Uranium-234	0.218	UJ	N	5
1040	03/15/89	3964	Uranium-234	0.201	UJ	N	5
1040	09/28/93	30928U1040-03	Uranium-234	0.1	UJ	N	3
1059	05/12/88	3188	Uranium-234	0.54	J	N	5
1059	05/12/88	3189	Uranium-234	1	U	D	5
1059	12/06/88	3751	Uranium-234	0.58	J	N	5
1059	03/14/89	3981	Uranium-234	0.596	J	N	5
1059	09/29/93	30929U1059-03	Uranium-234	0.6	J	N	3
1060	08/04/88	3398	Uranium-234	0.48	J	N	5
1060	10/25/88	3695	Uranium-234	0.52	J	N	5
1060	02/01/89	3888	Uranium-234	1	U	N	5
1060	12/18/89	66832	Uranium-234	0.25	J	N	5
1040	05/21/88	3218	Uranium-235/236	0.13	UJ	N	5
1040	08/25/88	3572	Uranium-235/236	0.17	UJ	N	5
1040	12/07/88	3778	Uranium-235/236	0.218	UJ	N	5
1040	03/15/89	3964	Uranium-235/236	0.201	UJ	N	5
1040	09/28/93	30928U1040-03	Uranium-235/236	0.1	UJ	N	3
1059	05/12/88	3188	Uranium-235/236	0.1	UJ	N	5
1059	08/18/88	3562	Uranium-235/236	0.18	UJ	N	5
1059	12/06/88	3751	Uranium-235/236	0.222	UJ	N	5
1059	03/14/89	3981	Uranium-235/236	0.266	UJ	N	5
1059	09/29/93	30929U1059-03	Uranium-235/236	0.1	UJ	N	3
1060	08/04/88	3398	Uranium-235/236	0.18	UJ	N	5
1060	10/25/88	3695	Uranium-235/236	0.23	UJ	N	5
1060	12/18/89	66832	Uranium-235/236	0.152	UJ	N	5
1040	05/21/88	3218	Uranium-238	0.18	J	N	5
1040	05/21/88	3219	Uranium-238	1	U	D	5

Table C-1 (Continued)
Validated Unfiltered Radiological Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	ASL
1040	08/25/88	3572	Uranium-238	0.99	J	N	5
1040	12/07/88	3778	Uranium-238	0.218	UJ	N	5
1040	03/15/89	3964	Uranium-238	0.201	UJ	N	5
1040	09/28/93	30928U1040-03	Uranium-238	0.1	UJ	N	3
1059	05/12/88	3188	Uranium-238	0.41	J	N	5
1059	05/12/88	3189	Uranium-238	1	U	D	5
1059	08/18/88	3562	Uranium-238	0.52	J	N	5
1059	12/06/88	3751	Uranium-238	0.232	J	N	5
1059	03/14/89	3981	Uranium-238	0.536	J	N	5
1060	08/04/88	3398	Uranium-238	0.41	J	N	5
1060	10/25/88	3695	Uranium-238	0.55	J	N	5
1060	02/01/89	3888	Uranium-238	1	U	N	5
1060	12/18/89	66832	Uranium-238	0.227	J	N	5

Table C-2
Validated Filtered Radiological Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	ASL
1024	04/12/93	GW930412-6	Radium-226	0.4	UJ	N	3
1040	09/28/93	30928F1040-03	Radium-226	0.9	J	N	3
1059	09/29/93	30929F1059-03	Radium-226	0.6	UJ	N	3
1060	09/29/93	30929F1060-03	Radium-226	0.5	UJ	N	3
1024	04/12/93	GW930412-6	Radium-228	2.2	-	N	3
1040	09/28/93	30928F1040-03	Radium-228	1.7	U	N	3
1059	09/29/93	30929F1059-03	Radium-228	1.8	U	N	3
1060	09/29/93	30929F1060-03	Radium-228	1.7	U	N	3
1024	04/12/93	GW930412-6	Technetium-99	30	J	N	3
1040	09/28/93	30928F1040-03	Technetium-99	11.8	U	N	3
1059	09/29/93	30929F1059-03	Technetium-99	12.4	U	N	3
1060	09/29/93	30929F1060-03	Technetium-99	12.3	U	N	3
1024	04/12/93	GW930412-6	Thorium-228	0.1	J	N	3
1059	09/29/93	30929F1059-03	Thorium-228	0.1	UJ	N	3
1024	04/12/93	GW930412-6	Thorium-230	0.1	UJ	N	3
1040	09/28/93	30928F1040-03	Thorium-230	0.2	UJ	N	3
1059	09/29/93	30929F1059-03	Thorium-230	0.2	UJ	N	3
1060	09/29/93	30929F1060-03	Thorium-230	0.2	UJ	N	3
1024	04/12/93	GW930412-6	Thorium-232	0.2	UJ	N	3
1040	09/28/93	30928F1040-03	Thorium-232	0.1	UJ	N	3
1059	09/29/93	30929F1059-03	Thorium-232	0.1	UJ	N	3
1040	09/28/93	30928F1040-03	Total Uranium	0.1	U	N	3
1059	09/29/93	30929F1059-03	Total Uranium	1	-	N	3
1060	09/29/93	30929F1060-03	Total Uranium	1.4	-	N	3
1059	09/29/93	30929F1059-03	Uranium-234	0.6	J	N	3
1040	09/28/93	30928F1040-03	Uranium-235/236	0.1	UJ	N	3
1059	09/29/93	30929F1059-03	Uranium-235/236	0.1	UJ	N	3

Table C-3
Validated Unfiltered Radiological Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
2026	05/12/88	3186	Cesium-137	8.3091	UJ	N	5	D
2026	08/17/88	3505	Cesium-137	8.7192	UJ	N	5	D
2026	12/07/88	3750	Cesium-137	12.047	UJ	N	5	D
2026	03/14/89	3980	Cesium-137	10.582	UJ	N	5	D
2036	05/12/88	3184	Cesium-137	9.7669	UJ	N	5	R
2036	08/23/88	3564	Cesium-137	9.0319	UJ	N	5	R
2036	12/07/88	3770	Cesium-137	10.217	UJ	N	5	R
2036	03/14/89	3983	Cesium-137	8.6997	UJ	N	5	R
2043	04/13/88	3091	Cesium-137	7.1437	UJ	N	5	S
2043	08/05/88	3440	Cesium-137	10.767	UJ	N	5	S
2043	11/04/88	3700	Cesium-137	9.1099	UJ	N	5	S
2050	08/16/88	3497	Cesium-137	9.7998	UJ	N	5	S
2050	12/05/88	3743	Cesium-137	7.9757	UJ	N	5	S
2050	03/13/89	3969	Cesium-137	12.093	UJ	N	5	S
2056	05/06/88	3159	Cesium-137	7.3388	UJ	N	5	S
2056	08/25/88	3575	Cesium-137	7.9474	UJ	N	5	S
2056	12/07/88	3781	Cesium-137	7.7156	UJ	N	5	S
2056	03/13/89	3967	Cesium-137	7.057	UJ	N	5	S
2057	08/25/88	3573	Cesium-137	11.615	UJ	N	5	R
2057	12/13/88	3779	Cesium-137	9.4095	UJ	N	5	R
2066	08/07/88	3443	Cesium-137	9.4092	UJ	N	5	S
2066	11/10/88	3710	Cesium-137	8.8816	UJ	N	5	S
2066	03/14/89	3894	Cesium-137	5.756	UJ	N	5	S
2096	09/12/88	3586	Cesium-137	9.8058	UJ	N	5	R
2096	12/07/88	3790	Cesium-137	9.0569	UJ	N	5	R
2096	02/09/89	3985	Cesium-137	8.8039	UJ	N	5	R
2096	04/30/89	4081	Cesium-137	7.6586	UJ	N	5	R
2096	04/25/90	4234	Cesium-137	11.535	UJ	N	5	R
2104	05/05/88	3146	Cesium-137	9.8618	UJ	N	5	R
2104	08/16/88	3498	Cesium-137	10.697	UJ	N	5	R
2104	12/06/88	3744	Cesium-137	8.5141	UJ	N	5	R
2104	04/22/90	4235	Cesium-137	9.664	UJ	N	5	R
2104	04/22/90	4269	Cesium-137	8.548	J	N	5	R
2105	06/05/88	3268	Cesium-137	10.372	UJ	N	5	S
2105	08/28/88	3577	Cesium-137	9.8548	UJ	N	5	S
2105	03/15/89	3968	Cesium-137	8.2221	UJ	N	5	S
2121	08/25/88	3571	Cesium-137	10.463	UJ	N	5	D
2121	12/13/88	3776	Cesium-137	11.432	UJ	N	5	D
2121	03/14/89	3962	Cesium-137	5.758	J	N	5	D
2122	08/17/88	3504	Cesium-137	11.437	UJ	N	5	D
2122	12/07/88	3749	Cesium-137	10.831	UJ	N	5	D
2122	03/15/89	3979	Cesium-137	9.5496	UJ	N	5	D
2123	08/23/88	3565	Cesium-137	10.735	UJ	N	5	R
2123	12/06/88	3771	Cesium-137	9.7443	UJ	N	5	R
2123	03/14/89	3984	Cesium-137	8.5812	UJ	N	5	R
3024	07/26/88	3377	Cesium-137	8.3725	UJ	N	5	S
3024	11/02/88	3658	Cesium-137	11.297	UJ	N	5	S
3043	04/13/88	3090	Cesium-137	6.4158	UJ	N	5	S
3043	08/04/88	3397	Cesium-137	9.8166	UJ	N	5	S
3043	11/04/88	3694	Cesium-137	9.3246	UJ	N	5	S

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Table C-3 (Continued)
Validated Unfiltered Radiological Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
3043	06/13/89	66439	Cesium-137	11.357	UJ	N	5	S
3063	05/12/88	3190	Cesium-137	8.7773	UJ	N	5	D
3063	08/16/88	3495	Cesium-137	7.4672	UJ	N	5	D
3063	12/13/88	3741	Cesium-137	10.076	UJ	N	5	D
3096	09/12/88	3585	Cesium-137	9.3898	UJ	N	5	R
3096	12/07/88	3789	Cesium-137	11.045	UJ	N	5	R
3096	04/25/90	4257	Cesium-137	11.325	UJ	N	5	R
3098	12/16/88	3795	Cesium-137	8.8699	UJ	N	5	D
3098	02/08/89	3989	Cesium-137	10.217	UJ	N	5	D
3098	05/25/89	4088	Cesium-137	9.224	UJ	N	5	D
3099	08/16/88	3496	Cesium-137	8.3223	UJ	N	5	D
3100	05/24/88	3239	Cesium-137	10.071	UJ	N	5	D
3100	08/19/88	3517	Cesium-137	7.3931	UJ	N	5	D
3100	12/06/88	3761	Cesium-137	9.5382	UJ	N	5	D
3100	03/13/89	3978	Cesium-137	9.3121	UJ	N	5	D
4011	10/05/90	4345	Cesium-137	7.882	UJ	N	5	S
4011	02/07/91	4382	Cesium-137	11.05	UJ	N	5	S
4096	09/12/88	3584	Cesium-137	9.4903	UJ	N	5	R
4096	12/14/88	3788	Cesium-137	7.7394	UJ	N	5	R
4096	02/10/89	3975	Cesium-137	9.8987	UJ	N	5	R
4096	04/30/89	4083	Cesium-137	9.824	UJ	N	5	R
2026	05/12/88	3186	Neptunium-237	0.14	UJ	N	5	D
2026	08/17/88	3505	Neptunium-237	0.19	UJ	N	5	D
2026	12/07/88	3750	Neptunium-237	0.417	UJ	N	5	D
2026	03/14/89	3980	Neptunium-237	0.405	UJ	N	5	D
2036	05/12/88	3184	Neptunium-237	0.15	UJ	N	5	R
2036	08/23/88	3564	Neptunium-237	0.23	UJ	N	5	R
2036	12/07/88	3770	Neptunium-237	0.407	UJ	N	5	R
2036	03/14/89	3983	Neptunium-237	0.392	UJ	N	5	R
2043	08/05/88	3440	Neptunium-237	0.34	UJ	N	5	S
2043	11/04/88	3700	Neptunium-237	0.3	UJ	N	5	S
2050	05/05/88	3147	Neptunium-237	0.19	UJ	N	5	S
2050	08/16/88	3497	Neptunium-237	0.19	UJ	N	5	S
2050	12/05/88	3743	Neptunium-237	0.271	UJ	N	5	S
2050	03/13/89	3969	Neptunium-237	0.378	UJ	N	5	S
2056	08/25/88	3575	Neptunium-237	0.27	UJ	N	5	S
2056	12/07/88	3781	Neptunium-237	0.428	UJ	N	5	S
2056	03/13/89	3967	Neptunium-237	0.405	UJ	N	5	S
2057	06/03/88	3265	Neptunium-237	0.17	UJ	N	5	R
2057	08/25/88	3573	Neptunium-237	0.22	UJ	N	5	R
2057	12/13/88	3779	Neptunium-237	0.381	UJ	N	5	R
2057	03/14/89	3965	Neptunium-237	0.619	J	N	5	R
2066	08/07/88	3443	Neptunium-237	0.34	UJ	N	5	S
2066	11/10/88	3710	Neptunium-237	0.23	UJ	N	5	S
2066	03/14/89	3894	Neptunium-237	0.407	UJ	N	5	S
2096	09/12/88	3586	Neptunium-237	0.0023	UJ	N	5	R
2096	12/07/88	3790	Neptunium-237	0.378	UJ	N	5	R
2096	02/09/89	3985	Neptunium-237	0.196	UJ	N	5	R
2096	04/30/89	4081	Neptunium-237	0.233	UJ	N	5	R
2096	04/25/90	4234	Neptunium-237	0.147	UJ	N	5	R

Table C-3 (Continued)
Validated Unfiltered Radiological Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
2104	05/05/88	3146	Neptunium-237	0.17	UJ	N	5	R
2104	08/16/88	3498	Neptunium-237	0.2	UJ	N	5	R
2104	12/06/88	3744	Neptunium-237	0.207	UJ	N	5	R
2104	03/15/89	3970	Neptunium-237	0.407	UJ	N	5	R
2104	04/22/90	4235	Neptunium-237	0.586	UJ	N	5	R
2104	04/22/90	4269	Neptunium-237	0.365	UJ	N	5	R
2105	06/05/88	3268	Neptunium-237	0.18	UJ	N	5	S
2105	08/28/88	3577	Neptunium-237	0.26	UJ	N	5	S
2105	12/13/88	3782	Neptunium-237	0.277	UJ	N	5	S
2105	03/15/89	3968	Neptunium-237	0.384	UJ	N	5	S
2121	05/06/88	3158	Neptunium-237	0.39	J	N	5	D
2121	08/25/88	3571	Neptunium-237	0.23	UJ	N	5	D
2121	12/13/88	3776	Neptunium-237	0.388	UJ	N	5	D
2121	03/14/89	3962	Neptunium-237	0.409	UJ	N	5	D
2122	05/06/88	3157	Neptunium-237	0.25	J	N	5	D
2122	08/17/88	3504	Neptunium-237	0.19	UJ	N	5	D
2122	12/07/88	3749	Neptunium-237	0.384	UJ	N	5	D
2122	03/15/89	3979	Neptunium-237	0.409	UJ	N	5	D
2123	05/06/88	3156	Neptunium-237	0.45	J	N	5	R
2123	08/23/88	3565	Neptunium-237	0.21	UJ	N	5	R
2123	12/06/88	3771	Neptunium-237	0.182	UJ	N	5	R
2123	03/14/89	3984	Neptunium-237	0.364	UJ	N	5	R
3024	07/26/88	3377	Neptunium-237	0.19	UJ	N	5	S
3024	11/02/88	3658	Neptunium-237	0.035	UJ	N	5	S
3043	08/04/88	3397	Neptunium-237	0.2	UJ	N	5	S
3043	11/04/88	3694	Neptunium-237	0.34	UJ	N	5	S
3063	05/12/88	3190	Neptunium-237	0.14	UJ	N	5	D
3063	08/16/88	3495	Neptunium-237	0.19	UJ	N	5	D
3063	12/13/88	3741	Neptunium-237	0.392	UJ	N	5	D
3063	03/13/89	3966	Neptunium-237	0.163	UJ	N	5	D
3096	09/12/88	3585	Neptunium-237	0.0025	UJ	N	5	R
3096	12/07/88	3789	Neptunium-237	0.405	UJ	N	5	R
3096	02/09/89	3974	Neptunium-237	0.189	UJ	N	5	R
3096	04/30/89	4082	Neptunium-237	0.244	UJ	N	5	R
3096	04/25/90	4257	Neptunium-237	0.12	UJ	N	5	R
3098	09/21/88	3589	Neptunium-237	0.0024	UJ	N	5	D
3098	12/16/88	3795	Neptunium-237	0.252	UJ	N	5	D
3098	02/08/89	3989	Neptunium-237	0.203	UJ	N	5	D
3098	05/25/89	4088	Neptunium-237	0.158	UJ	N	5	D
3099	05/24/88	3237	Neptunium-237	0.15	UJ	N	5	D
3099	08/16/88	3496	Neptunium-237	0.2	UJ	N	5	D
3099	12/06/88	3742	Neptunium-237	0.204	UJ	N	5	D
3099	03/14/89	3977	Neptunium-237	0.428	UJ	N	5	D
3100	05/24/88	3239	Neptunium-237	0.14	UJ	N	5	D
3100	08/19/88	3517	Neptunium-237	0.34	UJ	N	5	D
3100	12/06/88	3761	Neptunium-237	0.196	UJ	N	5	D
3100	03/13/89	3978	Neptunium-237	0.364	UJ	N	5	D
4011	10/05/90	4345	Neptunium-237	0.254	UJ	N	5	S
4011	02/07/91	4382	Neptunium-237	0.141	UJ	N	5	S
4096	09/12/88	3584	Neptunium-237	0.0026	UJ	N	5	R

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Table C-3 (Continued)
Validated Unfiltered Radiological Data for Background Monitoring Wells in the Great Miami Aquifer

Well	Sample			Validated		QA		
No.	Date	ID	Constituent	Result	Qualifier	type	ASL	Area
4096	12/14/88	3788	Neptunium-237	0.278	UJ	N	5	R
4096	02/10/89	3975	Neptunium-237	0.192	UJ	N	5	R
4096	04/30/89	4083	Neptunium-237	0.231	UJ	N	5	R
2026	05/12/88	3186	Plutonium-238	0.095	UJ	N	5	D
2026	08/17/88	3505	Plutonium-238	0.03	UJ	N	5	D
2026	12/07/88	3750	Plutonium-238	0.0524	UJ	N	5	D
2026	03/14/89	3980	Plutonium-238	0.0595	UJ	N	5	D
2036	05/12/88	3184	Plutonium-238	0.094	UJ	N	5	R
2036	12/07/88	3770	Plutonium-238	0.0546	UJ	N	5	R
2036	03/14/89	3983	Plutonium-238	0.0805	UJ	N	5	R
2043	08/05/88	3440	Plutonium-238	0.036	J	N	5	S
2043	11/04/88	3700	Plutonium-238	0.06	UJ	N	5	S
2050	08/16/88	3497	Plutonium-238	0.033	UJ	N	5	S
2050	12/05/88	3743	Plutonium-238	0.0467	UJ	N	5	S
2056	08/25/88	3575	Plutonium-238	0.032	UJ	N	5	S
2056	12/07/88	3781	Plutonium-238	0.0459	UJ	N	5	S
2056	03/13/89	3967	Plutonium-238	0.0855	UJ	N	5	S
2057	08/25/88	3573	Plutonium-238	0.086	UJ	N	5	R
2057	12/13/88	3779	Plutonium-238	0.0571	UJ	N	5	R
2057	03/14/89	3965	Plutonium-238	0.0829	UJ	N	5	R
2066	08/07/88	3443	Plutonium-238	0.022	J	N	5	S
2066	11/10/88	3710	Plutonium-238	0.037	UJ	N	5	S
2066	03/14/89	3894	Plutonium-238	0.0622	UJ	N	5	S
2096	09/12/88	3586	Plutonium-238	0.033	UJ	N	5	R
2096	12/07/88	3790	Plutonium-238	0.0378	UJ	N	5	R
2096	02/09/89	3985	Plutonium-238	0.0432	UJ	N	5	R
2104	08/16/88	3498	Plutonium-238	0.036	UJ	N	5	R
2104	12/06/88	3744	Plutonium-238	0.0325	UJ	N	5	R
2104	04/22/90	4235	Plutonium-238	0.0692	UJ	N	5	R
2105	08/28/88	3577	Plutonium-238	0.028	UJ	N	5	S
2105	03/15/89	3968	Plutonium-238	0.0855	UJ	N	5	S
2121	08/25/88	3571	Plutonium-238	0.085	UJ	N	5	D
2121	12/13/88	3776	Plutonium-238	0.0255	UJ	N	5	D
2121	03/14/89	3962	Plutonium-238	0.0651	UJ	N	5	D
2122	08/17/88	3504	Plutonium-238	0.048	J	N	5	D
2122	12/07/88	3749	Plutonium-238	0.0558	UJ	N	5	D
2122	03/15/89	3979	Plutonium-238	0.0977	UJ	N	5	D
2123	08/23/88	3565	Plutonium-238	0.081	UJ	N	5	R
2123	12/06/88	3771	Plutonium-238	0.0383	UJ	N	5	R
2123	03/14/89	3984	Plutonium-238	0.0651	UJ	N	5	R
3024	11/02/88	3658	Plutonium-238	0.089	UJ	N	5	S
3043	08/04/88	3397	Plutonium-238	0.014	UJ	N	5	S
3043	11/04/88	3694	Plutonium-238	0.064	UJ	N	5	S
3063	05/12/88	3190	Plutonium-238	0.094	UJ	N	5	D
3063	08/16/88	3495	Plutonium-238	0.035	UJ	N	5	D
3063	12/13/88	3741	Plutonium-238	0.0558	UJ	N	5	D
3063	03/13/89	3966	Plutonium-238	0.0943	UJ	N	5	D
3096	09/12/88	3585	Plutonium-238	0.037	UJ	N	5	R
3096	12/07/88	3789	Plutonium-238	0.0467	UJ	N	5	R
3096	02/09/89	3974	Plutonium-238	0.0592	UJ	N	5	R

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Table C-3 (Continued)
Validated Unfiltered Radiological Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
3098	09/21/88	3589	Plutonium-238	0.033	UJ	N	5	D
3098	12/16/88	3795	Plutonium-238	0.089	J	N	5	D
3098	02/08/89	3989	Plutonium-238	0.0368	UJ	N	5	D
3098	05/25/89	4088	Plutonium-238	0.0565	UJ	N	5	D
3099	08/16/88	3496	Plutonium-238	0.059	J	N	5	D
3099	03/14/89	3977	Plutonium-238	0.0702	UJ	N	5	D
3100	05/24/88	3239	Plutonium-238	0.1	UJ	N	5	D
3100	08/19/88	3517	Plutonium-238	0.045	UJ	N	5	D
3100	12/06/88	3761	Plutonium-238	0.0514	UJ	N	5	D
3100	03/13/89	3978	Plutonium-238	0.0943	UJ	N	5	D
4011	10/05/90	4345	Plutonium-238	0.0751	J	N	5	S
4011	02/07/91	4382	Plutonium-238	0.0465	UJ	N	5	S
4096	09/12/88	3584	Plutonium-238	0.036	UJ	N	5	R
4096	12/14/88	3788	Plutonium-238	0.0401	UJ	N	5	R
4096	02/10/89	3975	Plutonium-238	0.0075	UJ	N	5	R
2026	08/17/88	3505	Plutonium-239/240	0.081	J	N	5	D
2026	12/07/88	3750	Plutonium-239/240	0.0524	UJ	N	5	D
2026	03/14/89	3980	Plutonium-239/240	0.0595	UJ	N	5	D
2036	12/07/88	3770	Plutonium-239/240	0.0546	UJ	N	5	R
2036	03/14/89	3983	Plutonium-239/240	0.0805	UJ	N	5	R
2043	08/05/88	3440	Plutonium-239/240	0.016	J	N	5	S
2043	11/04/88	3700	Plutonium-239/240	0.06	UJ	N	5	S
2050	08/16/88	3497	Plutonium-239/240	0.033	UJ	N	5	S
2050	12/05/88	3743	Plutonium-239/240	0.0467	UJ	N	5	S
2056	08/25/88	3575	Plutonium-239/240	0.032	UJ	N	5	S
2056	12/07/88	3781	Plutonium-239/240	0.0459	UJ	N	5	S
2056	03/13/89	3967	Plutonium-239/240	0.0855	UJ	N	5	S
2057	08/25/88	3573	Plutonium-239/240	0.086	UJ	N	5	R
2057	12/13/88	3779	Plutonium-239/240	0.0571	UJ	N	5	R
2057	03/14/89	3965	Plutonium-239/240	0.0829	UJ	N	5	R
2066	08/07/88	3443	Plutonium-239/240	0.018	J	N	5	S
2066	11/10/88	3710	Plutonium-239/240	0.037	UJ	N	5	S
2066	03/14/89	3894	Plutonium-239/240	0.0622	UJ	N	5	S
2096	09/12/88	3586	Plutonium-239/240	0.033	UJ	N	5	R
2096	12/07/88	3790	Plutonium-239/240	0.0378	UJ	N	5	R
2096	02/09/89	3985	Plutonium-239/240	0.0432	UJ	N	5	R
2096	04/25/90	4234	Plutonium-239/240	0.0763	U	N	5	R
2104	08/16/88	3498	Plutonium-239/240	0.036	UJ	N	5	R
2104	12/06/88	3744	Plutonium-239/240	0.0325	UJ	N	5	R
2104	04/22/90	4235	Plutonium-239/240	0.0692	UJ	N	5	R
2104	04/22/90	4269	Plutonium-239/240	0.0565	UJ	N	5	R
2105	08/28/88	3577	Plutonium-239/240	0.028	UJ	N	5	S
2105	12/13/88	3782	Plutonium-239/240	0.0694	UJ	N	5	S
2105	03/15/89	3968	Plutonium-239/240	0.0855	UJ	N	5	S
2121	08/25/88	3571	Plutonium-239/240	0.015	UJ	N	5	D
2121	12/13/88	3776	Plutonium-239/240	0.0255	UJ	N	5	D
2121	03/14/89	3962	Plutonium-239/240	0.0651	UJ	N	5	D
2122	08/17/88	3504	Plutonium-239/240	0.026	UJ	N	5	D
2122	12/07/88	3749	Plutonium-239/240	0.0558	UJ	N	5	D
2123	08/23/88	3565	Plutonium-239/240	0.081	UJ	N	5	R

Table C-3 (Continued)
Validated Unfiltered Radiological Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
2123	12/06/88	3771	Plutonium-239/240	0.0383	UJ	N	5	R
2123	03/14/89	3984	Plutonium-239/240	0.0651	UJ	N	5	R
3024	07/26/88	3377	Plutonium-239/240	0.016	UJ	N	5	S
3024	11/02/88	3658	Plutonium-239/240	0.089	UJ	N	5	S
3043	08/04/88	3397	Plutonium-239/240	0.014	UJ	N	5	S
3043	11/04/88	3694	Plutonium-239/240	0.064	UJ	N	5	S
3063	08/16/88	3495	Plutonium-239/240	0.035	UJ	N	5	D
3063	12/13/88	3741	Plutonium-239/240	0.0558	UJ	N	5	D
3096	09/12/88	3585	Plutonium-239/240	0.037	UJ	N	5	R
3096	12/07/88	3789	Plutonium-239/240	0.0467	UJ	N	5	R
3096	02/09/89	3974	Plutonium-239/240	0.0592	UJ	N	5	R
3096	04/25/90	4257	Plutonium-239/240	0.0616	UJ	N	5	R
3098	09/21/88	3589	Plutonium-239/240	0.003	UJ	N	5	D
3098	12/16/88	3795	Plutonium-239/240	0.046	UJ	N	5	D
3098	02/08/89	3989	Plutonium-239/240	0.0368	UJ	N	5	D
3098	05/25/89	4088	Plutonium-239/240	0.0565	UJ	N	5	D
3099	08/16/88	3496	Plutonium-239/240	0.083	J	N	5	D
3099	03/14/89	3977	Plutonium-239/240	0.0702	UJ	N	5	D
3100	08/19/88	3517	Plutonium-239/240	0.045	UJ	N	5	D
3100	12/06/88	3761	Plutonium-239/240	0.0514	UJ	N	5	D
4011	10/05/90	4345	Plutonium-239/240	0.0501	J	N	5	S
4011	02/07/91	4382	Plutonium-239/240	0.0465	UJ	N	5	S
4096	09/12/88	3584	Plutonium-239/240	0.036	UJ	N	5	R
4096	12/14/88	3788	Plutonium-239/240	0.0401	UJ	N	5	R
4096	02/10/89	3975	Plutonium-239/240	0.008	UJ	N	5	R
2026	05/12/88	3186	Radium-226	0.5	J	N	5	D
2026	05/12/88	3187	Radium-226	1	U	D	5	D
2026	08/17/88	3505	Radium-226	0.35	J	N	5	D
2026	12/07/88	3750	Radium-226	0.0942	J	N	5	D
2026	03/14/89	3980	Radium-226	0.179	J	N	5	D
2036	05/12/88	3184	Radium-226	0.2	J	N	5	R
2036	05/12/88	3185	Radium-226	1	U	D	5	R
2036	08/23/88	3564	Radium-226	0.55	UJ	N	5	R
2036	12/07/88	3770	Radium-226	0.0831	UJ	N	5	R
2036	03/14/89	3983	Radium-226	0.0884	UJ	N	5	R
2043	04/13/88	3091	Radium-226	1.4	J	N	5	S
2043	08/05/88	3440	Radium-226	0.74	J	N	5	S
2043	11/04/88	3700	Radium-226	0.46	J	N	5	S
2043	02/02/89	3887	Radium-226	0.712	J	N	5	S
2043	04/07/93	GW930407-12	Radium-226	1.1	-	N	3	S
2050	05/05/88	3147	Radium-226	1.8	-	N	5	S
2050	08/16/88	3497	Radium-226	0.52	J	N	5	S
2050	12/05/88	3743	Radium-226	0.524	J	N	5	S
2050	03/13/89	3969	Radium-226	0.0658	UJ	N	5	S
2050	05/20/93	GW930520-8	Radium-226	1.1	J	N	3	S
2050	08/03/93	GW930803-3	Radium-226	1.7	J	N	3	S
2056	05/06/88	3159	Radium-226	2	-	N	5	S
2056	08/25/88	3575	Radium-226	0.83	J	N	5	S
2056	12/07/88	3781	Radium-226	0.619	J	N	5	S
2056	03/13/89	3967	Radium-226	0.6	J	N	5	S

Table C-3 (Continued)
Validated Unfiltered Radiological Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
2056	03/13/89	4045	Radium-226	1	U	D	5	S
2057	06/03/88	3265	Radium-226	0.51	UJ	N	5	R
2057	08/25/88	3573	Radium-226	0.39	UJ	N	5	R
2057	12/13/88	3779	Radium-226	0.0831	UJ	N	5	R
2057	03/14/89	3965	Radium-226	0.142	UJ	N	5	R
2066	04/26/88	3124	Radium-226	0.4	J	N	5	S
2066	08/07/88	3443	Radium-226	0.32	J	N	5	S
2066	11/10/88	3710	Radium-226	0.69	J	N	5	S
2066	03/14/89	3894	Radium-226	0.659	J	N	5	S
2066	04/07/93	GW930407-14	Radium-226	1.4	J	N	3	S
2096	09/12/88	3586	Radium-226	0.36	J	N	5	R
2096	12/07/88	3790	Radium-226	0.168	J	N	5	R
2096	02/09/89	3985	Radium-226	0.167	UJ	N	5	R
2096	04/30/89	4081	Radium-226	0.868	J	N	5	R
2096	04/25/90	4234	Radium-226	0.0581	U	N	5	R
2096	05/06/93	GW930506-5	Radium-226	0.4	UJ	N	3	R
2096	08/04/93	GW930804-1	Radium-226	0.4	-	N	3	R
2104	05/05/88	3146	Radium-226	0.5	J	N	5	R
2104	08/16/88	3498	Radium-226	0.34	UJ	N	5	R
2104	12/06/88	3744	Radium-226	0.505	J	N	5	R
2104	03/15/89	3970	Radium-226	0.427	J	N	5	R
2104	04/22/90	4235	Radium-226	0.439	J	N	5	R
2104	04/22/90	4269	Radium-226	0.225	J	N	5	R
2104	05/13/93	GW930513-14	Radium-226	0.6	J	N	3	R
2104	05/13/93	GW930513-18	Radium-226	0.5	UJ	N	3	R
2104	08/02/93	GW930802-5	Radium-226	0.9	J	N	3	R
2105	06/05/88	3268	Radium-226	0.37	UJ	N	5	S
2105	08/28/88	3577	Radium-226	0.2	UJ	N	5	S
2105	12/13/88	3782	Radium-226	0.136	UJ	N	5	S
2105	03/15/89	3968	Radium-226	0.784	J	N	5	S
2121	05/06/88	3158	Radium-226	1.1	-	N	5	D
2121	08/25/88	3571	Radium-226	0.55	UJ	N	5	D
2121	12/13/88	3776	Radium-226	0.082	UJ	N	5	D
2121	03/14/89	3962	Radium-226	0.146	J	N	5	D
2122	05/06/88	3157	Radium-226	0.8	UJ	N	5	D
2122	08/17/88	3504	Radium-226	0.44	UJ	N	5	D
2122	12/07/88	3749	Radium-226	0.0714	UJ	N	5	D
2122	03/15/89	3979	Radium-226	0.158	J	N	5	D
2123	05/06/88	3156	Radium-226	0.3	UJ	N	5	R
2123	08/23/88	3565	Radium-226	0.33	UJ	N	5	R
2123	12/06/88	3771	Radium-226	0.112	UJ	N	5	R
2123	03/14/89	3984	Radium-226	0.105	UJ	N	5	R
2728	05/24/93	GW930524-3	Radium-226	0.4	J	N	3	S
3024	07/26/88	3377	Radium-226	0.56	J	N	5	S
3024	11/02/88	3658	Radium-226	0.34	J	N	5	S
3024	01/24/89	3842	Radium-226	1	U	N	5	S
3024	04/12/93	GW930412-8	Radium-226	1.6	J	N	3	S
3043	04/13/88	3090	Radium-226	1.7	J	N	5	S
3043	11/04/88	3694	Radium-226	1.2	-	N	5	S
3043	02/02/89	3886	Radium-226	0.698	J	N	5	S

Table C-3 (Continued)
Validated Unfiltered Radiological Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
3043	06/13/89	66439	Radium-226	0.616	J	N	5	S
3043	04/07/93	GW930407-13	Radium-226	1.3	-	N	5	S
3063	05/12/88	3190	Radium-226	0.3	J	N	5	D
3063	05/12/88	3191	Radium-226	1	U	D	5	D
3063	08/16/88	3495	Radium-226	0.44	UJ	N	5	D
3063	12/13/88	3741	Radium-226	0.138	UJ	N	5	D
3063	03/13/89	3966	Radium-226	0.136	UJ	N	5	D
3096	09/12/88	3585	Radium-226	0.17	UJ	N	5	R
3096	12/07/88	3789	Radium-226	0.14	UJ	N	5	R
3096	02/09/89	3974	Radium-226	1	U	N	5	R
3096	04/30/89	4082	Radium-226	0.217	J	N	5	R
3096	04/25/90	4257	Radium-226	0.0707	J	N	5	R
3096	05/07/93	GW930507-1	Radium-226	0.5	UJ	N	3	R
3096	08/11/93	GW930811-3	Radium-226	1.3	UJ	N	3	R
3096	08/11/93	GW930811-2	Radium-226	0.8	UJ	N	4	R
3098	09/21/88	3589	Radium-226	0.36	UJ	N	5	D
3098	12/16/88	3795	Radium-226	0.151	UJ	N	5	D
3098	02/08/89	3989	Radium-226	0.0663	UJ	N	5	D
3098	05/25/89	4088	Radium-226	0.16	UJ	N	5	D
3098	05/20/93	GW930520-10	Radium-226	0.4	J	N	3	D
3099	05/24/88	3237	Radium-226	0.32	J	N	5	D
3099	05/24/88	3238	Radium-226	1	U	D	5	D
3099	08/16/88	3496	Radium-226	0.41	J	N	5	D
3099	12/06/88	3742	Radium-226	0.112	UJ	N	5	D
3099	03/14/89	3977	Radium-226	0.138	UJ	N	5	D
3100	05/24/88	3239	Radium-226	0.3	UJ	N	5	D
3100	05/24/88	3240	Radium-226	1	U	D	5	D
3100	08/19/88	3517	Radium-226	0.3	UJ	N	5	D
3100	12/06/88	3761	Radium-226	0.16	UJ	N	5	D
3100	03/13/89	3978	Radium-226	0.271	J	N	5	D
4011	10/05/90	4345	Radium-226	0.4647	J	N	5	S
4011	02/07/91	4382	Radium-226	0.2376	J	N	5	S
4011	04/08/93	GW930408-3	Radium-226	0.5	UJ	N	3	S
4011	04/08/93	GW930408-2	Radium-226	0.5	UJ	D	3	S
4096	09/12/88	3584	Radium-226	0.39	UJ	N	5	R
4096	12/14/88	3788	Radium-226	0.124	UJ	N	5	R
4096	12/14/88	3474	Radium-226	1	U	D	5	R
4096	02/10/89	3975	Radium-226	0.115	UJ	N	5	R
4096	04/30/89	4083	Radium-226	0.136	UJ	N	5	R
4096	05/06/93	GW930506-7	Radium-226	0.5	UJ	N	3	R
4096	08/04/93	GW930804-2	Radium-226	0.6	UJ	N	3	R
2026	05/12/88	3186	Radium-228	5	J	N	5	D
2026	05/12/88	3187	Radium-228	4	J	D	5	D
2026	08/17/88	3505	Radium-228	1.7	UJ	N	5	D
2026	12/07/88	3750	Radium-228	2.33	UJ	N	5	D
2026	03/14/89	3980	Radium-228	2.66	UJ	N	5	D
2036	05/12/88	3184	Radium-228	2.2	UJ	N	5	R
2036	05/12/88	3185	Radium-228	3	UJ	D	5	R
2036	08/23/88	3564	Radium-228	2	J	N	5	R
2036	12/07/88	3770	Radium-228	2.3	UJ	N	5	R

Table C-3 (Continued)
Validated Unfiltered Radiological Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
2036	03/14/89	3983	Radium-228	2.78	UJ	N	5	R
2043	04/13/88	3091	Radium-228	2.4	J	N	5	S
2043	08/05/88	3440	Radium-228	1.5	J	N	5	S
2043	11/04/88	3700	Radium-228	4.8	J	N	5	S
2043	02/02/89	3887	Radium-228	2.87	UJ	N	5	S
2043	04/07/93	GW930407-12	Radium-228	2.8	U	N	3	S
2050	05/05/88	3147	Radium-228	2.24	J	N	5	S
2050	08/16/88	3497	Radium-228	2	UJ	N	5	S
2050	12/05/88	3743	Radium-228	2.46	UJ	N	5	S
2050	03/13/89	3969	Radium-228	2.55	UJ	N	5	S
2050	05/20/93	GW930520-8	Radium-228	1.7	U	N	3	S
2050	08/03/93	GW930803-3	Radium-228	2.6	-	N	3	S
2056	05/06/88	3159	Radium-228	2.2	J	N	5	S
2056	08/25/88	3575	Radium-228	2	UJ	N	5	S
2056	12/07/88	3781	Radium-228	2.03	UJ	N	5	S
2056	03/13/89	3967	Radium-228	2.51	UJ	N	5	S
2057	06/03/88	3265	Radium-228	1.6	UJ	N	5	R
2057	08/25/88	3573	Radium-228	2.2	UJ	N	5	R
2057	12/13/88	3779	Radium-228	2.27	UJ	N	5	R
2057	03/14/89	3965	Radium-228	2.7	UJ	N	5	R
2066	04/26/88	3124	Radium-228	2.2	UJ	N	5	S
2066	08/07/88	3443	Radium-228	1.9	UJ	N	5	S
2066	11/10/88	3710	Radium-228	2.1	UJ	N	5	S
2066	03/14/89	3894	Radium-228	3.04	UJ	N	5	S
2066	04/07/93	GW930407-14	Radium-228	1.5	-	N	3	S
2096	09/12/88	3586	Radium-228	1.4	UJ	N	5	R
2096	12/07/88	3790	Radium-228	2.07	UJ	N	5	R
2096	02/09/89	3985	Radium-228	2.82	UJ	N	5	R
2096	04/30/89	4081	Radium-228	2.42	UJ	N	5	R
2096	04/25/90	4234	Radium-228	0.185	UJ	N	5	R
2096	05/06/93	GW930506-5	Radium-228	1.9	U	N	3	R
2096	08/04/93	GW930804-1	Radium-228	1.7	UJ	N	3	R
2104	05/05/88	3146	Radium-228	3.1	J	N	5	R
2104	08/16/88	3498	Radium-228	1.8	J	N	5	R
2104	12/06/88	3744	Radium-228	2.22	UJ	N	5	R
2104	03/15/89	3970	Radium-228	2.94	UJ	N	5	R
2104	04/22/90	4235	Radium-228	1.42	J	N	5	R
2104	04/22/90	4269	Radium-228	1.35	UJ	N	5	R
2104	05/13/93	GW930513-14	Radium-228	3	-	N	3	R
2104	05/13/93	GW930513-18	Radium-228	2.6	U	N	3	R
2104	08/02/93	GW930802-5	Radium-228	5.2	-	N	3	R
2105	06/05/88	3268	Radium-228	1.6	UJ	N	5	S
2105	08/28/88	3577	Radium-228	1.8	UJ	N	5	S
2105	12/13/88	3782	Radium-228	2.13	UJ	N	5	S
2105	03/15/89	3968	Radium-228	2.63	UJ	N	5	S
2121	05/06/88	3158	Radium-228	1.8	UJ	N	5	D
2121	08/25/88	3571	Radium-228	2.1	UJ	N	5	D
2121	12/13/88	3776	Radium-228	2.34	UJ	N	5	D
2121	03/14/89	3962	Radium-228	2.93	UJ	N	5	D
2122	05/06/88	3157	Radium-228	2	UJ	N	5	D

Table C-3 (Continued)
Validated Unfiltered Radiological Data for Background Monitoring Wells in the Great Miami Aquifer

Well	Sample			Validated		QA		
No.	Date	ID	Constituent	Result	Qualifier	type	ASL	Area
2122	08/17/88	3504	Radium-228	2.6	J	N	5	D
2122	12/07/88	3749	Radium-228	2.05	UJ	N	5	D
2122	03/15/89	3979	Radium-228	2.81	UJ	N	5	D
2123	05/06/88	3156	Radium-228	1.7	UJ	N	5	R
2123	08/23/88	3565	Radium-228	3.2	UJ	N	5	R
2123	12/06/88	3771	Radium-228	2.05	UJ	N	5	R
2123	03/14/89	3984	Radium-228	2.73	UJ	N	5	R
2728	05/24/93	GW930524-3	Radium-228	3.6	-	N	3	S
3024	07/26/88	3377	Radium-228	1.9	UJ	N	5	S
3024	11/02/88	3658	Radium-228	2	UJ	N	5	S
3024	01/24/89	3842	Radium-228	3	UJ	N	5	S
3024	04/12/93	GW930412-8	Radium-228	2.7	-	N	3	S
3043	04/13/88	3090	Radium-228	2.1	UJ	N	5	S
3043	08/04/88	3397	Radium-228	2	J	N	5	S
3043	11/04/88	3694	Radium-228	3.8	J	N	5	S
3043	02/02/89	3886	Radium-228	3.16	UJ	N	5	S
3043	06/13/89	66439	Radium-228	2.47	UJ	N	5	S
3043	04/07/93	GW930407-13	Radium-228	3	U	N	5	S
3063	05/12/88	3190	Radium-228	3.1	J	N	5	D
3063	05/12/88	3191	Radium-228	5.5	J	D	5	D
3063	08/16/88	3495	Radium-228	1.9	UJ	N	5	D
3063	12/13/88	3741	Radium-228	2.09	UJ	N	5	D
3063	03/13/89	3966	Radium-228	2.36	UJ	N	5	D
3096	09/12/88	3585	Radium-228	1.5	UJ	N	5	R
3096	12/07/88	3789	Radium-228	2.1	UJ	N	5	R
3096	02/09/89	3974	Radium-228	3	U	N	5	R
3096	04/30/89	4082	Radium-228	2.16	UJ	N	5	R
3096	04/25/90	4257	Radium-228	0.307	UJ	N	5	R
3096	05/07/93	GW930507-1	Radium-228	2	U	N	3	R
3096	08/11/93	GW930811-3	Radium-228	2.3	UJ	N	3	R
3096	08/11/93	GW930811-2	Radium-228	1.8	UJ	N	4	R
3098	09/21/88	3589	Radium-228	1.6	UJ	N	5	D
3098	12/16/88	3795	Radium-228	1.87	UJ	N	5	D
3098	02/08/89	3989	Radium-228	2.98	UJ	N	5	D
3098	05/25/89	4088	Radium-228	2.46	UJ	N	5	D
3098	05/20/93	GW930520-10	Radium-228	2.2	U	N	3	D
3099	05/24/88	3237	Radium-228	1	J	N	5	D
3099	05/24/88	3238	Radium-228	3	U	D	5	D
3099	08/16/88	3496	Radium-228	1.7	UJ	N	5	D
3099	12/06/88	3742	Radium-228	2.27	UJ	N	5	D
3099	03/14/89	3977	Radium-228	2.69	UJ	N	5	D
3100	05/24/88	3239	Radium-228	2.3	J	N	5	D
3100	05/24/88	3240	Radium-228	4.1	-	D	5	D
3100	08/19/88	3517	Radium-228	2	UJ	N	5	D
3100	12/06/88	3761	Radium-228	1.98	UJ	N	5	D
3100	03/13/89	3978	Radium-228	2.49	UJ	N	5	D
4011	10/05/90	4345	Radium-228	1.62	UJ	N	5	S
4011	02/07/91	4382	Radium-228	1.25	UJ	N	5	S
4011	04/08/93	GW930408-3	Radium-228	1.9	-	N	3	S
4011	04/08/93	GW930408-2	Radium-228	2.4	-	D	3	S

Table C-3 (Continued)
Validated Unfiltered Radiological Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
4096	09/12/88	3584	Radium-228	1.7	UJ	N	5	R
4096	12/14/88	3788	Radium-228	2.02	UJ	N	5	R
4096	12/14/88	3474	Radium-228	3	U	D	5	R
4096	02/10/89	3975	Radium-228	2.82	UJ	N	5	R
4096	04/30/89	4083	Radium-228	2.25	UJ	N	5	R
4096	05/06/93	GW930506-7	Radium-228	1.8	U	N	3	R
4096	08/04/93	GW930804-2	Radium-228	1.9	U	N	3	R
2026	05/12/88	3186	Ruthenium-106	80.843	UJ	N	5	D
2026	08/17/88	3505	Ruthenium-106	79.691	UJ	N	5	D
2026	12/07/88	3750	Ruthenium-106	86.26	UJ	N	5	D
2026	03/14/89	3980	Ruthenium-106	98.655	UJ	N	5	D
2036	05/12/88	3184	Ruthenium-106	69.206	UJ	N	5	R
2036	08/23/88	3564	Ruthenium-106	170.18	UJ	N	5	R
2036	12/07/88	3770	Ruthenium-106	72.693	UJ	N	5	R
2036	03/14/89	3983	Ruthenium-106	70.64	UJ	N	5	R
2043	04/13/88	3091	Ruthenium-106	71.773	UJ	N	5	S
2043	08/05/88	3440	Ruthenium-106	87.544	UJ	N	5	S
2043	11/04/88	3700	Ruthenium-106	58.066	UJ	N	5	S
2043	02/02/89	3887	Ruthenium-106	71.67	UJ	N	5	S
2050	05/05/88	3147	Ruthenium-106	84.474	UJ	N	5	S
2050	08/16/88	3497	Ruthenium-106	77.072	UJ	N	5	S
2050	12/05/88	3743	Ruthenium-106	76.565	UJ	N	5	S
2050	03/13/89	3969	Ruthenium-106	80.976	UJ	N	5	S
2056	05/06/88	3159	Ruthenium-106	60.768	UJ	N	5	S
2056	08/25/88	3575	Ruthenium-106	87.27	UJ	N	5	S
2056	12/07/88	3781	Ruthenium-106	79.726	UJ	N	5	S
2056	03/13/89	3967	Ruthenium-106	89.057	UJ	N	5	S
2057	08/25/88	3573	Ruthenium-106	88.114	UJ	N	5	R
2057	12/13/88	3779	Ruthenium-106	87.342	UJ	N	5	R
2066	08/07/88	3443	Ruthenium-106	81.404	UJ	N	5	S
2066	11/10/88	3710	Ruthenium-106	75.788	UJ	N	5	S
2066	03/14/89	3894	Ruthenium-106	79.041	UJ	N	5	S
2096	09/12/88	3586	Ruthenium-106	86.117	UJ	N	5	R
2096	12/07/88	3790	Ruthenium-106	95.886	UJ	N	5	R
2096	02/09/89	3985	Ruthenium-106	77.361	UJ	N	5	R
2096	04/30/89	4081	Ruthenium-106	78.505	UJ	N	5	R
2096	04/25/90	4234	Ruthenium-106	83.004	UJ	N	5	R
2104	05/05/88	3146	Ruthenium-106	63.672	UJ	N	5	R
2104	08/16/88	3498	Ruthenium-106	109.82	UJ	N	5	R
2104	12/06/88	3744	Ruthenium-106	77.527	UJ	N	5	R
2104	04/22/90	4235	Ruthenium-106	77.935	UJ	N	5	R
2104	04/22/90	4269	Ruthenium-106	79.857	UJ	N	5	R
2105	06/05/88	3268	Ruthenium-106	71.446	UJ	N	5	S
2105	08/28/88	3577	Ruthenium-106	74.393	UJ	N	5	S
2105	12/13/88	3782	Ruthenium-106	65.809	UJ	N	5	S
2105	03/15/89	3968	Ruthenium-106	64.113	UJ	N	5	S
2121	08/25/88	3571	Ruthenium-106	101.14	UJ	N	5	D
2121	12/13/88	3776	Ruthenium-106	84.996	UJ	N	5	D
2121	03/14/89	3962	Ruthenium-106	75.841	UJ	N	5	D
2122	08/17/88	3504	Ruthenium-106	75.512	UJ	N	5	D

Table C-3 (Continued)
Validated Unfiltered Radiological Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
2122	12/07/88	3749	Ruthenium-106	88.024	UJ	N	5	D
2123	08/23/88	3565	Ruthenium-106	82.473	UJ	N	5	R
2123	12/06/88	3771	Ruthenium-106	83.667	UJ	N	5	R
2123	03/14/89	3984	Ruthenium-106	71.228	UJ	N	5	R
3024	07/26/88	3377	Ruthenium-106	79.2	UJ	N	5	S
3024	11/02/88	3658	Ruthenium-106	73.669	UJ	N	5	S
3043	04/13/88	3090	Ruthenium-106	74.482	UJ	N	5	S
3043	08/04/88	3397	Ruthenium-106	66.371	UJ	N	5	S
3043	11/04/88	3694	Ruthenium-106	78.576	UJ	N	5	S
3043	02/02/89	3886	Ruthenium-106	72.804	UJ	N	5	S
3043	06/13/89	66439	Ruthenium-106	83.455	UJ	N	5	S
3063	05/12/88	3190	Ruthenium-106	68.312	UJ	N	5	D
3063	08/16/88	3495	Ruthenium-106	89.747	UJ	N	5	D
3063	12/13/88	3741	Ruthenium-106	64.948	UJ	N	5	D
3096	09/12/88	3585	Ruthenium-106	88.852	UJ	N	5	R
3096	12/07/88	3789	Ruthenium-106	84.181	UJ	N	5	R
3096	02/09/89	3974	Ruthenium-106	150	U	N	5	R
3096	04/30/89	4082	Ruthenium-106	78.665	UJ	N	5	R
3096	04/25/90	4257	Ruthenium-106	97.92	UJ	N	5	R
3098	12/16/88	3795	Ruthenium-106	77.354	UJ	N	5	D
3098	02/08/89	3989	Ruthenium-106	69.989	UJ	N	5	D
3098	05/25/89	4088	Ruthenium-106	66.868	UJ	N	5	D
3099	08/16/88	3496	Ruthenium-106	89.325	UJ	N	5	D
3099	12/06/88	3742	Ruthenium-106	90.368	UJ	N	5	D
3100	05/24/88	3239	Ruthenium-106	72.639	UJ	N	5	D
3100	08/19/88	3517	Ruthenium-106	83.488	UJ	N	5	D
3100	12/06/88	3761	Ruthenium-106	78.264	UJ	N	5	D
3100	03/13/89	3978	Ruthenium-106	67.046	UJ	N	5	D
4011	10/05/90	4345	Ruthenium-106	88.351	UJ	N	5	S
4011	02/07/91	4382	Ruthenium-106	90.909	UJ	N	5	S
4096	09/12/88	3584	Ruthenium-106	67.541	UJ	N	5	R
4096	12/14/88	3788	Ruthenium-106	90.679	UJ	N	5	R
4096	02/10/89	3975	Ruthenium-106	90.827	UJ	N	5	R
4096	04/30/89	4083	Ruthenium-106	65.667	UJ	N	5	R
2026	05/12/88	3186	Strontium-90	1	UJ	N	5	D
2026	08/17/88	3505	Strontium-90	1	UJ	N	5	D
2026	12/07/88	3750	Strontium-90	1.3	UJ	N	5	D
2026	03/14/89	3980	Strontium-90	1.16	UJ	N	5	D
2036	05/12/88	3184	Strontium-90	0.9	UJ	N	5	R
2036	08/23/88	3564	Strontium-90	0.53	UJ	N	5	R
2036	12/07/88	3770	Strontium-90	1.29	UJ	N	5	R
2036	03/14/89	3983	Strontium-90	1.14	UJ	N	5	R
2043	04/13/88	3091	Strontium-90	1.2	UJ	N	5	S
2043	08/05/88	3440	Strontium-90	1.6	UJ	N	5	S
2043	11/04/88	3700	Strontium-90	0.91	UJ	N	5	S
2043	02/02/89	3887	Strontium-90	1	UJ	N	5	S
2050	05/05/88	3147	Strontium-90	0.87	UJ	N	5	S
2050	08/16/88	3497	Strontium-90	1.2	UJ	N	5	S
2050	12/05/88	3743	Strontium-90	1.08	UJ	N	5	S
2050	03/13/89	3969	Strontium-90	1.16	UJ	N	5	S

Table C-3 (Continued)
Validated Unfiltered Radiological Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
2056	05/06/88	3159	Strontium-90	1.2	UJ	N	5	S
2056	08/25/88	3575	Strontium-90	0.98	UJ	N	5	S
2056	12/07/88	3781	Strontium-90	1.4	UJ	N	5	S
2056	03/13/89	3967	Strontium-90	1.07	UJ	N	5	S
2057	06/03/88	3265	Strontium-90	0.93	UJ	N	5	R
2057	08/25/88	3573	Strontium-90	1	UJ	N	5	R
2057	12/13/88	3779	Strontium-90	1.2	UJ	N	5	R
2057	03/14/89	3965	Strontium-90	1.02	UJ	N	5	R
2066	04/26/88	3124	Strontium-90	1.2	UJ	N	5	S
2066	08/07/88	3443	Strontium-90	0.78	UJ	N	5	S
2066	11/10/88	3710	Strontium-90	1.2	UJ	N	5	S
2066	03/14/89	3894	Strontium-90	1.04	UJ	N	5	S
2096	09/12/88	3586	Strontium-90	0.84	UJ	N	5	R
2096	12/07/88	3790	Strontium-90	1.15	UJ	N	5	R
2096	02/09/89	3985	Strontium-90	1.26	UJ	N	5	R
2096	04/30/89	4081	Strontium-90	1.35	UJ	N	5	R
2096	04/25/90	4234	Strontium-90	2.99	J	N	5	R
2104	05/05/88	3146	Strontium-90	0.91	UJ	N	5	R
2104	08/16/88	3498	Strontium-90	1.7	UJ	N	5	R
2104	12/06/88	3744	Strontium-90	1.06	UJ	N	5	R
2104	03/15/89	3970	Strontium-90	1.11	UJ	N	5	R
2104	04/22/90	4235	Strontium-90	1.04	UJ	N	5	R
2104	04/22/90	4269	Strontium-90	1.11	UJ	N	5	R
2105	06/05/88	3268	Strontium-90	1	UJ	N	5	S
2105	12/13/88	3782	Strontium-90	0.95	UJ	N	5	S
2105	03/15/89	3968	Strontium-90	1.03	UJ	N	5	S
2121	05/06/88	3158	Strontium-90	0.96	UJ	N	5	D
2121	08/25/88	3571	Strontium-90	0.89	UJ	N	5	D
2121	12/13/88	3776	Strontium-90	1.05	UJ	N	5	D
2121	03/14/89	3962	Strontium-90	1.1	UJ	N	5	D
2122	05/06/88	3157	Strontium-90	1.3	UJ	N	5	D
2122	08/17/88	3504	Strontium-90	1	UJ	N	5	D
2122	12/07/88	3749	Strontium-90	1.17	UJ	N	5	D
2122	03/15/89	3979	Strontium-90	1.12	UJ	N	5	D
2123	05/06/88	3156	Strontium-90	1.1	UJ	N	5	R
2123	08/23/88	3565	Strontium-90	1	UJ	N	5	R
2123	12/06/88	3771	Strontium-90	1.12	UJ	N	5	R
2123	03/14/89	3984	Strontium-90	1.1	UJ	N	5	R
3024	07/26/88	3377	Strontium-90	0.65	J	N	5	S
3024	11/02/88	3658	Strontium-90	1.2	UJ	N	5	S
3043	04/13/88	3090	Strontium-90	1.2	UJ	N	5	S
3043	08/04/88	3397	Strontium-90	1.1	UJ	N	5	S
3043	11/04/88	3694	Strontium-90	0.96	UJ	N	5	S
3043	02/02/89	3886	Strontium-90	0.833	UJ	N	5	S
3043	06/13/89	66439	Strontium-90	1.97	J	N	5	S
3063	05/12/88	3190	Strontium-90	1.2	UJ	N	5	D
3063	08/16/88	3495	Strontium-90	1.5	UJ	N	5	D
3063	12/13/88	3741	Strontium-90	1.07	UJ	N	5	D
3063	03/13/89	3966	Strontium-90	1.19	UJ	N	5	D
3096	09/12/88	3585	Strontium-90	1	UJ	N	5	R

Table C-3 (Continued)
Validated Unfiltered Radiological Data for Background Monitoring Wells in the Great Miami Aquifer

Well	Sample			Validated		QA		
No.	Date	ID	Constituent	Result	Qualifier	type	ASL	Area
3096	12/07/88	3789	Strontium-90	1.05	UJ	N	5	R
3096	02/09/89	3974	Strontium-90	1.34	UJ	N	5	R
3096	04/30/89	4082	Strontium-90	1.2	UJ	N	5	R
3096	04/25/90	4257	Strontium-90	4.84	J	N	5	R
3098	09/21/88	3589	Strontium-90	0.9	UJ	N	5	D
3098	12/16/88	3795	Strontium-90	0.901	UJ	N	5	D
3098	02/08/89	3989	Strontium-90	1.51	UJ	N	5	D
3098	05/25/89	4088	Strontium-90	1.12	UJ	N	5	D
3099	05/24/88	3237	Strontium-90	1.1	UJ	N	5	D
3099	08/16/88	3496	Strontium-90	1.2	UJ	N	5	D
3099	12/06/88	3742	Strontium-90	0.961	UJ	N	5	D
3099	03/14/89	3977	Strontium-90	1.03	UJ	N	5	D
3100	05/24/88	3239	Strontium-90	1.3	UJ	N	5	D
3100	08/19/88	3517	Strontium-90	1.3	UJ	N	5	D
3100	12/06/88	3761	Strontium-90	1.09	UJ	N	5	D
3100	03/13/89	3978	Strontium-90	1.12	UJ	N	5	D
4011	10/05/90	4345	Strontium-90	0.365	UJ	N	5	S
4011	02/07/91	4382	Strontium-90	1.21	UJ	N	5	S
4096	09/12/88	3584	Strontium-90	1.1	UJ	N	5	R
4096	12/14/88	3788	Strontium-90	1.1	UJ	N	5	R
4096	02/10/89	3975	Strontium-90	1.38	UJ	N	5	R
4096	04/30/89	4083	Strontium-90	1.03	UJ	N	5	R
2026	05/12/88	3186	Technetium-99	17.8	UJ	N	5	D
2026	05/12/88	3187	Technetium-99	30	U	D	5	D
2026	08/17/88	3505	Technetium-99	8.9	UJ	N	5	D
2026	12/07/88	3750	Technetium-99	19.27	UJ	N	5	D
2026	03/14/89	3980	Technetium-99	20.8	UJ	N	5	D
2036	05/12/88	3184	Technetium-99	18.9	UJ	N	5	R
2036	05/12/88	3185	Technetium-99	30	U	D	5	R
2036	08/23/88	3564	Technetium-99	10.3	UJ	N	5	R
2036	12/07/88	3770	Technetium-99	19.06	UJ	N	5	R
2036	03/14/89	3983	Technetium-99	18.47	UJ	N	5	R
2043	04/13/88	3091	Technetium-99	15.2	UJ	N	5	S
2043	08/05/88	3440	Technetium-99	12.2	UJ	N	5	S
2043	11/04/88	3700	Technetium-99	20.8	UJ	N	5	S
2043	02/02/89	3887	Technetium-99	15.77	UJ	N	5	S
2043	06/26/89	66438	Technetium-99	23.1	UJ	N	5	S
2043	08/30/89	66542	Technetium-99	36.03	J	N	5	S
2043	08/30/89	66547	Technetium-99	30	UJ	D	5	S
2043	11/14/89	66682	Technetium-99	14.87	UJ	N	5	S
2050	05/05/88	3147	Technetium-99	17	UJ	N	5	S
2050	08/16/88	3497	Technetium-99	8.9	UJ	N	5	S
2050	12/05/88	3743	Technetium-99	19.3	UJ	N	5	S
2050	03/13/89	3969	Technetium-99	21.91	UJ	N	5	S
2050	12/18/89	66846	Technetium-99	18.56	UJ	N	5	S
2056	05/06/88	3159	Technetium-99	16	UJ	N	5	S
2056	08/25/88	3575	Technetium-99	9.4	UJ	N	5	S
2056	12/07/88	3781	Technetium-99	14.18	UJ	N	5	S
2056	03/13/89	3967	Technetium-99	22.37	UJ	N	5	S
2056	03/13/89	4045	Technetium-99	30	U	D	5	S

Table C-3 (Continued)
Validated Unfiltered Radiological Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
2057	06/03/88	3265	Technetium-99	16	UJ	N	5	R
2057	08/25/88	3573	Technetium-99	7.6	UJ	N	5	R
2057	12/13/88	3779	Technetium-99	18.54	UJ	N	5	R
2057	03/14/89	3965	Technetium-99	24.25	UJ	N	5	R
2066	04/26/88	3124	Technetium-99	15.68	UJ	N	5	S
2066	08/07/88	3443	Technetium-99	11.9	UJ	N	5	S
2066	11/10/88	3710	Technetium-99	20.8	UJ	N	5	S
2066	03/14/89	3894	Technetium-99	19.41	UJ	N	5	S
2066	06/27/89	66436	Technetium-99	21.23	UJ	N	5	S
2066	11/06/89	66686	Technetium-99	22.06	UJ	N	5	S
2096	09/12/88	3586	Technetium-99	8.6	UJ	N	5	R
2096	12/07/88	3790	Technetium-99	16.51	UJ	N	5	R
2096	02/09/89	3985	Technetium-99	17.57	UJ	N	5	R
2096	04/30/89	4081	Technetium-99	22.12	UJ	N	5	R
2096	04/25/90	4234	Technetium-99	14.95	UJ	N	5	R
2104	05/05/88	3146	Technetium-99	16	UJ	N	5	R
2104	08/16/88	3498	Technetium-99	9.4	UJ	N	5	R
2104	12/06/88	3744	Technetium-99	17.69	UJ	N	5	R
2104	03/15/89	3970	Technetium-99	28.75	UJ	N	5	R
2104	04/22/90	4235	Technetium-99	30.63	UJ	N	5	R
2104	04/22/90	4269	Technetium-99	26.61	UJ	N	5	R
2105	06/05/88	3268	Technetium-99	16.29	UJ	N	5	S
2105	08/28/88	3577	Technetium-99	10.7	UJ	N	5	S
2105	12/13/88	3782	Technetium-99	18.01	UJ	N	5	S
2105	03/15/89	3968	Technetium-99	29.08	UJ	N	5	S
2121	05/06/88	3158	Technetium-99	23.13	UJ	N	5	D
2121	08/25/88	3571	Technetium-99	21.4	UJ	N	5	D
2121	12/13/88	3776	Technetium-99	19.4	UJ	N	5	D
2121	03/14/89	3962	Technetium-99	21.08	UJ	N	5	D
2122	05/06/88	3157	Technetium-99	16	UJ	N	5	D
2122	08/17/88	3504	Technetium-99	8.2	UJ	N	5	D
2122	12/07/88	3749	Technetium-99	14.82	UJ	N	5	D
2122	03/15/89	3979	Technetium-99	26.69	UJ	N	5	D
2123	05/06/88	3156	Technetium-99	19.3	UJ	N	5	R
2123	08/23/88	3565	Technetium-99	9.8	UJ	N	5	R
2123	12/06/88	3771	Technetium-99	17.27	UJ	N	5	R
2123	03/14/89	3984	Technetium-99	21.29	UJ	N	5	R
3024	07/26/88	3377	Technetium-99	4.4	UJ	N	5	S
3024	11/02/88	3658	Technetium-99	21.9	UJ	N	5	S
3024	01/24/89	3842	Technetium-99	30	U	N	5	S
3024	06/26/89	66460	Technetium-99	21.79	UJ	N	5	S
3024	11/30/89	66734	Technetium-99	14.28	UJ	N	5	S
3043	04/13/88	3090	Technetium-99	14.1	UJ	N	5	S
3043	08/04/88	3397	Technetium-99	10.2	UJ	N	5	S
3043	11/04/88	3694	Technetium-99	18.9	UJ	N	5	S
3043	02/02/89	3886	Technetium-99	17.72	UJ	N	5	S
3043	06/13/89	66439	Technetium-99	20.45	UJ	N	5	S
3043	08/30/89	66543	Technetium-99	23.12	UJ	N	5	S
3043	11/14/89	66684	Technetium-99	30	U	N	5	S
3063	05/12/88	3190	Technetium-99	19	UJ	N	5	D

Table C-3 (Continued)
Validated Unfiltered Radiological Data for Background Monitoring Wells in the Great Miami Aquifer

Well	Sample			Validated		QA		
No.	Date	ID	Constituent	Result	Qualifier	type	ASL	Area
3063	05/12/88	3191	Technetium-99	30	U	D	5	D
3063	08/16/88	3495	Technetium-99	10.2	UJ	N	5	D
3063	12/13/88	3741	Technetium-99	17.38	UJ	N	5	D
3063	03/13/89	3966	Technetium-99	20.54	UJ	N	5	D
3096	09/12/88	3585	Technetium-99	10.6	UJ	N	5	R
3096	12/07/88	3789	Technetium-99	17.82	UJ	N	5	R
3096	02/09/89	3974	Technetium-99	18.82	UJ	N	5	R
3096	04/30/89	4082	Technetium-99	20.53	UJ	N	5	R
3096	04/25/90	4257	Technetium-99	15.65	UJ	N	5	R
3098	09/21/88	3589	Technetium-99	12.6	UJ	N	5	D
3098	12/16/88	3795	Technetium-99	18.28	UJ	N	5	D
3098	02/08/89	3989	Technetium-99	17.99	UJ	N	5	D
3098	05/25/89	4088	Technetium-99	16.84	UJ	N	5	D
3099	05/24/88	3237	Technetium-99	18.66	UJ	N	5	D
3099	05/24/88	3238	Technetium-99	30	U	D	5	D
3099	08/16/88	3496	Technetium-99	21.9	J	N	5	D
3099	12/06/88	3742	Technetium-99	18.64	UJ	N	5	D
3099	03/14/89	3977	Technetium-99	25.37	UJ	N	5	D
3100	05/24/88	3239	Technetium-99	30	U	N	5	D
3100	05/24/88	3240	Technetium-99	30	U	D	5	D
3100	08/19/88	3517	Technetium-99	8.1	UJ	N	5	D
3100	12/06/88	3761	Technetium-99	17.88	UJ	N	5	D
3100	03/13/89	3978	Technetium-99	21.66	UJ	N	5	D
4011	10/05/90	4345	Technetium-99	12.74	UJ	N	5	S
4011	02/07/91	4382	Technetium-99	14.85	UJ	N	5	S
4096	09/12/88	3584	Technetium-99	9.7	UJ	N	5	R
4096	12/14/88	3788	Technetium-99	16.94	UJ	N	5	R
4096	12/14/88	3474	Technetium-99	30	U	D	5	R
4096	02/10/89	3975	Technetium-99	19.55	UJ	N	5	R
4096	04/30/89	4083	Technetium-99	21.09	UJ	N	5	R
2026	08/17/88	3505	Total Thorium	2.4	UJ	N	5	D
2026	12/07/88	3750	Total Thorium	2.31	UJ	N	5	D
2036	08/23/88	3564	Total Thorium	2.3	UJ	N	5	R
2036	12/07/88	3770	Total Thorium	2.5	UJ	N	5	R
2043	08/05/88	3440	Total Thorium	2.1	UJ	N	5	S
2043	11/04/88	3700	Total Thorium	1.9	UJ	N	5	S
2050	08/16/88	3497	Total Thorium	2.6	UJ	N	5	S
2050	12/05/88	3743	Total Thorium	3.79	UJ	N	5	S
2056	08/25/88	3575	Total Thorium	1.6	UJ	N	5	S
2056	12/07/88	3781	Total Thorium	2.2	UJ	N	5	S
2057	08/25/88	3573	Total Thorium	1.8	UJ	N	5	R
2057	12/13/88	3779	Total Thorium	2.03	UJ	N	5	R
2066	08/07/88	3443	Total Thorium	2.7	UJ	N	5	S
2066	11/10/88	3710	Total Thorium	3.1	UJ	N	5	S
2096	12/07/88	3790	Total Thorium	2.1	UJ	N	5	R
2096	02/09/89	3985	Total Thorium	1.76	UJ	N	5	R
2096	04/25/90	4234	Total Thorium	2.78	UJ	N	5	R
2104	08/16/88	3498	Total Thorium	2.1	UJ	N	5	R
2104	12/06/88	3744	Total Thorium	2.29	UJ	N	5	R
2104	03/15/89	3970	Total Thorium	0.85	UJ	N	5	R

Table C-3 (Continued)
Validated Unfiltered Radiological Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
2104	04/22/90	4235	Total Thorium	1.9	UJ	N	5	R
2105	08/28/88	3577	Total Thorium	1.2	UJ	N	5	S
2105	12/13/88	3782	Total Thorium	0.968	J	N	5	S
2121	08/25/88	3571	Total Thorium	2	-	N	5	D
2121	12/13/88	3776	Total Thorium	2.06	UJ	N	5	D
2122	08/17/88	3504	Total Thorium	2.6	UJ	N	5	D
2122	12/07/88	3749	Total Thorium	2.61	UJ	N	5	D
2123	08/23/88	3565	Total Thorium	1.8	UJ	N	5	R
2123	12/06/88	3771	Total Thorium	1.92	UJ	N	5	R
3024	07/26/88	3377	Total Thorium	3.4	UJ	N	5	S
3024	11/02/88	3658	Total Thorium	2.9	UJ	N	5	S
3024	01/24/89	3842	Total Thorium	2	U	N	5	S
3043	11/04/88	3694	Total Thorium	2.7	UJ	N	5	S
3063	08/16/88	3495	Total Thorium	1.8	UJ	N	5	D
3063	12/13/88	3741	Total Thorium	1.81	UJ	N	5	D
3096	09/12/88	3585	Total Thorium	1.9	UJ	N	5	R
3096	12/07/88	3789	Total Thorium	2.04	UJ	N	5	R
3096	02/09/89	3974	Total Thorium	1.45	UJ	N	5	R
3096	04/25/90	4257	Total Thorium	1.68	UJ	N	5	R
3098	09/21/88	3589	Total Thorium	1.5	UJ	N	5	D
3098	02/08/89	3989	Total Thorium	2.3	UJ	N	5	D
3099	08/16/88	3496	Total Thorium	2.4	UJ	N	5	D
3100	08/19/88	3517	Total Thorium	2.1	-	N	5	D
3100	12/06/88	3761	Total Thorium	2.21	UJ	N	5	D
4011	10/05/90	4345	Total Thorium	1.92	UJ	N	5	S
4011	02/07/91	4382	Total Thorium	2.98	UJ	N	5	S
4096	09/12/88	3584	Total Thorium	2.5	UJ	N	5	R
4096	12/14/88	3788	Total Thorium	1.83	UJ	N	5	R
4096	12/14/88	3474	Total Thorium	3	U	D	5	R
4096	02/10/89	3975	Total Thorium	1.79	UJ	N	5	R
4096	04/30/89	4083	Total Thorium	1.87	UJ	N	5	R
2026	05/12/88	3186	Thorium-228	0.27	J	N	5	D
2026	08/17/88	3505	Thorium-228	0.3	J	N	5	D
2026	12/07/88	3750	Thorium-228	0.256	UJ	N	5	D
2036	05/12/88	3184	Thorium-228	0.14	UJ	N	5	R
2036	08/23/88	3564	Thorium-228	0.28	J	N	5	R
2036	12/07/88	3770	Thorium-228	0.277	UJ	N	5	R
2036	03/14/89	3983	Thorium-228	0.536	UJ	N	5	R
2043	08/05/88	3440	Thorium-228	0.29	J	N	5	S
2043	11/04/88	3700	Thorium-228	0.28	J	N	5	S
2043	02/02/89	3887	Thorium-228	2.86	-	N	5	S
2043	06/26/89	66438	Thorium-228	0.179	UJ	N	5	S
2043	08/30/89	66542	Thorium-228	0.237	UJ	N	5	S
2043	11/14/89	66682	Thorium-228	0.245	UJ	N	5	S
2043	04/07/93	GW930407-12	Thorium-228	0.1	UJ	N	3	S
2050	05/05/88	3147	Thorium-228	0.19	UJ	N	5	S
2050	08/16/88	3497	Thorium-228	0.28	UJ	N	5	S
2050	12/05/88	3743	Thorium-228	0.42	UJ	N	5	S
2050	03/13/89	3969	Thorium-228	0.502	UJ	N	5	S
2050	12/18/89	66846	Thorium-228	0.439	J	N	5	S

Table C-3 (Continued)
Validated Unfiltered Radiological Data for Background Monitoring Wells in the Great Miami Aquifer

Well	Sample			Validated		QA		
No.	Date	ID	Constituent	Result	Qualifier	type	ASL	Area
2050	05/20/93	GW930520-8	Thorium-228	0.2	U	N	3	S
2056	05/06/88	3159	Thorium-228	0.33	J	N	5	S
2056	08/25/88	3575	Thorium-228	0.22	J	N	5	S
2056	12/07/88	3781	Thorium-228	0.244	UJ	N	5	S
2056	03/13/89	3967	Thorium-228	0.628	UJ	N	5	S
2057	06/03/88	3265	Thorium-228	0.48	J	N	5	R
2057	08/25/88	3573	Thorium-228	0.2	UJ	N	5	R
2057	12/13/88	3779	Thorium-228	0.225	UJ	N	5	R
2066	08/07/88	3443	Thorium-228	0.3	UJ	N	5	S
2066	11/10/88	3710	Thorium-228	0.34	UJ	N	5	S
2066	06/27/89	66436	Thorium-228	0.199	UJ	N	5	S
2066	11/06/89	66686	Thorium-228	1.99	-	N	5	S
2066	04/07/93	GW930407-14	Thorium-228	0.2	UJ	N	3	S
2096	09/12/88	3586	Thorium-228	0.64	UJ	N	5	R
2096	12/07/88	3790	Thorium-228	0.233	UJ	N	5	R
2096	02/09/89	3985	Thorium-228	0.481	J	N	5	R
2096	04/30/89	4081	Thorium-228	0.629	UJ	N	5	R
2096	04/25/90	4234	Thorium-228	0.506	J	N	5	R
2096	05/06/93	GW930506-5	Thorium-228	0.3	U	N	3	R
2104	05/05/88	3146	Thorium-228	0.32	J	N	5	R
2104	08/16/88	3498	Thorium-228	0.24	UJ	N	5	R
2104	12/06/88	3744	Thorium-228	0.253	UJ	N	5	R
2104	03/15/89	3970	Thorium-228	0.583	UJ	N	5	R
2104	04/22/90	4235	Thorium-228	0.34	J	N	5	R
2104	04/22/90	4269	Thorium-228	0.62	UJ	N	5	R
2104	05/13/93	GW930513-14	Thorium-228	0.1	-	N	3	R
2104	05/13/93	GW930513-18	Thorium-228	0.1	U	N	3	R
2105	06/05/88	3268	Thorium-228	0.76	J	N	5	S
2105	08/28/88	3577	Thorium-228	0.14	UJ	N	5	S
2105	12/13/88	3782	Thorium-228	0.239	UJ	N	5	S
2105	03/15/89	3968	Thorium-228	0.537	UJ	N	5	S
2121	05/06/88	3158	Thorium-228	0.37	J	N	5	D
2121	08/25/88	3571	Thorium-228	0.4	J	N	5	D
2121	12/13/88	3776	Thorium-228	0.228	UJ	N	5	D
2122	05/06/88	3157	Thorium-228	0.7	J	N	5	D
2122	08/17/88	3504	Thorium-228	0.34	J	N	5	D
2122	12/07/88	3749	Thorium-228	0.29	UJ	N	5	D
2122	03/15/89	3979	Thorium-228	0.547	UJ	N	5	D
2123	05/06/88	3156	Thorium-228	0.77	J	N	5	R
2123	08/23/88	3565	Thorium-228	0.27	J	N	5	R
2123	12/06/88	3771	Thorium-228	0.213	UJ	N	5	R
2123	03/14/89	3984	Thorium-228	0.666	UJ	N	5	R
2728	05/24/93	GW930524-3	Thorium-228	0.2	U	N	3	S
3024	07/26/88	3377	Thorium-228	0.38	UJ	N	5	S
3024	11/02/88	3658	Thorium-228	1	J	N	5	S
3024	06/26/89	66460	Thorium-228	0.292	UJ	N	5	S
3024	11/30/89	66734	Thorium-228	0.368	J	N	5	S
3024	04/12/93	GW930412-8	Thorium-228	0.3	U	N	3	S
3043	08/04/88	3397	Thorium-228	0.53	UJ	N	5	S
3043	11/04/88	3694	Thorium-228	0.34	J	N	5	S

Table C-3 (Continued)
Validated Unfiltered Radiological Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
3043	02/02/89	3886	Thorium-228	1.55	J	N	5	S
3043	06/13/89	66439	Thorium-228	0.345	UJ	N	5	S
3043	08/30/89	66543	Thorium-228	0.272	UJ	N	5	S
3063	05/12/88	3190	Thorium-228	0.23	UJ	N	5	D
3063	08/16/88	3495	Thorium-228	0.3	J	N	5	D
3063	12/13/88	3741	Thorium-228	0.2	UJ	N	5	D
3063	03/13/89	3966	Thorium-228	0.535	UJ	N	5	D
3096	09/12/88	3585	Thorium-228	0.21	UJ	N	5	R
3096	12/07/88	3789	Thorium-228	0.226	UJ	N	5	R
3096	02/09/89	3974	Thorium-228	0.348	J	N	5	R
3096	04/30/89	4082	Thorium-228	0.465	UJ	N	5	R
3096	04/25/90	4257	Thorium-228	0.186	UJ	N	5	R
3096	05/07/93	GW930507-1	Thorium-228	0.3	U	N	3	R
3098	09/21/88	3589	Thorium-228	0.17	UJ	N	5	D
3098	12/16/88	3795	Thorium-228	0.501	UJ	N	5	D
3098	02/08/89	3989	Thorium-228	0.722	J	N	5	D
3098	05/25/89	4088	Thorium-228	0.584	UJ	N	5	D
3098	05/20/93	GW930520-10	Thorium-228	0.2	U	N	3	D
3099	05/24/88	3237	Thorium-228	1.4	-	N	5	D
3099	08/16/88	3496	Thorium-228	0.34	J	N	5	D
3099	12/06/88	3742	Thorium-228	0.491	UJ	N	5	D
3099	03/14/89	3977	Thorium-228	0.554	UJ	N	5	D
3100	05/24/88	3239	Thorium-228	0.22	J	N	5	D
3100	08/19/88	3517	Thorium-228	0.24	J	N	5	D
3100	12/06/88	3761	Thorium-228	0.245	UJ	N	5	D
3100	03/13/89	3978	Thorium-228	0.493	UJ	N	5	D
4011	10/05/90	4345	Thorium-228	0.683	J	N	5	S
4011	02/07/91	4382	Thorium-228	0.331	UJ	N	5	S
4011	04/08/93	GW930408-3	Thorium-228	0.2	UJ	N	3	S
4011	04/08/93	GW930408-2	Thorium-228	0.2	UJ	D	3	S
4096	09/12/88	3584	Thorium-228	0.31	J	N	5	R
4096	12/14/88	3788	Thorium-228	0.202	UJ	N	5	R
4096	02/10/89	3975	Thorium-228	0.712	J	N	5	R
4096	04/30/89	4083	Thorium-228	0.208	UJ	N	5	R
4096	05/06/93	GW930506-7	Thorium-228	0.3	U	N	3	R
2026	05/12/88	3186	Thorium-230	0.36	J	N	5	D
2026	08/17/88	3505	Thorium-230	0.27	UJ	N	5	D
2026	12/07/88	3750	Thorium-230	0.256	UJ	N	5	D
2036	05/12/88	3184	Thorium-230	0.22	J	N	5	R
2036	08/23/88	3564	Thorium-230	0.36	J	N	5	R
2036	12/07/88	3770	Thorium-230	0.277	UJ	N	5	R
2036	03/14/89	3983	Thorium-230	0.536	UJ	N	5	R
2043	08/05/88	3440	Thorium-230	0.7	J	N	5	S
2043	11/04/88	3700	Thorium-230	0.36	J	N	5	S
2043	02/02/89	3887	Thorium-230	2.47	-	N	5	S
2043	06/26/89	66438	Thorium-230	0.308	J	N	5	S
2043	08/30/89	66542	Thorium-230	0.237	UJ	N	5	S
2043	11/14/89	66682	Thorium-230	0.245	UJ	N	5	S
2043	04/07/93	GW930407-12	Thorium-230	0.4	J	N	3	S
2050	05/05/88	3147	Thorium-230	0.32	J	N	5	S

Table C-3 (Continued)
Validated Unfiltered Radiological Data for Background Monitoring Wells in the Great Miami Aquifer

Well	Sample			Validated		QA		
No.	Date	ID	Constituent	Result	Qualifier	type	ASL	Area
2050	08/16/88	3497	Thorium-230	0.61	J	N	5	S
2050	12/05/88	3743	Thorium-230	0.42	UJ	N	5	S
2050	03/13/89	3969	Thorium-230	0.502	UJ	N	5	S
2050	12/18/89	66846	Thorium-230	0.329	UJ	N	5	S
2050	05/20/93	GW930520-8	Thorium-230	0.3	J	N	3	S
2056	05/06/88	3159	Thorium-230	0.61	J	N	5	S
2056	08/25/88	3575	Thorium-230	0.19	J	N	5	S
2056	12/07/88	3781	Thorium-230	0.244	UJ	N	5	S
2056	03/13/89	3967	Thorium-230	0.628	UJ	N	5	S
2057	06/03/88	3265	Thorium-230	0.18	J	N	5	R
2057	08/25/88	3573	Thorium-230	0.32	J	N	5	R
2057	12/13/88	3779	Thorium-230	0.225	UJ	N	5	R
2066	08/07/88	3443	Thorium-230	0.63	J	N	5	S
2066	11/10/88	3710	Thorium-230	0.34	UJ	N	5	S
2066	06/27/89	66436	Thorium-230	0.238	J	N	5	S
2066	11/06/89	66686	Thorium-230	0.341	J	N	5	S
2066	04/07/93	GW930407-14	Thorium-230	0.4	UJ	N	3	S
2096	09/12/88	3586	Thorium-230	0.64	UJ	N	5	R
2096	12/07/88	3790	Thorium-230	0.233	UJ	N	5	R
2096	02/09/89	3985	Thorium-230	0.195	UJ	N	5	R
2096	04/30/89	4081	Thorium-230	0.629	UJ	N	5	R
2096	04/25/90	4234	Thorium-230	0.308	UJ	N	5	R
2096	05/06/93	GW930506-5	Thorium-230	0.3	U	N	3	R
2104	05/05/88	3146	Thorium-230	0.71	J	N	5	R
2104	08/16/88	3498	Thorium-230	0.62	J	N	5	R
2104	12/06/88	3744	Thorium-230	0.265	J	N	5	R
2104	03/15/89	3970	Thorium-230	0.583	UJ	N	5	R
2104	04/22/90	4235	Thorium-230	0.541	J	N	5	R
2104	04/22/90	4269	Thorium-230	0.62	UJ	N	5	R
2104	05/13/93	GW930513-14	Thorium-230	0.3	U	N	3	R
2104	05/13/93	GW930513-18	Thorium-230	0.3	U	N	3	R
2105	06/05/88	3268	Thorium-230	0.19	J	N	5	S
2105	08/28/88	3577	Thorium-230	0.2	J	N	5	S
2105	12/13/88	3782	Thorium-230	0.239	UJ	N	5	S
2105	03/15/89	3968	Thorium-230	0.537	UJ	N	5	S
2121	05/06/88	3158	Thorium-230	1.7	-	N	5	D
2121	08/25/88	3571	Thorium-230	0.37	J	N	5	D
2121	12/13/88	3776	Thorium-230	0.228	UJ	N	5	D
2122	05/06/88	3157	Thorium-230	1	-	N	5	D
2122	08/17/88	3504	Thorium-230	0.32	J	N	5	D
2122	12/07/88	3749	Thorium-230	0.29	UJ	N	5	D
2122	03/15/89	3979	Thorium-230	0.547	UJ	N	5	D
2123	05/06/88	3156	Thorium-230	2.1	-	N	5	R
2123	08/23/88	3565	Thorium-230	0.24	J	N	5	R
2123	12/06/88	3771	Thorium-230	0.213	UJ	N	5	R
2123	03/14/89	3984	Thorium-230	0.666	UJ	N	5	R
3024	07/26/88	3377	Thorium-230	0.62	J	N	5	S
3024	11/02/88	3658	Thorium-230	0.32	UJ	N	5	S
3024	06/26/89	66460	Thorium-230	0.292	UJ	N	5	S
3024	11/30/89	66734	Thorium-230	0.579	J	N	5	S

Table C-3 (Continued)
Validated Unfiltered Radiological Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
3024	04/12/93	GW930412-8	Thorium-230	0.2	U	N	3	S
3043	08/04/88	3397	Thorium-230	0.53	UJ	N	5	S
3043	11/04/88	3694	Thorium-230	0.32	J	N	5	S
3043	06/13/89	66439	Thorium-230	0.345	UJ	N	5	S
3043	08/30/89	66543	Thorium-230	0.272	UJ	N	5	S
3063	05/12/88	3190	Thorium-230	0.31	J	N	5	D
3063	08/16/88	3495	Thorium-230	0.36	J	N	5	D
3063	12/13/88	3741	Thorium-230	0.2	UJ	N	5	D
3063	03/13/89	3966	Thorium-230	0.535	UJ	N	5	D
3096	09/12/88	3585	Thorium-230	0.21	UJ	N	5	R
3096	12/07/88	3789	Thorium-230	1.76	-	N	5	R
3096	02/09/89	3974	Thorium-230	0.161	UJ	N	5	R
3096	04/30/89	4082	Thorium-230	0.465	UJ	N	5	R
3096	04/25/90	4257	Thorium-230	0.278	J	N	5	R
3096	05/07/93	GW930507-1	Thorium-230	0.3	U	N	3	R
3098	09/21/88	3589	Thorium-230	0.26	J	N	5	D
3098	12/16/88	3795	Thorium-230	0.501	UJ	N	5	D
3098	02/08/89	3989	Thorium-230	0.255	UJ	N	5	D
3098	05/25/89	4088	Thorium-230	0.584	UJ	N	5	D
3098	05/20/93	GW930520-10	Thorium-230	0.2	UJ	N	3	D
3099	05/24/88	3237	Thorium-230	1.6	-	N	5	D
3099	08/16/88	3496	Thorium-230	0.46	J	N	5	D
3099	12/06/88	3742	Thorium-230	0.491	UJ	N	5	D
3099	03/14/89	3977	Thorium-230	0.554	UJ	N	5	D
3100	05/24/88	3239	Thorium-230	1.3	-	N	5	D
3100	08/19/88	3517	Thorium-230	0.61	J	N	5	D
3100	03/13/89	3978	Thorium-230	0.493	UJ	N	5	D
4011	10/05/90	4345	Thorium-230	0.213	UJ	N	5	S
4011	02/07/91	4382	Thorium-230	0.331	UJ	N	5	S
4011	04/08/93	GW930408-3	Thorium-230	0.3	UJ	N	3	S
4011	04/08/93	GW930408-2	Thorium-230	0.3	UJ	D	3	S
4096	09/12/88	3584	Thorium-230	0.58	J	N	5	R
4096	12/14/88	3788	Thorium-230	0.202	UJ	N	5	R
4096	02/10/89	3975	Thorium-230	0.199	UJ	N	5	R
4096	04/30/89	4083	Thorium-230	0.208	UJ	N	5	R
4096	05/06/93	GW930506-7	Thorium-230	0.3	-	N	3	R
2026	05/12/88	3186	Thorium-232	0.15	UJ	N	5	D
2026	08/17/88	3505	Thorium-232	0.27	UJ	N	5	D
2026	12/07/88	3750	Thorium-232	0.256	UJ	N	5	D
2036	05/12/88	3184	Thorium-232	0.14	UJ	N	5	R
2036	08/23/88	3564	Thorium-232	0.25	UJ	N	5	R
2036	12/07/88	3770	Thorium-232	0.277	UJ	N	5	R
2043	08/05/88	3440	Thorium-232	0.23	UJ	N	5	S
2043	11/04/88	3700	Thorium-232	0.21	UJ	N	5	S
2043	04/07/93	GW930407-12	Thorium-232	0.1	J	N	3	S
2050	05/05/88	3147	Thorium-232	0.19	UJ	N	5	S
2050	08/16/88	3497	Thorium-232	0.28	UJ	N	5	S
2050	12/05/88	3743	Thorium-232	0.42	UJ	N	5	S
2050	05/20/93	GW930520-8	Thorium-232	0.2	-	N	3	S
2056	05/06/88	3159	Thorium-232	0.17	UJ	N	5	S

Table C-3 (Continued)
Validated Unfiltered Radiological Data for Background Monitoring Wells in the Great Miami Aquifer

Well	Sample			Validated		QA		
No.	Date	ID	Constituent	Result	Qualifier	type	ASL	Area
2056	08/25/88	3575	Thorium-232	0.18	UJ	N	5	S
2056	12/07/88	3781	Thorium-232	0.244	UJ	N	5	S
2057	06/03/88	3265	Thorium-232	0.13	UJ	N	5	R
2057	08/25/88	3573	Thorium-232	0.2	UJ	N	5	R
2057	12/13/88	3779	Thorium-232	0.225	UJ	N	5	R
2066	08/07/88	3443	Thorium-232	0.3	UJ	N	5	S
2066	11/10/88	3710	Thorium-232	0.34	UJ	N	5	S
2096	12/07/88	3790	Thorium-232	0.233	UJ	N	5	R
2096	02/09/89	3985	Thorium-232	0.195	UJ	N	5	R
2096	04/25/90	4234	Thorium-232	0.308	UJ	N	5	R
2096	05/06/93	GW930506-5	Thorium-232	0.3	U	N	3	R
2104	05/05/88	3146	Thorium-232	0.24	UJ	N	5	R
2104	08/16/88	3498	Thorium-232	0.24	UJ	N	5	R
2104	12/06/88	3744	Thorium-232	0.253	UJ	N	5	R
2104	04/22/90	4235	Thorium-232	0.207	UJ	N	5	R
2104	05/13/93	GW930513-14	Thorium-232	0.2	U	N	3	R
2104	05/13/93	GW930513-18	Thorium-232	0.2	U	N	3	R
2105	06/05/88	3268	Thorium-232	0.1	UJ	N	5	S
2105	08/28/88	3577	Thorium-232	0.14	UJ	N	5	S
2105	12/13/88	3782	Thorium-232	0.239	UJ	N	5	S
2121	05/06/88	3158	Thorium-232	0.23	J	N	5	D
2121	08/25/88	3571	Thorium-232	0.22	J	N	5	D
2121	12/13/88	3776	Thorium-232	0.228	UJ	N	5	D
2122	05/06/88	3157	Thorium-232	0.14	J	N	5	D
2122	08/17/88	3504	Thorium-232	0.28	UJ	N	5	D
2122	12/07/88	3749	Thorium-232	0.29	UJ	N	5	D
2123	05/06/88	3156	Thorium-232	0.77	J	N	5	R
2123	08/23/88	3565	Thorium-232	0.2	UJ	N	5	R
2123	12/06/88	3771	Thorium-232	0.213	UJ	N	5	R
2728	05/24/93	GW930524-3	Thorium-232	0.2	U	N	3	S
3024	07/26/88	3377	Thorium-232	0.38	UJ	N	5	S
3024	11/02/88	3658	Thorium-232	0.32	UJ	N	5	S
3024	04/12/93	GW930412-8	Thorium-232	0.2	U	N	3	S
3043	11/04/88	3694	Thorium-232	0.3	UJ	N	5	S
3063	05/12/88	3190	Thorium-232	0.23	UJ	N	5	D
3063	08/16/88	3495	Thorium-232	0.2	UJ	N	5	D
3063	12/13/88	3741	Thorium-232	0.2	UJ	N	5	D
3096	09/12/88	3585	Thorium-232	0.21	UJ	N	5	R
3096	12/07/88	3789	Thorium-232	0.226	UJ	N	5	R
3096	02/09/89	3974	Thorium-232	0.161	UJ	N	5	R
3096	04/25/90	4257	Thorium-232	0.186	UJ	N	5	R
3096	05/07/93	GW930507-1	Thorium-232	0.3	U	N	3	R
3098	09/21/88	3589	Thorium-232	0.17	UJ	N	5	D
3098	02/08/89	3989	Thorium-232	0.255	UJ	N	5	D
3098	05/20/93	GW930520-10	Thorium-232	0.2	U	N	3	D
3099	05/24/88	3237	Thorium-232	0.32	J	N	5	D
3099	08/16/88	3496	Thorium-232	0.27	UJ	N	5	D
3100	05/24/88	3239	Thorium-232	0.2	J	N	5	D
3100	08/19/88	3517	Thorium-232	0.24	J	N	5	D
3100	12/06/88	3761	Thorium-232	0.245	UJ	N	5	D

Table C-3 (Continued)
Validated Unfiltered Radiological Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
4011	10/05/90	4345	Thorium-232	0.213	UJ	N	5	S
4011	02/07/91	4382	Thorium-232	0.331	UJ	N	5	S
4011	04/08/93	GW930408-3	Thorium-232	0.4	UJ	N	3	S
4011	04/08/93	GW930408-2	Thorium-232	0.4	UJ	D	3	S
4096	09/12/88	3584	Thorium-232	0.28	UJ	N	5	R
4096	12/14/88	3788	Thorium-232	0.202	UJ	N	5	R
4096	02/10/89	3975	Thorium-232	0.199	UJ	N	5	R
4096	04/30/89	4083	Thorium-232	0.208	UJ	N	5	R
4096	05/06/93	GW930506-7	Thorium-232	0.3	U	N	3	R
2026	05/12/88	3186	Total Uranium	0.1	UJ	N	5	D
2026	05/12/88	3187	Total Uranium	1	U	D	5	D
2026	08/17/88	3505	Total Uranium	0.285	J	N	5	D
2026	12/07/88	3750	Total Uranium	0.1	UJ	N	5	D
2026	03/14/89	3980	Total Uranium	0.1	UJ	N	5	D
2036	05/12/88	3184	Total Uranium	0.1	UJ	N	5	R
2036	05/12/88	3185	Total Uranium	1	U	D	5	R
2036	08/23/88	3564	Total Uranium	0.319	J	N	5	R
2036	12/07/88	3770	Total Uranium	0.26	J	N	5	R
2036	03/14/89	3983	Total Uranium	0.1	UJ	N	5	R
2043	04/13/88	3091	Total Uranium	1.2	-	N	5	S
2043	08/05/88	3440	Total Uranium	1	-	N	5	S
2043	11/04/88	3700	Total Uranium	0.1	UJ	N	5	S
2043	02/02/89	3887	Total Uranium	0.1	UJ	N	5	S
2043	06/26/89	66438	Total Uranium	0.1	UJ	N	5	S
2043	08/30/89	66542	Total Uranium	0.1	UJ	N	5	S
2043	08/30/89	66547	Total Uranium	1	U	D	5	S
2043	11/14/89	66682	Total Uranium	0.1	UJ	N	5	S
2043	04/07/93	GW930407-12	Total Uranium	0.2	J	N	3	S
2050	05/05/88	3147	Total Uranium	0.1	UJ	N	5	S
2050	08/16/88	3497	Total Uranium	0.1	UJ	N	5	S
2050	12/05/88	3743	Total Uranium	0.1	UJ	N	5	S
2050	03/13/89	3969	Total Uranium	0.755	J	N	5	S
2050	12/18/89	66846	Total Uranium	0.1	UJ	N	5	S
2050	05/20/93	GW930520-8	Total Uranium	0.1	U	N	3	S
2050	08/03/93	GW930803-3	Total Uranium	0.3	-	N	3	S
2056	05/06/88	3159	Total Uranium	0.1	UJ	N	5	S
2056	08/25/88	3575	Total Uranium	0.1	UJ	N	5	S
2056	12/07/88	3781	Total Uranium	0.1	UJ	N	5	S
2056	03/13/89	3967	Total Uranium	2.659	-	N	5	S
2056	03/13/89	4045	Total Uranium	1	U	D	5	S
2057	06/03/88	3265	Total Uranium	0.1	UJ	N	5	R
2057	08/25/88	3573	Total Uranium	0.259	J	N	5	R
2057	12/13/88	3779	Total Uranium	0.136	J	N	5	R
2057	03/14/89	3965	Total Uranium	0.168	J	N	5	R
2066	04/26/88	3124	Total Uranium	0.1	J	N	5	S
2066	08/07/88	3443	Total Uranium	0.1	UJ	N	5	S
2066	11/10/88	3710	Total Uranium	0.1	UJ	N	5	S
2066	03/14/89	3894	Total Uranium	0.446	J	N	5	S
2066	06/27/89	66436	Total Uranium	0.1	UJ	N	5	S
2066	11/06/89	66686	Total Uranium	3.147	J	N	5	S

Table C-3 (Continued)
Validated Unfiltered Radiological Data for Background Monitoring Wells in the Great Miami Aquifer

Well	Sample			Validated		QA		
No.	Date	ID	Constituent	Result	Qualifier	type	ASL	Area
2066	04/07/93	GW930407-14	Total Uranium	0.1	-	N	3	S
2096	09/12/88	3586	Total Uranium	1.099	J	N	5	R
2096	12/07/88	3790	Total Uranium	0.1	UJ	N	5	R
2096	02/09/89	3985	Total Uranium	0.425	J	N	5	R
2096	04/30/89	4081	Total Uranium	1.357	-	N	5	R
2096	04/25/90	4234	Total Uranium	0.552	J	N	5	R
2096	05/06/93	GW930506-5	Total Uranium	0.7	-	N	3	R
2096	08/04/93	GW930804-1	Total Uranium	0.6	-	N	3	R
2104	05/05/88	3146	Total Uranium	0.41	J	N	5	R
2104	08/16/88	3498	Total Uranium	0.2601	J	N	5	R
2104	12/06/88	3744	Total Uranium	0.391	J	N	5	R
2104	03/15/89	3970	Total Uranium	0.37	J	N	5	R
2104	05/13/93	GW930513-14	Total Uranium	0.7	-	N	3	R
2104	05/13/93	GW930513-18	Total Uranium	0.7	-	N	3	R
2104	08/02/93	GW930802-5	Total Uranium	0.7	-	N	3	R
2105	06/05/88	3268	Total Uranium	0.1	UJ	N	5	S
2105	08/28/88	3577	Total Uranium	0.1	UJ	N	5	S
2105	12/13/88	3782	Total Uranium	0.1	UJ	N	5	S
2105	03/15/89	3968	Total Uranium	0.1	UJ	N	5	S
2121	05/06/88	3158	Total Uranium	0.6	J	N	5	D
2121	08/25/88	3571	Total Uranium	0.869	J	N	5	D
2121	12/13/88	3776	Total Uranium	0.605	J	N	5	D
2121	03/14/89	3962	Total Uranium	1.04	UJ	N	5	D
2122	05/06/88	3157	Total Uranium	2.2	-	N	5	D
2122	08/17/88	3504	Total Uranium	0.3058	J	N	5	D
2122	12/07/88	3749	Total Uranium	0.346	U	N	5	D
2122	03/15/89	3979	Total Uranium	0.235	J	N	5	D
2123	05/06/88	3156	Total Uranium	0.2	J	N	5	R
2123	08/23/88	3565	Total Uranium	0.361	J	N	5	R
2123	12/06/88	3771	Total Uranium	0.268	J	N	5	R
2123	03/14/89	3984	Total Uranium	0.1	UJ	N	5	R
2728	05/24/93	GW930524-3	Total Uranium	0.2	-	N	3	S
3024	07/26/88	3377	Total Uranium	0.3	J	N	5	S
3024	11/02/88	3658	Total Uranium	0.693	J	N	5	S
3024	01/24/89	3842	Total Uranium	1	UJ	N	5	S
3024	06/26/89	66460	Total Uranium	0.1	UJ	N	5	S
3024	11/30/89	66734	Total Uranium	0.1	UJ	N	5	S
3024	04/12/93	GW930412-8	Total Uranium	0.5	-	N	3	S
3043	04/13/88	3090	Total Uranium	0.1	J	N	5	S
3043	08/04/88	3397	Total Uranium	0.1	UJ	N	5	S
3043	11/04/88	3694	Total Uranium	0.1	UJ	N	5	S
3043	02/02/89	3886	Total Uranium	0.1	UJ	N	5	S
3043	06/13/89	66439	Total Uranium	0.1	UJ	N	5	S
3043	08/30/89	66543	Total Uranium	0.1	UJ	N	5	S
3043	11/14/89	66684	Total Uranium	1	U	N	5	S
3043	04/07/93	GW930407-13	Total Uranium	0.2	J	N	5	S
3063	05/12/88	3190	Total Uranium	0.1	UJ	N	5	D
3063	05/12/88	3191	Total Uranium	1	U	D	5	D
3063	08/16/88	3495	Total Uranium	0.4487	J	N	5	D
3063	12/13/88	3741	Total Uranium	0.1	UJ	N	5	D

Table C-3 (Continued)
Validated Unfiltered Radiological Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
3063	03/13/89	3966	Total Uranium	0.599	J	N	5	D
3096	09/12/88	3585	Total Uranium	0.925	J	N	5	R
3096	12/07/88	3789	Total Uranium	1.038	-	N	5	R
3096	02/09/89	3974	Total Uranium	0.7	J	N	5	R
3096	04/30/89	4082	Total Uranium	0.82	J	N	5	R
3096	04/25/90	4257	Total Uranium	0.533	J	N	5	R
3096	05/07/93	GW930507-1	Total Uranium	0.6	-	N	3	R
3096	08/11/93	GW930811-2	Total Uranium	0.7	-	N	4	R
3098	09/21/88	3589	Total Uranium	0.85	J	N	5	D
3098	12/16/88	3795	Total Uranium	0.946	J	N	5	D
3098	02/08/89	3989	Total Uranium	0.723	J	N	5	D
3098	05/25/89	4088	Total Uranium	0.1	UJ	N	5	D
3098	05/20/93	GW930520-10	Total Uranium	0.8	-	N	3	D
3099	05/24/88	3237	Total Uranium	0.1	UJ	N	5	D
3099	05/24/88	3238	Total Uranium	1	UJ	D	5	D
3099	08/16/88	3496	Total Uranium	0.5054	J	N	5	D
3099	12/06/88	3742	Total Uranium	0.602	J	N	5	D
3099	03/14/89	3977	Total Uranium	0.1	UJ	N	5	D
3100	05/24/88	3239	Total Uranium	0.1	UJ	N	5	D
3100	05/24/88	3240	Total Uranium	1	UJ	D	5	D
3100	08/19/88	3517	Total Uranium	0.5236	J	N	5	D
3100	12/06/88	3761	Total Uranium	0.639	J	N	5	D
3100	03/13/89	3978	Total Uranium	1.117	-	N	5	D
4011	10/05/90	4345	Total Uranium	0.1	U	N	5	S
4011	02/07/91	4382	Total Uranium	0.215	J	N	5	S
4011	04/08/93	GW930408-3	Total Uranium	0.6	-	N	3	S
4011	04/08/93	GW930408-2	Total Uranium	0.3	-	D	3	S
4096	09/12/88	3584	Total Uranium	2.377	J	N	5	R
4096	12/14/88	3788	Total Uranium	0.73	J	N	5	R
4096	12/14/88	3474	Total Uranium	0.5	J	D	5	R
4096	02/10/89	3975	Total Uranium	0.52	J	N	5	R
4096	04/30/89	4083	Total Uranium	0.776	J	N	5	R
4096	05/06/93	GW930506-7	Total Uranium	0.7	-	N	3	R
4096	08/04/93	GW930804-2	Total Uranium	0.7	-	N	3	R
2026	05/12/88	3186	Uranium-234	0.25	J	N	5	D
2026	08/17/88	3505	Uranium-234	0.31	J	N	5	D
2026	12/07/88	3750	Uranium-234	0.361	J	N	5	D
2026	03/14/89	3980	Uranium-234	0.23	J	N	5	D
2036	05/12/88	3184	Uranium-234	0.25	J	N	5	R
2036	08/23/88	3564	Uranium-234	0.44	J	N	5	R
2036	12/07/88	3770	Uranium-234	0.665	J	N	5	R
2036	03/14/89	3983	Uranium-234	0.3	J	N	5	R
2043	08/05/88	3440	Uranium-234	0.22	UJ	N	5	S
2043	11/04/88	3700	Uranium-234	0.18	UJ	N	5	S
2043	06/26/89	66438	Uranium-234	0.173	UJ	N	5	S
2043	08/30/89	66542	Uranium-234	0.173	UJ	N	5	S
2043	11/14/89	66682	Uranium-234	0.155	J	N	5	S
2043	04/07/93	GW930407-12	Uranium-234	0.5	UJ	N	3	S
2050	05/05/88	3147	Uranium-234	0.14	J	N	5	S
2050	08/16/88	3497	Uranium-234	0.24	UJ	N	5	S

Table C-3 (Continued)
Validated Unfiltered Radiological Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
2050	12/05/88	3743	Uranium-234	0.263	UJ	N	5	S
2050	03/13/89	3969	Uranium-234	0.427	J	N	5	S
2050	12/18/89	66846	Uranium-234	0.729	UJ	N	5	S
2056	05/06/88	3159	Uranium-234	0.27	J	N	5	S
2056	08/25/88	3575	Uranium-234	0.25	UJ	N	5	S
2056	12/07/88	3781	Uranium-234	0.229	UJ	N	5	S
2056	03/13/89	3967	Uranium-234	0.445	J	N	5	S
2057	06/03/88	3265	Uranium-234	0.25	J	N	5	R
2057	08/25/88	3573	Uranium-234	0.25	J	N	5	R
2057	12/13/88	3779	Uranium-234	0.277	UJ	N	5	R
2057	03/14/89	3965	Uranium-234	0.2	J	N	5	R
2066	08/07/88	3443	Uranium-234	0.29	UJ	N	5	S
2066	11/10/88	3710	Uranium-234	0.24	UJ	N	5	S
2066	03/14/89	3894	Uranium-234	0.185	UJ	N	5	S
2066	06/27/89	66436	Uranium-234	0.354	J	N	5	S
2066	11/06/89	66686	Uranium-234	0.143	J	N	5	S
2066	04/07/93	GW930407-14	Uranium-234	0.6	J	N	3	S
2096	09/12/88	3586	Uranium-234	0.68	J	N	5	R
2096	12/07/88	3790	Uranium-234	0.21	UJ	N	5	R
2096	02/09/89	3985	Uranium-234	0.427	J	N	5	R
2096	04/30/89	4081	Uranium-234	0.75	J	N	5	R
2096	04/25/90	4234	Uranium-234	0.38	J	N	5	R
2104	05/05/88	3146	Uranium-234	0.38	J	N	5	R
2104	08/16/88	3498	Uranium-234	0.35	J	N	5	R
2104	12/06/88	3744	Uranium-234	0.294	J	N	5	R
2104	03/15/89	3970	Uranium-234	0.386	J	N	5	R
2104	04/22/90	4235	Uranium-234	0.568	UJ	N	5	R
2104	04/22/90	4269	Uranium-234	0.456	J	N	5	R
2104	05/13/93	GW930513-14	Uranium-234	0.6	-	N	3	R
2104	05/13/93	GW930513-18	Uranium-234	0.6	U	N	3	R
2105	06/05/88	3268	Uranium-234	0.34	J	N	5	S
2105	08/28/88	3577	Uranium-234	0.39	UJ	N	5	S
2105	12/13/88	3782	Uranium-234	0.231	UJ	N	5	S
2105	03/15/89	3968	Uranium-234	0.177	UJ	N	5	S
2121	05/06/88	3158	Uranium-234	0.48	J	N	5	D
2121	08/25/88	3571	Uranium-234	0.82	J	N	5	D
2121	12/13/88	3776	Uranium-234	0.411	J	N	5	D
2121	03/14/89	3962	Uranium-234	0.404	J	N	5	D
2122	05/06/88	3157	Uranium-234	0.19	J	N	5	D
2122	08/17/88	3504	Uranium-234	0.3	J	N	5	D
2122	12/07/88	3749	Uranium-234	0.295	J	N	5	D
2122	03/15/89	3979	Uranium-234	0.239	UJ	N	5	D
2123	05/06/88	3156	Uranium-234	0.32	J	N	5	R
2123	08/23/88	3565	Uranium-234	0.21	UJ	N	5	R
2123	12/06/88	3771	Uranium-234	0.311	UJ	N	5	R
2123	03/14/89	3984	Uranium-234	0.255	UJ	N	5	R
2728	05/24/93	GW930524-3	Uranium-234	0.6	J	N	3	S
3024	07/26/88	3377	Uranium-234	1.3	J	N	5	S
3024	11/02/88	3658	Uranium-234	0.26	UJ	N	5	S
3024	06/26/89	66460	Uranium-234	0.167	UJ	N	5	S

Table C-3 (Continued)
Validated Unfiltered Radiological Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
3024	11/30/89	66734	Uranium-234	0.295	UJ	N	5	S
3024	04/12/93	GW930412-8	Uranium-234	1.3	J	N	3	S
3043	08/04/88	3397	Uranium-234	0.38	J	N	5	S
3043	11/04/88	3694	Uranium-234	0.28	UJ	N	5	S
3043	06/13/89	66439	Uranium-234	0.248	UJ	N	5	S
3043	08/30/89	66543	Uranium-234	0.195	UJ	N	5	S
3043	04/07/93	GW930407-13	Uranium-234	0.5	UJ	N	5	S
3063	05/12/88	3190	Uranium-234	0.38	J	N	5	D
3063	08/16/88	3495	Uranium-234	0.43	J	N	5	D
3063	12/13/88	3741	Uranium-234	0.541	J	N	5	D
3063	03/13/89	3966	Uranium-234	0.223	J	N	5	D
3096	09/12/88	3585	Uranium-234	0.64	J	N	5	R
3096	12/07/88	3789	Uranium-234	0.213	UJ	N	5	R
3096	02/09/89	3974	Uranium-234	0.227	UJ	N	5	R
3096	04/30/89	4082	Uranium-234	0.363	J	N	5	R
3096	04/25/90	4257	Uranium-234	0.243	J	N	5	R
3098	09/21/88	3589	Uranium-234	0.39	J	N	5	D
3098	12/16/88	3795	Uranium-234	0.352	J	N	5	D
3098	02/08/89	3989	Uranium-234	0.449	J	N	5	D
3098	05/25/89	4088	Uranium-234	0.218	UJ	N	5	D
3098	05/20/93	GW930520-10	Uranium-234	0.6	J	N	3	D
3099	05/24/88	3237	Uranium-234	0.39	J	N	5	D
3099	08/16/88	3496	Uranium-234	0.61	J	N	5	D
3099	12/06/88	3742	Uranium-234	0.446	J	N	5	D
3099	03/14/89	3977	Uranium-234	0.481	J	N	5	D
3100	05/24/88	3239	Uranium-234	0.45	J	N	5	D
3100	08/19/88	3517	Uranium-234	0.24	UJ	N	5	D
3100	12/06/88	3761	Uranium-234	0.352	J	N	5	D
3100	03/13/89	3978	Uranium-234	0.62	J	N	5	D
4011	04/08/93	GW930408-3	Uranium-234	0.6	J	N	3	S
4011	04/08/93	GW930408-2	Uranium-234	0.5	J	D	3	S
4096	12/14/88	3788	Uranium-234	0.421	J	N	5	R
4096	02/10/89	3975	Uranium-234	0.431	J	N	5	R
4096	04/30/89	4083	Uranium-234	0.353	J	N	5	R
4096	05/06/93	GW930506-7	Uranium-234	0.4	J	N	3	R
2026	05/12/88	3186	Uranium-235/236	0.24	UJ	N	5	D
2026	08/17/88	3505	Uranium-235/236	0.28	UJ	N	5	D
2026	12/07/88	3750	Uranium-235/236	0.268	UJ	N	5	D
2026	03/14/89	3980	Uranium-235/236	0.205	UJ	N	5	D
2036	05/12/88	3184	Uranium-235/236	0.1	UJ	N	5	R
2036	08/23/88	3564	Uranium-235/236	0.24	UJ	N	5	R
2036	12/07/88	3770	Uranium-235/236	0.189	UJ	N	5	R
2036	03/14/89	3983	Uranium-235/236	0.251	UJ	N	5	R
2043	08/05/88	3440	Uranium-235/236	0.22	UJ	N	5	S
2043	11/04/88	3700	Uranium-235/236	0.18	UJ	N	5	S
2043	06/26/89	66438	Uranium-235/236	0.258	J	N	5	S
2043	08/30/89	66542	Uranium-235/236	0.173	UJ	N	5	S
2043	11/14/89	66682	Uranium-235/236	0.149	UJ	N	5	S
2043	04/07/93	GW930407-12	Uranium-235/236	0.2	UJ	N	3	S
2050	05/05/88	3147	Uranium-235/236	0.14	UJ	N	5	S

Table C-3 (Continued)
Validated Unfiltered Radiological Data for Background Monitoring Wells in the Great Miami Aquifer

Well	Sample			Validated		QA		
No.	Date	ID	Constituent	Result	Qualifier	type	ASL	Area
2050	08/16/88	3497	Uranium-235/236	0.24	UJ	N	5	S
2050	12/05/88	3743	Uranium-235/236	0.263	UJ	N	5	S
2050	03/13/89	3969	Uranium-235/236	0.22	UJ	N	5	S
2056	05/06/88	3159	Uranium-235/236	0.094	J	N	5	S
2056	08/25/88	3575	Uranium-235/236	0.25	UJ	N	5	S
2056	12/07/88	3781	Uranium-235/236	0.229	UJ	N	5	S
2056	03/13/89	3967	Uranium-235/236	0.213	UJ	N	5	S
2057	06/03/88	3265	Uranium-235/236	0.11	UJ	N	5	R
2057	08/25/88	3573	Uranium-235/236	0.17	UJ	N	5	R
2057	12/13/88	3779	Uranium-235/236	0.277	UJ	N	5	R
2057	03/14/89	3965	Uranium-235/236	0.179	UJ	N	5	R
2066	08/07/88	3443	Uranium-235/236	0.29	UJ	N	5	S
2066	11/10/88	3710	Uranium-235/236	0.24	UJ	N	5	S
2066	03/14/89	3894	Uranium-235/236	0.185	UJ	N	5	S
2066	06/27/89	66436	Uranium-235/236	0.176	UJ	N	5	S
2066	11/06/89	66686	Uranium-235/236	0.159	UJ	N	5	S
2096	09/12/88	3586	Uranium-235/236	0.16	UJ	N	5	R
2096	12/07/88	3790	Uranium-235/236	0.21	UJ	N	5	R
2096	02/09/89	3985	Uranium-235/236	0.212	UJ	N	5	R
2096	04/30/89	4081	Uranium-235/236	0.245	UJ	N	5	R
2096	04/25/90	4234	Uranium-235/236	0.231	UJ	N	5	R
2104	05/05/88	3146	Uranium-235/236	0.14	UJ	N	5	R
2104	08/16/88	3498	Uranium-235/236	0.19	UJ	N	5	R
2104	12/06/88	3744	Uranium-235/236	0.246	UJ	N	5	R
2104	03/15/89	3970	Uranium-235/236	0.215	UJ	N	5	R
2104	05/13/93	GW930513-14	Uranium-235/236	0.2	U	N	3	R
2104	05/13/93	GW930513-18	Uranium-235/236	0.2	U	N	3	R
2105	06/05/88	3268	Uranium-235/236	0.12	UJ	N	5	S
2105	08/28/88	3577	Uranium-235/236	0.39	UJ	N	5	S
2105	12/13/88	3782	Uranium-235/236	0.231	UJ	N	5	S
2105	03/15/89	3968	Uranium-235/236	0.17	UJ	N	5	S
2121	05/06/88	3158	Uranium-235/236	0.17	J	N	5	D
2121	08/25/88	3571	Uranium-235/236	0.16	UJ	N	5	D
2121	12/13/88	3776	Uranium-235/236	0.262	UJ	N	5	D
2121	03/14/89	3962	Uranium-235/236	0.2	UJ	N	5	D
2122	05/06/88	3157	Uranium-235/236	0.11	UJ	N	5	D
2122	08/17/88	3504	Uranium-235/236	0.19	UJ	N	5	D
2122	12/07/88	3749	Uranium-235/236	0.282	UJ	N	5	D
2122	03/15/89	3979	Uranium-235/236	0.239	UJ	N	5	D
2123	05/06/88	3156	Uranium-235/236	0.11	J	N	5	R
2123	08/23/88	3565	Uranium-235/236	0.21	UJ	N	5	R
2123	12/06/88	3771	Uranium-235/236	0.311	UJ	N	5	R
2123	03/14/89	3984	Uranium-235/236	0.255	UJ	N	5	R
2728	05/24/93	GW930524-3	Uranium-235/236	0.2	U	N	3	S
3024	11/02/88	3658	Uranium-235/236	0.26	UJ	N	5	S
3024	06/26/89	66460	Uranium-235/236	0.167	UJ	N	5	S
3024	11/30/89	66734	Uranium-235/236	0.295	UJ	N	5	S
3024	04/12/93	GW930412-8	Uranium-235/236	0.1	UJ	N	3	S
3043	08/04/88	3397	Uranium-235/236	0.18	UJ	N	5	S
3043	11/04/88	3694	Uranium-235/236	0.28	UJ	N	5	S

Table C-3 (Continued)
Validated Unfiltered Radiological Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
3043	06/13/89	66439	Uranium-235/236	0.248	UJ	N	5	S
3043	08/30/89	66543	Uranium-235/236	0.195	UJ	N	5	S
3043	04/07/93	GW930407-13	Uranium-235/236	0.2	UJ	N	5	S
3063	05/12/88	3190	Uranium-235/236	0.12	UJ	N	5	D
3063	08/16/88	3495	Uranium-235/236	0.2	UJ	N	5	D
3063	12/13/88	3741	Uranium-235/236	0.213	UJ	N	5	D
3063	03/13/89	3966	Uranium-235/236	0.214	UJ	N	5	D
3096	09/12/88	3585	Uranium-235/236	0.19	UJ	N	5	R
3096	12/07/88	3789	Uranium-235/236	0.213	UJ	N	5	R
3096	02/09/89	3974	Uranium-235/236	0.227	UJ	N	5	R
3096	04/30/89	4082	Uranium-235/236	0.304	UJ	N	5	R
3096	04/25/90	4257	Uranium-235/236	0.171	UJ	N	5	R
3098	09/21/88	3589	Uranium-235/236	0.17	UJ	N	5	D
3098	12/16/88	3795	Uranium-235/236	0.189	UJ	N	5	D
3098	02/08/89	3989	Uranium-235/236	0.207	UJ	N	5	D
3098	05/25/89	4088	Uranium-235/236	0.218	UJ	N	5	D
3098	05/20/93	GW930520-10	Uranium-235/236	0.2	UJ	N	3	D
3099	05/24/88	3237	Uranium-235/236	0.092	UJ	N	5	D
3099	08/16/88	3496	Uranium-235/236	0.29	UJ	N	5	D
3099	12/06/88	3742	Uranium-235/236	0.176	UJ	N	5	D
3099	03/14/89	3977	Uranium-235/236	0.23	UJ	N	5	D
3100	05/24/88	3239	Uranium-235/236	0.098	UJ	N	5	D
3100	08/19/88	3517	Uranium-235/236	0.24	UJ	N	5	D
3100	12/06/88	3761	Uranium-235/236	0.205	UJ	N	5	D
3100	03/13/89	3978	Uranium-235/236	0.193	UJ	N	5	D
4011	10/05/90	4345	Uranium-235/236	0.239	J	N	5	S
4011	02/07/91	4382	Uranium-235/236	0.28	UJ	N	5	S
4011	04/08/93	GW930408-3	Uranium-235/236	0.1	UJ	N	3	S
4096	09/12/88	3584	Uranium-235/236	0.27	UJ	N	5	R
4096	12/14/88	3788	Uranium-235/236	0.297	UJ	N	5	R
4096	02/10/89	3975	Uranium-235/236	0.231	UJ	N	5	R
4096	04/30/89	4083	Uranium-235/236	0.296	UJ	N	5	R
4096	05/06/93	GW930506-7	Uranium-235/236	0.1	UJ	N	3	R
2026	05/12/88	3186	Uranium-238	0.24	UJ	N	5	D
2026	05/12/88	3187	Uranium-238	1	U	D	5	D
2026	08/17/88	3505	Uranium-238	0.28	UJ	N	5	D
2026	12/07/88	3750	Uranium-238	0.268	UJ	N	5	D
2026	03/14/89	3980	Uranium-238	0.205	UJ	N	5	D
2036	05/12/88	3184	Uranium-238	0.22	J	N	5	R
2036	05/12/88	3185	Uranium-238	1	U	D	5	R
2036	08/23/88	3564	Uranium-238	0.25	J	N	5	R
2036	12/07/88	3770	Uranium-238	0.189	UJ	N	5	R
2036	03/14/89	3983	Uranium-238	0.251	UJ	N	5	R
2043	04/13/88	3091	Uranium-238	1	U	N	5	S
2043	08/05/88	3440	Uranium-238	0.22	UJ	N	5	S
2043	11/04/88	3700	Uranium-238	0.18	UJ	N	5	S
2043	06/26/89	66438	Uranium-238	0.113	UJ	N	5	S
2043	08/30/89	66542	Uranium-238	0.173	UJ	N	5	S
2043	08/30/89	66547	Uranium-238	1	U	D	5	S
2043	11/14/89	66682	Uranium-238	0.149	UJ	N	5	S

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Table C-3 (Continued)
Validated Unfiltered Radiological Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
2043	04/07/93	GW930407-12	Uranium-238	0.5	UJ	N	3	S
2050	05/05/88	3147	Uranium-238	0.19	J	N	5	S
2050	08/16/88	3497	Uranium-238	0.24	UJ	N	5	S
2050	12/05/88	3743	Uranium-238	0.263	UJ	N	5	S
2050	03/13/89	3969	Uranium-238	0.492	J	N	5	S
2050	12/18/89	66846	Uranium-238	0.729	UJ	N	5	S
2056	05/06/88	3159	Uranium-238	0.14	J	N	5	S
2056	08/25/88	3575	Uranium-238	0.25	UJ	N	5	S
2056	12/07/88	3781	Uranium-238	0.229	UJ	N	5	S
2056	03/13/89	3967	Uranium-238	0.493	J	N	5	S
2056	03/13/89	4045	Uranium-238	1	U	D	5	S
2057	06/03/88	3265	Uranium-238	0.26	J	N	5	R
2057	08/25/88	3573	Uranium-238	0.24	J	N	5	R
2057	12/13/88	3779	Uranium-238	0.277	UJ	N	5	R
2057	03/14/89	3965	Uranium-238	0.179	UJ	N	5	R
2066	04/26/88	3124	Uranium-238	1	U	N	5	S
2066	08/07/88	3443	Uranium-238	0.29	UJ	N	5	S
2066	11/10/88	3710	Uranium-238	0.24	UJ	N	5	S
2066	03/14/89	3894	Uranium-238	0.185	UJ	N	5	S
2066	06/27/89	66436	Uranium-238	0.276	J	N	5	S
2066	11/06/89	66686	Uranium-238	0.159	UJ	N	5	S
2066	04/07/93	GW930407-14	Uranium-238	0.4	UJ	N	3	S
2096	09/12/88	3586	Uranium-238	0.52	J	N	5	R
2096	12/07/88	3790	Uranium-238	0.21	UJ	N	5	R
2096	02/09/89	3985	Uranium-238	0.253	J	N	5	R
2096	04/30/89	4081	Uranium-238	0.604	J	N	5	R
2096	04/25/90	4234	Uranium-238	0.311	J	N	5	R
2104	05/05/88	3146	Uranium-238	0.24	J	N	5	R
2104	08/16/88	3498	Uranium-238	0.36	J	N	5	R
2104	12/06/88	3744	Uranium-238	0.246	UJ	N	5	R
2104	03/15/89	3970	Uranium-238	0.215	UJ	N	5	R
2104	04/22/90	4235	Uranium-238	0.568	UJ	N	5	R
2104	04/22/90	4269	Uranium-238	0.437	UJ	N	5	R
2104	05/13/93	GW930513-14	Uranium-238	0.5	U	N	3	R
2104	05/13/93	GW930513-18	Uranium-238	0.5	U	N	3	R
2105	06/05/88	3268	Uranium-238	0.21	J	N	5	S
2105	08/28/88	3577	Uranium-238	0.39	UJ	N	5	S
2105	12/13/88	3782	Uranium-238	0.231	UJ	N	5	S
2105	03/15/89	3968	Uranium-238	0.177	UJ	N	5	S
2121	05/06/88	3158	Uranium-238	0.31	J	N	5	D
2121	08/25/88	3571	Uranium-238	0.77	J	N	5	D
2121	12/13/88	3776	Uranium-238	0.313	J	N	5	D
2121	03/14/89	3962	Uranium-238	0.344	J	N	5	D
2122	05/06/88	3157	Uranium-238	0.22	J	N	5	D
2122	08/17/88	3504	Uranium-238	0.19	UJ	N	5	D
2122	12/07/88	3749	Uranium-238	0.282	UJ	N	5	D
2122	03/15/89	3979	Uranium-238	0.239	UJ	N	5	D
2123	05/06/88	3156	Uranium-238	0.54	J	N	5	R
2123	08/23/88	3565	Uranium-238	0.21	UJ	N	5	R
2123	12/06/88	3771	Uranium-238	0.311	UJ	N	5	R

Table C-3 (Continued)
Validated Unfiltered Radiological Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
2123	03/14/89	3984	Uranium-238	0.255	UJ	N	5	R
2728	05/24/93	GW930524-3	Uranium-238	0.7	-	N	3	S
3024	07/26/88	3377	Uranium-238	0.36	UJ	N	5	S
3024	11/02/88	3658	Uranium-238	0.37	J	N	5	S
3024	01/24/89	3842	Uranium-238	1	U	N	5	S
3024	06/26/89	66460	Uranium-238	0.167	UJ	N	5	S
3024	11/30/89	66734	Uranium-238	0.295	UJ	N	5	S
3024	04/12/93	GW930412-8	Uranium-238	0.9	J	N	3	S
3043	04/13/88	3090	Uranium-238	1	U	N	5	S
3043	08/04/88	3397	Uranium-238	0.18	UJ	N	5	S
3043	11/04/88	3694	Uranium-238	0.28	UJ	N	5	S
3043	02/02/89	3886	Uranium-238	1.02	UJ	N	5	S
3043	06/13/89	66439	Uranium-238	0.248	UJ	N	5	S
3043	08/30/89	66543	Uranium-238	0.195	UJ	N	5	S
3043	11/14/89	66684	Uranium-238	1	U	N	5	S
3043	04/07/93	GW930407-13	Uranium-238	0.5	UJ	N	5	S
3063	05/12/88	3190	Uranium-238	0.17	UJ	N	5	D
3063	05/12/88	3191	Uranium-238	1	U	D	5	D
3063	08/16/88	3495	Uranium-238	0.25	J	N	5	D
3063	12/13/88	3741	Uranium-238	0.302	J	N	5	D
3063	03/13/89	3966	Uranium-238	0.214	UJ	N	5	D
3096	09/12/88	3585	Uranium-238	0.93	J	N	5	R
3096	12/07/88	3789	Uranium-238	0.1	UJ	N	5	R
3096	02/09/89	3974	Uranium-238	0.227	UJ	N	5	R
3096	04/30/89	4082	Uranium-238	0.304	UJ	N	5	R
3096	04/25/90	4257	Uranium-238	0.218	J	N	5	R
3098	09/21/88	3589	Uranium-238	0.27	J	N	5	D
3098	12/16/88	3795	Uranium-238	0.381	J	N	5	D
3098	02/08/89	3989	Uranium-238	0.356	J	N	5	D
3098	05/25/89	4088	Uranium-238	0.218	UJ	N	5	D
3098	05/20/93	GW930520-10	Uranium-238	0.7	J	N	3	D
3099	05/24/88	3237	Uranium-238	0.4	J	N	5	D
3099	05/24/88	3238	Uranium-238	1	U	D	5	D
3099	08/16/88	3496	Uranium-238	0.29	UJ	N	5	D
3099	12/06/88	3742	Uranium-238	0.275	J	N	5	D
3099	03/14/89	3977	Uranium-238	0.378	J	N	5	D
3100	05/24/88	3239	Uranium-238	0.34	J	N	5	D
3100	05/24/88	3240	Uranium-238	1	U	D	5	D
3100	08/19/88	3517	Uranium-238	0.24	UJ	N	5	D
3100	12/06/88	3761	Uranium-238	0.214	J	N	5	D
3100	03/13/89	3978	Uranium-238	0.706	J	N	5	D
4011	04/08/93	GW930408-3	Uranium-238	0.6	J	N	3	S
4011	04/08/93	GW930408-2	Uranium-238	0.4	J	D	3	S
4096	12/14/88	3788	Uranium-238	0.354	J	N	5	R
4096	02/10/89	3975	Uranium-238	0.241	J	N	5	R
4096	04/30/89	4083	Uranium-238	0.296	UJ	N	5	R
4096	05/06/93	GW930506-7	Uranium-238	0.2	UJ	N	3	R

Table C-4
Validated Filtered Radiological Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
2728	04/04/93	113514	Cesium-137	13.358	UJ	N	3	S
2728	04/04/93	113514	Neptunium-237	0.1201	J	N	3	S
2728	04/04/93	113514	Plutonium-238	0.03775	UJ	N	3	S
2728	04/04/93	113514	Plutonium-239/240	0.04179	J	N	3	S
2043	04/07/93	GW930407-12	Radium-226	0.9	J	N	3	S
2050	05/20/93	GW930520-8	Radium-226	1.3	J	N	3	S
2096	05/06/93	GW930506-5	Radium-226	0.9	J	N	3	R
2104	05/13/93	GW930513-14	Radium-226	1.7	-	N	3	R
2104	05/13/93	GW930513-18	Radium-226	2.3	-	N	3	R
2728	04/04/93	113514	Radium-226	0.204	J	N	3	S
2728	05/24/93	GW930524-3	Radium-226	0.6	J	N	3	S
3024	04/12/93	GW930412-8	Radium-226	1.1	J	N	3	S
3043	04/07/93	GW930407-13	Radium-226	1.5	J	N	3	S
3096	05/07/93	GW930507-1	Radium-226	1.6	J	N	3	R
3098	05/20/93	GW930520-10	Radium-226	0.9	U	N	3	D
4096	05/06/93	GW930506-7	Radium-226	1.2	J	N	3	R
2043	04/07/93	GW930407-12	Radium-228	2.1	U	N	3	S
2050	05/20/93	GW930520-8	Radium-228	2.1	U	N	3	S
2066	04/07/93	GW930407-14	Radium-228	2.1	U	N	3	S
2096	05/06/93	GW930506-5	Radium-228	1.7	UJ	N	3	R
2104	05/13/93	GW930513-14	Radium-228	1.8	U	N	3	R
2104	05/13/93	GW930513-18	Radium-228	1.8	U	N	3	R
2728	04/04/93	113514	Radium-228	2.92	UJ	N	3	S
2728	05/24/93	GW930524-3	Radium-228	1.7	U	N	3	S
3024	04/12/93	GW930412-8	Radium-228	1.8	UJ	N	3	S
3043	04/07/93	GW930407-13	Radium-228	2	U	N	3	S
3096	05/07/93	GW930507-1	Radium-228	2	UJ	N	3	R
3098	05/20/93	GW930520-10	Radium-228	1.7	U	N	3	D
4011	04/08/93	GW930408-3	Radium-228	2.2	U	N	3	S
4011	04/08/93	GW930408-2	Radium-228	2.5	U	D	3	S
4096	05/06/93	GW930506-7	Radium-228	1.7	UJ	N	3	R
2728	04/04/93	113514	Ruthenium-106	143.74	UJ	N	3	S
2728	04/04/93	113514	Strontium-90	0.761	UJ	N	3	S
2728	04/04/93	113514	Technetium-99	13.99	UJ	N	3	S
2728	04/04/93	113514	Total Thorium	1	U	N	3	S
2043	04/07/93	GW930407-12	Thorium-228	0.3	UJ	N	3	S
2050	05/20/93	GW930520-8	Thorium-228	0.2	J	N	3	S
2066	04/07/93	GW930407-14	Thorium-228	0.2	UJ	N	3	S
2104	05/13/93	GW930513-14	Thorium-228	0.3	UJ	N	3	R
2104	05/13/93	GW930513-18	Thorium-228	0.3	UJ	N	3	R
2728	04/04/93	113514	Thorium-228	0.1083	UJ	N	3	S
2728	05/24/93	GW930524-3	Thorium-228	0.2	UJ	N	3	S
3043	04/07/93	GW930407-13	Thorium-228	0.2	J	N	3	S
3096	05/07/93	GW930507-1	Thorium-228	0.4	J	N	3	R
3098	05/20/93	GW930520-10	Thorium-228	0.2	UJ	N	3	D
4011	04/08/93	GW930408-3	Thorium-228	0.2	-	N	3	S
4011	04/08/93	GW930408-2	Thorium-228	0.2	-	D	3	S
2043	04/07/93	GW930407-12	Thorium-230	0.1	UJ	N	3	S
2050	05/20/93	GW930520-8	Thorium-230	0.2	UJ	N	3	S
2066	04/07/93	GW930407-14	Thorium-230	0.3	U	N	3	S

Table C-4 (Continued)
Validated Filtered Radiological Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
2096	05/06/93	GW930506-5	Thorium-230	0.3	UJ	N	3	R
2104	05/13/93	GW930513-14	Thorium-230	0.2	UJ	N	3	R
2104	05/13/93	GW930513-18	Thorium-230	0.3	UJ	N	3	R
2728	04/04/93	113514	Thorium-230	0.2927	J	N	3	S
2728	05/24/93	GW930524-3	Thorium-230	0.2	UJ	N	3	S
3043	04/07/93	GW930407-13	Thorium-230	0.1	J	N	3	S
3096	05/07/93	GW930507-1	Thorium-230	0.3	UJ	N	3	R
4011	04/08/93	GW930408-3	Thorium-230	0.3	U	N	3	S
4011	04/08/93	GW930408-2	Thorium-230	0.3	U	D	3	S
4096	05/06/93	GW930506-7	Thorium-230	0.2	UJ	N	3	R
2043	04/07/93	GW930407-12	Thorium-232	0.1	J	N	3	S
2050	05/20/93	GW930520-8	Thorium-232	0.2	-	N	3	S
2066	04/07/93	GW930407-14	Thorium-232	0.2	U	N	3	S
2096	05/06/93	GW930506-5	Thorium-232	0.3	U	N	3	R
2104	05/13/93	GW930513-14	Thorium-232	0.4	UJ	N	3	R
2104	05/13/93	GW930513-18	Thorium-232	0.4	UJ	N	3	R
2728	04/04/93	113514	Thorium-232	0.07116	UJ	N	3	S
2728	05/24/93	GW930524-3	Thorium-232	0.2	UJ	N	3	S
3043	04/07/93	GW930407-13	Thorium-232	0.3	J	N	3	S
3098	05/20/93	GW930520-10	Thorium-232	0.2	UJ	N	3	D
4011	04/08/93	GW930408-3	Thorium-232	0.2	U	N	3	S
4011	04/08/93	GW930408-2	Thorium-232	0.2	U	D	3	S
4096	05/06/93	GW930506-7	Thorium-232	0.3	U	N	3	R
2043	04/07/93	GW930407-12	Total Uranium	0.4	-	N	3	S
2050	05/20/93	GW930520-8	Total Uranium	0.1	-	N	3	S
2066	04/07/93	GW930407-14	Total Uranium	0.6	-	N	3	S
2096	05/06/93	GW930506-5	Total Uranium	0.7	-	N	3	R
2104	05/13/93	GW930513-14	Total Uranium	0.7	J	N	3	R
2104	05/13/93	GW930513-18	Total Uranium	0.6	J	N	3	R
2728	04/04/93	113514	Total Uranium	1	U	N	3	S
2728	05/24/93	GW930524-3	Total Uranium	0.1	-	N	3	S
3024	04/12/93	GW930412-8	Total Uranium	0.1	-	N	3	S
3043	04/07/93	GW930407-13	Total Uranium	0.1	U	N	3	S
3096	05/07/93	GW930507-1	Total Uranium	0.6	-	N	3	R
3098	05/20/93	GW930520-10	Total Uranium	0.8	-	N	3	D
4011	04/08/93	GW930408-3	Total Uranium	0.5	-	N	3	S
4011	04/08/93	GW930408-2	Total Uranium	0.3	-	D	3	S
2043	04/07/93	GW930407-12	Uranium-234	0.5	J	N	3	S
2050	05/20/93	GW930520-8	Uranium-234	0.8	J	N	3	S
2096	05/06/93	GW930506-5	Uranium-234	0.7	J	N	3	R
2104	05/13/93	GW930513-14	Uranium-234	0.3	J	N	3	R
2104	05/13/93	GW930513-18	Uranium-234	0.2	J	N	3	R
2728	04/04/93	113514	Uranium-234	0.4159	J	N	3	S
2728	05/24/93	GW930524-3	Uranium-234	0.5	UJ	N	3	S
3024	04/12/93	GW930412-8	Uranium-234	0.4	UJ	N	3	S
3043	04/07/93	GW930407-13	Uranium-234	0.6	J	N	3	S
3096	05/07/93	GW930507-1	Uranium-234	0.7	J	N	3	R
4011	04/08/93	GW930408-3	Uranium-234	0.3	UJ	N	3	S
4011	04/08/93	GW930408-2	Uranium-234	0.3	J	D	3	S
4096	05/06/93	GW930506-7	Uranium-234	0.9	J	N	3	R

Table C-4 (Continued)
Validated Filtered Radiological Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
2043	04/07/93	GW930407-12	Uranium-235/236	0.2	UJ	N	3	S
2050	05/20/93	GW930520-8	Uranium-235/236	0.2	UJ	N	3	S
2096	05/06/93	GW930506-5	Uranium-235/236	0.1	UJ	N	3	R
2104	05/13/93	GW930513-14	Uranium-235/236	0.1	UJ	N	3	R
2104	05/13/93	GW930513-18	Uranium-235/236	0.1	UJ	N	3	R
2728	04/04/93	113514	Uranium-235/236	0.043	UJ	N	3	S
3024	04/12/93	GW930412-8	Uranium-235/236	0.1	UJ	N	3	S
3043	04/07/93	GW930407-13	Uranium-235/236	0.2	UJ	N	3	S
3096	05/07/93	GW930507-1	Uranium-235/236	0.1	UJ	N	3	R
4011	04/08/93	GW930408-3	Uranium-235/236	0.1	UJ	N	3	S
4011	04/08/93	GW930408-2	Uranium-235/236	0.1	UJ	D	3	S
4096	05/06/93	GW930506-7	Uranium-235/236	0.1	UJ	N	3	R
2043	04/07/93	GW930407-12	Uranium-238	0.6	J	N	3	S
2050	05/20/93	GW930520-8	Uranium-238	0.7	J	N	3	S
2096	05/06/93	GW930506-5	Uranium-238	0.4	J	N	3	R
2104	05/13/93	GW930513-14	Uranium-238	0.2	UJ	N	3	R
2728	04/04/93	113514	Uranium-238	0.4887	J	N	3	S
2728	05/24/93	GW930524-3	Uranium-238	0.9	J	N	3	S
3024	04/12/93	GW930412-8	Uranium-238	0.5	J	N	3	S
3043	04/07/93	GW930407-13	Uranium-238	0.5	UJ	N	3	S
3096	05/07/93	GW930507-1	Uranium-238	0.8	J	N	3	R
4011	04/08/93	GW930408-3	Uranium-238	0.3	J	N	3	S
4011	04/08/93	GW930408-2	Uranium-238	0.3	UJ	D	3	S
4096	05/06/93	GW930506-7	Uranium-238	0.6	J	N	3	R

Table C-5
Validated Unfiltered Radiological Data for Background Surface Water in the Great Miami River

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	ASL
W-1	06/16/88	1035	Cesium-137	9.149	UJ	N	5
W-1	06/30/88	1055	Cesium-137	7.9083	UJ	N	5
W-1	08/29/88	1092	Cesium-137	8.5048	UJ	N	5
W-1	12/18/88	1104	Cesium-137	10.975	UJ	N	5
W-1	06/16/88	1035	Neptunium-237	0.22	UJ	N	5
W-1	06/30/88	1055	Neptunium-237	0.22	UJ	N	5
W-1	08/29/88	1092	Neptunium-237	0.27	UJ	N	5
W-1	12/18/88	1104	Neptunium-237	0.32	UJ	N	5
W-1	04/03/89	1178	Neptunium-237	0.228	UJ	N	5
W-1	06/16/88	1035	Plutonium-238	0.16	UJ	N	5
W-1	06/30/88	1055	Plutonium-238	0.038	UJ	N	5
W-1	08/29/88	1092	Plutonium-238	0.042	UJ	N	5
W-1	12/18/88	1104	Plutonium-238	0.046	UJ	N	5
W-1	04/03/89	1178	Plutonium-238	0.385	UJ	N	5
W-1	06/16/88	1035	Plutonium-239/240	0.16	UJ	N	5
W-1	06/30/88	1055	Plutonium-239/240	0.038	UJ	N	5
W-1	08/29/88	1092	Plutonium-239/240	0.042	UJ	N	5
W-1	12/18/88	1104	Plutonium-239/240	0.046	UJ	N	5
W-1	04/03/89	1178	Plutonium-239/240	0.385	UJ	N	5
W-1	06/30/88	1055	Radium-226	0.3	UJ	N	5
W-1	08/29/88	1092	Radium-226	0.2	UJ	N	5
W-1	12/18/88	1104	Radium-226	0.124	UJ	N	5
W-1	04/03/89	1178	Radium-226	0.411	J	N	5
W-1	06/16/88	1035	Radium-228	2.2	UJ	N	5
W-1	06/30/88	1055	Radium-228	1.6	UJ	N	5
W-1	08/29/88	1092	Radium-228	2.2	J	N	5
W-1	12/18/88	1104	Radium-228	2.01	UJ	N	5
W-1	04/03/89	1178	Radium-228	2.34	UJ	N	5
W-1	06/16/88	1035	Ruthenium-106	74.687	UJ	N	5
W-1	06/30/88	1055	Ruthenium-106	62.569	UJ	N	5
W-1	08/29/88	1092	Ruthenium-106	91.504	UJ	N	5
W-1	12/18/88	1104	Ruthenium-106	84.544	UJ	N	5
W-1	06/16/88	1035	Strontium-90	0.91	UJ	N	5
W-1	06/30/88	1055	Strontium-90	1.3	UJ	N	5
W-1	08/29/88	1092	Strontium-90	0.95	UJ	N	5
W-1	12/18/88	1104	Strontium-90	1.13	UJ	N	5
W-1	04/03/89	1178	Strontium-90	1.18	UJ	N	5
W-1	06/16/88	1035	Technetium-99	14.6	UJ	N	5
W-1	06/30/88	1055	Technetium-99	8.2	UJ	N	5
W-1	08/29/88	1092	Technetium-99	11.6	UJ	N	5
W-1	12/18/88	1104	Technetium-99	17.95	UJ	N	5
W-1	04/03/89	1178	Technetium-99	17.05	UJ	N	5
W-1	06/16/88	1035	Thorium-228	0.2	UJ	N	5
W-1	06/30/88	1055	Thorium-228	0.62	J	N	5
W-1	08/29/88	1092	Thorium-228	0.54	J	N	5
W-1	12/18/88	1104	Thorium-228	0.23	UJ	N	5
W-1	04/03/89	1178	Thorium-228	0.616	J	N	5
W-1	06/16/88	1035	Thorium-230	0.2	UJ	N	5
W-1	06/30/88	1055	Thorium-230	0.26	J	N	5
W-1	08/29/88	1092	Thorium-230	0.27	J	N	5

Table C-5 (Continued)
Validated Unfiltered Radiological Data for Background Surface Water in the Great Miami River

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	ASL
W-1	12/18/88	1104	Thorium-230	0.34	J	N	5
W-1	04/03/89	1178	Thorium-230	0.356	J	N	5
W-1	06/16/88	1035	Thorium-232	0.2	UJ	N	5
W-1	06/30/88	1055	Thorium-232	0.2	UJ	N	5
W-1	08/29/88	1092	Thorium-232	0.17	UJ	N	5
W-1	12/18/88	1104	Thorium-232	0.23	UJ	N	5
W-1	04/03/89	1178	Thorium-232	0.318	UJ	N	5
W-1	06/16/88	1035	Total Uranium	0.91	J	N	5
W-1	06/30/88	1055	Total Uranium	1	-	N	5
W-1	08/29/88	1092	Total Uranium	0.74	J	N	5
W-1	12/18/88	1104	Total Uranium	1.443	-	N	5
W-1	04/03/89	1178	Total Uranium	1.309	-	N	5
W-1	06/16/88	1035	Uranium-234	0.82	J	N	5
W-1	06/30/88	1055	Uranium-234	1.1	-	N	5
W-1	08/29/88	1092	Uranium-234	0.38	J	N	5
W-1	12/18/88	1104	Uranium-234	0.3	J	N	5
W-1	04/03/89	1178	Uranium-234	0.531	J	N	5
W-1	06/16/88	1035	Uranium-235/236	0.15	UJ	N	5
W-1	06/30/88	1055	Uranium-235/236	0.25	J	N	5
W-1	08/29/88	1092	Uranium-235/236	0.26	UJ	N	5
W-1	12/18/88	1104	Uranium-235/236	0.23	UJ	N	5
W-1	04/03/89	1178	Uranium-235/236	0.274	UJ	N	5
W-1	06/16/88	1035	Uranium-238	0.59	J	N	5
W-1	06/30/88	1055	Uranium-238	0.76	J	N	5
W-1	08/29/88	1092	Uranium-238	0.26	UJ	N	5
W-1	12/18/88	1104	Uranium-238	0.59	J	N	5
W-1	04/03/89	1178	Uranium-238	0.274	UJ	N	5

Table C-6
Validated Filtered Radiological Data for Background Surface Water in the Great Miami River

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	ASL
W-1	06/30/88	1055	Cesium-137	10.745	UJ	N	5
W-1	08/29/88	1092	Cesium-137	9.0838	UJ	N	5
W-1	06/30/88	1055	Neptunium-237	0.25	UJ	N	5
W-1	08/29/88	1092	Neptunium-237	0.28	UJ	N	5
W-1	04/03/89	1185	Neptunium-237	0.237	UJ	N	5
W-1	06/30/88	1055	Plutonium-238	0.034	UJ	N	5
W-1	08/29/88	1092	Plutonium-238	0.036	UJ	N	5
W-1	04/03/89	1185	Plutonium-238	0.393	UJ	N	5
W-1	06/30/88	1055	Plutonium-239/240	0.034	UJ	N	5
W-1	08/29/88	1092	Plutonium-239/240	0.036	UJ	N	5
W-1	04/03/89	1185	Plutonium-239/240	0.393	UJ	N	5
W-1	06/30/88	1055	Radium-226	0.37	UJ	N	5
W-1	08/29/88	1092	Radium-226	0.2	UJ	N	5
W-1	04/03/89	1185	Radium-226	0.105	UJ	N	5
W-1	06/30/88	1055	Radium-228	1.8	UJ	N	5
W-1	08/29/88	1092	Radium-228	1.7	UJ	N	5
W-1	04/03/89	1185	Radium-228	2.34	UJ	N	5
W-1	06/30/88	1055	Ruthenium-106	74.458	UJ	N	5
W-1	08/29/88	1092	Ruthenium-106	73.893	UJ	N	5
W-1	06/30/88	1055	Strontium-90	1.1	UJ	N	5
W-1	08/29/88	1092	Strontium-90	0.94	UJ	N	5
W-1	04/03/89	1185	Strontium-90	1.2	UJ	N	5
W-1	06/30/88	1055	Technetium-99	8.2	UJ	N	5
W-1	08/29/88	1092	Technetium-99	10	UJ	N	5
W-1	06/30/88	1055	Thorium-228	0.79	J	N	5
W-1	08/29/88	1092	Thorium-228	0.86	J	N	5
W-1	04/03/89	1185	Thorium-228	0.265	UJ	N	5
W-1	06/30/88	1055	Thorium-230	0.38	J	N	5
W-1	08/29/88	1092	Thorium-230	0.62	J	N	5
W-1	04/03/89	1185	Thorium-230	0.265	UJ	N	5
W-1	06/30/88	1055	Thorium-232	0.24	UJ	N	5
W-1	08/29/88	1092	Thorium-232	0.27	J	N	5
W-1	04/03/89	1185	Thorium-232	0.265	UJ	N	5
W-1	06/30/88	1055	Total Uranium	1	-	N	5
W-1	08/29/88	1092	Total Uranium	0.522	J	N	5
W-1	04/03/89	1185	Total Uranium	1.139	-	N	5
W-1	06/30/88	1055	Uranium-234	0.46	J	N	5
W-1	08/29/88	1092	Uranium-234	0.5	J	N	5
W-1	04/03/89	1185	Uranium-234	0.443	J	N	5
W-1	06/30/88	1055	Uranium-235/236	0.25	UJ	N	5
W-1	08/29/88	1092	Uranium-235/236	0.22	UJ	N	5
W-1	04/03/89	1185	Uranium-235/236	0.371	UJ	N	5
W-1	06/30/88	1055	Uranium-238	0.44	J	N	5
W-1	08/29/88	1092	Uranium-238	0.45	J	N	5
W-1	04/03/89	1185	Uranium-238	0.499	J	N	5

Table C-7
Validated Unfiltered Radiological Data for Background Surface Water in Paddys Run

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	ASL
W-5	06/24/93	120423	Cesium-137	3	J	N	3
W-5	06/24/93	120424	Cesium-137	3.2	J	D	3
W-5	03/25/93	113493	Plutonium-238	0.03799	UJ	N	3
W-5	03/25/93	113493	Plutonium-239/240	0.093	J	N	3
W-5	03/25/93	113493	Radium-226	0.141	UJ	N	3
W-5	06/24/93	120423	Radium-226	0.4	J	N	3
W-5	06/24/93	120424	Radium-226	0.3	J	D	3
W-5	03/25/93	113493	Radium-228	2.23	UJ	N	3
W-5	06/24/93	120423	Radium-228	2.1	-	N	3
W-5	06/24/93	120424	Radium-228	2	-	D	3
W-5	03/25/93	113493	Ruthenium-106	110.15	UJ	N	3
W-5	03/25/93	113493	Strontium-90	0.96	J	N	3
W-5	03/25/93	113493	Technetium-99	14.6	UJ	N	3
W-5	06/24/93	120423	Technetium-99	14.3	U	N	3
W-5	06/24/93	120424	Technetium-99	13.6	U	D	3
W-5	03/25/93	113493	Total Thorium	1.38	UJ	N	3
W-5	03/25/93	113493	Thorium-228	0.1076	UJ	N	3
W-5	06/24/93	120423	Thorium-228	0.2	U	N	3
W-5	06/24/93	120424	Thorium-228	0.2	U	D	3
W-5	03/25/93	113493	Thorium-230	0.1487	UJ	N	3
W-5	06/24/93	120423	Thorium-230	0.4	U	N	3
W-5	06/24/93	120424	Thorium-230	0.4	U	D	3
W-5	03/25/93	113493	Thorium-232	0.1485	UJ	N	3
W-5	06/24/93	120423	Thorium-232	0.3	U	N	3
W-5	06/24/93	120424	Thorium-232	0.3	U	D	3
W-5	03/25/93	113493	Total Uranium	0.902	J	N	3
W-5	06/24/93	120423	Total Uranium	1	-	N	3
W-5	06/24/93	120424	Total Uranium	1.1	-	D	3
W-5	03/25/93	113493	Uranium-234	0.6996	J	N	3
W-5	03/25/93	113493	Uranium-235/236	0.7274	UJ	N	3
W-5	06/24/93	120424	Uranium-235/236	0.3	U	D	3
W-5	03/25/93	113493	Uranium-238	0.7274	J	N	3
W-5	06/24/93	120424	Uranium-238	0.6	-	D	3

Table C-8
Validated Filtered Radiological Data for Background Surface Water in Paddys Run

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	ASL
W-5	06/24/93	120423F	Cesium-137	3.6	UJ	N	3
W-5	06/24/93	120424F	Cesium-137	6	J	D	3
W-5	03/25/93	113493	Neptunium-237	0.42	J	N	3
W-5	03/25/93	113493	Plutonium-238	0.0819	UJ	N	3
W-5	03/25/93	113493	Plutonium-239/240	0.29	J	N	3
W-5	03/25/93	113493	Radium-226	0.199	UJ	N	3
W-5	06/24/93	120423F	Radium-226	0.4	UJ	N	3
W-5	06/24/93	120424F	Radium-226	0.4	UJ	D	3
W-5	03/25/93	113493	Radium-228	2.66	UJ	N	3
W-5	06/24/93	120423F	Radium-228	1.5	UJ	N	3
W-5	06/24/93	120424F	Radium-228	1.4	UJ	D	3
W-5	03/25/93	113493	Ruthenium-106	101.09	UJ	N	3
W-5	03/25/93	113493	Strontium-90	0.86	J	N	3
W-5	03/25/93	113493	Technetium-99	14.31	UJ	N	3
W-5	06/24/93	120423F	Technetium-99	12.5	UJ	N	3
W-5	06/24/93	120424F	Technetium-99	14	UJ	D	3
W-5	03/25/93	113493	Total Thorium	1.01	UJ	N	3
W-5	03/25/93	113493	Thorium-228	0.1377	UJ	N	3
W-5	06/24/93	120423F	Thorium-228	0.1	UJ	N	3
W-5	06/24/93	120424F	Thorium-228	0.1	UJ	D	3
W-5	03/25/93	113493	Thorium-230	0.2824	J	N	3
W-5	06/24/93	120423F	Thorium-230	0.2	UJ	N	3
W-5	06/24/93	120424F	Thorium-230	0.2	UJ	D	3
W-5	03/25/93	113493	Thorium-232	0.11	UJ	N	3
W-5	06/24/93	120423F	Thorium-232	0.1	UJ	N	3
W-5	06/24/93	120424F	Thorium-232	0.1	UJ	D	3
W-5	03/25/93	113493	Total Uranium	0.807	J	N	3
W-5	06/24/93	120423F	Total Uranium	1.1	-	N	3
W-5	06/24/93	120424F	Total Uranium	1.1	-	D	3
W-5	03/25/93	113493	Uranium-234	0.4474	J	N	3
W-5	06/24/93	120423F	Uranium-234	0.7	J	N	3
W-5	03/25/93	113493	Uranium-235/236	0.0876	UJ	N	3
W-5	06/24/93	120423F	Uranium-235/236	0.1	UJ	N	3
W-5	03/25/93	113493	Uranium-238	0.4798	J	N	3
W-5	06/24/93	120423F	Uranium-238	0.5	J	N	3

Table C-9
Outlier/High Nondetect Unfiltered Radiological Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	ASL
			High Nondetects				
1024	04/21/88	3106	Neptunium-237	1	U	N	5
1024	01/22/89	3847	Neptunium-237	1	U	N	5
1040	05/21/88	3219	Neptunium-237	1	U	D	5
1040	12/07/88	3778	Neptunium-237	0.409	UJ	N	5
1040	03/15/89	3964	Neptunium-237	0.415	UJ	N	5
1059	05/12/88	3189	Neptunium-237	1	U	D	5
1059	03/14/89	3981	Neptunium-237	0.378	UJ	N	5
1060	02/01/89	3888	Neptunium-237	1	U	N	5
1065	04/14/88	3136	Neptunium-237	1	U	N	5
1065	01/22/89	3860	Neptunium-237	1.2	UJ	N	5
1024	04/21/88	3106	Plutonium-238	1	U	N	5
1024	01/22/89	3847	Plutonium-238	1	U	N	5
1040	05/21/88	3219	Plutonium-238	1	U	D	5
1059	05/12/88	3189	Plutonium-238	1	U	D	5
1060	06/02/88	3255	Plutonium-238	0.41	UJ	N	5
1060	02/01/89	3888	Plutonium-238	1	U	N	5
1065	04/14/88	3136	Plutonium-238	1	U	N	5
1065	01/22/89	3860	Plutonium-238	1	U	N	5
1024	01/22/89	3847	Strontium-90	5	U	N	5
1040	05/21/88	3219	Strontium-90	5	U	D	5
1059	05/12/88	3189	Strontium-90	5	U	D	5
1060	02/01/89	3888	Strontium-90	5	U	N	5
1065	01/22/89	3860	Strontium-90	5	U	N	5
1040	03/15/89	3964	Total Thorium	5.63	UJ	N	5
1059	03/14/89	3981	Total Thorium	6.55	UJ	N	5
1060	08/04/88	3398	Total Thorium	6.5	UJ	N	5
1065	01/22/89	3860	Total Thorium	11	UJ	N	5
1024	04/21/88	3106	Thorium-232	1	U	N	5
1024	01/22/89	3847	Thorium-232	1	U	N	5
1040	05/21/88	3219	Thorium-232	1	U	D	5
1040	03/15/89	3964	Thorium-232	0.623	UJ	N	5
1059	05/12/88	3189	Thorium-232	1	U	D	5
1059	03/14/89	3981	Thorium-232	0.726	UJ	N	5
1060	08/04/88	3398	Thorium-232	0.72	UJ	N	5
1060	02/01/89	3888	Thorium-232	1	U	N	5
1065	04/14/88	3136	Thorium-232	1	U	N	5
1065	01/22/89	3860	Thorium-232	1.2	UJ	N	5
1059	08/18/88	3562	Uranium-234	1.8	UJ	N	5
1024	04/21/88	3106	Uranium-235/236	1	U	N	5
1024	01/22/89	3847	Uranium-235/236	1	U	N	5
1040	05/21/88	3219	Uranium-235/236	1	U	D	5
1059	05/12/88	3189	Uranium-235/236	1	U	D	5
1060	02/01/89	3888	Uranium-235/236	1	U	N	5
1065	04/14/88	3136	Uranium-235/236	1	U	N	5
1065	01/22/89	3860	Uranium-235/236	1	U	N	5

Table C-9 (Continued)
Outlier/High Nondetect Unfiltered Radiological Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	ASL
			Result Outliers				
1024	11/21/89	66650	Thorium-230	34.78	J	N	5
1065	12/13/89	66834	Total Uranium	5.334	-	N	5
1060	06/02/88	3255	Uranium-234	1.9	J	N	5
1060	06/02/88	3255	Uranium-235/236	0.48	J	N	5
1060	06/02/88	3255	Uranium-238	0.87	J	N	5
			Deleted Samples				
1060	09/29/93	30929U1060-03	Radium-226	1.8	J	N	3
1060	09/29/93	30929U1060-03	Radium-228	1.5	U	N	3
1060	09/29/93	30929U1060-03	Technetium-99	11.2	U	N	3
1060	09/29/93	30929U1060-03	Thorium-230	0.2	UJ	N	3
1060	09/29/93	30929U1060-03	Thorium-232	0.1	UJ	N	3
1060	09/29/93	30929U1060-03	Total Uranium	7.9	-	N	3
1060	09/29/93	30929U1060-03	Uranium-234	2.6	J	N	3
1060	09/29/93	30929U1060-03	Uranium-238	2.5	J	N	3
			Suspect Well Data				
1024	04/21/88	3106	Total Uranium	0.7	J	N	5
1024	07/26/88	3376	Total Uranium	2	J	N	5
1024	11/02/88	3657	Total Uranium	0.1	UJ	N	5
1024	01/22/89	3847	Total Uranium	1	-	N	5
1024	06/26/89	66420	Total Uranium	3.852	-	N	5
1024	11/21/89	66650	Total Uranium	1.791	-	N	5
1024	04/12/93	GW930412-6	Total Uranium	0.5	J	N	3
1065	04/14/88	3136	Total Uranium	1.1	-	N	5
1065	01/22/89	3860	Total Uranium	2	-	N	5
1065	05/04/93	112014	Total Uranium	1.101	-	N	C
1065	05/04/93	112013	Total Uranium	1.364	-	N	C
1024	04/21/88	3106	Uranium-234	1	U	N	5
1024	07/26/88	3376	Uranium-234	1.7	J	N	5
1024	11/02/88	3657	Uranium-234	0.37	J	N	5
1024	01/22/89	3847	Uranium-234	1	U	N	5
1024	06/26/89	66420	Uranium-234	1.94	-	N	5
1024	11/21/89	66650	Uranium-234	1.09	J	N	5
1024	04/12/93	GW930412-6	Uranium-234	0.8	J	N	3
1065	04/14/88	3136	Uranium-234	1	U	N	5
1065	01/22/89	3860	Uranium-234	1	U	N	5
1065	12/13/89	66834	Uranium-234	1.06	-	N	5
1065	05/04/93	112013	Uranium-234	0.5376	J	N	C
1065	05/04/93	112014	Uranium-234	0.6399	-	N	C
1024	07/26/88	3376	Uranium-235/236	0.25	UJ	N	5
1024	11/02/88	3657	Uranium-235/236	0.27	UJ	N	5
1024	06/26/89	66420	Uranium-235/236	0.156	UJ	N	5
1024	11/21/89	66650	Uranium-235/236	0.186	UJ	N	5
1024	04/12/93	GW930412-6	Uranium-235/236	0.1	UJ	N	3
1065	12/13/89	66834	Uranium-235/236	0.184	UJ	N	5
1065	05/04/93	112014	Uranium-235/236	0.06195	UJ	N	C
1065	05/04/93	112013	Uranium-235/236	0.1574	UJ	N	C

Table C-9 (Continued)
Outlier/High Nondetect Unfiltered Radiological Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	ASL
			Suspect Well Data				
1024	04/21/88	3106	Uranium-238	1	U	N	5
1024	07/26/88	3376	Uranium-238	0.64	J	N	5
1024	11/02/88	3657	Uranium-238	0.27	UJ	N	5
1024	01/22/89	3847	Uranium-238	1	U	N	5
1024	06/26/89	66420	Uranium-238	1.47	-	N	5
1024	11/21/89	66650	Uranium-238	0.665	J	N	5
1024	04/12/93	GW930412-6	Uranium-238	0.4	J	N	3
1065	04/14/88	3136	Uranium-238	1	U	N	5
1065	01/22/89	3860	Uranium-238	1	U	N	5
1065	12/13/89	66834	Uranium-238	1.07	-	N	5
1065	05/04/93	112013	Uranium-238	0.5336	J	N	C
1065	05/04/93	112014	Uranium-238	0.467	-	N	C

Table C-10
Outlier/High Nondetect Filtered Radiological Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	ASL
Suspect Well Data							
1024	04/12/93	GW930412-6	Total Uranium	0.5	-	N	3
1024	04/12/93	GW930412-6	Uranium-234	0.5	J	N	3
1024	04/12/93	GW930412-6	Uranium-235/236	0.1	UJ	N	3
1024	04/12/93	GW930412-6	Uranium-238	0.4	J	N	3

Table C-11
Outlier/High Nondetect Unfiltered Radiological Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
			High Nondetects					
3096	02/09/89	3974	Cesium-137	20	U	N	5	R
2026	05/12/88	3187	Neptunium-237	1	U	D	5	D
2036	05/12/88	3185	Neptunium-237	1	U	D	5	R
2043	04/13/88	3091	Neptunium-237	1	U	N	5	S
2043	02/02/89	3887	Neptunium-237	0.989	UJ	N	5	S
2056	03/13/89	4045	Neptunium-237	1	UJ	D	5	S
2066	04/26/88	3124	Neptunium-237	1	U	N	5	S
3024	01/24/89	3842	Neptunium-237	1	U	N	5	S
3043	04/13/88	3090	Neptunium-237	1	U	N	5	S
3043	02/02/89	3886	Neptunium-237	1.06	UJ	N	5	S
3063	05/12/88	3191	Neptunium-237	1	U	D	5	D
3099	05/24/88	3238	Neptunium-237	1	U	D	5	D
3100	05/24/88	3240	Neptunium-237	1	U	D	5	D
4096	12/14/88	3474	Neptunium-237	1	U	D	5	R
2026	05/12/88	3187	Plutonium-238	1	U	D	5	D
2036	05/12/88	3185	Plutonium-238	1	U	D	5	R
2036	08/23/88	3564	Plutonium-238	0.12	UJ	N	5	R
2043	04/13/88	3091	Plutonium-238	1	U	N	5	S
2043	02/02/89	3887	Plutonium-238	0.292	UJ	N	5	S
2050	05/05/88	3147	Plutonium-238	0.14	UJ	N	5	S
2050	03/13/89	3969	Plutonium-238	0.13	UJ	N	5	S
2056	05/06/88	3159	Plutonium-238	0.11	UJ	N	5	S
2056	03/13/89	4045	Plutonium-238	1	U	D	5	S
2057	06/03/88	3265	Plutonium-238	0.46	UJ	N	5	R
2066	04/26/88	3124	Plutonium-238	1	U	N	5	S
2096	04/30/89	4081	Plutonium-238	0.123	UJ	N	5	R
2096	04/25/90	4234	Plutonium-238	0.146	UJ	N	5	R
2104	05/05/88	3146	Plutonium-238	0.14	UJ	N	5	R
2104	03/15/89	3970	Plutonium-238	0.119	UJ	N	5	R
2104	04/22/90	4269	Plutonium-238	0.144	UJ	N	5	R
2105	06/05/88	3268	Plutonium-238	0.77	UJ	N	5	S
2105	12/13/88	3782	Plutonium-238	0.694	UJ	N	5	S
2121	05/06/88	3158	Plutonium-238	0.13	UJ	N	5	D
2122	05/06/88	3157	Plutonium-238	0.13	UJ	N	5	D
2123	05/06/88	3156	Plutonium-238	0.17	UJ	N	5	R
3024	07/26/88	3377	Plutonium-238	0.38	UJ	N	5	S
3024	01/24/89	3842	Plutonium-238	1	U	N	5	S
3043	04/13/88	3090	Plutonium-238	1	U	N	5	S
3043	02/02/89	3886	Plutonium-238	0.314	UJ	N	5	S
3063	05/12/88	3191	Plutonium-238	1	U	D	5	D
3096	04/30/89	4082	Plutonium-238	0.335	UJ	N	5	R
3096	04/25/90	4257	Plutonium-238	0.157	UJ	N	5	R
3099	05/24/88	3237	Plutonium-238	0.15	UJ	N	5	D
3099	05/24/88	3238	Plutonium-238	1	U	D	5	D
3099	12/06/88	3742	Plutonium-238	0.122	UJ	N	5	D
3100	05/24/88	3240	Plutonium-238	1	U	D	5	D
4096	04/30/89	4083	Plutonium-238	0.194	UJ	N	5	R

Table C-11 (Continued)
Outlier/High Nondetect Unfiltered Radiological Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
			High Nondetects					
2026	05/12/88	3186	Plutonium-239/240	0.095	UJ	N	5	D
2026	05/12/88	3187	Plutonium-239/240	1	U	D	5	D
2036	05/12/88	3184	Plutonium-239/240	0.094	UJ	N	5	R
2036	05/12/88	3185	Plutonium-239/240	1	U	D	5	R
2036	08/23/88	3564	Plutonium-239/240	0.12	UJ	N	5	R
2043	04/13/88	3091	Plutonium-239/240	1	U	N	5	S
2043	02/02/89	3887	Plutonium-239/240	0.292	UJ	N	5	S
2050	05/05/88	3147	Plutonium-239/240	0.14	UJ	N	5	S
2050	03/13/89	3969	Plutonium-239/240	0.13	UJ	N	5	S
2056	05/06/88	3159	Plutonium-239/240	0.11	UJ	N	5	S
2056	03/13/89	4045	Plutonium-239/240	1	U	D	5	S
2057	06/03/88	3265	Plutonium-239/240	0.46	UJ	N	5	R
2066	04/26/88	3124	Plutonium-239/240	1	U	N	5	S
2096	04/30/89	4081	Plutonium-239/240	0.123	UJ	N	5	R
2104	05/05/88	3146	Plutonium-239/240	0.14	UJ	N	5	R
2104	03/15/89	3970	Plutonium-239/240	0.119	UJ	N	5	R
2105	06/05/88	3268	Plutonium-239/240	0.77	UJ	N	5	S
2121	05/06/88	3158	Plutonium-239/240	0.13	UJ	N	5	D
2122	05/06/88	3157	Plutonium-239/240	0.13	UJ	N	5	D
2122	03/15/89	3979	Plutonium-239/240	0.0977	UJ	N	5	D
2123	05/06/88	3156	Plutonium-239/240	0.17	UJ	N	5	R
3024	01/24/89	3842	Plutonium-239/240	1	U	N	5	S
3043	04/13/88	3090	Plutonium-239/240	1	U	N	5	S
3043	02/02/89	3886	Plutonium-239/240	0.314	UJ	N	5	S
3063	05/12/88	3190	Plutonium-239/240	0.094	UJ	N	5	D
3063	05/12/88	3191	Plutonium-239/240	1	U	D	5	D
3063	03/13/89	3966	Plutonium-239/240	0.0943	UJ	N	5	D
3096	04/30/89	4082	Plutonium-239/240	0.335	UJ	N	5	R
3099	05/24/88	3237	Plutonium-239/240	0.15	UJ	N	5	D
3099	05/24/88	3238	Plutonium-239/240	1	U	D	5	D
3099	12/06/88	3742	Plutonium-239/240	0.122	UJ	N	5	D
3100	05/24/88	3239	Plutonium-239/240	0.1	UJ	N	5	D
3100	05/24/88	3240	Plutonium-239/240	1	U	D	5	D
3100	03/13/89	3978	Plutonium-239/240	0.0943	UJ	N	5	D
4096	04/30/89	4083	Plutonium-239/240	0.194	UJ	N	5	R
2026	05/12/88	3187	Strontium-90	5	U	D	5	D
2036	05/12/88	3185	Strontium-90	5	U	D	5	R
2056	03/13/89	4045	Strontium-90	5	U	D	5	S
2105	08/28/88	3577	Strontium-90	5	U	N	5	S
3024	01/24/89	3842	Strontium-90	5	U	N	5	S
3063	05/12/88	3191	Strontium-90	5	U	D	5	D
3099	05/24/88	3238	Strontium-90	5	U	D	5	D
3100	05/24/88	3240	Strontium-90	5	U	D	5	D
4096	12/14/88	3474	Strontium-90	5	U	D	5	R
2026	03/14/89	3980	Total Thorium	7.67	UJ	N	5	D
2036	03/14/89	3983	Total Thorium	4.84	UJ	N	5	R
2043	02/02/89	3887	Total Thorium	9.34	UJ	N	5	S
2050	03/13/89	3969	Total Thorium	4.53	UJ	N	5	S

Table C-11 (Continued)
Outlier/High Nondetect Unfiltered Radiological Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
			High Nondetects					
2056	03/13/89	3967	Total Thorium	5.67	UJ	N	5	S
2056	03/13/89	4045	Total Thorium	7	U	D	5	S
2057	03/14/89	3965	Total Thorium	9.55	UJ	N	5	R
2066	03/14/89	3894	Total Thorium	6.55	UJ	N	5	S
2096	09/12/88	3586	Total Thorium	5.8	UJ	N	5	R
2096	04/30/89	4081	Total Thorium	5.68	UJ	N	5	R
2104	04/22/90	4269	Total Thorium	5.6	UJ	N	5	R
2105	03/15/89	3968	Total Thorium	4.85	UJ	N	5	S
2121	03/14/89	3962	Total Thorium	9.42	UJ	N	5	D
2122	03/15/89	3979	Total Thorium	4.94	UJ	N	5	D
2123	03/14/89	3984	Total Thorium	6.01	UJ	N	5	R
3043	08/04/88	3397	Total Thorium	4.7	UJ	N	5	S
3043	02/02/89	3886	Total Thorium	7.23	UJ	N	5	S
3063	03/13/89	3966	Total Thorium	4.83	UJ	N	5	D
3096	04/30/89	4082	Total Thorium	4.2	UJ	N	5	R
3098	12/16/88	3795	Total Thorium	4.53	UJ	N	5	D
3098	05/25/89	4088	Total Thorium	5.27	UJ	N	5	D
3099	12/06/88	3742	Total Thorium	4.43	UJ	N	5	D
3099	03/14/89	3977	Total Thorium	5	UJ	N	5	D
3100	03/13/89	3978	Total Thorium	4.45	UJ	N	5	D
2026	05/12/88	3187	Thorium-228	1	U	D	5	D
2026	03/14/89	3980	Thorium-228	0.85	UJ	N	5	D
2036	05/12/88	3185	Thorium-228	1	U	D	5	R
2043	04/13/88	3091	Thorium-228	1	U	N	5	S
2043	08/30/89	66547	Thorium-228	1	U	D	5	S
2056	03/13/89	4045	Thorium-228	1	U	D	5	S
2057	03/14/89	3965	Thorium-228	1.06	UJ	N	5	R
2066	04/26/88	3124	Thorium-228	1	U	N	5	S
2066	03/14/89	3894	Thorium-228	0.726	UJ	N	5	S
2121	03/14/89	3962	Thorium-228	1.04	UJ	N	5	D
3024	01/24/89	3842	Thorium-228	1	U	N	5	S
3043	04/13/88	3090	Thorium-228	1	U	N	5	S
3043	11/14/89	66684	Thorium-228	1	U	N	5	S
3063	05/12/88	3191	Thorium-228	1	U	D	5	D
3099	05/24/88	3238	Thorium-228	1	U	D	5	D
3100	05/24/88	3240	Thorium-228	1	U	D	5	D
4096	12/14/88	3474	Thorium-228	1	U	D	5	R
2026	05/12/88	3187	Thorium-230	1	U	D	5	D
2026	03/14/89	3980	Thorium-230	0.85	UJ	N	5	D
2036	05/12/88	3185	Thorium-230	1	U	D	5	R
2043	04/13/88	3091	Thorium-230	1	U	N	5	S
2043	08/30/89	66547	Thorium-230	1	U	D	5	S
2056	03/13/89	4045	Thorium-230	1	U	D	5	S
2057	03/14/89	3965	Thorium-230	1.06	UJ	N	5	R
2066	04/26/88	3124	Thorium-230	1	U	N	5	S
2066	03/14/89	3894	Thorium-230	0.726	UJ	N	5	S
2121	03/14/89	3962	Thorium-230	1.04	UJ	N	5	D
3024	01/24/89	3842	Thorium-230	1	U	N	5	S

Table C-11 (Continued)
Outlier/High Nondetect Unfiltered Radiological Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
			High Nondetects					
3043	04/13/88	3090	Thorium-230	1	U	N	5	S
3043	11/14/89	66684	Thorium-230	1	U	N	5	S
3063	05/12/88	3191	Thorium-230	1	U	D	5	D
3099	05/24/88	3238	Thorium-230	1	U	D	5	D
3100	05/24/88	3240	Thorium-230	1	U	D	5	D
3100	12/06/88	3761	Thorium-230	2.21	UJ	N	5	D
4096	12/14/88	3474	Thorium-230	1	U	D	5	R
2026	05/12/88	3187	Thorium-232	1	U	D	5	D
2026	03/14/89	3980	Thorium-232	0.85	UJ	N	5	D
2036	05/12/88	3185	Thorium-232	1	U	D	5	R
2036	03/14/89	3983	Thorium-232	0.536	UJ	N	5	R
2043	04/13/88	3091	Thorium-232	1	U	N	5	S
2043	02/02/89	3887	Thorium-232	1.04	UJ	N	5	S
2050	03/13/89	3969	Thorium-232	0.502	UJ	N	5	S
2056	03/13/89	3967	Thorium-232	0.628	UJ	N	5	S
2056	03/13/89	4045	Thorium-232	1	U	D	5	S
2057	03/14/89	3965	Thorium-232	1.06	UJ	N	5	R
2066	04/26/88	3124	Thorium-232	1	U	N	5	S
2066	03/14/89	3894	Thorium-232	0.726	UJ	N	5	S
2066	04/07/93	GW930407-14	Thorium-232	0.5	UJ	N	3	S
2096	09/12/88	3586	Thorium-232	0.64	UJ	N	5	R
2096	04/30/89	4081	Thorium-232	0.629	UJ	N	5	R
2104	03/15/89	3970	Thorium-232	0.583	UJ	N	5	R
2104	04/22/90	4269	Thorium-232	0.62	UJ	N	5	R
2105	03/15/89	3968	Thorium-232	0.537	UJ	N	5	S
2121	03/14/89	3962	Thorium-232	1.04	UJ	N	5	D
2122	03/15/89	3979	Thorium-232	0.547	UJ	N	5	D
2123	03/14/89	3984	Thorium-232	0.666	UJ	N	5	R
3024	01/24/89	3842	Thorium-232	1	U	N	5	S
3043	04/13/88	3090	Thorium-232	1	U	N	5	S
3043	08/04/88	3397	Thorium-232	0.53	UJ	N	5	S
3043	02/02/89	3886	Thorium-232	0.801	UJ	N	5	S
3063	05/12/88	3191	Thorium-232	1	U	D	5	D
3063	03/13/89	3966	Thorium-232	0.535	UJ	N	5	D
3096	04/30/89	4082	Thorium-232	0.465	UJ	N	5	R
3098	12/16/88	3795	Thorium-232	0.501	UJ	N	5	D
3098	05/25/89	4088	Thorium-232	0.584	UJ	N	5	D
3099	05/24/88	3238	Thorium-232	1	U	D	5	D
3099	12/06/88	3742	Thorium-232	0.491	UJ	N	5	D
3099	03/14/89	3977	Thorium-232	0.554	UJ	N	5	D
3100	05/24/88	3240	Thorium-232	1	U	D	5	D
3100	03/13/89	3978	Thorium-232	0.493	UJ	N	5	D
4096	12/14/88	3474	Thorium-232	1	U	D	5	R
2104	04/22/90	4269	Total Uranium	1.5	UJ	N	5	R
2104	04/22/90	4235	Total Uranium	1.95	UJ	N	5	R
2026	05/12/88	3187	Uranium-234	1	U	D	5	D
2036	05/12/88	3185	Uranium-234	1	U	D	5	R
2043	04/13/88	3091	Uranium-234	1	U	N	5	S

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Table C-11 (Continued)
Outlier/High Nondetect Unfiltered Radiological Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
			High Nondetects					
2043	02/02/89	3887	Uranium-234	1.26	UJ	N	5	S
2043	08/30/89	66547	Uranium-234	1	U	D	5	S
2056	03/13/89	4045	Uranium-234	1	U	D	5	S
2066	04/26/88	3124	Uranium-234	1	U	N	5	S
3024	01/24/89	3842	Uranium-234	1	U	N	5	S
3043	04/13/88	3090	Uranium-234	1	U	N	5	S
3043	02/02/89	3886	Uranium-234	1.02	UJ	N	5	S
3043	11/14/89	66684	Uranium-234	1	U	N	5	S
3063	05/12/88	3191	Uranium-234	1	U	D	5	D
3099	05/24/88	3238	Uranium-234	1	U	D	5	D
3100	05/24/88	3240	Uranium-234	1	U	D	5	D
2026	05/12/88	3187	Uranium-235/236	1	U	D	5	D
2036	05/12/88	3185	Uranium-235/236	1	U	D	5	R
2043	04/13/88	3091	Uranium-235/236	1	U	N	5	S
2043	02/02/89	3887	Uranium-235/236	1.26	UJ	N	5	S
2043	08/30/89	66547	Uranium-235/236	1	U	D	5	S
2050	12/18/89	66846	Uranium-235/236	0.729	UJ	N	5	S
2056	03/13/89	4045	Uranium-235/236	1	U	D	5	S
2066	04/26/88	3124	Uranium-235/236	1	U	N	5	S
2104	04/22/90	4269	Uranium-235/236	0.437	UJ	N	5	R
2104	04/22/90	4235	Uranium-235/236	0.568	UJ	N	5	R
3024	01/24/89	3842	Uranium-235/236	1	U	N	5	S
3043	04/13/88	3090	Uranium-235/236	1	U	N	5	S
3043	02/02/89	3886	Uranium-235/236	1.02	UJ	N	5	S
3043	11/14/89	66684	Uranium-235/236	1	U	N	5	S
3063	05/12/88	3191	Uranium-235/236	1	U	D	5	D
3099	05/24/88	3238	Uranium-235/236	1	U	D	5	D
3100	05/24/88	3240	Uranium-235/236	1	U	D	5	D
2043	02/02/89	3887	Uranium-238	1.26	UJ	N	5	S
			Result Outliers					
3043	08/04/88	3397	Radium-226	8.5	-	N	5	S
4011	10/05/90	4345	Uranium-234	2.45	J	N	5	S
4011	02/07/91	4382	Uranium-234	2.43	-	N	5	S
4096	09/12/88	3584	Uranium-234	0.94	J	N	5	R
3024	07/26/88	3377	Uranium-235/236	0.51	J	N	5	S
4011	10/05/90	4345	Uranium-238	2.37	J	N	5	S
4011	02/07/91	4382	Uranium-238	2.09	-	N	5	S
4096	09/12/88	3584	Uranium-238	1.8	J	N	5	R
			Deleted Sample					
3024	04/20/88	3096	Cesium-137	7.3652	UJ	N	5	S
3024	04/20/88	3096	Plutonium-238	1	U	N	5	S
3024	04/20/88	3096	Plutonium-239/240	1	U	N	5	S
3024	04/20/88	3096	Radium-226	1.1	J	N	5	S
3024	04/20/88	3096	Radium-228	1.9	UJ	N	5	S
3024	04/20/88	3096	Ruthenium-106	81.517	UJ	N	5	S
3024	04/20/88	3096	Strontium-90	1.2	J	N	5	S

Table C-11 (Continued)
Outlier/High Nondetect Unfiltered Radiological Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
			Deleted Sample					
3024	04/20/88	3096	Technetium-99	16.5	UJ	N	5	S
3024	04/20/88	3096	Thorium-228	1	U	N	5	S
3024	04/20/88	3096	Thorium-230	1	U	N	5	S
3024	04/20/88	3096	Thorium-232	1	U	N	5	S
3024	04/20/88	3096	Total Uranium	13.6	J	N	5	S
3024	04/20/88	3096	Uranium-234	3.2	J	N	5	S
3024	04/20/88	3096	Uranium-235/236	1	U	N	5	S
3024	04/20/88	3096	Uranium-238	4.4	J	N	5	S
			Suspect Well Data					
2098	09/22/88	3591	Cesium-137	7.2394	UJ	N	5	D
2098	12/16/88	3796	Cesium-137	8.9459	UJ	N	5	D
2098	02/08/89	3990	Cesium-137	10.875	UJ	N	5	D
2098	05/25/89	4087	Cesium-137	10.556	UJ	N	5	D
2098	09/22/88	3591	Neptunium-237	0.41	UJ	N	5	D
2098	12/16/88	3796	Neptunium-237	0.261	UJ	N	5	D
2098	02/08/89	3990	Neptunium-237	0.204	UJ	N	5	D
2098	05/25/89	4087	Neptunium-237	0.152	UJ	N	5	D
2098	09/22/88	3591	Plutonium-238	0.081	UJ	N	5	D
2098	12/16/88	3796	Plutonium-238	0.0299	UJ	N	5	D
2098	02/08/89	3990	Plutonium-238	0.0556	UJ	N	5	D
2098	05/25/89	4087	Plutonium-238	0.11	UJ	N	5	D
2098	09/22/88	3591	Plutonium-239/240	0.081	UJ	N	5	D
2098	12/16/88	3796	Plutonium-239/240	0.0299	UJ	N	5	D
2098	02/08/89	3990	Plutonium-239/240	0.0556	UJ	N	5	D
2098	05/25/89	4087	Plutonium-239/240	0.11	UJ	N	5	D
2098	09/22/88	3591	Radium-226	0.2	UJ	N	5	D
2098	12/16/88	3796	Radium-226	0.181	UJ	N	5	D
2098	02/08/89	3990	Radium-226	0.112	J	N	5	D
2098	05/25/89	4087	Radium-226	0.138	UJ	N	5	D
2098	05/20/93	GW930520-9	Radium-226	0.4	J	N	3	D
2098	09/22/88	3591	Radium-228	2.3	UJ	N	5	D
2098	12/16/88	3796	Radium-228	1.89	UJ	N	5	D
2098	02/08/89	3990	Radium-228	2.87	UJ	N	5	D
2098	05/25/89	4087	Radium-228	2.5	UJ	N	5	D
2098	05/20/93	GW930520-9	Radium-228	2.1	U	N	3	D
2098	09/22/88	3591	Ruthenium-106	62.162	UJ	N	5	D
2098	12/16/88	3796	Ruthenium-106	90.239	UJ	N	5	D
2098	02/08/89	3990	Ruthenium-106	94.823	UJ	N	5	D
2098	05/25/89	4087	Ruthenium-106	79.823	UJ	N	5	D
2098	09/22/88	3591	Strontium-90	0.82	UJ	N	5	D
2098	12/16/88	3796	Strontium-90	1.02	UJ	N	5	D
2098	02/08/89	3990	Strontium-90	1.34	UJ	N	5	D
2098	05/25/89	4087	Strontium-90	1.06	J	N	5	D
2098	09/22/88	3591	Technetium-99	11.5	UJ	N	5	D
2098	12/16/88	3796	Technetium-99	18.71	UJ	N	5	D
2098	02/08/89	3990	Technetium-99	18.05	UJ	N	5	D
2098	05/25/89	4087	Technetium-99	16.19	UJ	N	5	D

Table C-11 (Continued)
Outlier/High Nondetect Unfiltered Radiological Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
			Suspect Well Data					
2098	09/22/88	3591	Total Thorium	1.7	UJ	N	5	D
2098	12/16/88	3796	Total Thorium	2.1	UJ	N	5	D
2098	02/08/89	3990	Total Thorium	2.52	UJ	N	5	D
2098	05/25/89	4087	Total Thorium	3.51	UJ	N	5	D
2098	09/22/88	3591	Thorium-228	0.2	UJ	N	5	D
2098	12/16/88	3796	Thorium-228	0.232	UJ	N	5	D
2098	02/08/89	3990	Thorium-228	0.584	J	N	5	D
2098	05/25/89	4087	Thorium-228	0.389	UJ	N	5	D
2098	05/20/93	GW930520-9	Thorium-228	0.2	UJ	N	3	D
2098	09/22/88	3591	Thorium-230	0.19	UJ	N	5	D
2098	12/16/88	3796	Thorium-230	0.232	UJ	N	5	D
2098	02/08/89	3990	Thorium-230	0.279	UJ	N	5	D
2098	05/25/89	4087	Thorium-230	0.389	UJ	N	5	D
2098	05/20/93	GW930520-9	Thorium-230	0.3	UJ	N	3	D
2098	09/22/88	3591	Thorium-232	0.19	UJ	N	5	D
2098	12/16/88	3796	Thorium-232	0.232	UJ	N	5	D
2098	02/08/89	3990	Thorium-232	0.279	UJ	N	5	D
2098	05/25/89	4087	Thorium-232	0.389	UJ	N	5	D
2098	05/20/93	GW930520-9	Thorium-232	0.2	UJ	N	3	D
2098	09/22/88	3591	Total Uranium	2.496	J	N	5	D
2098	12/16/88	3796	Total Uranium	1.843	-	N	5	D
2098	02/08/89	3990	Total Uranium	1.521	-	N	5	D
2098	05/25/89	4087	Total Uranium	2.751	-	N	5	D
2098	05/20/93	GW930520-9	Total Uranium	5.1	-	N	3	D
2098	09/22/88	3591	Uranium-234	0.69	J	N	5	D
2098	12/16/88	3796	Uranium-234	0.585	J	N	5	D
2098	02/08/89	3990	Uranium-234	0.76	J	N	5	D
2098	05/25/89	4087	Uranium-234	1.21	-	N	5	D
2098	05/20/93	GW930520-9	Uranium-234	1.7	J	N	3	D
2098	09/22/88	3591	Uranium-235/236	0.2	UJ	N	5	D
2098	12/16/88	3796	Uranium-235/236	0.224	UJ	N	5	D
2098	02/08/89	3990	Uranium-235/236	0.185	UJ	N	5	D
2098	05/25/89	4087	Uranium-235/236	0.367	UJ	N	5	D
2098	05/20/93	GW930520-9	Uranium-235/236	0.2	UJ	N	3	D
2098	09/22/88	3591	Uranium-238	0.66	J	N	5	D
2098	12/16/88	3796	Uranium-238	0.552	J	N	5	D
2098	02/08/89	3990	Uranium-238	0.539	J	N	5	D
2098	05/25/89	4087	Uranium-238	0.987	J	N	5	D
2098	05/20/93	GW930520-9	Uranium-238	1.7	J	N	3	D

Table C-12
Outlier/High Nondetect Filtered Radiological Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
Suspect Well Data								
2098	05/20/93	GW930520-9	Radium-226	0.9	U	N	3	D
2098	05/20/93	GW930520-9	Radium-228	1.7	U	N	3	D
2098	05/20/93	GW930520-9	Thorium-228	0.2	UJ	N	3	D
2098	05/20/93	GW930520-9	Thorium-230	0.3	J	N	3	D
2098	05/20/93	GW930520-9	Thorium-232	0.2	UJ	N	3	D
2098	05/20/93	GW930520-9	Total Uranium	4.6	-	N	3	D
2098	05/20/93	GW930520-9	Uranium-234	2.2	J	N	3	D
2098	05/20/93	GW930520-9	Uranium-235/236	0.2	UJ	N	3	D
2098	05/20/93	GW930520-9	Uranium-238	2	J	N	3	D

5644

Table C-13
Outlier/High Nondetect Unfiltered Radiological Data for Background Surface Water in the Great Miami River

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	ASL
High Nondetect							
W-1	06/16/88	1035	Radium-226	1	UJ	N	5

000444

Table C-14
Outlier/High Nondetect Filtered Radiological Data for Background Surface Water in the Great Miami River

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	ASL
High Nondetect							
W-1	04/03/89	1185	Technetium-99	92.63	UJ	N	5

Table C-15
Outlier/High Nondetect Unfiltered Radiological Data for Background Surface Water in Paddys Run

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	ASL
High Nondetect							
W-5	03/25/93	113493	Cesium-137	18.116	UJ	N	3

Table C-16
Outlier/High Nondetect Filtered Radiological Data for Background Surface Water in Paddys Run

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	ASL
High Nondetect							
W-5	03/25/93	113493	Cesium-137	13.71	UJ	N	3

000447

Table C-17
Rejected/Nonvalidated Unfiltered Radiological Data for Background Monitoring Wells in the Glacial Overburden

Well	Sample			Validated		QA
No.	Date	ID	Constituent	Result	Qualifier	type
1024	01/22/89	3847	Cesium-137	20	R	N
1024	05/15/90	EMGW_SYSGEN_35	Cesium-137	12	UNV	N
1024	02/27/91	EMGW_SYSGEN_38	Cesium-137	6.2	UNV	N
1024	02/27/91	EMGW_SYSGEN_38D	Cesium-137	6.5	UNV	D
1040	05/21/88	3218	Cesium-137	7.5199	R	N
1040	05/21/88	3219	Cesium-137	20	R	D
1059	05/12/88	3188	Cesium-137	7.9225	R	N
1059	05/12/88	3189	Cesium-137	20	R	D
1060	06/02/88	3255	Cesium-137	7.097	R	N
1060	02/01/89	3888	Cesium-137	20	R	N
1060	03/11/91	EMGW_SYSGEN_162	Cesium-137	8.4	UNV	N
1065	01/22/89	3860	Cesium-137	20	R	N
1024	05/15/90	EMGW_SYSGEN_35	Gross Alpha	11	UNV	N
1024	02/27/91	EMGW_SYSGEN_38	Gross Alpha	8.5	UNV	N
1024	02/27/91	EMGW_SYSGEN_38D	Gross Alpha	8.65	NV	D
1024	01/13/93	GW930113-6	Gross Alpha	1.3	NV	N
1024	04/12/93	GW930412-6	Gross Alpha	1.5	UNV	N
1040	09/28/93	30928U1040-04	Gross Alpha	370	UNV	N
1040	09/28/93	30928U1040-04	Gross Alpha	370	UNV	N
1060	11/30/87	3001	Gross Alpha	1	UNV	N
1060	12/05/87	3045	Gross Alpha	1	UNV	N
1060	06/04/90	EMGW_SYSGEN_159	Gross Alpha	11.4	NV	N
1060	06/04/90	EMGW_SYSGEN_159D	Gross Alpha	0.0151	NV	D
1060	11/27/90	EMGW_SYSGEN_161	Gross Alpha	5.4	UNV	N
1060	11/27/90	EMGW_SYSGEN_161D	Gross Alpha	5	UNV	D
1060	03/11/91	EMGW_SYSGEN_162	Gross Alpha	6.8	UNV	N
1024	05/15/90	EMGW_SYSGEN_35	Gross Beta	28	UNV	N
1024	02/27/91	EMGW_SYSGEN_38	Gross Beta	5.1	UNV	N
1024	02/27/91	EMGW_SYSGEN_38D	Gross Beta	5.2	UNV	D
1024	01/13/93	GW930113-6	Gross Beta	2.7	NV	N
1024	04/12/93	GW930412-6	Gross Beta	5.7	NV	N
1040	09/28/93	30928U1040-04	Gross Beta	500	UNV	N
1040	09/28/93	30928U1040-04	Gross Beta	500	UNV	N
1060	11/30/87	3001	Gross Beta	4	NV	N
1060	12/05/87	3045	Gross Beta	24	UNV	N
1060	06/04/90	EMGW_SYSGEN_159	Gross Beta	24.4	NV	N
1060	06/04/90	EMGW_SYSGEN_159D	Gross Beta	0.0258	NV	D
1060	11/27/90	EMGW_SYSGEN_161	Gross Beta	9.49	NV	N
1060	11/27/90	EMGW_SYSGEN_161D	Gross Beta	13.9	NV	D
1060	03/11/91	EMGW_SYSGEN_162	Gross Beta	13.8	NV	N
1024	05/15/90	EMGW_SYSGEN_35	Neptunium-237	0.12	UNV	N
1024	02/27/91	EMGW_SYSGEN_38	Neptunium-237	0.12	UNV	N
1024	02/27/91	EMGW_SYSGEN_38D	Neptunium-237	0.19	UNV	D
1060	03/11/91	EMGW_SYSGEN_162	Neptunium-237	0.11	UNV	N
1065	05/04/93	112013	Neptunium-237	0.2236	UN	N
1065	05/04/93	112014	Neptunium-237	0.3	UN	N
1024	05/15/90	EMGW_SYSGEN_35	Plutonium-238	0.14	UNV	N
1060	03/11/91	EMGW_SYSGEN_162	Plutonium-238	0.071	UNV	N
1024	05/15/90	EMGW_SYSGEN_35	Plutonium-239/240	0.18	UNV	N
1060	03/11/91	EMGW_SYSGEN_162	Plutonium-239/240	0.071	UNV	N

Table C-17 (Continued)
Rejected/Nonvalidated Unfiltered Radiological Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type
1060	11/30/87	3001	Radium, Total	1	UNV	N
1060	12/05/87	3045	Radium, Total	1	UNV	N
1024	05/15/90	EMGW_SYSGEN_35	Radium-226	0.16	UNV	N
1024	08/08/90	EMGW_SYSGEN_36	Radium-226	0.13	UNV	N
1024	02/27/91	EMGW_SYSGEN_38	Radium-226	0.12	UNV	N
1024	02/27/91	EMGW_SYSGEN_38D	Radium-226	0.14	UNV	D
1024	01/13/93	GW930113-6	Radium-226	0.4	NV	N
1060	06/04/90	EMGW_SYSGEN_159	Radium-226	0.29	UNV	N
1060	06/04/90	EMGW_SYSGEN_159D	Radium-226	1.9	NV	D
1060	11/27/90	EMGW_SYSGEN_161	Radium-226	0.17	UNV	N
1060	11/27/90	EMGW_SYSGEN_161D	Radium-226	0.117	NV	D
1060	03/11/91	EMGW_SYSGEN_162	Radium-226	0.1	UNV	N
1065	04/16/90	EMGW_SYSGEN_167	Radium-226	1.14	NV	N
1024	05/15/90	EMGW_SYSGEN_35	Radium-228	0.13	UNV	N
1024	08/08/90	EMGW_SYSGEN_36	Radium-228	1.3	UNV	N
1024	02/27/91	EMGW_SYSGEN_38	Radium-228	0.87	UNV	N
1024	02/27/91	EMGW_SYSGEN_38D	Radium-228	1	UNV	D
1024	01/13/93	GW930113-6	Radium-228	2.2	NV	N
1060	06/04/90	EMGW_SYSGEN_159	Radium-228	2	UNV	N
1060	06/04/90	EMGW_SYSGEN_159D	Radium-228	2	UNV	D
1060	11/27/90	EMGW_SYSGEN_161	Radium-228	1.4	UNV	N
1060	11/27/90	EMGW_SYSGEN_161D	Radium-228	0.57	UNV	D
1060	03/11/91	EMGW_SYSGEN_162	Radium-228	1.4	UNV	N
1065	04/16/90	EMGW_SYSGEN_167	Radium-228	0.7	UNV	N
1024	01/22/89	3847	Ruthenium-106	150	R	N
1024	05/15/90	EMGW_SYSGEN_35	Ruthenium-106	88	UNV	N
1024	02/27/91	EMGW_SYSGEN_38	Ruthenium-106	74	UNV	N
1024	02/27/91	EMGW_SYSGEN_38D	Ruthenium-106	73	UNV	D
1040	05/21/88	3218	Ruthenium-106	74.153	R	N
1040	05/21/88	3219	Ruthenium-106	150	R	D
1059	05/12/88	3188	Ruthenium-106	82.589	R	N
1059	05/12/88	3189	Ruthenium-106	150	R	D
1060	06/02/88	3255	Ruthenium-106	68.502	R	N
1060	02/01/89	3888	Ruthenium-106	150	R	N
1060	03/11/91	EMGW_SYSGEN_162	Ruthenium-106	60	UNV	N
1065	01/22/89	3860	Ruthenium-106	150	R	N
1024	05/15/90	EMGW_SYSGEN_35	Strontium-90	1.39	NV	N
1024	02/18/90	EMGW_SYSGEN_34	Technetium-99	15	UNV	N
1024	05/15/90	EMGW_SYSGEN_35	Technetium-99	26	UNV	N
1024	02/27/91	EMGW_SYSGEN_38	Technetium-99	19	UNV	N
1024	02/27/91	EMGW_SYSGEN_38D	Technetium-99	19	UNV	D
1060	03/11/91	EMGW_SYSGEN_162	Technetium-99	17	UNV	N
1024	05/15/90	EMGW_SYSGEN_35	Total Thorium	3	UNV	N
1024	08/08/90	EMGW_SYSGEN_36	Total Thorium	2.8	UNV	N
1024	02/27/91	EMGW_SYSGEN_38	Total Thorium	1.8	UNV	N
1024	02/27/91	EMGW_SYSGEN_38D	Total Thorium	1.7	UNV	D
1024	01/13/93	GW930113-6	Total Thorium	1	UNV	N
1060	12/05/87	3045	Total Thorium	18000	UNV	N
1060	06/04/90	EMGW_SYSGEN_159	Total Thorium	2.6	UNV	N
1060	06/04/90	EMGW_SYSGEN_159D	Total Thorium	2.2	UNV	D

Table C-17 (Continued)
Rejected/Nonvalidated Unfiltered Radiological Data for Background Monitoring Wells in the Glacial Overburden

Well	Sample			Validated		QA
No.	Date	ID	Constituent	Result	Qualifier	type
1060	11/27/90	EMGW_SYSGEN_161	Total Thorium	2.8	UNV	N
1060	11/27/90	EMGW_SYSGEN_161D	Total Thorium	3.4	UNV	D
1060	03/11/91	EMGW_SYSGEN_162	Total Thorium	1.7	UNV	N
1065	04/16/90	EMGW_SYSGEN_167	Total Thorium	8.18	NV	N
1024	05/15/90	EMGW_SYSGEN_35	Thorium-228	0.34	UNV	N
1024	08/08/90	EMGW_SYSGEN_36	Thorium-228	0.31	UNV	N
1024	02/27/91	EMGW_SYSGEN_38	Thorium-228	0.19	UNV	N
1024	02/27/91	EMGW_SYSGEN_38D	Thorium-228	0.851	NV	D
1024	01/13/93	GW930113-6	Thorium-228	0.2	NV	N
1040	09/28/93	30928U1040-03	Thorium-228	0.1	R	N
1059	09/29/93	30929U1059-03	Thorium-228	0.1	R	N
1060	06/04/90	EMGW_SYSGEN_159	Thorium-228	1.49	NV	N
1060	06/04/90	EMGW_SYSGEN_159D	Thorium-228	1.39	NV	D
1060	11/27/90	EMGW_SYSGEN_161	Thorium-228	0.343	NV	N
1060	11/27/90	EMGW_SYSGEN_161D	Thorium-228	0.38	UNV	D
1060	03/11/91	EMGW_SYSGEN_162	Thorium-228	1.16	NV	N
1060	09/29/93	30929U1060-03	Thorium-228	0.2	R	N
1065	04/16/90	EMGW_SYSGEN_167	Thorium-228	1.07	NV	N
1024	05/15/90	EMGW_SYSGEN_35	Thorium-230	0.604	NV	N
1024	08/08/90	EMGW_SYSGEN_36	Thorium-230	0.366	NV	N
1024	02/27/91	EMGW_SYSGEN_38	Thorium-230	0.202	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	Thorium-230	0.303	NV	D
1024	01/13/93	GW930113-6	Thorium-230	0.1	NV	N
1060	06/04/90	EMGW_SYSGEN_159	Thorium-230	0.29	UNV	N
1060	06/04/90	EMGW_SYSGEN_159D	Thorium-230	0.44	NV	D
1060	11/27/90	EMGW_SYSGEN_161	Thorium-230	0.31	UNV	N
1060	11/27/90	EMGW_SYSGEN_161D	Thorium-230	0.652	NV	D
1060	03/11/91	EMGW_SYSGEN_162	Thorium-230	0.19	UNV	N
1065	04/16/90	EMGW_SYSGEN_167	Thorium-230	1.07	NV	N
1024	05/15/90	EMGW_SYSGEN_35	Thorium-232	0.34	UNV	N
1024	08/08/90	EMGW_SYSGEN_36	Thorium-232	0.31	UNV	N
1024	02/27/91	EMGW_SYSGEN_38	Thorium-232	0.19	UNV	N
1024	02/27/91	EMGW_SYSGEN_38D	Thorium-232	0.19	UNV	D
1024	01/13/93	GW930113-6	Thorium-232	0.1	NV	N
1060	06/04/90	EMGW_SYSGEN_159	Thorium-232	0.29	UNV	N
1060	06/04/90	EMGW_SYSGEN_159D	Thorium-232	0.25	UNV	D
1060	11/27/90	EMGW_SYSGEN_161	Thorium-232	0.31	UNV	N
1060	11/27/90	EMGW_SYSGEN_161D	Thorium-232	0.38	UNV	D
1060	03/11/91	EMGW_SYSGEN_162	Thorium-232	0.019	UNV	N
1065	04/16/90	EMGW_SYSGEN_167	Thorium-232	0.907	NV	N
1024	02/18/90	EMGW_SYSGEN_34	Total Uranium	2.2	NV	N
1024	05/15/90	EMGW_SYSGEN_35	Total Uranium	1	UNV	N
1024	08/08/90	EMGW_SYSGEN_36	Total Uranium	1.09	NV	N
1024	02/27/91	EMGW_SYSGEN_38	Total Uranium	0.529	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	Total Uranium	0.481	NV	D
1024	07/15/91	EMGW_SYSGEN_40	Total Uranium	0.8	NV	N
1024	10/01/91	EMGW_SYSGEN_41	Total Uranium	0.8	NV	N
1024	01/02/92	EMGW_SYSGEN_42	Total Uranium	0.7	NV	N
1024	07/01/92	1024-07/01/92-A-N9	Total Uranium	0.6	NV	N
1024	10/01/92	1024-10/01/92-A-N9	Total Uranium	1.5	NV	N

Table C-17 (Continued)
Rejected/Nonvalidated Unfiltered Radiological Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type
1024	01/13/93	GW930113-6	Total Uranium	0.5	UNV	N
1024	01/13/93	GW930113-6	Total Uranium	0.5	NV	N
1040	09/28/93	30928U1040-05	Total Uranium	0.1	UNV	N
1059	09/29/93	30929U1059-05	Total Uranium	1	NV	N
1060	12/05/87	3045	Total Uranium	11000	UNV	N
1060	03/15/90	EMGW_SYSGEN_158	Total Uranium	1.13	NV	N
1060	06/04/90	EMGW_SYSGEN_159	Total Uranium	2.06	NV	N
1060	06/04/90	EMGW_SYSGEN_159D	Total Uranium	3.98	NV	D
1060	06/05/90	EMGW_SYSGEN_160	Total Uranium	3	NV	N
1060	11/27/90	EMGW_SYSGEN_161	Total Uranium	0.879	NV	N
1060	11/27/90	EMGW_SYSGEN_161D	Total Uranium	0.824	NV	D
1060	03/11/91	EMGW_SYSGEN_162	Total Uranium	1.26	NV	N
1060	09/29/93	30929U1060-05	Total Uranium	7.5	NV	N
1065	04/16/90	EMGW_SYSGEN_167	Total Uranium	3.77	NV	N
1065	05/04/93	113292	Total Uranium	1.4	NV	N
1065	05/04/93	113293	Total Uranium	1.3	NV	N
1024	02/18/90	EMGW_SYSGEN_34	Uranium-234	1	UNV	N
1024	05/15/90	EMGW_SYSGEN_35	Uranium-234	0.396	NV	N
1024	08/08/90	EMGW_SYSGEN_36	Uranium-234	1.04	NV	N
1024	02/27/91	EMGW_SYSGEN_38	Uranium-234	0.282	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	Uranium-234	0.18	UNV	D
1060	03/15/90	EMGW_SYSGEN_158	Uranium-234	0.599	NV	N
1060	06/04/90	EMGW_SYSGEN_159	Uranium-234	1.39	NV	N
1060	06/04/90	EMGW_SYSGEN_159D	Uranium-234	1.34	NV	D
1060	06/05/90	EMGW_SYSGEN_160	Uranium-234	0.9	NV	N
1060	11/27/90	EMGW_SYSGEN_161	Uranium-234	0.542	NV	N
1060	11/27/90	EMGW_SYSGEN_161D	Uranium-234	0.372	NV	D
1060	03/11/91	EMGW_SYSGEN_162	Uranium-234	0.521	NV	N
1065	04/16/90	EMGW_SYSGEN_167	Uranium-234	1.25	NV	N
1060	06/05/90	EMGW_SYSGEN_160	Uranium-235	0.04	NV	N
1024	05/15/90	EMGW_SYSGEN_35	Uranium-235/236	0.2	UNV	N
1024	08/08/90	EMGW_SYSGEN_36	Uranium-235/236	0.351	NV	N
1024	02/27/91	EMGW_SYSGEN_38	Uranium-235/236	0.18	UNV	N
1024	02/27/91	EMGW_SYSGEN_38D	Uranium-235/236	0.18	UNV	D
1060	03/15/90	EMGW_SYSGEN_158	Uranium-235/236	0.22	UNV	N
1060	06/04/90	EMGW_SYSGEN_159	Uranium-235/236	0.414	NV	N
1060	06/04/90	EMGW_SYSGEN_159D	Uranium-235/236	0.495	NV	D
1060	11/27/90	EMGW_SYSGEN_161	Uranium-235/236	0.2	UNV	N
1060	11/27/90	EMGW_SYSGEN_161D	Uranium-235/236	0.23	UNV	D
1060	03/11/91	EMGW_SYSGEN_162	Uranium-235/236	0.22	UNV	N
1060	09/29/93	30929U1060-03	Uranium-235/236	0.2	R	N
1065	04/16/90	EMGW_SYSGEN_167	Uranium-235/236	0.29	UNV	N
1060	06/05/90	EMGW_SYSGEN_160	Uranium-236	0.01	NV	N
1024	02/18/90	EMGW_SYSGEN_34	Uranium-238	1	UNV	N
1024	05/15/90	EMGW_SYSGEN_35	Uranium-238	0.2	UNV	N
1024	08/08/90	EMGW_SYSGEN_36	Uranium-238	0.979	NV	N
1024	02/27/91	EMGW_SYSGEN_38	Uranium-238	0.188	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	Uranium-238	0.269	NV	D
1059	09/29/93	30929U1059-03	Uranium-238	0.4	R	N
1060	03/15/90	EMGW_SYSGEN_158	Uranium-238	0.373	NV	N

Table C-17 (Continued)
Rejected/Nonvalidated Unfiltered Radiological Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample		Constituent	Validated		QA type
	Date	ID		Result	Qualifier	
1060	06/04/90	EMGW_SYSGEN_159	Uranium-238	0.628	NV	N
1060	06/04/90	EMGW_SYSGEN_159D	Uranium-238	1.26	NV	D
1060	06/05/90	EMGW_SYSGEN_160	Uranium-238	1	NV	N
1060	11/27/90	EMGW_SYSGEN_161	Uranium-238	0.322	NV	N
1060	11/27/90	EMGW_SYSGEN_161D	Uranium-238	0.406	NV	D
1060	03/11/91	EMGW_SYSGEN_162	Uranium-238	0.586	NV	N
1065	04/16/90	EMGW_SYSGEN_167	Uranium-238	1.25	NV	N

Table C-18
Rejected/Nonvalidated Filtered Radiological Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type
1024	04/12/93	GW930412-6	Gross Alpha	0	UNV	N
1024	04/12/93	GW930412-6	Gross Beta	0	UNV	N
1040	09/28/93	30928F1040-03	Thorium-228	0.1	R	N
1060	09/29/93	30929F1060-03	Thorium-228	0.2	R	N
1060	09/29/93	30929F1060-03	Thorium-232	0.1	R	N
1040	09/28/93	30928F1040-05	Total Uranium	0.1	UNV	N
1059	09/29/93	30929F1059-05	Total Uranium	0.9	NV	N
1059	09/29/93	30929U1059-05	Total Uranium	1	NV	N
1060	09/29/93	30929F1060-05	Total Uranium	1.2	NV	N
1060	09/29/93	30929F1060-05	Total Uranium	1.2	NV	N
1040	09/28/93	30928F1040-03	Uranium-234	0.1	R	N
1060	09/29/93	30929F1060-03	Uranium-234	0.5	R	N
1060	09/29/93	30929F1060-03	Uranium-235/236	0.1	R	N
1040	09/28/93	30928F1040-03	Uranium-238	0.1	R	N
1059	09/29/93	30929F1059-03	Uranium-238	0.4	R	N
1060	09/29/93	30929F1060-03	Uranium-238	0.5	R	N

Table C-19
Rejected/Nonvalidated Unfiltered Radiological Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	Area
2026	05/12/88	3187	Cesium-137	20	R	D	D
2036	05/12/88	3185	Cesium-137	20	R	D	R
2043	02/02/89	3887	Cesium-137	7.9089	R	N	S
2043	05/17/90	EMGW_SYSGEN_523	Cesium-137	11	UNV	N	S
2043	11/06/90	EMGW_SYSGEN_525	Cesium-137	4	UNV	N	S
2043	02/28/91	EMGW_SYSGEN_526	Cesium-137	9.1	UNV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	Cesium-137	5.2	UNV	D	S
2050	05/05/88	3147	Cesium-137	9.4114	R	N	S
2056	03/13/89	4045	Cesium-137	20	R	D	S
2057	06/03/88	3265	Cesium-137	9.7634	R	N	R
2057	03/14/89	3965	Cesium-137	6.9493	R	N	R
2066	04/26/88	3124	Cesium-137	10.252	R	N	S
2066	05/16/90	EMGW_SYSGEN_629	Cesium-137	9	UNV	N	S
2066	11/06/90	EMGW_SYSGEN_631	Cesium-137	6	UNV	N	S
2066	02/25/91	EMGW_SYSGEN_632	Cesium-137	6.5	UNV	N	S
2066	02/25/91	EMGW_SYSGEN_632D	Cesium-137	6.1	UNV	D	S
2098	02/15/91	EMGW_SYSGEN_713	Cesium-137	5.4	UNV	N	D
2104	03/15/89	3970	Cesium-137	7.5766	R	N	R
2104	03/07/91	EMGW_SYSGEN_721	Cesium-137	4.5	UNV	N	R
2105	12/13/88	3782	Cesium-137	20	R	N	S
2121	05/06/88	3158	Cesium-137	9.0107	R	N	D
2122	05/06/88	3157	Cesium-137	8.9453	R	N	D
2123	05/06/88	3156	Cesium-137	10.948	R	N	R
3024	01/24/89	3842	Cesium-137	20	R	N	S
3024	06/11/90	EMGW_SYSGEN_993	Cesium-137	8.1	UNV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	Cesium-137	7	UNV	D	S
3024	02/27/91	EMGW_SYSGEN_996	Cesium-137	3.6	UNV	N	S
3043	02/02/89	3886	Cesium-137	9.5594	R	N	S
3043	05/17/90	EMGW_SYSGEN_1019	Cesium-137	14	UNV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	Cesium-137	7.3	UNV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	Cesium-137	8.4	UNV	N	S
3063	05/12/88	3191	Cesium-137	20	R	D	D
3063	03/13/89	3966	Cesium-137	6.3196	R	N	D
3096	04/30/89	4082	Cesium-137	2.74	R	N	R
3098	09/21/88	3589	Cesium-137	8.948	R	N	D
3099	05/24/88	3237	Cesium-137	7.4694	R	N	D
3099	05/24/88	3238	Cesium-137	20	R	D	D
3099	12/06/88	3742	Cesium-137	10.512	R	N	D
3099	03/14/89	3977	Cesium-137	7.9831	R	N	D
3100	05/24/88	3240	Cesium-137	20	R	D	D
4011	02/21/91	EMGW_SYSGEN_1245	Cesium-137	6.2	UNV	N	S
4096	12/14/88	3474	Cesium-137	20	R	D	R
2043	05/17/90	EMGW_SYSGEN_523	Gross Alpha	19	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	Gross Alpha	9	UNV	N	S
2043	01/18/93	GW930118-12	Gross Alpha	0.5	NV	N	S
2043	04/07/93	GW930407-12	Gross Alpha	5	NV	N	S
2050	05/20/93	GW930520-8	Gross Alpha	4.7	NV	N	S
2050	08/03/93	GW930803-3	Gross Alpha	0	UNV	N	S
2066	05/16/90	EMGW_SYSGEN_629	Gross Alpha	12.7	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	Gross Alpha	5.6	UNV	N	S

Table C-19 (Continued)
Rejected/Nonvalidated Unfiltered Radiological Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	Area
2066	02/25/91	EMGW_SYSGEN_632	Gross Alpha	7.8	UNV	N	S
2066	02/25/91	EMGW_SYSGEN_632D	Gross Alpha	10	UNV	D	S
2066	01/06/93	GW930106-7	Gross Alpha	1.6	NV	N	S
2066	04/07/93	GW930407-14	Gross Alpha	4.1	NV	N	S
2096	05/06/93	GW930506-5	Gross Alpha	0	UNV	N	R
2096	08/04/93	GW930804-1	Gross Alpha	5.8	NV	N	R
2098	02/15/91	EMGW_SYSGEN_713	Gross Alpha	18.8	NV	N	D
2098	05/20/93	GW930520-9	Gross Alpha	3.5	NV	N	D
2104	06/14/90	EMGW_SYSGEN_718	Gross Alpha	15	UNV	N	R
2104	09/12/90	EMGW_SYSGEN_719	Gross Alpha	7.3	UNV	N	R
2104	11/27/90	EMGW_SYSGEN_720	Gross Alpha	5.2	UNV	N	R
2104	03/07/91	EMGW_SYSGEN_721	Gross Alpha	1.9	UNV	N	R
2104	05/13/93	GW930513-18	Gross Alpha	3.7	UNV	N	R
2104	05/13/93	GW930513-14	Gross Alpha	6.8	NV	N	R
2104	08/02/93	GW930802-5	Gross Alpha	1.2	UNV	N	R
2728	05/24/93	GW930524-3	Gross Alpha	10.3	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993	Gross Alpha	10.1	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	Gross Alpha	0.0101	NV	D	S
3024	02/27/91	EMGW_SYSGEN_996	Gross Alpha	7.3	UNV	N	S
3024	01/13/93	GW930113-8	Gross Alpha	0.9	NV	N	S
3024	04/12/93	GW930412-8	Gross Alpha	3	UNV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	Gross Alpha	6.9	UNV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	Gross Alpha	5.6	UNV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	Gross Alpha	12	UNV	N	S
3043	01/18/93	GW930118-14	Gross Alpha	0.8	UNV	N	S
3043	04/07/93	GW930407-13	Gross Alpha	0	UNV	N	S
3096	05/07/93	GW930507-1	Gross Alpha	0	UNV	N	R
3096	08/11/93	GW930811-2	Gross Alpha	0.1	UNV	N	R
3096	08/11/93	GW930811-3	Gross Alpha	1.9	UNV	N	R
3098	05/20/93	GW930520-10	Gross Alpha	4.3	NV	N	D
4011	02/21/91	EMGW_SYSGEN_1245	Gross Alpha	8	UNV	N	S
4011	01/05/93	GW930105-7	Gross Alpha	0.5	UNV	N	S
4011	04/08/93	GW930408-3	Gross Alpha	2.5	UNV	N	S
4011	04/08/93	GW930408-2	Gross Alpha	4.4	UNV	D	S
4096	05/06/93	GW930506-7	Gross Alpha	1	UNV	N	R
4096	08/04/93	GW930804-2	Gross Alpha	3.7	NV	N	R
2043	05/17/90	EMGW_SYSGEN_523	Gross Beta	25	UNV	N	S
2043	11/06/90	EMGW_SYSGEN_525	Gross Beta	7.1	UNV	N	S
2043	01/18/93	GW930118-12	Gross Beta	0.3	UNV	N	S
2043	04/07/93	GW930407-12	Gross Beta	6.6	NV	N	S
2050	05/20/93	GW930520-8	Gross Beta	6.2	NV	N	S
2050	08/03/93	GW930803-3	Gross Beta	3.2	UNV	N	S
2066	05/16/90	EMGW_SYSGEN_629	Gross Beta	26	UNV	N	S
2066	11/06/90	EMGW_SYSGEN_631	Gross Beta	4.45	NV	N	S
2066	02/25/91	EMGW_SYSGEN_632	Gross Beta	6.1	UNV	N	S
2066	02/25/91	EMGW_SYSGEN_632D	Gross Beta	7.9	NV	D	S
2066	01/06/93	GW930106-7	Gross Beta	0.6	NV	N	S
2066	04/07/93	GW930407-14	Gross Beta	0	UNV	N	S
2096	05/06/93	GW930506-5	Gross Beta	2	UNV	N	R
2096	08/04/93	GW930804-1	Gross Beta	40.9	NV	N	R

Table C-19 (Continued)
Rejected/Nonvalidated Unfiltered Radiological Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	Area
2098	02/15/91	EMGW_SYSGEN_713	Gross Beta	14	UNV	N	D
2098	05/20/93	GW930520-9	Gross Beta	5.8	NV	N	D
2104	06/14/90	EMGW_SYSGEN_718	Gross Beta	12	UNV	N	R
2104	09/12/90	EMGW_SYSGEN_719	Gross Beta	4.86	NV	N	R
2104	11/27/90	EMGW_SYSGEN_720	Gross Beta	4.6	UNV	N	R
2104	03/07/91	EMGW_SYSGEN_721	Gross Beta	5.46	NV	N	R
2104	05/13/93	GW930513-18	Gross Beta	2	UNV	N	R
2104	05/13/93	GW930513-14	Gross Beta	4.5	NV	N	R
2104	08/02/93	GW930802-5	Gross Beta	1.8	UNV	N	R
2728	05/24/93	GW930524-3	Gross Beta	8.8	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993	Gross Beta	12	UNV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	Gross Beta	0.012	UNV	D	S
3024	02/27/91	EMGW_SYSGEN_996	Gross Beta	9.22	NV	N	S
3024	01/13/93	GW930113-8	Gross Beta	0.4	UNV	N	S
3024	04/12/93	GW930412-8	Gross Beta	3.6	UNV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	Gross Beta	22	UNV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	Gross Beta	5.34	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	Gross Beta	4.9	NV	N	S
3043	01/18/93	GW930118-14	Gross Beta	0.2	UNV	N	S
3043	04/07/93	GW930407-13	Gross Beta	1.8	UNV	N	S
3096	05/07/93	GW930507-1	Gross Beta	0.5	UNV	N	R
3096	08/11/93	GW930811-3	Gross Beta	0.5	UNV	N	R
3096	08/11/93	GW930811-2	Gross Beta	5.5	NV	N	R
3098	05/20/93	GW930520-10	Gross Beta	4.1	NV	N	D
4011	02/21/91	EMGW_SYSGEN_1245	Gross Beta	5.7	UNV	N	S
4011	01/05/93	GW930105-7	Gross Beta	2.4	NV	N	S
4011	04/08/93	GW930408-3	Gross Beta	0.3	UNV	N	S
4011	04/08/93	GW930408-2	Gross Beta	3.4	UNV	D	S
4096	05/06/93	GW930506-7	Gross Beta	1.9	UNV	N	R
4096	08/04/93	GW930804-2	Gross Beta	0	UNV	N	R
2043	05/17/90	EMGW_SYSGEN_523	Neptunium-237	0.12	UNV	N	S
2043	11/06/90	EMGW_SYSGEN_525	Neptunium-237	0.12	UNV	N	S
2043	02/28/91	EMGW_SYSGEN_526	Neptunium-237	0.0956	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	Neptunium-237	0.14	UNV	D	S
2056	05/06/88	3159	Neptunium-237	0	R	N	S
2066	05/16/90	EMGW_SYSGEN_629	Neptunium-237	0.2	UNV	N	S
2066	11/06/90	EMGW_SYSGEN_631	Neptunium-237	0.14	UNV	N	S
2066	02/25/91	EMGW_SYSGEN_632	Neptunium-237	0.11	UNV	N	S
2066	02/25/91	EMGW_SYSGEN_632D	Neptunium-237	0.12	UNV	D	S
2098	02/15/91	EMGW_SYSGEN_713	Neptunium-237	0.15	UNV	N	D
2104	03/07/91	EMGW_SYSGEN_721	Neptunium-237	0.17	UNV	N	R
3024	04/20/88	3096	Neptunium-237	1	R	N	S
3024	06/11/90	EMGW_SYSGEN_993	Neptunium-237	0.31	UNV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	Neptunium-237	0.197	NV	D	S
3024	02/27/91	EMGW_SYSGEN_996	Neptunium-237	0.12	UNV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	Neptunium-237	0.163	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	Neptunium-237	0.11	UNV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	Neptunium-237	0.045	UNV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	Neptunium-237	0.057	UNV	N	S

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Table C-19 (Continued)
Rejected/Nonvalidated Unfiltered Radiological Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	Area
2043	05/17/90	EMGW_SYSGEN_523	Plutonium-238	0.093	UNV	N	S
2043	11/06/90	EMGW_SYSGEN_525	Plutonium-238	0.0803	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	Plutonium-238	0.14	UNV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	Plutonium-238	0.19	UNV	D	S
2066	05/16/90	EMGW_SYSGEN_629	Plutonium-238	0.12	UNV	N	S
2066	11/06/90	EMGW_SYSGEN_631	Plutonium-238	0.0602	NV	N	S
2066	02/25/91	EMGW_SYSGEN_632	Plutonium-238	0.032	UNV	N	S
2066	02/25/91	EMGW_SYSGEN_632D	Plutonium-238	0.047	UNV	D	S
2098	02/15/91	EMGW_SYSGEN_713	Plutonium-238	0.12	UNV	N	D
2104	03/07/91	EMGW_SYSGEN_721	Plutonium-238	0.096	UNV	N	R
3024	06/11/90	EMGW_SYSGEN_993	Plutonium-238	0.13	UNV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	Plutonium-238	0.17	UNV	D	S
3024	02/27/91	EMGW_SYSGEN_996	Plutonium-238	0.063	UNV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	Plutonium-238	0.15	UNV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	Plutonium-238	0.139	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	Plutonium-238	0.12	UNV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	Plutonium-238	0.073	UNV	N	S
4096	12/14/88	3474	Plutonium-238	1	R	D	R
2043	05/17/90	EMGW_SYSGEN_523	Plutonium-239/240	0.14	UNV	N	S
2043	11/06/90	EMGW_SYSGEN_525	Plutonium-239/240	0.048	UNV	N	S
2043	02/28/91	EMGW_SYSGEN_526	Plutonium-239/240	0.14	UNV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	Plutonium-239/240	0.19	UNV	D	S
2066	05/16/90	EMGW_SYSGEN_629	Plutonium-239/240	0.13	UNV	N	S
2066	11/06/90	EMGW_SYSGEN_631	Plutonium-239/240	0.105	NV	N	S
2066	02/25/91	EMGW_SYSGEN_632	Plutonium-239/240	0.032	UNV	N	S
2066	02/25/91	EMGW_SYSGEN_632D	Plutonium-239/240	0.047	UNV	D	S
2098	02/15/91	EMGW_SYSGEN_713	Plutonium-239/240	0.096	UNV	N	D
2104	03/07/91	EMGW_SYSGEN_721	Plutonium-239/240	0.038	UNV	N	R
3024	06/11/90	EMGW_SYSGEN_993	Plutonium-239/240	0.18	UNV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	Plutonium-239/240	0.053	UNV	D	S
3024	02/27/91	EMGW_SYSGEN_996	Plutonium-239/240	0.063	UNV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	Plutonium-239/240	0.292	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	Plutonium-239/240	0.0795	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	Plutonium-239/240	0.092	UNV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	Plutonium-239/240	0.073	UNV	N	S
4096	12/14/88	3474	Plutonium-239/240	1	R	D	R
2043	05/17/90	EMGW_SYSGEN_523	Radium-226	2.49	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	Radium-226	2.6	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	Radium-226	0.724	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	Radium-226	2.76	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	Radium-226	2.04	NV	D	S
2043	01/18/93	GW930118-12	Radium-226	1.6	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	Radium-226	0.532	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	Radium-226	0.13	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	Radium-226	0.18	UNV	N	S
2066	02/25/91	EMGW_SYSGEN_632	Radium-226	0.561	NV	N	S
2066	02/25/91	EMGW_SYSGEN_632D	Radium-226	0.225	NV	D	S
2066	01/06/93	GW930106-7	Radium-226	1.1	NV	N	S
2098	04/25/90	EMGW_SYSGEN_711	Radium-226	1.22	NV	N	D
2098	02/15/91	EMGW_SYSGEN_713	Radium-226	0.281	NV	N	D

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Table C-19 (Continued)
Rejected/Nonvalidated Unfiltered Radiological Data for Background Monitoring Wells in the Great Miami Aquifer

Well	Sample			Validated		QA	
No.	Date	ID	Constituent	Result	Qualifier	type	Area
2104	06/14/90	EMGW_SYSGEN_718	Radium-226	0.45	NV	N	R
2104	09/12/90	EMGW_SYSGEN_719	Radium-226	0.195	NV	N	R
2104	11/27/90	EMGW_SYSGEN_720	Radium-226	0.154	NV	N	R
2104	03/07/91	EMGW_SYSGEN_721	Radium-226	0.25	NV	N	R
3024	06/11/90	EMGW_SYSGEN_993	Radium-226	0.122	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	Radium-226	0.107	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	Radium-226	0.5	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	Radium-226	0.1	UNV	N	S
3024	01/13/93	GW930113-8	Radium-226	1.2	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	Radium-226	0.588	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	Radium-226	0.6	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	Radium-226	0.541	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	Radium-226	0.519	NV	N	S
3043	01/18/93	GW930118-14	Radium-226	1.1	NV	N	S
3098	04/25/90	EMGW_SYSGEN_1146	Radium-226	0.099	UNV	N	D
4011	02/21/91	EMGW_SYSGEN_1245	Radium-226	0.277	NV	N	S
4011	01/05/93	GW930105-7	Radium-226	0.6	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	Radium-228	0.95	UNV	N	S
2043	08/06/90	EMGW_SYSGEN_524	Radium-228	1.9	UNV	N	S
2043	11/06/90	EMGW_SYSGEN_525	Radium-228	1.22	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	Radium-228	2.35	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	Radium-228	1.77	NV	D	S
2043	01/18/93	GW930118-12	Radium-228	1.4	NV	N	S
2056	03/13/89	4045	Radium-228	3	R	D	S
2066	05/16/90	EMGW_SYSGEN_629	Radium-228	2	UNV	N	S
2066	08/06/90	EMGW_SYSGEN_630	Radium-228	1.7	UNV	N	S
2066	11/06/90	EMGW_SYSGEN_631	Radium-228	1.51	NV	N	S
2066	02/25/91	EMGW_SYSGEN_632	Radium-228	1.1	UNV	N	S
2066	02/25/91	EMGW_SYSGEN_632D	Radium-228	0.69	UNV	D	S
2066	01/06/93	GW930106-7	Radium-228	1	NV	N	S
2098	04/25/90	EMGW_SYSGEN_711	Radium-228	0.642	NV	N	D
2098	02/15/91	EMGW_SYSGEN_713	Radium-228	3.7	UNV	N	D
2104	06/14/90	EMGW_SYSGEN_718	Radium-228	2	UNV	N	R
2104	09/12/90	EMGW_SYSGEN_719	Radium-228	1.1	UNV	N	R
2104	11/27/90	EMGW_SYSGEN_720	Radium-228	1.3	UNV	N	R
2104	03/07/91	EMGW_SYSGEN_721	Radium-228	1.8	UNV	N	R
3024	06/11/90	EMGW_SYSGEN_993	Radium-228	0.61	UNV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	Radium-228	0.46	UNV	D	S
3024	08/08/90	EMGW_SYSGEN_994	Radium-228	2.21	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	Radium-228	1.1	UNV	N	S
3024	01/13/93	GW930113-8	Radium-228	1.9	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	Radium-228	2	UNV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	Radium-228	0.376	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	Radium-228	1.3	UNV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	Radium-228	1.3	UNV	N	S
3043	01/18/93	GW930118-14	Radium-228	1.2	NV	N	S
3098	04/25/90	EMGW_SYSGEN_1146	Radium-228	0.42	UNV	N	D
4011	02/21/91	EMGW_SYSGEN_1245	Radium-228	1.1	UNV	N	S
4011	01/05/93	GW930105-7	Radium-228	0.3	UNV	N	S

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Table C-19 (Continued)
Rejected/Nonvalidated Unfiltered Radiological Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	Area
2026	05/12/88	3187	Ruthenium-106	150	R	D	D
2036	05/12/88	3185	Ruthenium-106	150	R	D	R
2043	05/17/90	EMGW_SYSGEN_523	Ruthenium-106	78	UNV	N	S
2043	11/06/90	EMGW_SYSGEN_525	Ruthenium-106	46	UNV	N	S
2043	02/28/91	EMGW_SYSGEN_526	Ruthenium-106	57	UNV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	Ruthenium-106	75	UNV	D	S
2056	03/13/89	4045	Ruthenium-106	150	R	D	S
2057	06/03/88	3265	Ruthenium-106	83.936	R	N	R
2057	03/14/89	3965	Ruthenium-106	68.574	R	N	R
2066	04/26/88	3124	Ruthenium-106	70.527	R	N	S
2066	05/16/90	EMGW_SYSGEN_629	Ruthenium-106	77	UNV	N	S
2066	11/06/90	EMGW_SYSGEN_631	Ruthenium-106	58	UNV	N	S
2066	02/25/91	EMGW_SYSGEN_632	Ruthenium-106	71	UNV	N	S
2066	02/25/91	EMGW_SYSGEN_632D	Ruthenium-106	73	UNV	D	S
2098	02/15/91	EMGW_SYSGEN_713	Ruthenium-106	66	UNV	N	D
2104	03/15/89	3970	Ruthenium-106	72.563	R	N	R
2104	03/07/91	EMGW_SYSGEN_721	Ruthenium-106	72	UNV	N	R
2121	05/06/88	3158	Ruthenium-106	54.522	R	N	D
2122	05/06/88	3157	Ruthenium-106	78.357	R	N	D
2122	03/15/89	3979	Ruthenium-106	77.765	R	N	D
2123	05/06/88	3156	Ruthenium-106	78.573	R	N	R
3024	01/24/89	3842	Ruthenium-106	150	R	N	S
3024	06/11/90	EMGW_SYSGEN_993	Ruthenium-106	56	UNV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	Ruthenium-106	63	UNV	D	S
3024	02/27/91	EMGW_SYSGEN_996	Ruthenium-106	64	UNV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	Ruthenium-106	96	UNV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	Ruthenium-106	52	UNV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	Ruthenium-106	77	UNV	N	S
3063	05/12/88	3191	Ruthenium-106	150	R	D	D
3063	03/13/89	3966	Ruthenium-106	75.611	R	N	D
3098	09/21/88	3589	Ruthenium-106	103.58	R	N	D
3099	05/24/88	3237	Ruthenium-106	66.817	R	N	D
3099	05/24/88	3238	Ruthenium-106	150	R	D	D
3099	03/14/89	3977	Ruthenium-106	70.456	R	N	D
3100	05/24/88	3240	Ruthenium-106	150	R	D	D
4011	02/21/91	EMGW_SYSGEN_1245	Ruthenium-106	54	UNV	N	S
4096	12/14/88	3474	Ruthenium-106	150	R	D	R
2043	05/17/90	EMGW_SYSGEN_523	Strontium-90	0.19	UNV	N	S
2066	05/16/90	EMGW_SYSGEN_629	Strontium-90	0.18	UNV	N	S
3024	06/11/90	EMGW_SYSGEN_993	Strontium-90	0.087	UNV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	Strontium-90	0.12	UNV	D	S
3043	05/17/90	EMGW_SYSGEN_1019	Strontium-90	0.36	NV	N	S
2043	02/20/90	EMGW_SYSGEN_522	Technetium-99	15	UNV	N	S
2043	05/17/90	EMGW_SYSGEN_523	Technetium-99	24	UNV	N	S
2043	11/06/90	EMGW_SYSGEN_525	Technetium-99	13	UNV	N	S
2043	02/28/91	EMGW_SYSGEN_526	Technetium-99	18	UNV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	Technetium-99	18	UNV	D	S
2066	02/22/90	EMGW_SYSGEN_628	Technetium-99	15	UNV	N	S
2066	05/16/90	EMGW_SYSGEN_629	Technetium-99	27	UNV	N	S
2066	11/06/90	EMGW_SYSGEN_631	Technetium-99	18	UNV	N	S

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Table C-19 (Continued)
Rejected/Nonvalidated Unfiltered Radiological Data for Background Monitoring Wells in the Great Miami Aquifer

Well	Sample			Validated		QA	
No.	Date	ID	Constituent	Result	Qualifier	type	Area
2066	02/25/91	EMGW_SYSGEN_632	Technetium-99	22	UNV	N	S
2066	02/25/91	EMGW_SYSGEN_632D	Technetium-99	19	UNV	D	S
2098	02/15/91	EMGW_SYSGEN_713	Technetium-99	16	UNV	N	D
2104	03/07/91	EMGW_SYSGEN_721	Technetium-99	21	UNV	N	R
3024	02/18/90	EMGW_SYSGEN_992	Technetium-99	15	UNV	N	S
3024	06/11/90	EMGW_SYSGEN_993	Technetium-99	28	UNV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	Technetium-99	26	UNV	D	S
3024	02/27/91	EMGW_SYSGEN_996	Technetium-99	20	UNV	N	S
3043	02/20/90	EMGW_SYSGEN_1018	Technetium-99	15	UNV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	Technetium-99	24	UNV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	Technetium-99	15	UNV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	Technetium-99	23	UNV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	Technetium-99	20	UNV	N	S
2043	05/17/90	EMGW_SYSGEN_523	Total Thorium	14	UNV	N	S
2043	08/06/90	EMGW_SYSGEN_524	Total Thorium	6.2	UNV	N	S
2043	11/06/90	EMGW_SYSGEN_525	Total Thorium	5	UNV	N	S
2043	02/28/91	EMGW_SYSGEN_526	Total Thorium	3.8	UNV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	Total Thorium	3.3	UNV	D	S
2043	01/18/93	GW930118-12	Total Thorium	0.7	UNV	N	S
2043	04/07/93	GW930407-12	Total Thorium	0.91202	NV	N	S
2050	05/20/93	GW930520-8	Total Thorium	1.824015	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	Total Thorium	2.6	UNV	N	S
2066	08/06/90	EMGW_SYSGEN_630	Total Thorium	4.5	UNV	N	S
2066	11/06/90	EMGW_SYSGEN_631	Total Thorium	2.7	UNV	N	S
2066	02/25/91	EMGW_SYSGEN_632	Total Thorium	3.13	NV	N	S
2066	02/25/91	EMGW_SYSGEN_632D	Total Thorium	1.6	UNV	D	S
2066	01/06/93	GW930106-7	Total Thorium	1	UNV	N	S
2098	04/25/90	EMGW_SYSGEN_711	Total Thorium	9.2	UNV	N	D
2098	02/15/91	EMGW_SYSGEN_713	Total Thorium	4.29	NV	N	D
2104	06/14/90	EMGW_SYSGEN_718	Total Thorium	1.7	UNV	N	R
2104	09/12/90	EMGW_SYSGEN_719	Total Thorium	2.3	UNV	N	R
2104	11/27/90	EMGW_SYSGEN_720	Total Thorium	4.8	UNV	N	R
2104	03/07/91	EMGW_SYSGEN_721	Total Thorium	2.5	UNV	N	R
3024	06/11/90	EMGW_SYSGEN_993	Total Thorium	2.3	UNV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	Total Thorium	2	UNV	D	S
3024	08/08/90	EMGW_SYSGEN_994	Total Thorium	5.6	UNV	N	S
3024	02/27/91	EMGW_SYSGEN_996	Total Thorium	4.17	NV	N	S
3024	01/13/93	GW930113-8	Total Thorium	1.1	UNV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	Total Thorium	3.2	UNV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	Total Thorium	3.1	UNV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	Total Thorium	2.5	UNV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	Total Thorium	2.3	UNV	N	S
3043	01/18/93	GW930118-14	Total Thorium	0.8	UNV	N	S
3098	04/25/90	EMGW_SYSGEN_1146	Total Thorium	2.5	UNV	N	D
4011	02/21/91	EMGW_SYSGEN_1245	Total Thorium	1.9	UNV	N	S
4011	01/05/93	GW930105-7	Total Thorium	1.7	UNV	N	S
2043	02/20/90	EMGW_SYSGEN_522	Thorium-228	1	UNV	N	S
2043	05/17/90	EMGW_SYSGEN_523	Thorium-228	2.06	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	Thorium-228	1.73	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	Thorium-228	0.704	NV	N	S

Table C-19 (Continued)
Rejected/Nonvalidated Unfiltered Radiological Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	Area
2043	02/28/91	EMGW_SYSGEN_526	Thorium-228	0.679	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	Thorium-228	0.37	UNV	D	S
2043	01/18/93	GW930118-12	Thorium-228	0.1	NV	N	S
2066	02/22/90	EMGW_SYSGEN_628	Thorium-228	1	UNV	N	S
2066	05/16/90	EMGW_SYSGEN_629	Thorium-228	0.383	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	Thorium-228	0.5	UNV	N	S
2066	11/06/90	EMGW_SYSGEN_631	Thorium-228	0.316	NV	N	S
2066	02/25/91	EMGW_SYSGEN_632	Thorium-228	0.841	NV	N	S
2066	02/25/91	EMGW_SYSGEN_632D	Thorium-228	0.17	UNV	D	S
2066	01/06/93	GW930106-7	Thorium-228	0.1	UNV	N	S
2098	04/25/90	EMGW_SYSGEN_711	Thorium-228	1.22	NV	N	D
2098	02/15/91	EMGW_SYSGEN_713	Thorium-228	0.999	NV	N	D
2104	06/14/90	EMGW_SYSGEN_718	Thorium-228	0.513	NV	N	R
2104	09/12/90	EMGW_SYSGEN_719	Thorium-228	0.25	UNV	N	R
2104	11/27/90	EMGW_SYSGEN_720	Thorium-228	1.64	NV	N	R
2104	03/07/91	EMGW_SYSGEN_721	Thorium-228	0.27	UNV	N	R
3024	06/11/90	EMGW_SYSGEN_993	Thorium-228	0.269	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	Thorium-228	0.32	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	Thorium-228	0.62	UNV	N	S
3024	02/27/91	EMGW_SYSGEN_996	Thorium-228	1.15	NV	N	S
3024	01/13/93	GW930113-8	Thorium-228	0.1	NV	N	S
3043	02/20/90	EMGW_SYSGEN_1018	Thorium-228	1	UNV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	Thorium-228	0.36	UNV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	Thorium-228	0.362	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	Thorium-228	0.73	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	Thorium-228	5.22	NV	N	S
3043	01/18/93	GW930118-14	Thorium-228	0.1	UNV	N	S
3043	04/07/93	GW930407-13	Thorium-228	0.1	R	N	S
3098	04/25/90	EMGW_SYSGEN_1146	Thorium-228	0.27	UNV	N	D
4011	02/21/91	EMGW_SYSGEN_1245	Thorium-228	1.53	NV	N	S
4011	01/05/93	GW930105-7	Thorium-228	0.3	NV	N	S
2043	02/20/90	EMGW_SYSGEN_522	Thorium-230	1	UNV	N	S
2043	05/17/90	EMGW_SYSGEN_523	Thorium-230	1.83	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	Thorium-230	0.68	UNV	N	S
2043	11/06/90	EMGW_SYSGEN_525	Thorium-230	0.56	UNV	N	S
2043	02/28/91	EMGW_SYSGEN_526	Thorium-230	0.4	UNV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	Thorium-230	0.37	UNV	D	S
2043	01/18/93	GW930118-12	Thorium-230	0.4	NV	N	S
2066	02/22/90	EMGW_SYSGEN_628	Thorium-230	1	UNV	N	S
2066	05/16/90	EMGW_SYSGEN_629	Thorium-230	0.702	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	Thorium-230	0.5	UNV	N	S
2066	11/06/90	EMGW_SYSGEN_631	Thorium-230	0.994	NV	N	S
2066	02/25/91	EMGW_SYSGEN_632	Thorium-230	0.885	NV	N	S
2066	02/25/91	EMGW_SYSGEN_632D	Thorium-230	0.17	UNV	D	S
2066	01/06/93	GW930106-7	Thorium-230	0.1	NV	N	S
2098	04/25/90	EMGW_SYSGEN_711	Thorium-230	2.44	NV	N	D
2098	02/15/91	EMGW_SYSGEN_713	Thorium-230	1.7	NV	N	D
2104	06/14/90	EMGW_SYSGEN_718	Thorium-230	0.19	UNV	N	R
2104	09/12/90	EMGW_SYSGEN_719	Thorium-230	0.25	UNV	N	R
2104	11/27/90	EMGW_SYSGEN_720	Thorium-230	0.54	UNV	N	R

Table C-19 (Continued)
Rejected/Nonvalidated Unfiltered Radiological Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	Area
2104	03/07/91	EMGW_SYSGEN_721	Thorium-230	0.386	NV	N	R
2728	05/24/93	GW930524-3	Thorium-230	0.1	R	N	S
3024	06/11/90	EMGW_SYSGEN_993	Thorium-230	0.26	UNV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	Thorium-230	0.978	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	Thorium-230	0.62	UNV	N	S
3024	02/27/91	EMGW_SYSGEN_996	Thorium-230	1.46	NV	N	S
3024	01/13/93	GW930113-8	Thorium-230	0.4	NV	N	S
3043	02/20/90	EMGW_SYSGEN_1018	Thorium-230	1	UNV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	Thorium-230	0.36	UNV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	Thorium-230	0.35	UNV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	Thorium-230	0.146	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	Thorium-230	1.14	NV	N	S
3043	01/18/93	GW930118-14	Thorium-230	0.1	NV	N	S
3043	04/07/93	GW930407-13	Thorium-230	0.5	R	N	S
3098	04/25/90	EMGW_SYSGEN_1146	Thorium-230	0.344	NV	N	D
4011	02/21/91	EMGW_SYSGEN_1245	Thorium-230	0.379	NV	N	S
4011	01/05/93	GW930105-7	Thorium-230	0.6	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	Thorium-232	1.5	UNV	N	S
2043	08/06/90	EMGW_SYSGEN_524	Thorium-232	0.68	UNV	N	S
2043	11/06/90	EMGW_SYSGEN_525	Thorium-232	0.56	UNV	N	S
2043	02/28/91	EMGW_SYSGEN_526	Thorium-232	0.4	UNV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	Thorium-232	0.37	UNV	D	S
2043	01/18/93	GW930118-12	Thorium-232	0.1	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	Thorium-232	0.29	UNV	N	S
2066	08/06/90	EMGW_SYSGEN_630	Thorium-232	0.5	UNV	N	S
2066	11/06/90	EMGW_SYSGEN_631	Thorium-232	0.3	UNV	N	S
2066	02/25/91	EMGW_SYSGEN_632	Thorium-232	0.347	NV	N	S
2066	02/25/91	EMGW_SYSGEN_632D	Thorium-232	0.17	UNV	D	S
2066	01/06/93	GW930106-7	Thorium-232	0.1	NV	N	S
2098	04/25/90	EMGW_SYSGEN_711	Thorium-232	1	UNV	N	D
2098	02/15/91	EMGW_SYSGEN_713	Thorium-232	0.475	NV	N	D
2104	06/14/90	EMGW_SYSGEN_718	Thorium-232	0.19	UNV	N	R
2104	09/12/90	EMGW_SYSGEN_719	Thorium-232	0.25	UNV	N	R
2104	11/27/90	EMGW_SYSGEN_720	Thorium-232	0.54	UNV	N	R
2104	03/07/91	EMGW_SYSGEN_721	Thorium-232	0.27	UNV	N	R
3024	06/11/90	EMGW_SYSGEN_993	Thorium-232	0.26	UNV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	Thorium-232	0.23	UNV	D	S
3024	08/08/90	EMGW_SYSGEN_994	Thorium-232	0.62	UNV	N	S
3024	02/27/91	EMGW_SYSGEN_996	Thorium-232	0.462	NV	N	S
3024	01/13/93	GW930113-8	Thorium-232	0.1	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	Thorium-232	0.36	UNV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	Thorium-232	0.35	UNV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	Thorium-232	0.28	UNV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	Thorium-232	0.26	UNV	N	S
3043	01/18/93	GW930118-14	Thorium-232	0.1	NV	N	S
3043	04/07/93	GW930407-13	Thorium-232	0.2	R	N	S
3098	04/25/90	EMGW_SYSGEN_1146	Thorium-232	0.27	UNV	N	D
4011	02/21/91	EMGW_SYSGEN_1245	Thorium-232	0.21	UNV	N	S
4011	01/05/93	GW930105-7	Thorium-232	0.2	NV	N	S

Table C-19 (Continued)
Rejected/Nonvalidated Unfiltered Radiological Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	Area
2043	02/20/90	EMGW_SYSGEN_522	Total Uranium	1.2	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	Total Uranium	2.64	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	Total Uranium	15.5	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	Total Uranium	0.739	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	Total Uranium	0.8	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	Total Uranium	1.1	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	Total Uranium	1.05	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	Total Uranium	0.8	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	Total Uranium	0.6	NV	N	S
2043	07/06/92	2043-07/06/92-A-N9	Total Uranium	0.3	NV	N	S
2043	10/7/92	2043-10/07/92-A-N9	Total Uranium	0.2	UNV	N	S
2043	01/18/93	GW930118-12	Total Uranium	0.5	UNV	N	S
2043	01/18/93	GW930118-12	Total Uranium	0.1	NV	N	S
2043	04/07/93	GW930407-12	Total Uranium	0.5	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559	Total Uranium	0.6	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560	Total Uranium	0.1	NV	N	S
2050	8/10/92	2050-08/10/92-B-N7	Total Uranium	0.3	UNV	N	S
2050	11/02/92	2050-11/02/92-A-N4	Total Uranium	0.3	NV	N	S
2050	11/2/92	2050-11/02/92-A-N8	Total Uranium	0.0003	UNV	N	S
2050	05/20/93	GW930520-8	Total Uranium	0.1	UNV	N	S
2066	02/22/90	EMGW_SYSGEN_628	Total Uranium	1	UNV	N	S
2066	02/22/90	EMGW_SYSGEN_628	Total Uranium	3.15	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	Total Uranium	1	UNV	N	S
2066	08/06/90	EMGW_SYSGEN_630	Total Uranium	1	UNV	N	S
2066	11/06/90	EMGW_SYSGEN_631	Total Uranium	0.221	NV	N	S
2066	02/25/91	EMGW_SYSGEN_632	Total Uranium	0.4	UNV	N	S
2066	02/25/91	EMGW_SYSGEN_632D	Total Uranium	0.4	UNV	D	S
2066	07/17/91	EMGW_SYSGEN_635	Total Uranium	0.5	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	Total Uranium	0.2	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	Total Uranium	0.1	NV	N	S
2066	07/02/92	2066-07/02/92-B-N9	Total Uranium	0.5	NV	N	S
2066	9/14/92	2066-09/14/92-A-N1	Total Uranium	0.1	UNV	N	S
2066	10/7/92	2066-10/07/92-A-N9	Total Uranium	0.2	UNV	N	S
2066	01/06/93	GW930106-7	Total Uranium	0.5	UNV	N	S
2066	01/06/93	GW930106-7	Total Uranium	0.1	NV	N	S
2066	04/07/93	GW930407-14	Total Uranium	0.1	UNV	N	S
2096	11/12/91	EMGW_SYSGEN_703	Total Uranium	0.9	NV	N	R
2096	8/18/92	2096-08/18/92-B-N7	Total Uranium	1.2	UNV	N	R
2096	11/4/92	2096-11/04/92-A-N8	Total Uranium	0.7	UNV	N	R
2096	05/06/93	GW930506-5	Total Uranium	0.8	NV	N	R
2098	04/25/90	EMGW_SYSGEN_711	Total Uranium	8.11	NV	N	D
2098	02/15/91	EMGW_SYSGEN_713	Total Uranium	6.5	NV	N	D
2098	02/15/91	EMGW_SYSGEN_713	Total Uranium	5.9	NV	N	D
2098	05/06/91	EMGW_SYSGEN_714	Total Uranium	3.5	NV	N	D
2098	11/05/91	EMGW_SYSGEN_715	Total Uranium	2.4	NV	N	D
2098	8/13/92	2098-08/13/92-A-N7	Total Uranium	N/A	UNV	N	D
2098	11/23/92	GW921123-5	Total Uranium	2.2	NV	N	D
2098	05/20/93	GW930520-9	Total Uranium	4.4	NV	N	D
2104	06/14/90	EMGW_SYSGEN_718	Total Uranium	1.94	NV	N	R
2104	09/12/90	EMGW_SYSGEN_719	Total Uranium	1.02	NV	N	R

Table C-19 (Continued)
Rejected/Nonvalidated Unfiltered Radiological Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	Area
2104	11/27/90	EMGW_SYSGEN_720	Total Uranium	0.433	NV	N	R
2104	03/07/91	EMGW_SYSGEN_721	Total Uranium	0.614	NV	N	R
2104	11/07/91	EMGW_SYSGEN_722	Total Uranium	0.8	NV	N	R
2104	8/10/92	2104-08/10/92-B-N7	Total Uranium	0.8	UNV	N	R
2104	11/02/92	2104-11/02/92-A-N4	Total Uranium	0.8	NV	N	R
2104	11/2/92	2104-11/02/92-A-N8	Total Uranium	0.0008	UNV	N	R
2104	05/13/93	GW930513-14	Total Uranium	0.5	NV	N	R
2104	05/13/93	GW930513-18	Total Uranium	0.8	NV	N	R
2728	04/04/93	113515	Total Uranium	0.2	NV	N	S
2728	05/24/93	GW930524-3	Total Uranium	0.1	UNV	N	S
2728	05/24/93	GW930524-3	Total Uranium	0.1	UNV	N	S
3024	02/18/90	EMGW_SYSGEN_992	Total Uranium	8.2	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993	Total Uranium	0.82	UNV	N	S
3024	06/11/90	EMGW_SYSGEN_993	Total Uranium	0.7	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	Total Uranium	0.65	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	Total Uranium	1	UNV	N	S
3024	02/27/91	EMGW_SYSGEN_996	Total Uranium	3.39	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	Total Uranium	2.6	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	Total Uranium	2.5	NV	N	S
3024	07/01/92	3024-07/01/92-A-N9	Total Uranium	0.3	NV	N	S
3024	10/1/92	3024-10/01/92-A-N9	Total Uranium	0.1	UNV	N	S
3024	01/13/93	GW930113-8	Total Uranium	0.5	UNV	N	S
3024	01/13/93	GW930113-8	Total Uranium	0.2	NV	N	S
3043	02/20/90	EMGW_SYSGEN_1018	Total Uranium	1.24	NV	N	S
3043	02/20/90	EMGW_SYSGEN_1018	Total Uranium	2.5	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	Total Uranium	1	UNV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	Total Uranium	5.7	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	Total Uranium	1.35	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	Total Uranium	0.857	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	Total Uranium	0.1	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	Total Uranium	0.1	NV	N	S
3043	07/06/92	3043-07/06/92-A-N9	Total Uranium	0.3	NV	N	S
3043	10/7/92	3043-10/07/92-A-N9	Total Uranium	0.2	UNV	N	S
3043	01/18/93	GW930118-14	Total Uranium	0.3	UNV	N	S
3043	01/18/93	GW930118-14	Total Uranium	0.1	NV	N	S
3043	04/07/93	GW930407-13	Total Uranium	0.2	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138	Total Uranium	0.7	NV	N	R
3096	08/18/92	3096-08/18/92-B-N7	Total Uranium	0.6	NV	N	R
3096	11/04/92	3096-11/04/92-A-N8	Total Uranium	0.7	NV	N	R
3096	05/07/93	GW930507-1	Total Uranium	0.6	NV	N	R
3096	08/11/93	GW930811-3	Total Uranium	0.7	R	N	R
3096	08/11/93	GW930811-2	Total Uranium	0.7	NV	N	R
3096	08/11/93	GW930811-3	Total Uranium	0.6	NV	N	R
3096	08/11/93	GW930811-3	Total Uranium	0.6	NV	N	R
3098	04/25/90	EMGW_SYSGEN_1146	Total Uranium	1	UNV	N	D
3098	05/06/91	EMGW_SYSGEN_1148	Total Uranium	0.7	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149	Total Uranium	0.9	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D	Total Uranium	0.8	NV	D	D
3098	08/13/92	3098-08/13/92-A-N7	Total Uranium	0.9	NV	N	D
3098	11/23/92	GW921123-6	Total Uranium	1.3	NV	N	D

Table C-19 (Continued)
Rejected/Nonvalidated Unfiltered Radiological Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	Area
3098	05/20/93	GW930520-10	Total Uranium	0.5	NV	N	D
4011	02/21/91	EMGW_SYSGEN_1245	Total Uranium	2.67	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	Total Uranium	2.3	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	Total Uranium	5.3	NV	N	S
4011	07/20/92	4011-07/20/92-B-N9	Total Uranium	1.7	NV	N	S
4011	10/06/92	4011-10/06/92-A-N9	Total Uranium	1.2	NV	N	S
4011	01/05/93	GW930105-7	Total Uranium	0.5	UNV	N	S
4011	01/05/93	GW930105-7	Total Uranium	1.1	NV	N	S
4011	04/08/93	GW930408-3	Total Uranium	0.5	NV	N	S
4011	04/08/93	GW930408-3	Total Uranium	0.5	NV	N	S
4011	04/08/93	GW930408-2	Total Uranium	0.4	NV	D	S
4011	04/08/93	GW930408-2	Total Uranium	0.4	NV	D	S
4096	11/12/91	EMGW_SYSGEN_1297	Total Uranium	0.6	NV	N	R
4096	08/18/92	4096-08/18/92-B-N7	Total Uranium	0.8	NV	N	R
4096	08/18/92	4096-08/18/92-B-D7	Total Uranium	0.9	NV	D	R
4096	11/04/92	4096-11/04/92-A-N8	Total Uranium	0.8	NV	N	R
4096	11/04/92	4096-11/04/92-A-D8	Total Uranium	0.8	NV	D	R
4096	05/06/93	GW930506-7	Total Uranium	0.7	NV	N	R
2043	02/20/90	EMGW_SYSGEN_522	Uranium-234	1	UNV	N	S
2043	05/17/90	EMGW_SYSGEN_523	Uranium-234	0.68	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	Uranium-234	4.35	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	Uranium-234	0.343	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	Uranium-234	0.469	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	Uranium-234	0.4498	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	Uranium-234	1.01	NV	D	S
2050	05/20/93	GW930520-8	Uranium-234	0.7	R	N	S
2066	02/22/90	EMGW_SYSGEN_628	Uranium-234	1	UNV	N	S
2066	05/16/90	EMGW_SYSGEN_629	Uranium-234	0.15	UNV	N	S
2066	08/06/90	EMGW_SYSGEN_630	Uranium-234	0.312	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	Uranium-234	0.32	UNV	N	S
2066	02/25/91	EMGW_SYSGEN_632	Uranium-234	0.39	UNV	N	S
2066	02/25/91	EMGW_SYSGEN_632D	Uranium-234	0.14	UNV	D	S
2096	05/06/93	GW930506-5	Uranium-234	0.7	R	N	R
2098	04/25/90	EMGW_SYSGEN_711	Uranium-234	3.31	NV	N	D
2098	02/15/91	EMGW_SYSGEN_713	Uranium-234	1.2495	NV	N	D
2098	02/15/91	EMGW_SYSGEN_713	Uranium-234	2.52	NV	N	D
2104	06/14/90	EMGW_SYSGEN_718	Uranium-234	0.597	NV	N	R
2104	09/12/90	EMGW_SYSGEN_719	Uranium-234	0.385	NV	N	R
2104	11/27/90	EMGW_SYSGEN_720	Uranium-234	0.51	UNV	N	R
2104	03/07/91	EMGW_SYSGEN_721	Uranium-234	0.19	UNV	N	R
3024	02/18/90	EMGW_SYSGEN_992	Uranium-234	2.6	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993	Uranium-234	0.24	UNV	N	S
3024	06/11/90	EMGW_SYSGEN_993	Uranium-234	0.2	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	Uranium-234	0.257	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	Uranium-234	0.381	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	Uranium-234	0.919	NV	N	S
3043	02/20/90	EMGW_SYSGEN_1018	Uranium-234	1	UNV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	Uranium-234	0.31	UNV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	Uranium-234	1.7	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	Uranium-234	0.514	NV	N	S

Table C-19 (Continued)
Rejected/Nonvalidated Unfiltered Radiological Data for Background Monitoring Wells in the Great Miami Aquifer

Well	Sample			Validated		QA	
No.	Date	ID	Constituent	Result	Qualifier	type	Area
3043	02/28/91	EMGW_SYSGEN_1022	Uranium-234	0.18	UNV	N	S
3096	05/07/93	GW930507-1	Uranium-234	0.6	R	N	R
3098	04/25/90	EMGW_SYSGEN_1146	Uranium-234	0.26	UNV	N	D
4011	02/21/91	EMGW_SYSGEN_1245	Uranium-234	1.19	NV	N	S
4096	12/14/88	3474	Uranium-234	1	R	D	R
2043	02/20/90	EMGW_SYSGEN_522	Uranium-235	1	UNV	N	S
2043	02/28/91	EMGW_SYSGEN_526	Uranium-235	0.0213	NV	N	S
2066	02/22/90	EMGW_SYSGEN_628	Uranium-235	1	UNV	N	S
2098	02/15/91	EMGW_SYSGEN_713	Uranium-235	0.0955	NV	N	D
3024	06/11/90	EMGW_SYSGEN_993	Uranium-235	0.01	NV	N	S
3043	02/20/90	EMGW_SYSGEN_1018	Uranium-235	1	UNV	N	S
2043	05/17/90	EMGW_SYSGEN_523	Uranium-235/236	0.25	UNV	N	S
2043	08/06/90	EMGW_SYSGEN_524	Uranium-235/236	0.312	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	Uranium-235/236	0.2	UNV	N	S
2043	02/28/91	EMGW_SYSGEN_526	Uranium-235/236	0.17	UNV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	Uranium-235/236	0.18	UNV	D	S
2050	05/20/93	GW930520-8	Uranium-235/236	0.2	R	N	S
2066	05/16/90	EMGW_SYSGEN_629	Uranium-235/236	0.15	UNV	N	S
2066	08/06/90	EMGW_SYSGEN_630	Uranium-235/236	0.21	UNV	N	S
2066	11/06/90	EMGW_SYSGEN_631	Uranium-235/236	0.32	UNV	N	S
2066	02/25/91	EMGW_SYSGEN_632	Uranium-235/236	0.39	UNV	N	S
2066	02/25/91	EMGW_SYSGEN_632D	Uranium-235/236	0.16	UNV	D	S
2066	04/07/93	GW930407-14	Uranium-235/236	0.1	R	N	S
2096	05/06/93	GW930506-5	Uranium-235/236	0.1	R	N	R
2098	04/25/90	EMGW_SYSGEN_711	Uranium-235/236	0.23	UNV	N	D
2098	02/15/91	EMGW_SYSGEN_713	Uranium-235/236	0.17	UNV	N	D
2104	06/14/90	EMGW_SYSGEN_718	Uranium-235/236	0.256	NV	N	R
2104	09/12/90	EMGW_SYSGEN_719	Uranium-235/236	0.17	UNV	N	R
2104	11/27/90	EMGW_SYSGEN_720	Uranium-235/236	0.51	UNV	N	R
2104	03/07/91	EMGW_SYSGEN_721	Uranium-235/236	0.19	UNV	N	R
3024	06/11/90	EMGW_SYSGEN_993	Uranium-235/236	0.24	UNV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	Uranium-235/236	0.189	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	Uranium-235/236	0.2	UNV	N	S
3024	02/27/91	EMGW_SYSGEN_996	Uranium-235/236	0.18	UNV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	Uranium-235/236	0.31	UNV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	Uranium-235/236	0.35	UNV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	Uranium-235/236	0.23	UNV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	Uranium-235/236	0.18	UNV	N	S
3096	05/07/93	GW930507-1	Uranium-235/236	0.1	R	N	R
3098	04/25/90	EMGW_SYSGEN_1146	Uranium-235/236	0.26	UNV	N	D
4011	02/21/91	EMGW_SYSGEN_1245	Uranium-235/236	0.238	NV	N	S
4011	04/08/93	GW930408-2	Uranium-235/236	0.1	R	D	S
4096	12/14/88	3474	Uranium-235/236	1	R	D	R
2043	02/28/91	EMGW_SYSGEN_526	Uranium-236	0.1087	NV	N	S
2098	02/15/91	EMGW_SYSGEN_713	Uranium-236	0.0259	NV	N	D
3024	06/11/90	EMGW_SYSGEN_993	Uranium-236	0.003	NV	N	S
2043	02/20/90	EMGW_SYSGEN_522	Uranium-238	1	UNV	N	S
2043	05/17/90	EMGW_SYSGEN_523	Uranium-238	0.864	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	Uranium-238	5.17	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	Uranium-238	0.209	NV	N	S

Table C-19 (Continued)
Rejected/Nonvalidated Unfiltered Radiological Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	Area
2043	02/28/91	EMGW_SYSGEN_526	Uranium-238	0.371	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	Uranium-238	0.2655	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	Uranium-238	0.438	NV	D	S
2050	05/20/93	GW930520-8	Uranium-238	0.5	R	N	S
2066	02/22/90	EMGW_SYSGEN_628	Uranium-238	1	UNV	N	S
2066	05/16/90	EMGW_SYSGEN_629	Uranium-238	0.15	UNV	N	S
2066	08/06/90	EMGW_SYSGEN_630	Uranium-238	0.28	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	Uranium-238	0.32	UNV	N	S
2066	02/25/91	EMGW_SYSGEN_632	Uranium-238	0.39	UNV	N	S
2066	02/25/91	EMGW_SYSGEN_632D	Uranium-238	0.16	UNV	D	S
2096	05/06/93	GW930506-5	Uranium-238	0.3	R	N	R
2098	04/25/90	EMGW_SYSGEN_711	Uranium-238	3.77	NV	N	D
2098	02/15/91	EMGW_SYSGEN_713	Uranium-238	2.1628	NV	N	D
2098	02/15/91	EMGW_SYSGEN_713	Uranium-238	2.77	NV	N	D
2104	06/14/90	EMGW_SYSGEN_718	Uranium-238	0.614	NV	N	R
2104	09/12/90	EMGW_SYSGEN_719	Uranium-238	0.336	NV	N	R
2104	11/27/90	EMGW_SYSGEN_720	Uranium-238	0.51	UNV	N	R
2104	03/07/91	EMGW_SYSGEN_721	Uranium-238	0.39	NV	N	R
3024	02/18/90	EMGW_SYSGEN_992	Uranium-238	2.7	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993	Uranium-238	0.25	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993	Uranium-238	0.2	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	Uranium-238	0.189	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	Uranium-238	0.29	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	Uranium-238	1	NV	N	S
3043	02/20/90	EMGW_SYSGEN_1018	Uranium-238	1	UNV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	Uranium-238	0.31	UNV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	Uranium-238	1.88	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	Uranium-238	0.479	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	Uranium-238	0.191	NV	N	S
3096	05/07/93	GW930507-1	Uranium-238	0.3	R	N	R
3098	04/25/90	EMGW_SYSGEN_1146	Uranium-238	0.26	UNV	N	D
4011	02/21/91	EMGW_SYSGEN_1245	Uranium-238	1.19	NV	N	S
4096	12/14/88	3474	Uranium-238	1	R	D	R

Table C-20
Rejected/Nonvalidated Filtered Radiological Data for Background Monitoring Wells in the Great Miami Aquifer

Well	Sample			Validated		QA	
No.	Date	ID	Constituent	Result	Qualifier	type	Area
2043	04/07/93	GW930407-12	Gross Alpha	4.4	NV	N	S
2050	05/20/93	GW930520-8	Gross Alpha	2.3	UNV	N	S
2066	04/07/93	GW930407-14	Gross Alpha	3	NV	N	S
2096	05/06/93	GW930506-5	Gross Alpha	0	UNV	N	R
2098	05/20/93	GW930520-9	Gross Alpha	2.2	UNV	N	D
2104	05/13/93	GW930513-14	Gross Alpha	2.6	UNV	N	R
2104	05/13/93	GW930513-18	Gross Alpha	6.4	NV	N	R
2728	04/04/93	113514	Gross Alpha	-0.614	UNV	N	S
2728	05/24/93	GW930524-3	Gross Alpha	0	UNV	N	S
3024	04/12/93	GW930412-8	Gross Alpha	3.3	UNV	N	S
3043	04/07/93	GW930407-13	Gross Alpha	3.4	UNV	N	S
3096	05/07/93	GW930507-1	Gross Alpha	0	UNV	N	R
3098	05/20/93	GW930520-10	Gross Alpha	0	UNV	N	D
4011	04/08/93	GW930408-3	Gross Alpha	3.4	UNV	N	S
4011	04/08/93	GW930408-2	Gross Alpha	3.3	UNV	D	S
4096	05/06/93	GW930506-7	Gross Alpha	0	UNV	N	R
2043	04/07/93	GW930407-12	Gross Beta	4	UNV	N	S
2050	05/20/93	GW930520-8	Gross Beta	1.5	UNV	N	S
2066	04/07/93	GW930407-14	Gross Beta	4.9	NV	N	S
2096	05/06/93	GW930506-5	Gross Beta	0	UNV	N	R
2098	05/20/93	GW930520-9	Gross Beta	2.4	UNV	N	D
2104	05/13/93	GW930513-14	Gross Beta	7	NV	N	R
2104	05/13/93	GW930513-18	Gross Beta	8.5	NV	N	R
2728	04/04/93	113514	Gross Beta	3.16	UNV	N	S
2728	05/24/93	GW930524-3	Gross Beta	0	UNV	N	S
3024	04/12/93	GW930412-8	Gross Beta	3.5	UNV	N	S
3043	04/07/93	GW930407-13	Gross Beta	5.3	NV	N	S
3096	05/07/93	GW930507-1	Gross Beta	2.8	NV	N	R
3098	05/20/93	GW930520-10	Gross Beta	5.4	NV	N	D
4011	04/08/93	GW930408-3	Gross Beta	5.2	NV	N	S
4011	04/08/93	GW930408-2	Gross Beta	4.2	NV	D	S
4096	05/06/93	GW930506-7	Gross Beta	0.4	UNV	N	R
2066	04/07/93	GW930407-14	Radium-226	1	R	N	S
4011	04/08/93	GW930408-3	Radium-226	0.5	R	N	S
4011	04/08/93	GW930408-2	Radium-226	0.5	R	D	S
2096	05/06/93	GW930506-5	Total Thorium	0.912037	NV	N	R
3043	04/07/93	GW930407-13	Total Thorium	2.736029	NV	N	S
3096	05/07/93	GW930507-1	Total Thorium	0.912049	NV	N	R
2096	05/06/93	GW930506-5	Thorium-228	0.3	R	N	R
3024	04/12/93	GW930412-8	Thorium-228	3.5	R	N	S
4096	05/06/93	GW930506-7	Thorium-228	0.2	R	N	R
3024	04/12/93	GW930412-8	Thorium-230	3.8	R	N	S
3098	05/20/93	GW930520-10	Thorium-230	0.2	R	N	D
3024	04/12/93	GW930412-8	Thorium-232	2.4	R	N	S
3096	05/07/93	GW930507-1	Thorium-232	0.1	R	N	R
2043	04/07/93	GW930407-12	Total Uranium	0.7	NV	N	S
2050	05/20/93	GW930520-8	Total Uranium	0.1	UNV	N	S
2066	04/07/93	GW930407-14	Total Uranium	0.2	NV	N	S
2096	05/06/93	GW930506-5	Total Uranium	0.5	NV	N	R
2098	05/20/93	GW930520-9	Total Uranium	4.2	NV	N	D

Table C-20 (Continued)
Rejected/Nonvalidated Filtered Radiological Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type	Area
2104	05/13/93	GW930513-14	Total Uranium	0.7	NV	N	R
2104	05/13/93	GW930513-18	Total Uranium	0.7	NV	N	R
3043	04/07/93	GW930407-13	Total Uranium	0.1	NV	N	S
3096	05/07/93	GW930507-1	Total Uranium	0.6	NV	N	R
3098	05/20/93	GW930520-10	Total Uranium	0.7	NV	N	D
4096	05/06/93	GW930506-7	Total Uranium	0.8	NV	N	R
4096	05/06/93	GW930506-7	Total Uranium	0.7	R	N	R
2066	04/07/93	GW930407-14	Uranium-234	0.4	R	N	S
3098	05/20/93	GW930520-10	Uranium-234	0.2	R	N	D
2066	04/07/93	GW930407-14	Uranium-235/236	0.1	R	N	S
2728	05/24/93	GW930524-3	Uranium-235/236	0.1	R	N	S
3098	05/20/93	GW930520-10	Uranium-235/236	0.1	R	N	D
2066	04/07/93	GW930407-14	Uranium-238	0.4	R	N	S
2104	05/13/93	GW930513-18	Uranium-238	0.2	R	N	R
3098	05/20/93	GW930520-10	Uranium-238	0.2	R	N	D

Table C-21
Rejected/Nonvalidated Unfiltered Radiological Data for Background Surface Water in the Great Miami River

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type
W-1	04/03/89	1178	Cesium-137	10.307	R	N
W-1	04/03/89	1178	Ruthenium-106	88.978	R	N
W-1	05/20/93	120066	Total Uranium	1.8	NV	N
W-1	06/23/93	120420	Total Uranium	1.3	NV	N
W-1	06/23/93	120419	Total Uranium	1.3	NV	D

Table C-22
Rejected/Nonvalidated Filtered Radiological Data for Background Surface Water in the Great Miami River

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type
W-1	04/03/89	1185	Cesium-137	7.5774	R	N
W-1	04/03/89	1185	Ruthenium-106	64.058	R	N

Table C-23
Rejected/Nonvalidated Unfiltered Radiological Data for Background Surface Water in Paddys Run

Well	Sample			Validated		QA
No.	Date	ID	Constituent	Result	Qualifier	type
W-5	03/25/93	113493	Gross Alpha	4	UNV	N
W-5	06/24/93	120423	Gross Alpha	2.8	NV	N
W-5	06/24/93	120424	Gross Alpha	2.5	UNV	D
W-5	03/25/93	113493	Gross Beta	4.8	UNV	N
W-5	06/24/93	120423	Gross Beta	9.9	NV	N
W-5	06/24/93	120424	Gross Beta	5.8	NV	D
W-5	03/25/93	113493	Neptunium-237	0.16	R	N
W-5	06/24/93	120423	Strontium-90	0.5	R	N
W-5	06/24/93	120424	Strontium-90	0.5	R	D
W-5	03/25/93	113495	Total Uranium	0.7	NV	N
W-5	06/24/93	120423	Uranium-234	1.2	R	N
W-5	06/24/93	120424	Uranium-234	0.5	R	D
W-5	06/24/93	120423	Uranium-235/236	0.3	R	N
W-5	06/24/93	120423	Uranium-238	0.6	R	N

Table C-24
Rejected/Nonvalidated Filtered Radiological Data for Background Surface Water in Paddys Run

Well No.	Sample Date	Sample ID	Constituent	Validated Result	Validated Qualifier	QA type
W-5	03/25/93	113493	Gross Alpha	3.76	UNV	N
W-5	06/24/93	120423F	Gross Alpha	3	UNV	N
W-5	06/24/93	120424F	Gross Alpha	3.4	UNV	D
W-5	03/25/93	113493	Gross Beta	4.09	UNV	N
W-5	06/24/93	120423F	Gross Beta	6.6	NV	N
W-5	06/24/93	120424F	Gross Beta	3.7	NV	D
W-5	06/24/93	120423F	Strontium-90	0.5	R	N
W-5	06/24/93	120424F	Strontium-90	0.5	R	D
W-5	06/24/93	120424F	Uranium-234	1	R	D
W-5	06/24/93	120424F	Uranium-235/236	0.2	R	D
W-5	06/24/93	120424F	Uranium-238	0.9	R	D

APPENDIX D

INORGANIC CHEMICAL DATA

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FOOTNOTES FOR APPENDIX D TABLES

(1) Units:
All results within the tables are reported in mg/L (milligrams per liter) except where noted.

(2) Lab Qualifiers:

- * Duplicate analysis was not within control limits. These data should be considered estimated.
- + The correlation coefficient for the method of standard additions was less than 0.995. These data should be considered estimated.
- B The reported value was obtained from a reading that was less than the contract required detection limit (CRDL) but greater than or equal to the instrument detection limit.
- E The reported value was estimated because of the presence of interference.
- N Spiked sample recovery was not within control limits. These data should be considered estimated.
- S The reported value was determined by the method of standard additions.
- U The analyte was analyzed for but was not detected.
- W The reported value was generated from graphite furnace atomic absorption analysis, and post-digestion spike recovery was outside of the allowable range. These data should be considered estimated.

(3) Validation Qualifiers:

- - These data meet all requirements of the indicated analytical support level (ASL).
- J These data should be considered an estimate on the basis of laboratory quality control results.
- NV These data were not validated.
- R These data are considered unreliable/unusable for any quantitative purpose.
- U These data were not detected at levels up to the corresponding limit of detection. This qualifier was also used to denote a value that was adjusted by the use of the 5X/10X rule for evaluation for blank data.
- Z These data indicate that a more representative result exists within the corresponding sample.

(4) QA Type:
QA Type refers to the number of replicate samples taken from a location during the sampling event.

- N One sample set was obtained.
- D Duplicate sample sets were obtained.
- T Triplicate sample sets were obtained.

(5) Analytical Support Levels (ASLs):
The validation of analytical data is correlated to ASLs A through E defined in the SCQ; these FEMP-specific ASLs are analogous to the EPA's Analytical Levels 1 through 5. The ASLs are assigned depending on the intended use of the data and the quality control methods required. The ASL for inorganic data was generally EPA Level 3 or 4 and the ASL for field data was EPA Level 2.

FOOTNOTES FOR APPENDIX D TABLES
(continued)

(6) Area:
Area refers to the tributary section of the Great Miami Aquifer.

D	Dry Fork section of the Great Miami Aquifer
R	Ross section of the Great Miami Aquifer
S	Shandon section of the Great Miami Aquifer

(7) Data Types:

Validated Data:	Data that have been through the validation process and are of a known quality based on the ASL specified.
High Nondect Data:	Nondect data that have unusually high detection limits. Refer to Section 4.2.2.
Low Nondect Data:	Nondect data that have unusally low detection limits.
Result Outlier:	A result that has been deemed "suspect". Refer to Section 4.2.3.
Sample Outlier:	A sample that has several result outliers. Refer to Section 4.2.3.
Rejected Data:	Data that have been identified through validation as being either unreliable or unusable.
Nonvalidated Data:	Data that have not been through the validation process.

(8) Due to the limited analytical results available, statistics were not calculated for phospate, ossmium, nitrite as nitrogen, or tin.

(9) All nondectect data (data with a U qualifier) listed in these tables are the actual results reported by the laboratories. For statistical computations, nondetect data were set equal to one-half of the detection limit. Nondetect data can also be referred to by using a < symbol.

Table D-1
Validated Filtered Inorganic Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL
1024	06/26/89	66420		Aluminum	0.1206	-	N	3
1024	08/10/89	66497		Aluminum	0.123	-	N	3
1024	04/12/93	GW930412-6	B	Aluminum	0.0291	U	N	3
1040	09/28/93	30928F1040-02	U	Aluminum	0.09	U	N	3
1059	09/29/93	30929F1059-02	U	Aluminum	0.0193	U	N	3
1060	09/29/93	30929F1060-02	B	Aluminum	0.0375	-	N	3
1065	05/04/93	112014	B	Aluminum	0.069	U	N	C
1040	09/28/93	30928F1040-02	U	Antimony	0.011	U	N	3
1059	09/29/93	30929F1059-02	B	Antimony	0.0272	-	N	3
1060	09/29/93	30929F1060-02	U	Antimony	0.0222	U	N	3
1065	05/04/93	112014	BW	Antimony	0.0141	J	N	C
1024	07/26/88	3376	U	Arsenic	0.01	U	N	3
1024	11/02/88	3657	U	Arsenic	0.002	U	N	3
1024	01/22/89	3847		Arsenic	0.003	U	N	3
1024	04/12/93	GW930412-6	B	Arsenic	0.0042	-	N	3
1040	08/25/88	3572		Arsenic	0.122	-	N	3
1040	12/07/88	3778		Arsenic	0.015	-	N	3
1040	03/15/89	3964		Arsenic	0.015	-	N	3
1040	09/28/93	30928F1040-02		Arsenic	0.0201	-	N	3
1059	12/06/88	3751	U	Arsenic	0.002	UJ	N	3
1059	03/14/89	3981	U	Arsenic	0.003	UJ	N	3
1059	09/29/93	30929F1059-02	U	Arsenic	0.001	U	N	3
1060	08/04/88	3398	U	Arsenic	0.01	U	N	3
1060	10/25/88	3695	U	Arsenic	0.002	U	N	3
1060	02/01/89	3888	U	Arsenic	0.002	UJ	N	3
1060	09/29/93	30929F1060-02	U	Arsenic	0.001	U	N	3
1065	01/22/89	3860	U	Arsenic	0.002	U	N	3
1065	05/04/93	112014	U	Arsenic	0.001	U	N	C
1024	04/21/88	3106		Barium	0.091	J	N	3
1024	11/02/88	3657		Barium	0.09	-	N	3
1024	01/22/89	3847		Barium	0.09	-	N	3
1024	06/26/89	66420		Barium	0.0944	-	N	3
1024	08/10/89	66497		Barium	0.112	-	N	3
1024	04/12/93	GW930412-6	B	Barium	0.0891	-	N	3
1040	05/21/88	3218		Barium	0.444	-	N	3
1040	05/21/88	3219		Barium	0.459	-	D	3
1040	08/25/88	3572		Barium	0.422	-	N	3
1040	12/07/88	3778		Barium	0.446	-	N	3
1040	03/15/89	3964		Barium	0.45	-	N	3
1040	09/28/93	30928F1040-02		Barium	0.451	-	N	3
1059	05/12/88	3188		Barium	0.05	-	N	3
1059	05/12/88	3189		Barium	0.05	-	D	3
1059	08/18/88	3562		Barium	0.05	-	N	3
1059	12/06/88	3751		Barium	0.055	U	N	3
1059	03/14/89	3981		Barium	0.046	J	N	3
1059	09/29/93	30929F1059-02	B	Barium	0.0532	-	N	3
1060	06/02/88	3255		Barium	0.062	-	N	3
1060	10/25/88	3695		Barium	0.059	-	N	3
1060	02/01/89	3888		Barium	0.058	J	N	3
1060	09/29/93	30929F1060-02	B	Barium	0.0677	-	N	3

Table D-1 (Continued)
Validated Filtered Inorganic Data for Background Monitoring Wells in the Glacial Overburden

Well	Sample		Lab		Validated		QA	
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type	ASL
1065	04/14/88	3136		Barium	0.034	J	N	3
1065	01/22/89	3860		Barium	0.042	-	N	3
1065	05/04/93	112014	B	Barium	0.0475	-	N	C
1024	06/26/89	66420		Beryllium	0.0018	-	N	3
1024	08/10/89	66497		Beryllium	0.001	-	N	3
1024	04/12/93	GW930412-6	U	Beryllium	0.001	U	N	3
1059	09/29/93	30929F1059-02	U	Beryllium	0.0003	U	N	3
1060	09/29/93	30929F1060-02	U	Beryllium	0.0003	U	N	3
1065	05/04/93	112014	U	Beryllium	0.001	U	N	C
1024	04/21/88	3106	U	Cadmium	0.005	UJ	N	3
1024	07/26/88	3376	U	Cadmium	0.005	U	N	3
1024	11/02/88	3657	U	Cadmium	0.002	U	N	3
1024	01/22/89	3847		Cadmium	0.007	-	N	3
1024	04/12/93	GW930412-6	U	Cadmium	0.003	UJ	N	3
1040	05/21/88	3218	U	Cadmium	0.005	U	N	3
1040	05/21/88	3219	U	Cadmium	0.005	U	D	3
1040	08/25/88	3572	U	Cadmium	0.002	U	N	3
1040	12/07/88	3778	U	Cadmium	0.002	U	N	3
1040	03/15/89	3964	U	Cadmium	0.005	U	N	3
1040	09/28/93	30928F1040-02	U	Cadmium	0.005	U	N	3
1059	05/12/88	3188	U	Cadmium	0.005	U	N	3
1059	05/12/88	3189	U	Cadmium	0.005	U	D	3
1059	08/18/88	3562	U	Cadmium	0.002	U	N	3
1059	12/06/88	3751	U	Cadmium	0.002	U	N	3
1059	03/14/89	3981	U	Cadmium	0.005	UJ	N	3
1059	09/29/93	30929F1059-02	U	Cadmium	0.0012	UJ	N	3
1060	06/02/88	3255	U	Cadmium	0.002	U	N	3
1060	08/04/88	3398	U	Cadmium	0.005	U	N	3
1060	10/25/88	3695	U	Cadmium	0.002	U	N	3
1060	09/29/93	30929F1060-02	U	Cadmium	0.0012	UJ	N	3
1065	04/14/88	3136	U	Cadmium	0.005	UJ	N	3
1065	01/22/89	3860		Cadmium	0.006	-	N	3
1065	05/04/93	112014	U	Cadmium	0.002	U	N	C
1024	04/21/88	3106		Calcium	83.8	-	N	3
1024	07/26/88	3376		Calcium	130	-	N	3
1024	11/02/88	3657		Calcium	90.4	-	N	3
1024	01/22/89	3847		Calcium	89	-	N	3
1024	06/26/89	66420		Calcium	89.2	-	N	3
1024	08/10/89	66497		Calcium	95.6	-	N	3
1024	04/12/93	GW930412-6		Calcium	85.2	-	N	3
1040	05/21/88	3218		Calcium	76.4	-	N	3
1040	05/21/88	3219		Calcium	78.6	-	D	3
1040	08/25/88	3572		Calcium	77	-	N	3
1040	12/07/88	3778		Calcium	75.7	-	N	3
1040	03/15/89	3964		Calcium	84	-	N	3
1040	09/28/93	30928F1040-02		Calcium	80.2	-	N	3
1059	05/12/88	3188		Calcium	80.9	-	N	3
1059	05/12/88	3189		Calcium	79.4	-	D	3
1059	08/18/88	3562		Calcium	77.7	-	N	3
1059	12/06/88	3751		Calcium	74.4	-	N	3

Table D-1 (Continued)
Validated Filtered Inorganic Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL
1059	03/14/89	3981		Calcium	91	J	N	3
1059	09/29/93	30929F1059-02		Calcium	82.6	-	N	3
1060	06/02/88	3255		Calcium	130	-	N	3
1060	08/04/88	3398		Calcium	120	-	N	3
1060	10/25/88	3695		Calcium	114	-	N	3
1060	02/01/89	3888		Calcium	124	J	N	3
1060	09/29/93	30929F1060-02		Calcium	155	-	N	3
1065	04/14/88	3136		Calcium	89	J	N	3
1065	01/22/89	3860		Calcium	97.4	-	N	3
1065	05/04/93	112014		Calcium	108	-	N	C
1024	04/21/88	3106	U	Chromium	0.02	UJ	N	3
1024	11/02/88	3657	U	Chromium	0.02	U	N	3
1024	01/22/89	3847		Chromium	0.022	-	N	3
1024	06/26/89	66420		Chromium	0.0345	-	N	3
1024	08/10/89	66497		Chromium	0.025	-	N	3
1024	04/12/93	GW930412-6	U	Chromium	0.005	U	N	3
1040	05/21/88	3218	U	Chromium	0.02	U	N	3
1040	05/21/88	3219	U	Chromium	0.02	U	D	3
1040	08/25/88	3572	U	Chromium	0.02	U	N	3
1040	12/07/88	3778	U	Chromium	0.02	U	N	3
1040	03/15/89	3964		Chromium	0.02	-	N	3
1040	09/28/93	30928F1040-02	U	Chromium	0.006	J	N	3
1059	05/12/88	3188	U	Chromium	0.02	U	N	3
1059	05/12/88	3189	U	Chromium	0.02	U	D	3
1059	08/18/88	3562	U	Chromium	0.02	U	N	3
1059	12/06/88	3751	U	Chromium	0.02	U	N	3
1059	03/14/89	3981		Chromium	0.02	J	N	3
1059	09/29/93	30929F1059-02	U	Chromium	0.0032	U	N	3
1060	06/02/88	3255	U	Chromium	0.02	U	N	3
1060	08/04/88	3398	U	Chromium	0.01	U	N	3
1060	10/25/88	3695	U	Chromium	0.02	U	N	3
1060	02/01/89	3888		Chromium	0.034	J	N	3
1060	09/29/93	30929F1060-02	U	Chromium	0.0032	U	N	3
1065	04/14/88	3136	U	Chromium	0.02	UJ	N	3
1065	01/22/89	3860		Chromium	0.023	-	N	3
1065	05/04/93	112014	U	Chromium	0.004	U	N	C
1024	06/26/89	66420	U	Cobalt	0.01	U	N	3
1024	08/10/89	66497	U	Cobalt	0.01	U	N	3
1024	04/12/93	GW930412-6	U	Cobalt	0.008	U	N	3
1040	09/28/93	30928F1040-02	U	Cobalt	0.007	U	N	3
1059	09/29/93	30929F1059-02	U	Cobalt	0.0053	U	N	3
1060	09/29/93	30929F1060-02	U	Cobalt	0.0053	U	N	3
1065	05/04/93	112014	U	Cobalt	0.003	U	N	C
1024	04/21/88	3106	U	Copper	0.01	UJ	N	3
1024	07/26/88	3376	U	Copper	0.025	U	N	3
1024	11/02/88	3657	U	Copper	0.01	U	N	3
1024	01/22/89	3847		Copper	0.013	-	N	3
1024	06/26/89	66420	U	Copper	0.01	U	N	3
1024	08/10/89	66497	U	Copper	0.01	U	N	3
1024	04/12/93	GW930412-6	B	Copper	0.009	U	N	3

Table D-1 (Continued)
Validated Filtered Inorganic Data for Background Monitoring Wells in the Glacial Overburden

Well	Sample		Lab		Validated		QA	
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type	ASL
1040	05/21/88	3218	U	Copper	0.01	U	N	3
1040	05/21/88	3219	U	Copper	0.01	U	D	3
1040	08/25/88	3572	U	Copper	0.01	U	N	3
1040	12/07/88	3778	U	Copper	0.01	U	N	3
1040	03/15/89	3964	U	Copper	0.01	U	N	3
1040	09/28/93	30928F1040-02	U	Copper	0.008	UJ	N	3
1059	05/12/88	3188	U	Copper	0.01	U	N	3
1059	05/12/88	3189	U	Copper	0.01	U	D	3
1059	08/18/88	3562		Copper	0.03	-	N	3
1059	09/29/93	30929F1059-02	U	Copper	0.0026	U	N	3
1060	06/02/88	3255	U	Copper	0.01	U	N	3
1060	08/04/88	3398	U	Copper	0.03	U	N	3
1060	10/25/88	3695	U	Copper	0.01	U	N	3
1060	02/01/89	3888		Copper	0.017	J	N	3
1060	09/29/93	30929F1060-02	U	Copper	0.0026	U	N	3
1065	04/14/88	3136	U	Copper	0.01	UJ	N	3
1065	01/22/89	3860		Copper	0.019	-	N	3
1065	05/04/93	112014	B	Copper	0.0088	U	N	C
1024	04/12/93	GW930412-6	U	Cyanide	0.01	UJ	N	3
1040	09/28/93	30928F1040-02	U	Cyanide	0.005	U	N	3
1059	09/29/93	30929F1059-02	U	Cyanide	0.01	U	N	3
1060	09/29/93	30929F1060-02	U	Cyanide	0.01	U	N	3
1024	04/21/88	3106		Iron	0.667	J	N	3
1024	07/26/88	3376		Iron	4.9	-	N	3
1024	11/02/88	3657		Iron	2.1	-	N	3
1024	01/22/89	3847		Iron	0.061	-	N	3
1024	06/26/89	66420		Iron	1.074	-	N	3
1024	08/10/89	66497		Iron	0.154	-	N	3
1024	04/12/93	GW930412-6		Iron	1.77	-	N	3
1040	05/21/88	3218		Iron	2.61	-	N	3
1040	05/21/88	3219		Iron	3.44	-	D	3
1040	08/25/88	3572		Iron	3.31	-	N	3
1040	12/07/88	3778		Iron	3.2	-	N	3
1040	03/15/89	3964		Iron	3.2	J	N	3
1040	09/28/93	30928F1040-02		Iron	3.58	-	N	3
1059	05/12/88	3188	U	Iron	0.05	U	N	3
1059	05/12/88	3189	U	Iron	0.05	U	D	3
1059	08/18/88	3562		Iron	0.082	-	N	3
1059	12/06/88	3751		Iron	0.027	U	N	3
1059	03/14/89	3981	U	Iron	0.03	UJ	N	3
1059	09/29/93	30929F1059-02	B	Iron	0.0467	-	N	3
1060	06/02/88	3255		Iron	0.256	-	N	3
1060	08/04/88	3398	U	Iron	0.1	U	N	3
1060	10/25/88	3695		Iron	0.069	-	N	3
1060	02/01/89	3888		Iron	0.172	J	N	3
1060	09/29/93	30929F1060-02	B	Iron	0.0789	-	N	3
1065	04/14/88	3136		Iron	0.005	UJ	N	3
1065	01/22/89	3860		Iron	0.045	U	N	3
1065	05/04/93	112014	B	Iron	0.0906	U	N	C

Table D-1 (Continued)
Validated Filtered Inorganic Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL
1024	01/22/89	3847	U	Lead	0.002	UJ	N	3
1024	06/26/89	66420		Lead	0.0027	-	N	3
1024	08/10/89	66497		Lead	0.003	-	N	3
1024	04/12/93	GW930412-6	BWN	Lead	0.0019	UJ	N	3
1040	08/25/88	3572	U	Lead	0.002	UJ	N	3
1040	12/07/88	3778	U	Lead	0.002	UJ	N	3
1040	03/15/89	3964	U	Lead	0.002	U	N	3
1040	09/28/93	30928F1040-02	U	Lead	0.001	U	N	3
1059	12/06/88	3751		Lead	0.004	UJ	N	3
1059	03/14/89	3981		Lead	0.006	J	N	3
1059	09/29/93	30929F1059-02		Lead	0.0087	J	N	3
1060	08/04/88	3398	U	Lead	0.005	U	N	3
1060	10/25/88	3695		Lead	0.002	-	N	3
1060	02/01/89	3888	U	Lead	0.002	UJ	N	3
1060	09/29/93	30929F1060-02	B	Lead	0.0014	-	N	3
1065	01/22/89	3860	U	Lead	0.002	UJ	N	3
1065	05/04/93	112014	U	Lead	0.001	U	N	C
1024	04/21/88	3106		Magnesium	40.5	-	N	3
1024	07/26/88	3376		Magnesium	31	-	N	3
1024	11/02/88	3657		Magnesium	44.4	-	N	3
1024	01/22/89	3847		Magnesium	44	-	N	3
1024	06/26/89	66420		Magnesium	44.2	-	N	3
1024	08/10/89	66497		Magnesium	46	-	N	3
1024	04/12/93	GW930412-6		Magnesium	42.5	-	N	3
1040	05/21/88	3218		Magnesium	23.3	-	N	3
1040	05/21/88	3219		Magnesium	25.1	-	D	3
1040	08/25/88	3572		Magnesium	23.3	-	N	3
1040	12/07/88	3778		Magnesium	23.3	-	N	3
1040	03/15/89	3964		Magnesium	24	-	N	3
1040	09/28/93	30928F1040-02		Magnesium	23.1	-	N	3
1059	05/12/88	3188		Magnesium	22.5	-	N	3
1059	05/12/88	3189		Magnesium	21.9	-	D	3
1059	08/18/88	3562		Magnesium	22.6	-	N	3
1059	12/06/88	3751		Magnesium	20.4	-	N	3
1059	03/14/89	3981		Magnesium	22	J	N	3
1059	09/29/93	30929F1059-02		Magnesium	22.8	-	N	3
1060	06/02/88	3255		Magnesium	47.8	-	N	3
1060	08/04/88	3398		Magnesium	34	-	N	3
1060	10/25/88	3695		Magnesium	33.8	-	N	3
1060	02/01/89	3888		Magnesium	34.8	J	N	3
1060	09/29/93	30929F1060-02		Magnesium	46.3	-	N	3
1065	04/14/88	3136		Magnesium	29.5	J	N	3
1065	01/22/89	3860		Magnesium	31.3	-	N	3
1065	05/04/93	112014		Magnesium	37.9	-	N	C
1024	04/21/88	3106		Manganese	0.08	J	N	3
1024	07/26/88	3376		Manganese	0.22	-	N	3
1024	11/02/88	3657		Manganese	0.03	-	N	3
1024	01/22/89	3847		Manganese	0.09	-	N	3
1024	04/12/93	GW930412-6		Manganese	0.0388	-	N	3
1040	05/21/88	3218	U	Manganese	0.02	U	N	3

Table D-1 (Continued)
Validated Filtered Inorganic Data for Background Monitoring Wells in the Glacial Overburden

Well	Sample		Lab		Validated		QA	
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type	ASL
1040	05/21/88	3219		Manganese	0.021	-	D	3
1040	08/25/88	3572		Manganese	0.018	-	N	3
1040	12/07/88	3778		Manganese	0.016	-	N	3
1040	03/15/89	3964		Manganese	0.021	-	N	3
1040	09/28/93	30928F1040-02		Manganese	0.024	J	N	3
1059	05/12/88	3188	U	Manganese	0.02	U	N	3
1059	05/12/88	3189	U	Manganese	0.02	U	D	3
1059	08/18/88	3562		Manganese	0.04	-	N	3
1059	12/06/88	3751		Manganese	0.003	U	N	3
1059	03/14/89	3981		Manganese	0.007	J	N	3
1059	09/29/93	30929F1059-02	B	Manganese	0.0025	-	N	3
1060	06/02/88	3255		Manganese	0.087	-	N	3
1060	08/04/88	3398		Manganese	0.1	-	N	3
1060	10/25/88	3695		Manganese	0.019	-	N	3
1060	02/01/89	3888		Manganese	0.021	J	N	3
1060	09/29/93	30929F1060-02		Manganese	0.1	-	N	3
1065	04/14/88	3136	U	Manganese	0.02	UJ	N	3
1065	01/22/89	3860		Manganese	0.008	-	N	3
1065	05/04/93	112014	B	Manganese	0.0039	U	N	C
1024	04/21/88	3106	U	Mercury	0.0002	UJ	N	3
1024	07/26/88	3376		Mercury	0.0004	-	N	3
1024	11/02/88	3657	U	Mercury	0.0002	U	N	3
1024	01/22/89	3847	U	Mercury	0.0002	U	N	3
1024	04/12/93	GW930412-6	U	Mercury	0.0002	U	N	3
1040	05/21/88	3218	U	Mercury	0.0002	U	N	3
1040	05/21/88	3219	U	Mercury	0.0002	U	D	3
1040	08/25/88	3572	U	Mercury	0.0002	UJ	N	3
1040	12/07/88	3778	U	Mercury	0.0002	U	N	3
1040	03/15/89	3964	U	Mercury	0.0002	UJ	N	3
1040	09/28/93	30928F1040-02	U	Mercury	0.0001	U	N	3
1059	05/12/88	3188	U	Mercury	0.0002	U	N	3
1059	05/12/88	3189	U	Mercury	0.0002	U	D	3
1059	08/18/88	3562	U	Mercury	0.0002	U	N	3
1059	12/06/88	3751	U	Mercury	0.0002	U	N	3
1059	03/14/89	3981	U	Mercury	0.0002	UJ	N	3
1059	09/29/93	30929F1059-02	U	Mercury	0.0002	U	N	3
1060	06/02/88	3255	U	Mercury	0.0002	U	N	3
1060	08/04/88	3398	U	Mercury	0.0003	U	N	3
1060	10/25/88	3695	U	Mercury	0.0002	U	N	3
1060	09/29/93	30929F1060-02	U	Mercury	0.0002	U	N	3
1065	04/14/88	3136	U	Mercury	0.0002	UJ	N	3
1065	01/22/89	3860	U	Mercury	0.0002	U	N	3
1065	05/04/93	112014	U	Mercury	0.0002	U	N	C
1024	04/21/88	3106	U	Molybdenum	0.02	UJ	N	3
1024	11/02/88	3657	U	Molybdenum	0.02	U	N	3
1024	01/22/89	3847	U	Molybdenum	0.02	U	N	3
1040	05/21/88	3218	U	Molybdenum	0.02	U	N	3
1040	05/21/88	3219		Molybdenum	0.024	-	D	3
1040	08/25/88	3572	U	Molybdenum	0.02	U	N	3
1040	12/07/88	3778		Molybdenum	0.028	-	N	3

Table D-1 (Continued)
Validated Filtered Inorganic Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL
1040	03/15/89	3964	U	Molybdenum	0.01	U	N	3
1040	09/28/93	30928F1040-02		Molybdenum	0.027	U	N	3
1059	05/12/88	3188	U	Molybdenum	0.02	U	N	3
1059	05/12/88	3189	U	Molybdenum	0.02	U	D	3
1059	08/18/88	3562	U	Molybdenum	0.02	U	N	3
1059	12/06/88	3751	U	Molybdenum	0.02	U	N	3
1059	03/14/89	3981	U	Molybdenum	0.01	UJ	N	3
1059	09/29/93	30929F1059-02	U	Molybdenum	0.0147	U	N	3
1060	06/02/88	3255	U	Molybdenum	0.02	U	N	3
1060	10/25/88	3695	U	Molybdenum	0.02	U	N	3
1060	02/01/89	3888	U	Molybdenum	0.02	UJ	N	3
1060	09/29/93	30929F1060-02	U	Molybdenum	0.0147	U	N	3
1065	04/14/88	3136	U	Molybdenum	0.02	UJ	N	3
1065	01/22/89	3860	U	Molybdenum	0.02	U	N	3
1065	05/04/93	112014	U	Molybdenum	0.003	U	N	C
1024	04/21/88	3106		Nickel	0.021	J	N	3
1024	11/02/88	3657	U	Nickel	0.02	U	N	3
1024	01/22/89	3847		Nickel	0.026	-	N	3
1024	06/26/89	66420		Nickel	0.0224	-	N	3
1024	08/10/89	66497	U	Nickel	0.02	U	N	3
1024	04/12/93	GW930412-6	U	Nickel	0.02	U	N	3
1040	05/21/88	3218	U	Nickel	0.02	U	N	3
1040	05/21/88	3219	U	Nickel	0.02	U	D	3
1040	08/25/88	3572	U	Nickel	0.02	U	N	3
1040	12/07/88	3778	U	Nickel	0.02	U	N	3
1040	03/15/89	3964	U	Nickel	0.03	U	N	3
1040	09/28/93	30928F1040-02	B	Nickel	0.0186	U	N	3
1059	05/12/88	3188	U	Nickel	0.02	U	N	3
1059	05/12/88	3189	U	Nickel	0.02	U	D	3
1059	08/18/88	3562	U	Nickel	0.02	U	N	3
1059	12/06/88	3751	U	Nickel	0.02	U	N	3
1059	03/14/89	3981	U	Nickel	0.03	UJ	N	3
1059	09/29/93	30929F1059-02	U	Nickel	0.015	U	N	3
1060	06/02/88	3255	U	Nickel	0.02	U	N	3
1060	08/04/88	3398	U	Nickel	0.04	U	N	3
1060	10/25/88	3695	U	Nickel	0.02	U	N	3
1060	02/01/89	3888		Nickel	0.022	J	N	3
1060	09/29/93	30929F1060-02	U	Nickel	0.015	U	N	3
1065	04/14/88	3136	U	Nickel	0.02	UJ	N	3
1065	01/22/89	3860	U	Nickel	0.02	U	N	3
1065	05/04/93	112014	U	Nickel	0.003	U	N	C
1024	04/21/88	3106		Potassium	1.64	J	N	3
1024	07/26/88	3376	U	Potassium	5	U	N	3
1024	11/02/88	3657		Potassium	1.18	-	N	3
1024	01/22/89	3847		Potassium	1.37	-	N	3
1024	04/12/93	GW930412-6	B	Potassium	0.908	-	N	3
1040	05/21/88	3218		Potassium	1.31	-	N	3
1040	05/21/88	3219		Potassium	1.18	-	D	3
1040	08/25/88	3572		Potassium	1.7	-	N	3
1040	12/07/88	3778		Potassium	11.2	-	N	3

Table D-1 (Continued)
Validated Filtered Inorganic Data for Background Monitoring Wells in the Glacial Overburden

Well	Sample		Lab		Validated		QA	
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type	ASL
1040	03/15/89	3964		Potassium	1.7	-	N	3
1040	09/28/93	30928F1040-02	B	Potassium	1.05	-	N	3
1059	05/12/88	3188		Potassium	10.2	-	N	3
1059	05/12/88	3189		Potassium	9.93	-	D	3
1059	08/18/88	3562		Potassium	8.2	-	N	3
1059	12/06/88	3751		Potassium	8.81	-	N	3
1059	03/14/89	3981		Potassium	11	J	N	3
1059	09/29/93	30929F1059-02		Potassium	9.29	-	N	3
1060	06/02/88	3255		Potassium	31.5	-	N	3
1060	08/04/88	3398		Potassium	15	-	N	3
1060	10/25/88	3695		Potassium	20	J	N	3
1060	02/01/89	3888		Potassium	5.04	J	N	3
1060	09/29/93	30929F1060-02		Potassium	17.2	-	N	3
1065	04/14/88	3136		Potassium	1.05	J	N	3
1065	01/22/89	3860		Potassium	0.891	-	N	3
1065	05/04/93	112014	B	Potassium	0.632	U	N	C
1024	07/26/88	3376	U	Selenium	0.005	U	N	3
1024	01/22/89	3847	U	Selenium	0.002	U	N	3
1024	04/12/93	GW930412-6	U	Selenium	0.001	U	N	3
1040	08/25/88	3572	U	Selenium	0.002	U	N	3
1040	12/07/88	3778	U	Selenium	0.002	UJ	N	3
1040	03/15/89	3964	U	Selenium	0.005	U	N	3
1040	09/28/93	30928F1040-02	UW	Selenium	0.002	UJ	N	3
1059	12/06/88	3751	U	Selenium	0.002	UJ	N	3
1059	03/14/89	3981	U	Selenium	0.005	UJ	N	3
1059	09/29/93	30929F1059-02	B	Selenium	0.0014	U	N	3
1060	08/04/88	3398	U	Selenium	0.005	U	N	3
1060	10/25/88	3695	U	Selenium	0.002	U	N	3
1060	02/01/89	3888	U	Selenium	0.002	UJ	N	3
1060	09/29/93	30929F1060-02	BW	Selenium	0.0017	UJ	N	3
1065	01/22/89	3860	U	Selenium	0.002	U	N	3
1065	05/04/93	112014	U	Selenium	0.001	U	N	C
1040	09/28/93	30928F1040-02	E	Silicon	6.38	J	N	3
1059	09/29/93	30929F1059-02		Silicon	5.62	-	N	3
1060	09/29/93	30929F1060-02		Silicon	7.43	-	N	3
1065	05/04/93	112014		Silicon	5.67	-	N	C
1024	04/21/88	3106	U	Silver	0.01	UJ	N	3
1024	07/26/88	3376	U	Silver	0.01	U	N	3
1024	11/02/88	3657	U	Silver	0.01	U	N	3
1024	01/22/89	3847	U	Silver	0.0005	U	N	3
1024	06/26/89	66420		Silver	0.0105	-	N	3
1024	08/10/89	66497		Silver	0.011	-	N	3
1024	04/12/93	GW930412-6	U	Silver	0.007	U	N	3
1040	05/21/88	3218		Silver	0.021	-	N	3
1040	05/21/88	3219	U	Silver	0.01	U	D	3
1040	08/25/88	3572	U	Silver	0.01	U	N	3
1040	12/07/88	3778	U	Silver	0.0005	UJ	N	3
1040	03/15/89	3964	U	Silver	0.01	U	N	3
1040	09/28/93	30928F1040-02	U	Silver	0.002	U	N	3
1059	05/12/88	3188	U	Silver	0.02	U	N	3

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Table D-1 (Continued)
Validated Filtered Inorganic Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL
1059	05/12/88	3189	U	Silver	0.02	U	D	3
1059	08/18/88	3562	U	Silver	0.01	U	N	3
1059	12/06/88	3751	U	Silver	0.02	U	N	3
1059	03/14/89	3981	U	Silver	0.01	UJ	N	3
1059	09/29/93	30929F1059-02	U	Silver	0.0032	U	N	3
1060	06/02/88	3255		Silver	0.052	-	N	3
1060	08/04/88	3398	U	Silver	0.01	U	N	3
1060	10/25/88	3695	U	Silver	0.01	UJ	N	3
1060	02/01/89	3888	U	Silver	0.0005	UJ	N	3
1060	09/29/93	30929F1060-02	U	Silver	0.0032	U	N	3
1065	04/14/88	3136		Silver	0.04	J	N	3
1065	01/22/89	3860	U	Silver	0.0005	U	N	3
1065	05/04/93	112014	U	Silver	0.002	U	N	C
1024	04/21/88	3106		Sodium	19.7	-	N	3
1024	07/26/88	3376		Sodium	12	-	N	3
1024	11/02/88	3657		Sodium	12.4	-	N	3
1024	01/22/89	3847		Sodium	16.6	-	N	3
1024	04/12/93	GW930412-6		Sodium	10.8	-	N	3
1040	05/21/88	3218		Sodium	29.8	-	N	3
1040	05/21/88	3219		Sodium	30.9	-	D	3
1040	08/25/88	3572		Sodium	29.5	-	N	3
1040	12/07/88	3778		Sodium	29.1	-	N	3
1040	03/15/89	3964		Sodium	31	-	N	3
1040	09/28/93	30928F1040-02	E	Sodium	29.9	J	N	3
1059	05/12/88	3188		Sodium	37.4	-	N	3
1059	05/12/88	3189		Sodium	37.5	-	D	3
1059	08/18/88	3562		Sodium	53.6	-	N	3
1059	12/06/88	3751		Sodium	56.3	-	N	3
1059	03/14/89	3981		Sodium	18	J	N	3
1059	09/29/93	30929F1059-02		Sodium	50.4	-	N	3
1060	06/02/88	3255		Sodium	26.5	-	N	3
1060	08/04/88	3398		Sodium	12	-	N	3
1060	10/25/88	3695		Sodium	14.7	-	N	3
1060	02/01/89	3888		Sodium	10.3	J	N	3
1060	09/29/93	30929F1060-02		Sodium	24.1	-	N	3
1065	04/14/88	3136		Sodium	5.71	J	N	3
1065	01/22/89	3860		Sodium	8.6	-	N	3
1065	05/04/93	112014		Sodium	8.04	-	N	C
1024	04/12/93	GW930412-6	U	Thallium	0.002	U	N	3
1040	09/28/93	30928F1040-02	UWN	Thallium	0.001	UJ	N	3
1059	09/29/93	30929F1059-02	U	Thallium	0.001	U	N	3
1060	09/29/93	30929F1060-02	U	Thallium	0.001	U	N	3
1065	05/04/93	112014	U	Thallium	0.001	U	N	C
1024	04/12/93	GW930412-6		TDS	433	-	N	3
1024	06/26/89	66420		Vanadium	0.0195	-	N	3
1024	08/10/89	66497		Vanadium	0.018	-	N	3
1024	04/12/93	GW930412-6	U	Vanadium	0.003	U	N	3
1040	09/28/93	30928F1040-02	U	Vanadium	0.012	U	N	3
1059	09/29/93	30929F1059-02	U	Vanadium	0.0029	U	N	3
1060	09/29/93	30929F1060-02	U	Vanadium	0.0029	U	N	3

Table D-1 (Continued)
Validated Filtered Inorganic Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL
1065	05/04/93	112014	B	Vanadium	0.0066	U	N	C
1024	06/26/89	66420		Zinc	0.0317	-	N	3
1024	08/10/89	66497		Zinc	0.042	U	N	3
1024	04/12/93	GW930412-6	B	Zinc	0.0102	U	N	3
1040	09/28/93	30928F1040-02	B	Zinc	0.0104	-	N	3
1059	09/29/93	30929F1059-02		Zinc	0.0443	-	N	3
1060	09/29/93	30929F1060-02		Zinc	0.0402	-	N	3
1065	05/04/93	112014		Zinc	0.0372	-	N	C

Table D-2
Validated Unfiltered Inorganic Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL
1024	04/12/93	GW930412-6		Alkalinity as CaCO3	366	-	N	3
1040	09/28/93	30928-1040-02		Alkalinity as CaCO3	313	-	N	3
1059	09/29/93	30929-1059-02		Alkalinity as CaCO3	350	-	N	3
1060	09/29/93	30929-1060-02		Alkalinity as CaCO3	430	-	N	3
1065	05/04/93	112013		Alkalinity as CaCO3	360	-	N	B
1024	04/12/93	GW930412-6	B	Aluminum	0.0262	U	N	3
1040	09/28/93	30928U1040-02	U	Aluminum	0.09	U	N	3
1059	09/29/93	30929U1059-02	U	Aluminum	0.0193	U	N	3
1060	09/29/93	30929U1060-02		Aluminum	2.29	-	N	3
1065	05/04/93	112013		Aluminum	0.774	-	N	C
1024	04/21/88	3106		Ammonia	0.58	-	N	3
1024	07/26/88	3376	U	Ammonia	0.1	U	N	3
1024	11/02/88	3657		Ammonia	0.55	-	N	3
1024	01/22/89	3847		Ammonia	0.2	-	N	3
1040	05/21/88	3218		Ammonia	2.9	J	N	3
1040	05/21/88	3219		Ammonia	3.2	J	D	3
1040	08/25/88	3572		Ammonia	4.5	-	N	3
1040	12/07/88	3778		Ammonia	4.34	J	N	3
1040	03/15/89	3964		Ammonia	3.9	-	N	3
1040	09/28/93	30928-1040-02		Ammonia	4.2	-	N	3
1059	05/12/88	3188	U	Ammonia	0.1	UJ	N	3
1059	05/12/88	3189	U	Ammonia	0.1	UJ	D	3
1059	08/18/88	3562	U	Ammonia	0.1	UJ	N	3
1059	12/06/88	3751	U	Ammonia	0.1	UJ	N	3
1059	03/14/89	3981	U	Ammonia	0.1	UJ	N	3
1059	09/29/93	30929-1059-02	U*	Ammonia	0.05	U	N	3
1060	06/02/88	3255		Ammonia	0.17	-	N	3
1060	08/04/88	3398		Ammonia	0.1	J	N	3
1060	10/25/88	3695	U	Ammonia	0.1	U	N	3
1060	02/01/89	3888	U	Ammonia	0.1	UJ	N	3
1060	09/29/93	30929-1060-02		Ammonia	0.13	-	N	3
1065	04/14/88	3136	U	Ammonia	0.1	U	N	3
1065	01/22/89	3860	U	Ammonia	0.1	U	N	3
1065	05/04/93	112013	U	Ammonia	0.1	U	N	B
1040	09/28/93	30928U1040-02	U	Antimony	0.011	U	N	3
1065	05/04/93	112013	BW	Antimony	0.0041	UJ	N	C
1024	04/12/93	GW930412-6	B	Arsenic	0.004	-	N	3
1040	09/28/93	30928U1040-02		Arsenic	0.0194	-	N	3
1059	09/29/93	30929U1059-02	U	Arsenic	0.001	U	N	3
1060	09/29/93	30929U1060-02	B	Arsenic	0.0031	-	N	3
1065	05/04/93	112013	U	Arsenic	0.001	U	N	C
1024	04/12/93	GW930412-6	B	Barium	0.0854	-	N	3
1040	09/28/93	30928U1040-02		Barium	0.454	-	N	3
1059	09/29/93	30929U1059-02	B	Barium	0.0535	-	N	3
1060	09/29/93	30929U1060-02	B	Barium	0.095	-	N	3
1065	05/04/93	112013	B	Barium	0.0486	-	N	C
1024	04/12/93	GW930412-6	U	Beryllium	0.001	U	N	3
1059	09/29/93	30929U1059-02	U	Beryllium	0.0003	U	N	3
1060	09/29/93	30929U1060-02	U	Beryllium	0.0003	U	N	3
1065	05/04/93	112013	U	Beryllium	0.001	U	N	C

Table D-2 (Continued)
Validated Unfiltered Inorganic Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL
1024	04/12/93	GW930412-6	U	Cadmium	0.003	U	N	3
1040	09/28/93	30928U1040-02	U	Cadmium	0.005	U	N	3
1059	09/29/93	30929U1059-02	U	Cadmium	0.0012	UJ	N	3
1060	09/29/93	30929U1060-02	U	Cadmium	0.0012	UJ	N	3
1024	04/12/93	GW930412-6		Calcium	82.5	-	N	3
1040	09/28/93	30928U1040-02		Calcium	81.1	-	N	3
1059	09/29/93	30929U1059-02		Calcium	83.3	-	N	3
1060	09/29/93	30929U1060-02		Calcium	172	-	N	3
1065	05/04/93	112013		Calcium	106	-	N	C
1024	04/21/88	3106		Chloride	1.4	J	N	3
1024	07/26/88	3376		Chloride	18	-	N	3
1024	11/02/88	3657		Chloride	1.9	-	N	3
1024	01/22/89	3847		Chloride	1.5	U	N	3
1024	06/26/89	66420	U	Chloride	0.5	U	N	3
1024	08/10/89	66497		Chloride	1.5	-	N	3
1024	04/12/93	GW930412-6		Chloride	13	-	N	3
1040	05/21/88	3218		Chloride	41.3	J	N	3
1040	05/21/88	3219		Chloride	46.1	J	D	3
1040	08/25/88	3572		Chloride	27.5	-	N	3
1040	12/07/88	3778		Chloride	7.5	-	N	3
1040	03/15/89	3964		Chloride	50	-	N	3
1040	09/28/93	30928-1040-02		Chloride	45	-	N	3
1059	05/12/88	3188		Chloride	5.6	J	N	3
1059	05/12/88	3189		Chloride	7.1	J	D	3
1059	08/18/88	3562		Chloride	8.5	J	N	3
1059	12/06/88	3751		Chloride	2	U	N	3
1059	03/14/89	3981	U	Chloride	8.6	UJ	N	3
1059	09/29/93	30929-1059-02		Chloride	9.2	-	N	3
1060	06/02/88	3255		Chloride	35.7	-	N	3
1060	08/04/88	3398		Chloride	26	-	N	3
1060	10/25/88	3695		Chloride	25	-	N	3
1060	02/01/89	3888		Chloride	25	J	N	3
1060	09/29/93	30929-1060-02		Chloride	39	-	N	3
1065	04/14/88	3136	U	Chloride	0.5	UJ	N	3
1065	01/22/89	3860		Chloride	4.8	-	N	3
1065	05/04/93	112013		Chloride	2.77	-	N	B
1024	04/12/93	GW930412-6	U	Chromium	0.005	U	N	3
1040	09/28/93	30928U1040-02	U	Chromium	0.006	UJ	N	3
1059	09/29/93	30929U1059-02	U	Chromium	0.0032	U	N	3
1060	09/29/93	30929U1060-02	U	Chromium	0.0032	U	N	3
1065	05/04/93	112013	B	Chromium	0.0046	-	N	C
1024	04/12/93	GW930412-6	U	Cobalt	0.008	U	N	3
1040	09/28/93	30928U1040-02	U	Cobalt	0.007	U	N	3
1059	09/29/93	30929U1059-02	U	Cobalt	0.0053	U	N	3
1060	09/29/93	30929U1060-02	U	Cobalt	0.0053	U	N	3
1065	05/04/93	112013	U	Cobalt	0.003	U	N	C
1024	04/12/93	GW930412-6	B	Copper	0.0045	U	N	3
1040	09/28/93	30928U1040-02		Copper	0.0294	J	N	3
1059	09/29/93	30929U1059-02	B	Copper	0.0053	-	N	3
1060	09/29/93	30929U1060-02	B	Copper	0.0164	-	N	3

Table D-2 (Continued)
Validated Unfiltered Inorganic Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL
1065	05/04/93	112013	B	Copper	0.0099	U	N	C
1024	04/12/93	GW930412-6	UN	Cyanide	0.01	UJ	N	3
1040	09/28/93	30928U1040-02	U	Cyanide	0.005	U	N	3
1059	09/29/93	30929U1059-02	U	Cyanide	0.01	U	N	3
1060	09/29/93	30929U1060-02	U	Cyanide	0.01	U	N	3
1065	05/04/93	112013	U	Cyanide	0.001	U	N	C
1024	04/21/88	3106		Fluoride	0.83	J	N	3
1024	07/26/88	3376		Fluoride	1.3	-	N	3
1024	11/02/88	3657		Fluoride	0.94	J	N	3
1024	01/22/89	3847		Fluoride	1	-	N	3
1024	06/26/89	66420		Fluoride	0.94	-	N	3
1024	08/10/89	66497		Fluoride	0.98	-	N	3
1024	04/12/93	GW930412-6		Fluoride	0.96	-	N	3
1040	05/21/88	3218		Fluoride	0.51	J	N	3
1040	05/21/88	3219		Fluoride	0.72	J	D	3
1040	08/25/88	3572		Fluoride	1.2	-	N	3
1040	12/07/88	3778		Fluoride	0.61	-	N	3
1040	03/15/89	3964		Fluoride	0.5	-	N	3
1040	09/28/93	30928-1040-02		Fluoride	0.47	-	N	3
1059	05/12/88	3188		Fluoride	0.42	-	N	3
1059	05/12/88	3189		Fluoride	0.42	-	D	3
1059	08/18/88	3562		Fluoride	0.48	J	N	3
1059	12/06/88	3751		Fluoride	0.4	-	N	3
1059	03/14/89	3981		Fluoride	0.2	J	N	3
1059	09/29/93	30929-1059-02		Fluoride	0.3	-	N	3
1060	06/02/88	3255		Fluoride	0.49	-	N	3
1060	08/04/88	3398		Fluoride	0.29	-	N	3
1060	10/25/88	3695		Fluoride	0.32	-	N	3
1060	02/01/89	3888		Fluoride	0.22	J	N	3
1060	09/29/93	30929-1060-02		Fluoride	0.3	-	N	3
1065	04/14/88	3136		Fluoride	0.35	-	N	3
1065	01/22/89	3860		Fluoride	0.4	-	N	3
1065	05/04/93	112013		Fluoride	0.23	-	N	B
1024	04/12/93	GW930412-6		Iron	1.65	-	N	3
1040	09/28/93	30928U1040-02		Iron	3.65	-	N	3
1059	09/29/93	30929U1059-02		Iron	0.249	-	N	3
1060	09/29/93	30929U1060-02		Iron	6.35	-	N	3
1065	05/04/93	112013		Iron	1.82	-	N	C
1024	04/12/93	GW930412-6	NS	Lead	0.0032	UJ	N	3
1040	09/28/93	30928U1040-02	B	Lead	0.0016	-	N	3
1059	09/29/93	30929U1059-02	B	Lead	0.0013	J	N	3
1065	05/04/93	112013	B	Lead	0.0016	-	N	C
1024	04/12/93	GW930412-6		Magnesium	40.5	-	N	3
1040	09/28/93	30928U1040-02		Magnesium	23.7	-	N	3
1059	09/29/93	30929U1059-02		Magnesium	23.1	-	N	3
1060	09/29/93	30929U1060-02		Magnesium	50.7	-	N	3
1065	05/04/93	112013		Magnesium	35.5	-	N	C
1024	04/12/93	GW930412-6		Manganese	0.0372	-	N	3
1040	09/28/93	30928U1040-02		Manganese	0.0178	UJ	N	3
1059	09/29/93	30929U1059-02	B	Manganese	0.0035	-	N	3

Table D-2 (Continued)
Validated Unfiltered Inorganic Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL
1060	09/29/93	30929U1060-02		Manganese	0.205	-	N	3
1065	05/04/93	112013		Manganese	0.0559	-	N	C
1024	04/12/93	GW930412-6	U	Mercury	0.0004	U	N	3
1040	09/28/93	30928U1040-02	U	Mercury	0.0001	U	N	3
1059	09/29/93	30929U1059-02	U	Mercury	0.0002	U	N	3
1060	09/29/93	30929U1060-02	U	Mercury	0.0002	U	N	3
1065	05/04/93	112013	U	Mercury	0.0002	U	N	C
1040	09/28/93	30928U1040-02	B	Molybdenum	0.019	U	N	3
1059	09/29/93	30929U1059-02	U	Molybdenum	0.0147	U	N	3
1060	09/29/93	30929U1060-02	U	Molybdenum	0.0147	U	N	3
1065	05/04/93	112013	B	Molybdenum	0.0041	U	N	C
1024	04/12/93	GW930412-6	U	Nickel	0.02	U	N	3
1040	09/28/93	30928U1040-02	U	Nickel	0.011	U	N	3
1059	09/29/93	30929U1059-02	U	Nickel	0.015	U	N	3
1060	09/29/93	30929U1060-02	U	Nickel	0.015	U	N	3
1065	05/04/93	112013	B	Nickel	0.0072	-	N	C
1040	05/21/88	3218		Nitrate	0.1	J	N	3
1040	05/21/88	3219		Nitrate	0.1	J	D	3
1040	08/25/88	3572	U	Nitrate	0.1	U	N	3
1040	12/07/88	3778		Nitrate	0.012	J	N	3
1059	05/12/88	3188		Nitrate	0.2	J	N	3
1059	05/12/88	3189		Nitrate	0.2	J	D	3
1059	03/14/89	3981		Nitrate	0.22	J	N	3
1060	06/02/88	3255		Nitrate	0.3	J	N	3
1060	08/04/88	3398		Nitrate	0.1	-	N	3
1060	10/25/88	3695		Nitrate	0.235	J	N	3
1060	02/01/89	3888		Nitrate	0.19	J	N	3
1065	04/14/88	3136	U	Nitrate	0.1	UJ	N	3
1065	01/22/89	3860		Nitrate	0.06	J	N	3
1024	04/12/93	GW930412-6	U	Nitrate/Nitrite	0.02	U	N	3
1040	09/28/93	30928-1040-02	U	Nitrate/Nitrite	0.02	U	N	3
1059	09/29/93	30929-1059-02	U*	Nitrate/Nitrite	0.05	U	N	3
1060	09/29/93	30929-1060-02		Nitrate/Nitrite	0.07	-	N	3
1040	09/28/93	30928-1040-02		Phosphate	0.191	-	N	3
1024	04/21/88	3106	U	Phosphorus	0.05	UJ	N	3
1024	07/26/88	3376		Phosphorus	0.18	-	N	3
1024	11/02/88	3657		Phosphorus	0.026	-	N	3
1024	01/22/89	3847		Phosphorus	0.1	-	N	3
1040	05/21/88	3218		Phosphorus	0.17	J	N	3
1040	05/21/88	3219		Phosphorus	0.17	J	D	3
1040	08/25/88	3572		Phosphorus	0.135	-	N	3
1040	12/07/88	3778	U	Phosphorus	0.02	U	N	3
1040	03/15/89	3964		Phosphorus	0.12	-	N	3
1059	05/12/88	3188		Phosphorus	0.052	-	N	3
1059	05/12/88	3189		Phosphorus	0.05	-	D	3
1059	08/18/88	3562	U	Phosphorus	0.05	UJ	N	3
1059	12/06/88	3751		Phosphorus	0.045	U	N	3
1059	03/14/89	3981		Phosphorus	0.04	J	N	3
1059	09/29/93	30929-1059-02		Phosphorus	0.12	J	N	3
1060	06/02/88	3255		Phosphorus	0.06	-	N	3

Table D-2 (Continued)
Validated Unfiltered Inorganic Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL
1060	08/04/88	3398	U	Phosphorus	0.05	U	N	3
1060	10/25/88	3695	U	Phosphorus	0.02	U	N	3
1060	02/01/89	3888		Phosphorus	0.06	J	N	3
1065	04/14/88	3136	U	Phosphorus	0.05	UJ	N	3
1065	01/22/89	3860	U	Phosphorus	0.1	U	N	3
1065	05/04/93	112013		Phosphorus	0.08	-	N	B
1024	04/12/93	GW930412-6	B	Potassium	0.963	-	N	3
1040	09/28/93	30928U1040-02	B	Potassium	1.07	-	N	3
1059	09/29/93	30929U1059-02		Potassium	8.93	-	N	3
1060	09/29/93	30929U1060-02		Potassium	17.2	-	N	3
1065	05/04/93	112013	B	Potassium	0.894	U	N	C
1024	04/12/93	GW930412-6	UWN	Selenium	0.001	UJ	N	3
1040	09/28/93	30928U1040-02	U	Selenium	0.002	UJ	N	3
1059	09/29/93	30929U1059-02	U	Selenium	0.001	U	N	3
1060	09/29/93	30929U1060-02	BW	Selenium	0.0018	UJ	N	3
1065	05/04/93	112013	U	Selenium	0.001	U	N	C
1040	09/28/93	30928U1040-02	E	Silicon	6.4	J	N	3
1059	09/29/93	30929U1059-02		Silicon	5.6	-	N	3
1060	09/29/93	30929U1060-02		Silicon	10.7	-	N	3
1065	05/04/93	112013		Silicon	6.61	-	N	C
1024	04/12/93	GW930412-6	U	Silver	0.007	U	N	3
1040	09/28/93	30928U1040-02	BW	Silver	0.0031	J	N	3
1059	09/29/93	30929U1059-02	U	Silver	0.0032	U	N	3
1060	09/29/93	30929U1060-02	U	Silver	0.0032	U	N	3
1065	05/04/93	112013	U	Silver	0.002	U	N	C
1024	04/12/93	GW930412-6		Sodium	10.5	-	N	3
1040	09/28/93	30928U1040-02	E	Sodium	30.8	J	N	3
1059	09/29/93	30929U1059-02		Sodium	50	-	N	3
1060	09/29/93	30929U1060-02		Sodium	23.8	-	N	3
1065	05/04/93	112013		Sodium	8.81	-	N	C
1024	04/21/88	3106		Sulfate	50	-	N	3
1024	07/26/88	3376		Sulfate	130	-	N	3
1024	11/02/88	3657		Sulfate	109	J	N	3
1024	01/22/89	3847		Sulfate	48	-	N	3
1024	06/26/89	66420		Sulfate	49.1	-	N	3
1024	08/10/89	66497		Sulfate	55.7	-	N	3
1024	04/12/93	GW930412-6		Sulfate	89	-	N	3
1040	05/21/88	3218	U	Sulfate	2	UJ	N	3
1040	05/21/88	3219		Sulfate	5	J	D	3
1040	08/25/88	3572	U	Sulfate	2	UJ	N	3
1040	12/07/88	3778		Sulfate	68.2	-	N	3
1040	03/15/89	3964	U	Sulfate	2	U	N	3
1040	09/28/93	30928-1040-02	U	Sulfate	0.5	U	N	3
1059	05/12/88	3188		Sulfate	86	-	N	3
1059	05/12/88	3189		Sulfate	58	-	D	3
1059	08/18/88	3562		Sulfate	4	-	N	3
1059	12/06/88	3751		Sulfate	3.24	-	N	3
1059	03/14/89	3981		Sulfate	53	J	N	3
1059	09/29/93	30929-1059-02		Sulfate	52	-	N	3
1060	06/02/88	3255		Sulfate	175	-	N	3

Table D-2 (Continued)
Validated Unfiltered Inorganic Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL
1060	08/04/88	3398		Sulfate	120	-	N	3
1060	10/25/88	3695		Sulfate	53	J	N	3
1060	02/01/89	3888		Sulfate	102	J	N	3
1060	09/29/93	30929-1060-02		Sulfate	85	-	N	3
1065	04/14/88	3136		Sulfate	10	J	N	3
1065	01/22/89	3860		Sulfate	89	-	N	3
1065	05/04/93	112013		Sulfate	71.7	-	N	B
1040	09/28/93	30928-1040-02	U	Sulfide	1	UJ	N	3
1059	09/29/93	30929-1059-02	U*	Sulfide	1	U	N	3
1060	09/29/93	30929-1060-02	U	Sulfide	1	U	N	3
1065	05/04/93	112013	U	Sulfide	0.5	U	N	B
1024	04/12/93	GW930412-6	UW	Thallium	0.002	UJ	N	3
1040	09/28/93	30928U1040-02	UWN	Thallium	0.001	UJ	N	3
1059	09/29/93	30929U1059-02	U	Thallium	0.001	U	N	3
1060	09/29/93	30929U1060-02	U	Thallium	0.001	U	N	3
1065	05/04/93	112013	U	Thallium	0.001	U	N	C
1024	11/02/88	3657		TKN	0.68	-	N	3
1024	01/22/89	3847		TKN	0.2	-	N	3
1024	04/12/93	GW930412-6		TKN	0.44	-	N	3
1040	12/07/88	3778		TKN	4.34	J	N	3
1040	03/15/89	3964		TKN	4.2	-	N	3
1040	09/28/93	30928-1040-02		TKN	3.87	-	N	3
1059	12/06/88	3751		TKN	0.23	UJ	N	3
1059	03/14/89	3981	U	TKN	0.4	UJ	N	3
1059	09/29/93	30929-1059-02	U*	TKN	0.1	U	N	3
1060	10/25/88	3695		TKN	0.319	-	N	3
1060	02/01/89	3888		TKN	0.178	J	N	3
1060	09/29/93	30929-1060-02		TKN	2.2	-	N	3
1065	01/22/89	3860	U	TKN	0.1	U	N	3
1065	05/04/93	112013		TKN	0.34	-	N	B
1024	04/12/93	GW930412-6		Total Solids	452	-	N	3
1024	04/12/93	GW930412-6	U	Vanadium	0.003	U	N	3
1040	09/28/93	30928U1040-02	U	Vanadium	0.012	U	N	3
1059	09/29/93	30929U1059-02	U	Vanadium	0.0029	U	N	3
1060	09/29/93	30929U1060-02	B	Vanadium	0.0051	-	N	3
1065	05/04/93	112013	B	Vanadium	0.01	U	N	C
1024	04/12/93	GW930412-6	B	Zinc	0.0066	U	N	3
1040	09/28/93	30928U1040-02	B	Zinc	0.0192	-	N	3
1059	09/29/93	30929U1059-02		Zinc	0.0502	-	N	3
1060	09/29/93	30929U1060-02		Zinc	0.352	-	N	3
1065	05/04/93	112013		Zinc	0.122	-	N	C

Table D-3
Validated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
2043	06/26/89	66438		Aluminum	0.116	-	N	3	S
2043	08/30/89	66572	B	Aluminum	0.163	-	N	4	S
2043	08/30/89	66577	B	Aluminum	0.182	-	D	4	S
2043	04/07/93	GW930407-12	U	Aluminum	0.036	U	N	3	S
2050	05/20/93	GW930520-8	U	Aluminum	0.024	U	N	3	S
2066	06/27/89	66436		Aluminum	0.0816	J	N	3	S
2066	08/09/89	66498		Aluminum	0.143	-	N	3	S
2066	04/07/93	GW930407-14	U	Aluminum	0.036	U	N	3	S
2096	04/25/90	4234		Aluminum	0.083	-	N	3	R
2096	05/06/93	GW930506-5	U	Aluminum	0.014	U	N	3	R
2098	05/25/89	4087	U	Aluminum	0.0982	UJ	N	3	D
2098	05/20/93	GW930520-9	U	Aluminum	0.024	U	N	3	D
2104	04/22/90	4235	U	Aluminum	0.06	U	N	3	R
2104	04/22/90	4269	U	Aluminum	0.06	U	N	3	R
2104	05/13/93	GW930513-14	U	Aluminum	0.024	U	N	3	R
2104	05/13/93	GW930513-18	U	Aluminum	0.024	U	N	3	R
2728	05/24/93	GW930524-3	U	Aluminum	0.02	U	N	3	S
3024	06/26/89	66460		Aluminum	0.138	-	N	3	S
3024	08/10/89	66515		Aluminum	0.175	-	N	3	S
3024	04/12/93	GW930412-8	U	Aluminum	0.02	U	N	3	S
3043	06/13/89	66439		Aluminum	0.09	-	N	3	S
3043	08/30/89	66573	B	Aluminum	0.156	-	N	4	S
3043	04/07/93	GW930407-13	U	Aluminum	0.036	U	N	3	S
3096	04/25/90	4257		Aluminum	0.062	-	N	3	R
3096	05/07/93	GW930507-1	U	Aluminum	0.014	U	N	3	R
3098	05/20/93	GW930520-10	U	Aluminum	0.024	U	N	3	D
4011	10/05/90	4345	B	Aluminum	0.096	-	N	3	S
4011	02/07/91	4382	U	Aluminum	0.04	U	N	3	S
4011	04/08/93	GW930408-3	U	Aluminum	0.036	U	N	3	S
4011	04/08/93	GW930408-2	U	Aluminum	0.036	U	D	3	S
4096	05/06/93	GW930506-7	U	Aluminum	0.014	U	N	3	R
2043	08/30/89	66572	U	Antimony	0.03	U	N	4	S
2043	08/30/89	66577	U	Antimony	0.03	U	D	4	S
2043	04/07/93	GW930407-12	U	Antimony	0.031	U	N	3	S
2050	05/20/93	GW930520-8	U	Antimony	0.027	U	N	3	S
2098	05/20/93	GW930520-9	U	Antimony	0.027	U	N	3	D
2104	05/13/93	GW930513-14	B	Antimony	0.0313	UJ	N	3	R
2104	05/13/93	GW930513-18	U	Antimony	0.027	U	N	3	R
3043	08/30/89	66573	U	Antimony	0.03	U	N	4	S
3043	04/07/93	GW930407-13	U	Antimony	0.031	U	N	3	S
3098	05/20/93	GW930520-10	U	Antimony	0.027	U	N	3	D
4011	02/07/91	4382	U	Antimony	0.03	U	N	3	S
4011	04/08/93	GW930408-3	U	Antimony	0.031	U	N	3	S
4011	04/08/93	GW930408-2	U	Antimony	0.031	U	D	3	S
2026	05/12/88	3186		Arsenic	0.3	-	N	3	D
2026	05/12/88	3187		Arsenic	0.3	-	D	3	D
2026	08/17/88	3505		Arsenic	0.55	-	N	3	D
2026	12/07/88	3750	U	Arsenic	0.002	U	N	3	D
2026	03/14/89	3980	U	Arsenic	0.003	UJ	N	3	D
2036	05/12/88	3185		Arsenic	0.3	-	D	3	R

Table D-3 (Continued)
Validated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
2036	08/23/88	3564	U	Arsenic	0.002	U	N	3	R
2036	12/07/88	3770	U	Arsenic	0.002	U	N	3	R
2036	03/14/89	3983	U	Arsenic	0.003	UJ	N	3	R
2043	08/05/88	3440	U	Arsenic	0.01	U	N	3	S
2043	11/04/88	3700	U	Arsenic	0.002	U	N	3	S
2043	02/02/89	3887	U	Arsenic	0.002	U	N	3	S
2043	08/30/89	66572	U	Arsenic	0.002	U	N	4	S
2043	08/30/89	66577	U	Arsenic	0.002	U	D	4	S
2043	04/07/93	GW930407-12	B	Arsenic	0.0027	-	N	3	S
2050	08/16/88	3497		Arsenic	0.26	-	N	3	S
2050	12/05/88	3743		Arsenic	0.004	J	N	3	S
2050	03/13/89	3969		Arsenic	0.007	J	N	3	S
2050	05/20/93	GW930520-8	BW	Arsenic	0.0054	J	N	3	S
2056	08/25/88	3575		Arsenic	0.254	-	N	3	S
2056	12/07/88	3781		Arsenic	0.029	-	N	3	S
2056	03/13/89	3967		Arsenic	0.027	J	N	3	S
2056	03/13/89	4045		Arsenic	0.027	J	D	3	S
2057	08/25/88	3573		Arsenic	0.037	-	N	3	R
2057	12/13/88	3779	U	Arsenic	0.002	U	N	3	R
2057	03/14/89	3965		Arsenic	0.004	J	N	3	R
2066	11/10/88	3710		Arsenic	0.042	J	N	3	S
2066	03/14/89	3894		Arsenic	0.021	J	N	3	S
2066	04/07/93	GW930407-14		Arsenic	0.0288	-	N	3	S
2096	09/12/88	3586	U	Arsenic	0.005	UJ	N	3	R
2096	12/07/88	3790	U	Arsenic	0.002	U	N	3	R
2096	02/09/89	3985	U	Arsenic	0.002	U	N	3	R
2096	04/30/89	4081	U	Arsenic	0.002	U	N	3	R
2096	04/25/90	4234	U	Arsenic	0.002	U	N	3	R
2096	05/06/93	GW930506-5	U	Arsenic	0.001	U	N	3	R
2098	09/22/88	3591	U	Arsenic	0.002	UJ	N	3	D
2098	12/16/88	3796	U	Arsenic	0.002	UJ	N	3	D
2098	02/08/89	3990	U	Arsenic	0.002	UJ	N	3	D
2098	05/25/89	4087	U	Arsenic	0.002	UJ	N	3	D
2098	05/20/93	GW930520-9	U	Arsenic	0.002	U	N	3	D
2104	08/16/88	3498		Arsenic	0.25	-	N	3	R
2104	12/06/88	3744	U	Arsenic	0.002	UJ	N	3	R
2104	03/15/89	3970	U	Arsenic	0.003	U	N	3	R
2104	04/22/90	4235	U	Arsenic	0.002	U	N	3	R
2104	04/22/90	4269	U	Arsenic	0.002	U	N	3	R
2104	05/13/93	GW930513-14	U	Arsenic	0.002	U	N	3	R
2104	05/13/93	GW930513-18	B	Arsenic	0.0035	-	N	3	R
2105	08/28/88	3577		Arsenic	0.106	-	N	3	S
2105	03/15/89	3968		Arsenic	0.016	-	N	3	S
2121	08/25/88	3571	U	Arsenic	0.002	U	N	3	D
2121	12/13/88	3776	U	Arsenic	0.002	U	N	3	D
2121	03/14/89	3962	U	Arsenic	0.003	UJ	N	3	D
2122	12/07/88	3749	U	Arsenic	0.002	U	N	3	D
2122	03/15/89	3979	U	Arsenic	0.003	U	N	3	D
2123	08/23/88	3565	U	Arsenic	0.002	U	N	3	R
2123	12/06/88	3771	U	Arsenic	0.005	UJ	N	3	R

Table D-3 (Continued)
Validated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
2123	03/14/89	3984	U	Arsenic	0.003	UJ	N	3	R
2728	05/24/93	GW930524-3	U	Arsenic	0.002	U	N	3	S
3024	07/26/88	3377	U	Arsenic	0.01	UJ	N	3	S
3024	11/02/88	3658	U	Arsenic	0.002	U	N	3	S
3024	01/24/89	3842	U	Arsenic	0.002	UJ	N	3	S
3024	04/12/93	GW930412-8	U	Arsenic	0.002	U	N	3	S
3043	08/04/88	3397		Arsenic	0.01	-	N	3	S
3043	11/04/88	3694		Arsenic	0.014	-	N	3	S
3043	02/02/89	3886		Arsenic	0.011	-	N	3	S
3043	08/30/89	66573		Arsenic	0.0124	-	N	4	S
3043	04/07/93	GW930407-13		Arsenic	0.015	-	N	3	S
3063	05/12/88	3190		Arsenic	0.3	-	N	3	D
3063	12/13/88	3741	U	Arsenic	0.002	U	N	3	D
3063	03/13/89	3966	U	Arsenic	0.003	UJ	N	3	D
3096	09/12/88	3585	U	Arsenic	0.005	UJ	N	3	R
3096	12/07/88	3789	U	Arsenic	0.002	U	N	3	R
3096	02/09/89	3974	U	Arsenic	0.002	U	N	3	R
3096	04/30/89	4082	U	Arsenic	0.002	U	N	3	R
3096	04/25/90	4257	U	Arsenic	0.002	U	N	3	R
3096	05/07/93	GW930507-1	U	Arsenic	0.001	U	N	3	R
3098	09/21/88	3589	U	Arsenic	0.002	UJ	N	3	D
3098	12/16/88	3795	U	Arsenic	0.002	UJ	N	3	D
3098	02/08/89	3989	U	Arsenic	0.002	UJ	N	3	D
3098	05/25/89	4088	U	Arsenic	0.002	UJ	N	3	D
3098	05/20/93	GW930520-10	U	Arsenic	0.002	U	N	3	D
3099	12/06/88	3742	U	Arsenic	0.002	UJ	N	3	D
3099	03/14/89	3977	U	Arsenic	0.003	UJ	N	3	D
3100	08/19/88	3517	U	Arsenic	0.002	U	N	3	D
3100	12/06/88	3761	U	Arsenic	0.002	UJ	N	3	D
3100	03/13/89	3978	U	Arsenic	0.003	UJ	N	3	D
4011	10/05/90	4345	U	Arsenic	0.002	U	N	3	S
4011	02/07/91	4382		Arsenic	0.002	-	N	3	S
4011	04/08/93	GW930408-3	U	Arsenic	0.002	U	N	3	S
4011	04/08/93	GW930408-2	U	Arsenic	0.002	U	D	3	S
4096	09/12/88	3584	U	Arsenic	0.005	UJ	N	3	R
4096	12/14/88	3788	U	Arsenic	0.002	UJ	N	3	R
4096	12/14/88	3474	U	Arsenic	0.002	UJ	D	3	R
4096	02/10/89	3975	U	Arsenic	0.002	U	N	3	R
4096	04/30/89	4083	U	Arsenic	0.002	U	N	3	R
4096	05/06/93	GW930506-7	U	Arsenic	0.001	U	N	3	R
2026	05/12/88	3186		Barium	0.06	-	N	3	D
2026	05/12/88	3187		Barium	0.06	-	D	3	D
2026	08/17/88	3505		Barium	0.055	-	N	3	D
2026	12/07/88	3750		Barium	0.04	-	N	3	D
2026	03/14/89	3980		Barium	0.073	J	N	3	D
2036	05/12/88	3184	U	Barium	0.05	U	N	3	R
2036	05/12/88	3185	U	Barium	0.05	U	D	3	R
2036	08/23/88	3564		Barium	0.034	-	N	3	R
2036	12/07/88	3770		Barium	0.037	-	N	3	R
2036	03/14/89	3983		Barium	0.036	J	N	3	R

Table D-3 (Continued)
Validated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
2043	08/05/88	3440		Barium	0.2	-	N	3	S
2043	11/04/88	3700		Barium	0.04	-	N	3	S
2043	02/02/89	3887		Barium	0.272	-	N	3	S
2043	06/26/89	66438		Barium	0.2509	-	N	3	S
2043	08/30/89	66572		Barium	0.251	-	N	4	S
2043	08/30/89	66577		Barium	0.229	-	D	4	S
2043	04/07/93	GW930407-12		Barium	0.285	-	N	3	S
2050	05/05/88	3147		Barium	0.52	-	N	3	S
2050	08/16/88	3497		Barium	0.541	-	N	3	S
2050	12/05/88	3743		Barium	0.572	-	N	3	S
2050	03/13/89	3969		Barium	0.52	J	N	3	S
2050	05/20/93	GW930520-8		Barium	0.665	-	N	3	S
2056	05/06/88	3159		Barium	0.669	-	N	3	S
2056	08/25/88	3575		Barium	0.658	-	N	3	S
2056	12/07/88	3781		Barium	0.713	-	N	3	S
2056	03/13/89	3967		Barium	0.66	J	N	3	S
2056	03/13/89	4045		Barium	0.67	J	D	3	S
2057	06/03/88	3265	U	Barium	0.05	U	N	3	R
2057	08/25/88	3573		Barium	0.045	-	N	3	R
2057	12/13/88	3779		Barium	0.036	-	N	3	R
2057	03/14/89	3965		Barium	0.043	J	N	3	R
2066	04/26/88	3124		Barium	0.758	-	N	3	S
2066	11/10/88	3710		Barium	0.668	-	N	3	S
2066	03/14/89	3894		Barium	0.7	J	N	3	S
2066	06/27/89	66436		Barium	0.658	J	N	3	S
2066	08/09/89	66498		Barium	0.789	-	N	3	S
2066	04/07/93	GW930407-14		Barium	0.82	-	N	3	S
2096	09/12/88	3586		Barium	0.08	-	N	3	R
2096	12/07/88	3790		Barium	0.072	-	N	3	R
2096	02/09/89	3985		Barium	0.051	-	N	3	R
2096	04/30/89	4081		Barium	0.105	-	N	3	R
2096	04/25/90	4234		Barium	0.072	-	N	3	R
2096	05/06/93	GW930506-5	B	Barium	0.0714	U	N	3	R
2098	09/22/88	3591		Barium	0.05	-	N	3	D
2098	12/16/88	3796		Barium	0.045	-	N	3	D
2098	02/08/89	3990		Barium	0.052	J	N	3	D
2098	05/25/89	4087		Barium	0.034	UJ	N	3	D
2098	05/20/93	GW930520-9	B	Barium	0.0274	-	N	3	D
2104	05/05/88	3146		Barium	0.05	-	N	3	R
2104	08/16/88	3498		Barium	0.059	-	N	3	R
2104	12/06/88	3744		Barium	0.063	U	N	3	R
2104	03/15/89	3970		Barium	0.06	-	N	3	R
2104	04/22/90	4235		Barium	0.061	-	N	3	R
2104	04/22/90	4269		Barium	0.058	-	N	3	R
2104	05/13/93	GW930513-14	B	Barium	0.0613	-	N	3	R
2104	05/13/93	GW930513-18	B	Barium	0.0609	-	N	3	R
2105	06/05/88	3268		Barium	0.086	-	N	3	S
2105	08/28/88	3577		Barium	0.5	-	N	3	S
2105	03/15/89	3968		Barium	0.48	-	N	3	S
2121	05/06/88	3158		Barium	0.035	-	N	3	D

Table D-3 (Continued)
Validated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
2121	08/25/88	3571		Barium	0.04	-	N	3	D
2121	12/13/88	3776		Barium	0.044	-	N	3	D
2121	03/14/89	3962		Barium	0.04	J	N	3	D
2122	05/06/88	3157		Barium	0.039	-	N	3	D
2122	08/17/88	3504		Barium	0.035	-	N	3	D
2122	12/07/88	3749		Barium	0.057	-	N	3	D
2122	03/15/89	3979		Barium	0.043	-	N	3	D
2123	05/06/88	3156		Barium	0.036	-	N	3	R
2123	08/23/88	3565		Barium	0.036	-	N	3	R
2123	12/06/88	3771		Barium	0.036	U	N	3	R
2123	03/14/89	3984		Barium	0.036	J	N	3	R
2728	05/24/93	GW930524-3	B	Barium	0.189	-	N	3	S
3024	04/20/88	3096		Barium	0.088	-	N	3	S
3024	07/26/88	3377	U	Barium	0.2	UJ	N	3	S
3024	11/02/88	3658		Barium	0.1	-	N	3	S
3024	01/24/89	3842		Barium	0.141	J	N	3	S
3024	06/26/89	66460		Barium	0.143	-	N	3	S
3024	08/10/89	66515		Barium	0.142	-	N	3	S
3024	04/12/93	GW930412-8	B	Barium	0.156	-	N	3	S
3043	08/04/88	3397		Barium	0.3	-	N	3	S
3043	11/04/88	3694		Barium	0.3	-	N	3	S
3043	02/02/89	3886		Barium	0.279	-	N	3	S
3043	06/13/89	66439		Barium	0.249	-	N	3	S
3043	08/30/89	66573		Barium	0.255	-	N	4	S
3043	04/07/93	GW930407-13		Barium	0.309	-	N	3	S
3063	05/12/88	3190	U	Barium	0.05	U	N	3	D
3063	05/12/88	3191	U	Barium	0.05	U	D	3	D
3063	08/16/88	3495		Barium	0.047	-	N	3	D
3063	12/13/88	3741		Barium	0.066	-	N	3	D
3063	03/13/89	3966		Barium	0.045	J	N	3	D
3096	09/12/88	3585		Barium	0.03	-	N	3	R
3096	12/07/88	3789		Barium	0.037	-	N	3	R
3096	02/09/89	3974		Barium	0.048	-	N	3	R
3096	04/30/89	4082		Barium	0.0448	-	N	3	R
3096	04/25/90	4257		Barium	0.042	-	N	3	R
3096	05/07/93	GW930507-1	B	Barium	0.0413	-	N	3	R
3098	09/21/88	3589		Barium	0.04	J	N	3	D
3098	12/16/88	3795		Barium	0.048	-	N	3	D
3098	02/08/89	3989		Barium	0.049	J	N	3	D
3098	05/25/89	4088		Barium	0.0514	J	N	3	D
3098	05/20/93	GW930520-10	B	Barium	0.0468	-	N	3	D
3099	05/24/88	3237		Barium	0.062	-	N	3	D
3099	05/24/88	3238		Barium	0.064	-	D	3	D
3099	08/16/88	3496		Barium	0.061	-	N	3	D
3099	12/06/88	3742		Barium	0.064	U	N	3	D
3099	03/14/89	3977		Barium	0.061	J	N	3	D
3100	05/24/88	3239	U	Barium	0.05	U	N	3	D
3100	05/24/88	3240	U	Barium	0.05	U	D	3	D
3100	08/19/88	3517		Barium	0.044	-	N	3	D
3100	12/06/88	3761		Barium	0.049	U	N	3	D

Table D-3 (Continued)
Validated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
3100	03/13/89	3978		Barium	0.054	J	N	3	D
4011	10/05/90	4345		Barium	0.408	-	N	3	S
4011	02/07/91	4382		Barium	0.037	-	N	3	S
4011	04/08/93	GW930408-3		Barium	0.371	-	N	3	S
4011	04/08/93	GW930408-2		Barium	0.368	-	D	3	S
4096	09/12/88	3584		Barium	0.03	-	N	3	R
4096	12/14/88	3788		Barium	0.028	J	N	3	R
4096	12/14/88	3474	U	Barium	0.028	U	D	3	R
4096	02/10/89	3975		Barium	0.033	U	N	3	R
4096	04/30/89	4083		Barium	0.0361	-	N	3	R
4096	05/06/93	GW930506-7	B	Barium	0.0231	U	N	3	R
2043	06/26/89	66438	U	Beryllium	0.001	U	N	3	S
2043	08/30/89	66572	B	Beryllium	0.0017	-	N	4	S
2043	08/30/89	66577	B	Beryllium	0.0017	-	D	4	S
2043	04/07/93	GW930407-12	U	Beryllium	0.001	U	N	3	S
2050	05/20/93	GW930520-8	U	Beryllium	0.001	U	N	3	S
2066	06/27/89	66436	U	Beryllium	0.001	UJ	N	3	S
2066	08/09/89	66498		Beryllium	0.001	-	N	3	S
2066	04/07/93	GW930407-14	U	Beryllium	0.001	U	N	3	S
2096	05/06/93	GW930506-5	U	Beryllium	0.001	U	N	3	R
2098	05/20/93	GW930520-9	U	Beryllium	0.001	U	N	3	D
2104	05/13/93	GW930513-14	U	Beryllium	0.001	U	N	3	R
2104	05/13/93	GW930513-18	U	Beryllium	0.001	U	N	3	R
2728	05/24/93	GW930524-3	U	Beryllium	0.001	U	N	3	S
3024	06/26/89	66460		Beryllium	0.0022	-	N	3	S
3024	08/10/89	66515		Beryllium	0.002	-	N	3	S
3024	04/12/93	GW930412-8	U	Beryllium	0.001	U	N	3	S
3043	06/13/89	66439	U	Beryllium	0.001	U	N	3	S
3043	08/30/89	66573	B	Beryllium	0.0018	-	N	4	S
3043	04/07/93	GW930407-13	U	Beryllium	0.001	U	N	3	S
3096	05/07/93	GW930507-1	U	Beryllium	0.001	U	N	3	R
3098	05/20/93	GW930520-10	U	Beryllium	0.001	U	N	3	D
4011	10/05/90	4345	B	Beryllium	0.0023	J	N	3	S
4011	02/07/91	4382	U	Beryllium	0.001	U	N	3	S
4011	04/08/93	GW930408-3	U	Beryllium	0.001	U	N	3	S
4011	04/08/93	GW930408-2	U	Beryllium	0.001	U	D	3	S
4096	05/06/93	GW930506-7	U	Beryllium	0.001	U	N	3	R
2026	05/12/88	3186	U	Cadmium	0.005	U	N	3	D
2026	05/12/88	3187	U	Cadmium	0.005	U	D	3	D
2026	08/17/88	3505	U	Cadmium	0.002	U	N	3	D
2026	12/07/88	3750	U	Cadmium	0.002	U	N	3	D
2026	03/14/89	3980	U	Cadmium	0.005	UJ	N	3	D
2036	05/12/88	3184	U	Cadmium	0.005	U	N	3	R
2036	05/12/88	3185	U	Cadmium	0.005	U	D	3	R
2036	08/23/88	3564	U	Cadmium	0.002	U	N	3	R
2036	12/07/88	3770	U	Cadmium	0.002	U	N	3	R
2036	03/14/89	3983	U	Cadmium	0.005	UJ	N	3	R
2043	04/13/88	3091	U	Cadmium	0.002	U	N	3	S
2043	08/05/88	3440	U	Cadmium	0.005	U	N	3	S
2043	11/04/88	3700	U	Cadmium	0.002	U	N	3	S

Table D-3 (Continued)
Validated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
2043	02/02/89	3887		Cadmium	0.007	-	N	3	S
2043	08/30/89	66572		Cadmium	0.0056	-	N	4	S
2043	08/30/89	66577		Cadmium	0.006	-	D	4	S
2043	04/07/93	GW930407-12	U	Cadmium	0.003	U	N	3	S
2050	05/05/88	3147		Cadmium	0.006	-	N	3	S
2050	08/16/88	3497	U	Cadmium	0.002	U	N	3	S
2050	12/05/88	3743	U	Cadmium	0.002	U	N	3	S
2050	03/13/89	3969	U	Cadmium	0.005	UJ	N	3	S
2050	05/20/93	GW930520-8	U	Cadmium	0.002	U	N	3	S
2056	05/06/88	3159	U	Cadmium	0.005	U	N	3	S
2056	08/25/88	3575	U	Cadmium	0.002	U	N	3	S
2056	12/07/88	3781	U	Cadmium	0.002	U	N	3	S
2056	03/13/89	3967	U	Cadmium	0.005	UJ	N	3	S
2056	03/13/89	4045	U	Cadmium	0.005	UJ	D	3	S
2057	06/03/88	3265	U	Cadmium	0.005	U	N	3	R
2057	08/25/88	3573	U	Cadmium	0.002	U	N	3	R
2057	12/13/88	3779	U	Cadmium	0.002	U	N	3	R
2057	03/14/89	3965	U	Cadmium	0.005	UJ	N	3	R
2066	04/26/88	3124	U	Cadmium	0.005	U	N	3	S
2066	11/10/88	3710	U	Cadmium	0.002	U	N	3	S
2066	03/14/89	3894	U	Cadmium	0.005	UJ	N	3	S
2066	04/07/93	GW930407-14	U	Cadmium	0.003	U	N	3	S
2096	09/12/88	3586	U	Cadmium	0.002	U	N	3	R
2096	12/07/88	3790	U	Cadmium	0.002	U	N	3	R
2096	02/09/89	3985	U	Cadmium	0.006	U	N	3	R
2096	04/30/89	4081		Cadmium	0.0055	-	N	3	R
2096	04/25/90	4234		Cadmium	0.004	U	N	3	R
2096	05/06/93	GW930506-5	B	Cadmium	0.0032	U	N	3	R
2098	09/22/88	3591	U	Cadmium	0.002	U	N	3	D
2098	12/16/88	3796	U	Cadmium	0.002	U	N	3	D
2098	02/08/89	3990		Cadmium	0.006	J	N	3	D
2098	05/25/89	4087		Cadmium	0.0039	UJ	N	3	D
2098	05/20/93	GW930520-9	U	Cadmium	0.002	U	N	3	D
2104	05/05/88	3146	U	Cadmium	0.005	U	N	3	R
2104	08/16/88	3498	U	Cadmium	0.002	U	N	3	R
2104	12/06/88	3744	U	Cadmium	0.002	U	N	3	R
2104	03/15/89	3970	U	Cadmium	0.005	U	N	3	R
2104	04/22/90	4235		Cadmium	0.002	-	N	3	R
2104	04/22/90	4269		Cadmium	0.002	-	N	3	R
2104	05/13/93	GW930513-14	B	Cadmium	0.0024	UJ	N	3	R
2104	05/13/93	GW930513-18	B	Cadmium	0.0035	UJ	N	3	R
2105	06/05/88	3268	U	Cadmium	0.005	U	N	3	S
2105	08/28/88	3577		Cadmium	0.002	-	N	3	S
2105	03/15/89	3968	U	Cadmium	0.005	U	N	3	S
2121	05/06/88	3158	U	Cadmium	0.005	U	N	3	D
2121	08/25/88	3571	U	Cadmium	0.002	U	N	3	D
2121	12/13/88	3776	U	Cadmium	0.002	U	N	3	D
2121	03/14/89	3962	U	Cadmium	0.005	UJ	N	3	D
2122	05/06/88	3157	U	Cadmium	0.005	U	N	3	D
2122	08/17/88	3504	U	Cadmium	0.002	U	N	3	D

Table D-3 (Continued)
Validated Filtered Inorganic Data for Background
Monitoring Wells in the Great Miami Aquifer

Well	Sample		Lab		Validated		QA		
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type	ASL	Area
2122	12/07/88	3749	U	Cadmium	0.002	U	N	3	D
2122	03/15/89	3979	U	Cadmium	0.005	U	N	3	D
2123	05/06/88	3156	U	Cadmium	0.005	U	N	3	R
2123	08/23/88	3565	U	Cadmium	0.002	U	N	3	R
2123	12/06/88	3771	U	Cadmium	0.002	U	N	3	R
2123	03/14/89	3984	U	Cadmium	0.005	UJ	N	3	R
2728	05/24/93	GW930524-3	U	Cadmium	0.003	UJ	N	3	S
3024	04/20/88	3096	U	Cadmium	0.005	U	N	3	S
3024	07/26/88	3377	U	Cadmium	0.005	UJ	N	3	S
3024	11/02/88	3658	U	Cadmium	0.002	U	N	3	S
3024	01/24/89	3842		Cadmium	0.005	J	N	3	S
3024	04/12/93	GW930412-8	U	Cadmium	0.003	UJ	N	3	S
3043	04/13/88	3090	U	Cadmium	0.002	U	N	3	S
3043	08/04/88	3397	U	Cadmium	0.005	U	N	3	S
3043	11/04/88	3694	U	Cadmium	0.002	U	N	3	S
3043	02/02/89	3886		Cadmium	0.006	-	N	3	S
3043	08/30/89	66573		Cadmium	0.0051	-	N	4	S
3043	04/07/93	GW930407-13	U	Cadmium	0.003	U	N	3	S
3063	05/12/88	3190	U	Cadmium	0.005	U	N	3	D
3063	05/12/88	3191	U	Cadmium	0.005	U	D	3	D
3063	08/16/88	3495	U	Cadmium	0.002	U	N	3	D
3063	12/13/88	3741		Cadmium	0.01	-	N	3	D
3063	03/13/89	3966	U	Cadmium	0.005	UJ	N	3	D
3096	09/12/88	3585	U	Cadmium	0.002	U	N	3	R
3096	12/07/88	3789	U	Cadmium	0.002	U	N	3	R
3096	02/09/89	3974	U	Cadmium	0.005	U	N	3	R
3096	04/30/89	4082		Cadmium	0.0042	-	N	3	R
3096	04/25/90	4257		Cadmium	0.003	U	N	3	R
3096	05/07/93	GW930507-1	U	Cadmium	0.003	U	N	3	R
3098	09/21/88	3589	U	Cadmium	0.002	UJ	N	3	D
3098	12/16/88	3795	U	Cadmium	0.002	U	N	3	D
3098	02/08/89	3989		Cadmium	0.006	J	N	3	D
3098	05/25/89	4088		Cadmium	0.0054	J	N	3	D
3098	05/20/93	GW930520-10	U	Cadmium	0.002	U	N	3	D
3099	05/24/88	3237	U	Cadmium	0.005	U	N	3	D
3099	05/24/88	3238	U	Cadmium	0.005	U	D	3	D
3099	08/16/88	3496	U	Cadmium	0.002	U	N	3	D
3099	12/06/88	3742	U	Cadmium	0.002	U	N	3	D
3099	03/14/89	3977	U	Cadmium	0.005	UJ	N	3	D
3100	05/24/88	3239	U	Cadmium	0.005	U	N	3	D
3100	05/24/88	3240	U	Cadmium	0.005	U	D	3	D
3100	08/19/88	3517	U	Cadmium	0.002	U	N	3	D
3100	12/06/88	3761	U	Cadmium	0.002	U	N	3	D
3100	03/13/89	3978	U	Cadmium	0.005	UJ	N	3	D
4011	10/05/90	4345		Cadmium	0.0082	J	N	3	S
4011	02/07/91	4382	U	Cadmium	0.005	U	N	3	S
4011	04/08/93	GW930408-3	U	Cadmium	0.002	U	N	3	S
4011	04/08/93	GW930408-2	U	Cadmium	0.002	U	D	3	S
4096	09/12/88	3584	U	Cadmium	0.002	U	N	3	R
4096	12/14/88	3788	U	Cadmium	0.002	U	N	3	R

Table D-3 (Continued)
Validated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
4096	12/14/88	3474	U	Cadmium	0.002	U	D	3	R
4096	02/10/89	3975		Cadmium	0.004	U	N	3	R
4096	04/30/89	4083		Cadmium	0.0031	-	N	3	R
4096	05/06/93	GW930506-7	U	Cadmium	0.003	U	N	3	R
2026	05/12/88	3186		Calcium	87.7	-	N	3	D
2026	05/12/88	3187		Calcium	86.7	-	D	3	D
2026	08/17/88	3505		Calcium	91.8	-	N	3	D
2026	12/07/88	3750		Calcium	84.2	-	N	3	D
2026	03/14/89	3980		Calcium	110	J	N	3	D
2036	05/12/88	3184		Calcium	94	-	N	3	R
2036	05/12/88	3185		Calcium	92.3	-	D	3	R
2036	08/23/88	3564		Calcium	99.4	-	N	3	R
2036	12/07/88	3770		Calcium	92.8	-	N	3	R
2036	03/14/89	3983		Calcium	110	J	N	3	R
2043	04/13/88	3091		Calcium	103	J	N	3	S
2043	08/05/88	3440		Calcium	100	-	N	3	S
2043	11/04/88	3700		Calcium	72.4	-	N	3	S
2043	02/02/89	3887		Calcium	110	-	N	3	S
2043	06/26/89	66438		Calcium	106	-	N	3	S
2043	08/30/89	66572		Calcium	121	-	N	4	S
2043	08/30/89	66577		Calcium	114	-	D	4	S
2043	04/07/93	GW930407-12		Calcium	123	-	N	3	S
2050	05/05/88	3147		Calcium	82.9	-	N	3	S
2050	08/16/88	3497		Calcium	85.9	-	N	3	S
2050	12/05/88	3743		Calcium	88	-	N	3	S
2050	03/13/89	3969		Calcium	89	J	N	3	S
2050	05/20/93	GW930520-8		Calcium	94	-	N	3	S
2056	05/06/88	3159		Calcium	63.6	-	N	3	S
2056	08/25/88	3575		Calcium	73.3	-	N	3	S
2056	12/07/88	3781		Calcium	73.5	-	N	3	S
2056	03/13/89	3967		Calcium	76	J	N	3	S
2056	03/13/89	4045		Calcium	78	J	D	3	S
2057	06/03/88	3265		Calcium	84.1	-	N	3	R
2057	08/25/88	3573		Calcium	83.4	-	N	3	R
2057	12/13/88	3779		Calcium	83.5	-	N	3	R
2057	03/14/89	3965		Calcium	90	J	N	3	R
2066	04/26/88	3124		Calcium	68.8	-	N	3	S
2066	11/10/88	3710		Calcium	65.7	-	N	3	S
2066	03/14/89	3894		Calcium	78	J	N	3	S
2066	06/27/89	66436		Calcium	74.2	J	N	3	S
2066	08/09/89	66498		Calcium	81.7	-	N	3	S
2066	04/07/93	GW930407-14		Calcium	82.5	-	N	3	S
2096	09/12/88	3586		Calcium	120	-	N	3	R
2096	12/07/88	3790		Calcium	120	-	N	3	R
2096	02/09/89	3985		Calcium	102	-	N	3	R
2096	04/30/89	4081		Calcium	181	-	N	3	R
2096	04/25/90	4234		Calcium	153	-	N	3	R
2096	05/06/93	GW930506-5		Calcium	151	-	N	3	R
2098	09/22/88	3591		Calcium	113	-	N	3	D
2098	12/16/88	3796		Calcium	114	-	N	3	D

Table D-3 (Continued)
Validated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
2098	02/08/89	3990		Calcium	120	J	N	3	D
2098	05/25/89	4087		Calcium	92.6	UJ	N	3	D
2098	05/20/93	GW930520-9		Calcium	84.1	-	N	3	D
2104	05/05/88	3146		Calcium	115	-	N	3	R
2104	08/16/88	3498		Calcium	112.5	-	N	3	R
2104	12/06/88	3744		Calcium	129	-	N	3	R
2104	03/15/89	3970		Calcium	120	-	N	3	R
2104	04/22/90	4235		Calcium	122	-	N	3	R
2104	04/22/90	4269		Calcium	116	-	N	3	R
2104	05/13/93	GW930513-14		Calcium	133	-	N	3	R
2104	05/13/93	GW930513-18		Calcium	133	-	N	3	R
2105	08/28/88	3577		Calcium	75.3	-	N	3	S
2105	03/15/89	3968		Calcium	87	-	N	3	S
2121	05/06/88	3158		Calcium	70.2	-	N	3	D
2121	08/25/88	3571		Calcium	89.6	-	N	3	D
2121	12/13/88	3776		Calcium	95.2	-	N	3	D
2121	03/14/89	3962		Calcium	95	J	N	3	D
2122	05/06/88	3157		Calcium	76.7	-	N	3	D
2122	08/17/88	3504		Calcium	83.5	-	N	3	D
2122	12/07/88	3749		Calcium	93	-	N	3	D
2122	03/15/89	3979		Calcium	91	-	N	3	D
2123	05/06/88	3156		Calcium	81.7	-	N	3	R
2123	08/23/88	3565		Calcium	91.4	-	N	3	R
2123	12/06/88	3771		Calcium	88.7	-	N	3	R
2123	03/14/89	3984		Calcium	92	J	N	3	R
2728	05/24/93	GW930524-3		Calcium	122	J	N	3	S
3024	04/20/88	3096		Calcium	81.7	-	N	3	S
3024	07/26/88	3377		Calcium	85	-	N	3	S
3024	11/02/88	3658		Calcium	135	-	N	3	S
3024	01/24/89	3842		Calcium	134	J	N	3	S
3024	06/26/89	66460		Calcium	133	-	N	3	S
3024	08/10/89	66515		Calcium	133	-	N	3	S
3024	04/12/93	GW930412-8		Calcium	145	-	N	3	S
3043	04/13/88	3090		Calcium	82.8	J	N	3	S
3043	08/04/88	3397		Calcium	86	-	N	3	S
3043	11/04/88	3694		Calcium	78.4	-	N	3	S
3043	02/02/89	3886		Calcium	91.1	-	N	3	S
3043	06/13/89	66439		Calcium	87.1	-	N	3	S
3043	08/30/89	66573		Calcium	144	-	N	4	S
3043	04/07/93	GW930407-13		Calcium	100	-	N	3	S
3063	05/12/88	3190		Calcium	86.3	-	N	3	D
3063	05/12/88	3191		Calcium	87.9	-	D	3	D
3063	08/16/88	3495		Calcium	96.5	-	N	3	D
3063	12/13/88	3741		Calcium	94.7	-	N	3	D
3063	03/13/89	3966		Calcium	100	J	N	3	D
3096	09/12/88	3585		Calcium	80	-	N	3	R
3096	12/07/88	3789		Calcium	84.3	-	N	3	R
3096	02/09/89	3974		Calcium	88.3	-	N	3	R
3096	04/30/89	4082		Calcium	88.4	-	N	3	R
3096	04/25/90	4257		Calcium	86.3	-	N	3	R

Table D-3 (Continued)
Validated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
3096	05/07/93	GW930507-1		Calcium	90	-	N	3	R
3098	09/21/88	3589		Calcium	103	J	N	3	D
3098	12/16/88	3795		Calcium	106	-	N	3	D
3098	02/08/89	3989		Calcium	108	J	N	3	D
3098	05/25/89	4088		Calcium	114	J	N	3	D
3098	05/20/93	GW930520-10		Calcium	113	-	N	3	D
3099	05/24/88	3237		Calcium	95.5	-	N	3	D
3099	05/24/88	3238		Calcium	93.6	-	D	3	D
3099	08/16/88	3496		Calcium	100.9	-	N	3	D
3099	12/06/88	3742		Calcium	99	-	N	3	D
3099	03/14/89	3977		Calcium	110	J	N	3	D
3100	05/24/88	3239		Calcium	92.8	-	N	3	D
3100	05/24/88	3240		Calcium	88.5	-	D	3	D
3100	08/19/88	3517		Calcium	96.8	-	N	3	D
3100	12/06/88	3761		Calcium	98.9	-	N	3	D
3100	03/13/89	3978		Calcium	100	J	N	3	D
4011	10/05/90	4345		Calcium	127	J	N	3	S
4011	02/07/91	4382		Calcium	85	-	N	3	S
4011	04/08/93	GW930408-3		Calcium	131	-	N	3	S
4011	04/08/93	GW930408-2		Calcium	129	-	D	3	S
4096	09/12/88	3584		Calcium	77.2	-	N	3	R
4096	12/14/88	3788		Calcium	79	J	N	3	R
4096	12/14/88	3474		Calcium	79.1	J	D	3	R
4096	02/10/89	3975		Calcium	87.2	-	N	3	R
4096	04/30/89	4083		Calcium	83	-	N	3	R
4096	05/06/93	GW930506-7		Calcium	86.8	-	N	3	R
2026	05/12/88	3186	U	Chromium	0.02	U	N	3	D
2026	05/12/88	3187	U	Chromium	0.02	U	D	3	D
2026	08/17/88	3505	U	Chromium	0.02	U	N	3	D
2026	12/07/88	3750	U	Chromium	0.02	U	N	3	D
2026	03/14/89	3980		Chromium	0.02	J	N	3	D
2036	05/12/88	3184	U	Chromium	0.02	U	N	3	R
2036	05/12/88	3185	U	Chromium	0.02	U	D	3	R
2036	08/23/88	3564	U	Chromium	0.02	U	N	3	R
2036	12/07/88	3770	U	Chromium	0.02	U	N	3	R
2036	03/14/89	3983		Chromium	0.03	J	N	3	R
2043	04/13/88	3091	U	Chromium	0.02	U	N	3	S
2043	08/05/88	3440	U	Chromium	0.01	U	N	3	S
2043	11/04/88	3700	U	Chromium	0.02	U	N	3	S
2043	02/02/89	3887		Chromium	0.024	-	N	3	S
2043	06/26/89	66438		Chromium	0.0415	-	N	3	S
2043	08/30/89	66572		Chromium	0.0303	-	N	4	S
2043	08/30/89	66577		Chromium	0.0271	-	D	4	S
2043	04/07/93	GW930407-12	U	Chromium	0.003	U	N	3	S
2050	05/05/88	3147	U	Chromium	0.02	U	N	3	S
2050	08/16/88	3497	U	Chromium	0.02	U	N	3	S
2050	12/05/88	3743	U	Chromium	0.02	U	N	3	S
2050	03/13/89	3969		Chromium	0.03	J	N	3	S
2050	05/20/93	GW930520-8	U	Chromium	0.004	U	N	3	S
2056	05/06/88	3159	U	Chromium	0.02	U	N	3	S

Table D-3 (Continued)
Validated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
2056	08/25/88	3575	U	Chromium	0.02	U	N	3	S
2056	12/07/88	3781	U	Chromium	0.02	U	N	3	S
2056	03/13/89	3967		Chromium	0.03	J	N	3	S
2056	03/13/89	4045		Chromium	0.02	J	D	3	S
2057	06/03/88	3265	U	Chromium	0.02	U	N	3	R
2057	08/25/88	3573	U	Chromium	0.02	U	N	3	R
2057	12/13/88	3779	U	Chromium	0.02	U	N	3	R
2057	03/14/89	3965		Chromium	0.02	J	N	3	R
2066	04/26/88	3124	U	Chromium	0.02	U	N	3	S
2066	11/10/88	3710	U	Chromium	0.02	U	N	3	S
2066	03/14/89	3894		Chromium	0.02	J	N	3	S
2066	06/27/89	66436		Chromium	0.0259	J	N	3	S
2066	08/09/89	66498		Chromium	0.022	-	N	3	S
2066	04/07/93	GW930407-14	U	Chromium	0.003	U	N	3	S
2096	09/12/88	3586	U	Chromium	0.02	U	N	3	R
2096	12/07/88	3790	U	Chromium	0.02	U	N	3	R
2096	02/09/89	3985		Chromium	0.026	-	N	3	R
2096	04/30/89	4081		Chromium	0.0207	U	N	3	R
2096	04/25/90	4234		Chromium	0.016	-	N	3	R
2096	05/06/93	GW930506-5	U	Chromium	0.004	U	N	3	R
2098	09/22/88	3591	U	Chromium	0.02	U	N	3	D
2098	12/16/88	3796	U	Chromium	0.02	U	N	3	D
2098	02/08/89	3990		Chromium	0.03	J	N	3	D
2098	05/25/89	4087		Chromium	0.0358	UJ	N	3	D
2098	05/20/93	GW930520-9	U	Chromium	0.004	U	N	3	D
2104	05/05/88	3146	U	Chromium	0.02	U	N	3	R
2104	08/16/88	3498	U	Chromium	0.02	U	N	3	R
2104	12/06/88	3744	U	Chromium	0.02	U	N	3	R
2104	03/15/89	3970		Chromium	0.02	-	N	3	R
2104	04/22/90	4235	U	Chromium	0.01	U	N	3	R
2104	04/22/90	4269		Chromium	0.011	-	N	3	R
2104	05/13/93	GW930513-14	U	Chromium	0.004	U	N	3	R
2104	05/13/93	GW930513-18	U	Chromium	0.004	U	N	3	R
2105	06/05/88	3268	U	Chromium	0.02	U	N	3	S
2105	08/28/88	3577	U	Chromium	0.02	U	N	3	S
2105	03/15/89	3968		Chromium	0.02	-	N	3	S
2121	05/06/88	3158	U	Chromium	0.02	U	N	3	D
2121	08/25/88	3571	U	Chromium	0.02	U	N	3	D
2121	12/13/88	3776	U	Chromium	0.02	U	N	3	D
2121	03/14/89	3962		Chromium	0.02	J	N	3	D
2122	05/06/88	3157	U	Chromium	0.02	U	N	3	D
2122	08/17/88	3504	U	Chromium	0.02	U	N	3	D
2122	12/07/88	3749	U	Chromium	0.02	U	N	3	D
2122	03/15/89	3979		Chromium	0.01	-	N	3	D
2123	05/06/88	3156	U	Chromium	0.02	U	N	3	R
2123	08/23/88	3565	U	Chromium	0.02	U	N	3	R
2123	12/06/88	3771	U	Chromium	0.02	U	N	3	R
2123	03/14/89	3984		Chromium	0.02	J	N	3	R
2728	05/24/93	GW930524-3	U	Chromium	0.005	U	N	3	S
3024	04/20/88	3096	U	Chromium	0.02	U	N	3	S

Table D-3 (Continued)
Validated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
3024	11/02/88	3658	U	Chromium	0.02	U	N	3	S
3024	01/24/89	3842		Chromium	0.028	J	N	3	S
3024	06/26/89	66460		Chromium	0.0441	-	N	3	S
3024	08/10/89	66515		Chromium	0.042	-	N	3	S
3024	04/12/93	GW930412-8	U	Chromium	0.005	U	N	3	S
3043	04/13/88	3090	U	Chromium	0.02	U	N	3	S
3043	08/04/88	3397	U	Chromium	0.01	U	N	3	S
3043	11/04/88	3694	U	Chromium	0.02	U	N	3	S
3043	02/02/89	3886		Chromium	0.021	-	N	3	S
3043	06/13/89	66439		Chromium	0.021	-	N	3	S
3043	08/30/89	66573		Chromium	0.0292	-	N	4	S
3043	04/07/93	GW930407-13	U	Chromium	0.003	U	N	3	S
3063	05/12/88	3190	U	Chromium	0.02	U	N	3	D
3063	05/12/88	3191	U	Chromium	0.02	U	D	3	D
3063	08/16/88	3495	U	Chromium	0.02	U	N	3	D
3063	12/13/88	3741	U	Chromium	0.02	U	N	3	D
3063	03/13/89	3966		Chromium	0.03	J	N	3	D
3096	09/12/88	3585	U	Chromium	0.02	U	N	3	R
3096	12/07/88	3789	U	Chromium	0.02	U	N	3	R
3096	02/09/89	3974		Chromium	0.024	-	N	3	R
3096	04/30/89	4082		Chromium	0.0142	U	N	3	R
3096	04/25/90	4257		Chromium	0.021	-	N	3	R
3096	05/07/93	GW930507-1	U	Chromium	0.004	U	N	3	R
3098	09/21/88	3589	U	Chromium	0.02	UJ	N	3	D
3098	12/16/88	3795	U	Chromium	0.02	U	N	3	D
3098	02/08/89	3989		Chromium	0.026	J	N	3	D
3098	05/25/89	4088		Chromium	0.041	J	N	3	D
3098	05/20/93	GW930520-10	U	Chromium	0.004	U	N	3	D
3099	05/24/88	3237	U	Chromium	0.02	U	N	3	D
3099	05/24/88	3238	U	Chromium	0.02	U	D	3	D
3099	08/16/88	3496	U	Chromium	0.02	U	N	3	D
3099	12/06/88	3742	U	Chromium	0.02	U	N	3	D
3099	03/14/89	3977		Chromium	0.02	J	N	3	D
3100	05/24/88	3239	U	Chromium	0.02	U	N	3	D
3100	05/24/88	3240	U	Chromium	0.02	U	D	3	D
3100	08/19/88	3517	U	Chromium	0.02	U	N	3	D
3100	12/06/88	3761	U	Chromium	0.02	U	N	3	D
3100	03/13/89	3978		Chromium	0.03	J	N	3	D
4011	10/05/90	4345		Chromium	0.0228	-	N	3	S
4011	02/07/91	4382	U	Chromium	0.01	U	N	3	S
4011	04/08/93	GW930408-3	U	Chromium	0.003	U	N	3	S
4011	04/08/93	GW930408-2	U	Chromium	0.003	U	D	3	S
4096	09/12/88	3584	U	Chromium	0.02	U	N	3	R
4096	12/14/88	3788	U	Chromium	0.02	U	N	3	R
4096	12/14/88	3474	U	Chromium	0.02	U	D	3	R
4096	02/10/89	3975		Chromium	0.022	-	N	3	R
4096	04/30/89	4083		Chromium	0.0118	U	N	3	R
4096	05/06/93	GW930506-7	U	Chromium	0.004	U	N	3	R
2043	06/26/89	66438	U	Cobalt	0.01	U	N	3	S
2043	08/30/89	66572	U	Cobalt	0.01	U	N	4	S

Table D-3 (Continued)
Validated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
2043	08/30/89	66577	U	Cobalt	0.01	U	D	4	S
2043	04/07/93	GW930407-12	U	Cobalt	0.009	U	N	3	S
2050	05/20/93	GW930520-8	U	Cobalt	0.005	U	N	3	S
2066	06/27/89	66436	U	Cobalt	0.01	UJ	N	3	S
2066	08/09/89	66498	U	Cobalt	0.01	U	N	3	S
2066	04/07/93	GW930407-14	U	Cobalt	0.009	U	N	3	S
2096	05/06/93	GW930506-5	U	Cobalt	0.006	U	N	3	R
2098	05/20/93	GW930520-9	U	Cobalt	0.005	U	N	3	D
2104	05/13/93	GW930513-14	U	Cobalt	0.005	U	N	3	R
2104	05/13/93	GW930513-18	U	Cobalt	0.005	U	N	3	R
2728	05/24/93	GW930524-3	U	Cobalt	0.008	U	N	3	S
3024	06/26/89	66460	U	Cobalt	0.01	U	N	3	S
3024	08/10/89	66515	U	Cobalt	0.01	U	N	3	S
3024	04/12/93	GW930412-8	U	Cobalt	0.008	U	N	3	S
3043	06/13/89	66439	U	Cobalt	0.01	U	N	3	S
3043	08/30/89	66573	U	Cobalt	0.01	U	N	4	S
3043	04/07/93	GW930407-13	U	Cobalt	0.009	U	N	3	S
3096	05/07/93	GW930507-1	U	Cobalt	0.006	U	N	3	R
3098	05/20/93	GW930520-10	U	Cobalt	0.005	U	N	3	D
4011	10/05/90	4345	U	Cobalt	0.01	U	N	3	S
4011	02/07/91	4382	U	Cobalt	0.02	U	N	3	S
4011	04/08/93	GW930408-3	U	Cobalt	0.008	U	N	3	S
4011	04/08/93	GW930408-2	U	Cobalt	0.008	U	D	3	S
4096	05/06/93	GW930506-7	U	Cobalt	0.006	U	N	3	R
2026	05/12/88	3186	U	Copper	0.01	U	N	3	D
2026	05/12/88	3187	U	Copper	0.01	U	D	3	D
2026	08/17/88	3505	U	Copper	0.01	U	N	3	D
2026	12/07/88	3750		Copper	0.024	-	N	3	D
2026	03/14/89	3980		Copper	0.02	J	N	3	D
2036	05/12/88	3184	U	Copper	0.01	U	N	3	R
2036	05/12/88	3185	U	Copper	0.01	U	D	3	R
2036	08/23/88	3564		Copper	0.027	-	N	3	R
2036	12/07/88	3770		Copper	0.033	-	N	3	R
2043	04/13/88	3091	U	Copper	0.01	UJ	N	3	S
2043	08/05/88	3440	U	Copper	0.03	U	N	3	S
2043	11/04/88	3700	U	Copper	0.01	U	N	3	S
2043	02/02/89	3887		Copper	0.022	-	N	3	S
2043	06/26/89	66438	U	Copper	0.01	U	N	3	S
2043	08/30/89	66572	U	Copper	0.01	U	N	4	S
2043	08/30/89	66577	U	Copper	0.01	U	D	4	S
2043	04/07/93	GW930407-12	U	Copper	0.005	U	N	3	S
2050	05/05/88	3147	U	Copper	0.01	U	N	3	S
2050	08/16/88	3497	U	Copper	0.01	U	N	3	S
2050	12/05/88	3743	U	Copper	0.01	U	N	3	S
2050	03/13/89	3969	U	Copper	0.01	UJ	N	3	S
2050	05/20/93	GW930520-8		Copper	0.0258	U	N	3	S
2056	05/06/88	3159	U	Copper	0.01	U	N	3	S
2056	08/25/88	3575	U	Copper	0.01	U	N	3	S
2056	12/07/88	3781	U	Copper	0.01	U	N	3	S
2056	03/13/89	3967	U	Copper	0.01	UJ	N	3	S

Table D-3 (Continued)
Validated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
2056	03/13/89	4045	U	Copper	0.01	UJ	D	3	S
2057	06/03/88	3265	U	Copper	0.01	U	N	3	R
2057	08/25/88	3573	U	Copper	0.01	U	N	3	R
2057	12/13/88	3779		Copper	0.014	-	N	3	R
2057	03/14/89	3965	U	Copper	0.01	UJ	N	3	R
2066	04/26/88	3124	U	Copper	0.01	U	N	3	S
2066	11/10/88	3710	U	Copper	0.01	U	N	3	S
2066	03/14/89	3894	U	Copper	0.01	UJ	N	3	S
2066	06/27/89	66436	U	Copper	0.01	UJ	N	3	S
2066	08/09/89	66498	U	Copper	0.01	U	N	3	S
2066	04/07/93	GW930407-14	U	Copper	0.005	U	N	3	S
2096	09/12/88	3586	U	Copper	0.01	U	N	3	R
2096	12/07/88	3790	U	Copper	0.01	U	N	3	R
2096	02/09/89	3985		Copper	0.011	-	N	3	R
2096	04/30/89	4081		Copper	0.013	-	N	3	R
2096	04/25/90	4234		Copper	0.014	U	N	3	R
2096	05/06/93	GW930506-5	U	Copper	0.004	U	N	3	R
2098	09/22/88	3591		Copper	0.05	-	N	3	D
2098	12/16/88	3796	U	Copper	0.01	U	N	3	D
2098	02/08/89	3990		Copper	0.014	J	N	3	D
2098	05/25/89	4087		Copper	0.011	J	N	3	D
2098	05/20/93	GW930520-9	U	Copper	0.003	U	N	3	D
2104	05/05/88	3146	U	Copper	0.01	U	N	3	R
2104	08/16/88	3498	U	Copper	0.01	U	N	3	R
2104	12/06/88	3744	U	Copper	0.01	U	N	3	R
2104	03/15/89	3970	U	Copper	0.01	U	N	3	R
2104	04/22/90	4235	U	Copper	0.01	U	N	3	R
2104	04/22/90	4269	U	Copper	0.01	U	N	3	R
2104	05/13/93	GW930513-14	U	Copper	0.003	U	N	3	R
2104	05/13/93	GW930513-18	U	Copper	0.003	U	N	3	R
2105	06/05/88	3268	U	Copper	0.01	U	N	3	S
2105	08/28/88	3577	U	Copper	0.01	U	N	3	S
2105	03/15/89	3968	U	Copper	0.01	U	N	3	S
2121	05/06/88	3158		Copper	0.012	U	N	3	D
2121	08/25/88	3571		Copper	0.14	-	N	3	D
2121	12/13/88	3776		Copper	0.176	-	N	3	D
2121	03/14/89	3962		Copper	0.12	J	N	3	D
2122	05/06/88	3157	U	Copper	0.01	U	N	3	D
2122	08/17/88	3504	U	Copper	0.01	U	N	3	D
2122	12/07/88	3749		Copper	0.015	-	N	3	D
2122	03/15/89	3979		Copper	0.01	-	N	3	D
2123	05/06/88	3156	U	Copper	0.01	U	N	3	R
2123	08/23/88	3565		Copper	0.023	-	N	3	R
2123	12/06/88	3771		Copper	0.012	U	N	3	R
2123	03/14/89	3984		Copper	0.02	J	N	3	R
2728	05/24/93	GW930524-3	B	Copper	0.0032	U	N	3	S
3024	04/20/88	3096		Copper	0.017	-	N	3	S
3024	07/26/88	3377	U	Copper	0.025	UJ	N	3	S
3024	11/02/88	3658	U	Copper	0.01	U	N	3	S
3024	01/24/89	3842		Copper	0.012	J	N	3	S

Table D-3 (Continued)
Validated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
3024	06/26/89	66460	U	Copper	0.01	U	N	3	S
3024	08/10/89	66515	U	Copper	0.01	U	N	3	S
3024	04/12/93	GW930412-8	B	Copper	0.0116	U	N	3	S
3043	04/13/88	3090	U	Copper	0.01	UJ	N	3	S
3043	08/04/88	3397	U	Copper	0.03	U	N	3	S
3043	11/04/88	3694	U	Copper	0.01	U	N	3	S
3043	02/02/89	3886		Copper	0.022	-	N	3	S
3043	06/13/89	66439	U	Copper	0.01	U	N	3	S
3043	08/30/89	66573	U	Copper	0.01	U	N	4	S
3043	04/07/93	GW930407-13	U	Copper	0.005	U	N	3	S
3063	05/12/88	3190	U	Copper	0.01	U	N	3	D
3063	05/12/88	3191	U	Copper	0.01	U	D	3	D
3063	08/16/88	3495		Copper	0.093	-	N	3	D
3063	12/13/88	3741		Copper	0.138	-	N	3	D
3063	03/13/89	3966	U	Copper	0.01	UJ	N	3	D
3096	09/12/88	3585	U	Copper	0.01	U	N	3	R
3096	12/07/88	3789	U	Copper	0.01	U	N	3	R
3096	02/09/89	3974		Copper	0.012	-	N	3	R
3096	04/30/89	4082		Copper	0.011	-	N	3	R
3096	04/25/90	4257		Copper	0.014	U	N	3	R
3096	05/07/93	GW930507-1	U	Copper	0.004	U	N	3	R
3098	09/21/88	3589	U	Copper	0.01	UJ	N	3	D
3098	12/16/88	3795	U	Copper	0.01	U	N	3	D
3098	02/08/89	3989		Copper	0.011	J	N	3	D
3098	05/25/89	4088	U	Copper	0.01	UJ	N	3	D
3098	05/20/93	GW930520-10	B	Copper	0.0038	U	N	3	D
3099	05/24/88	3237		Copper	0.025	-	N	3	D
3099	05/24/88	3238		Copper	0.091	-	D	3	D
3099	08/16/88	3496		Copper	0.083	-	N	3	D
3099	03/14/89	3977		Copper	0.05	J	N	3	D
3100	05/24/88	3239	U	Copper	0.01	U	N	3	D
3100	05/24/88	3240	U	Copper	0.01	U	D	3	D
3100	08/19/88	3517	U	Copper	0.01	U	N	3	D
3100	12/06/88	3761		Copper	0.018	U	N	3	D
3100	03/13/89	3978	U	Copper	0.01	UJ	N	3	D
4011	10/05/90	4345	B	Copper	0.0102	-	N	3	S
4011	02/07/91	4382		Copper	0.01	-	N	3	S
4011	04/08/93	GW930408-3	U	Copper	0.004	U	N	3	S
4011	04/08/93	GW930408-2	U	Copper	0.004	U	D	3	S
4096	09/12/88	3584	U	Copper	0.01	U	N	3	R
4096	12/14/88	3788	U	Copper	0.01	U	N	3	R
4096	12/14/88	3474	U	Copper	0.01	U	D	3	R
4096	02/10/89	3975		Copper	0.009	U	N	3	R
4096	04/30/89	4083	U	Copper	0.01	U	N	3	R
4096	05/06/93	GW930506-7	B	Copper	0.0043	U	N	3	R
2043	04/07/93	GW930407-12	U	Cyanide	0.02	U	N	3	S
2050	05/20/93	GW930520-8	U	Cyanide	0.02	UJ	N	3	S
2066	04/07/93	GW930407-14	U	Cyanide	0.02	U	N	3	S
2096	05/06/93	GW930506-5	U	Cyanide	0.01	U	N	3	R
2098	05/20/93	GW930520-9	U	Cyanide	0.02	U	N	3	D

Table D-3 (Continued)
Validated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
2104	05/13/93	GW930513-14	U	Cyanide	0.02	UJ	N	3	R
2104	05/13/93	GW930513-18	U	Cyanide	0.02	UJ	N	3	R
2728	05/24/93	GW930524-3	U	Cyanide	0.01	UJ	N	3	S
3024	04/12/93	GW930412-8	U	Cyanide	0.01	UJ	N	3	S
3043	04/07/93	GW930407-13	U	Cyanide	0.02	U	N	3	S
3096	05/07/93	GW930507-1	U	Cyanide	0.01	U	N	3	R
3098	05/20/93	GW930520-10	U	Cyanide	0.02	U	N	3	D
4096	05/06/93	GW930506-7	U	Cyanide	0.01	U	N	3	R
2026	05/12/88	3186	U	Iron	0.05	U	N	3	D
2026	05/12/88	3187	U	Iron	0.05	U	D	3	D
2026	08/17/88	3505	U	Iron	0.005	U	N	3	D
2026	12/07/88	3750		Iron	0.016	-	N	3	D
2026	03/14/89	3980	U	Iron	0.02	UJ	N	3	D
2036	05/12/88	3184	U	Iron	0.05	U	N	3	R
2036	05/12/88	3185	U	Iron	0.05	U	D	3	R
2036	08/23/88	3564		Iron	0.014	-	N	3	R
2036	12/07/88	3770		Iron	0.009	-	N	3	R
2036	03/14/89	3983	U	Iron	0.03	UJ	N	3	R
2043	04/13/88	3091		Iron	0.259	-	N	3	S
2043	08/05/88	3440		Iron	1.1	-	N	3	S
2043	11/04/88	3700		Iron	0.06	-	N	3	S
2043	02/02/89	3887		Iron	1.04	-	N	3	S
2043	06/26/89	66438		Iron	0.873	-	N	3	S
2043	08/30/89	66572		Iron	0.843	-	N	4	S
2043	08/30/89	66577		Iron	1.05	-	D	4	S
2043	04/07/93	GW930407-12		Iron	1.4	-	N	3	S
2050	05/05/88	3147		Iron	1.63	-	N	3	S
2050	08/16/88	3497		Iron	2.227	-	N	3	S
2050	12/05/88	3743		Iron	2.46	-	N	3	S
2050	03/13/89	3969		Iron	2.2	J	N	3	S
2050	05/20/93	GW930520-8		Iron	5.42	J	N	3	S
2056	05/06/88	3159		Iron	2.51	-	N	3	S
2056	08/25/88	3575		Iron	2.15	-	N	3	S
2056	12/07/88	3781		Iron	3.51	-	N	3	S
2056	03/13/89	3967		Iron	3.5	J	N	3	S
2056	03/13/89	4045		Iron	3.6	J	D	3	S
2057	06/03/88	3265		Iron	1.25	-	N	3	R
2057	08/25/88	3573		Iron	1.38	-	N	3	R
2057	12/13/88	3779		Iron	0.019	-	N	3	R
2057	03/14/89	3965	U	Iron	0.02	UJ	N	3	R
2066	04/26/88	3124		Iron	1.6	-	N	3	S
2066	11/10/88	3710		Iron	1.703	-	N	3	S
2066	03/14/89	3894		Iron	1.6	J	N	3	S
2066	06/27/89	66436		Iron	1.73	J	N	3	S
2066	08/09/89	66498		Iron	0.506	-	N	3	S
2066	04/07/93	GW930407-14		Iron	2.1	-	N	3	S
2096	09/12/88	3586		Iron	2.6	-	N	3	R
2096	12/07/88	3790		Iron	2.65	-	N	3	R
2096	02/09/89	3985		Iron	2.38	-	N	3	R
2096	04/30/89	4081		Iron	1.46	-	N	3	R

Table D-3 (Continued)
Validated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
2096	04/25/90	4234		Iron	3.55	-	N	3	R
2096	05/06/93	GW930506-5		Iron	2.65	-	N	3	R
2098	09/22/88	3591		Iron	0.4	-	N	3	D
2098	12/16/88	3796		Iron	0.1	UJ	N	3	D
2098	02/08/89	3990		Iron	0.116	J	N	3	D
2098	05/25/89	4087	U	Iron	0.0481	UJ	N	3	D
2098	05/20/93	GW930520-9	U	Iron	0.005	U	N	3	D
2104	05/05/88	3146		Iron	2.38	-	N	3	R
2104	08/16/88	3498		Iron	2.992	-	N	3	R
2104	12/06/88	3744		Iron	3.57	-	N	3	R
2104	03/15/89	3970		Iron	2.4	J	N	3	R
2104	04/22/90	4235		Iron	2.9	-	N	3	R
2104	04/22/90	4269		Iron	2.88	-	N	3	R
2104	05/13/93	GW930513-14		Iron	3.18	-	N	3	R
2104	05/13/93	GW930513-18		Iron	3.39	-	N	3	R
2105	06/05/88	3268		Iron	1.88	-	N	3	S
2105	08/28/88	3577		Iron	3	-	N	3	S
2105	03/15/89	3968		Iron	2.9	J	N	3	S
2121	05/06/88	3158	U	Iron	0.005	U	N	3	D
2121	08/25/88	3571	U	Iron	0.005	U	N	3	D
2121	12/13/88	3776	U	Iron	0.005	U	N	3	D
2121	03/14/89	3962	U	Iron	0.02	UJ	N	3	D
2122	05/06/88	3157	U	Iron	0.005	U	N	3	D
2122	08/17/88	3504	U	Iron	0.005	U	N	3	D
2122	12/07/88	3749	U	Iron	0.005	U	N	3	D
2122	03/15/89	3979		Iron	0.05	UJ	N	3	D
2123	05/06/88	3156	U	Iron	0.005	U	N	3	R
2123	08/23/88	3565	U	Iron	0.005	U	N	3	R
2123	12/06/88	3771		Iron	0.019	U	N	3	R
2123	03/14/89	3984	U	Iron	0.02	UJ	N	3	R
2728	05/24/93	GW930524-3		Iron	1.77	-	N	3	S
3024	04/20/88	3096	U	Iron	0.005	U	N	3	S
3024	07/26/88	3377		Iron	3	J	N	3	S
3024	11/02/88	3658		Iron	4.2	-	N	3	S
3024	01/24/89	3842		Iron	4.1	J	N	3	S
3024	06/26/89	66460		Iron	4.16	-	N	3	S
3024	08/10/89	66515		Iron	4	-	N	3	S
3024	04/12/93	GW930412-8		Iron	4.43	-	N	3	S
3043	04/13/88	3090		Iron	1.52	-	N	3	S
3043	08/04/88	3397		Iron	4	-	N	3	S
3043	11/04/88	3694		Iron	3.6	-	N	3	S
3043	02/02/89	3886		Iron	4.14	-	N	3	S
3043	06/13/89	66439		Iron	3.66	-	N	3	S
3043	08/30/89	66573		Iron	3.63	-	N	4	S
3043	04/07/93	GW930407-13		Iron	4.85	-	N	3	S
3063	05/12/88	3190	U	Iron	0.05	U	N	3	D
3063	05/12/88	3191	U	Iron	0.05	U	D	3	D
3063	08/16/88	3495		Iron	0.037	-	N	3	D
3063	12/13/88	3741		Iron	0.007	-	N	3	D
3063	03/13/89	3966		Iron	0.07	J	N	3	D

Table D-3 (Continued)
Validated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
3096	09/12/88	3585	U	Iron	0.005	U	N	3	R
3096	12/07/88	3789		Iron	0.642	-	N	3	R
3096	02/09/89	3974		Iron	0.076	-	N	3	R
3096	04/30/89	4082		Iron	0.0426	U	N	3	R
3096	04/25/90	4257		Iron	0.704	-	N	3	R
3096	05/07/93	GW930507-1		Iron	0.544	-	N	3	R
3098	09/21/88	3589	U	Iron	0.005	UJ	N	3	D
3098	12/16/88	3795		Iron	0.022	UJ	N	3	D
3098	02/08/89	3989		Iron	0.027	J	N	3	D
3098	05/25/89	4088	U	Iron	0.057	UJ	N	3	D
3098	05/20/93	GW930520-10	B	Iron	0.0507	U	N	3	D
3099	05/24/88	3237	U	Iron	0.04	U	N	3	D
3099	05/24/88	3238	U	Iron	0.05	U	D	3	D
3099	08/16/88	3496	U	Iron	0.005	U	N	3	D
3099	12/06/88	3742		Iron	0.099	U	N	3	D
3099	03/14/89	3977	U	Iron	0.02	UJ	N	3	D
3100	05/24/88	3239		Iron	0.08	-	N	3	D
3100	05/24/88	3240		Iron	0.21	-	D	3	D
3100	08/19/88	3517	U	Iron	0.005	U	N	3	D
3100	12/06/88	3761		Iron	0.028	U	N	3	D
3100	03/13/89	3978		Iron	0.03	J	N	3	D
4011	02/07/91	4382		Iron	0.04	U	N	3	S
4011	04/08/93	GW930408-3		Iron	2.99	-	N	3	S
4011	04/08/93	GW930408-2		Iron	2.92	-	D	3	S
4096	09/12/88	3584		Iron	0.4	-	N	3	R
4096	12/14/88	3788		Iron	0.077	J	N	3	R
4096	12/14/88	3474		Iron	0.085	J	D	3	R
4096	02/10/89	3975		Iron	0.189	-	N	3	R
4096	04/30/89	4083		Iron	0.0367	U	N	3	R
4096	05/06/93	GW930506-7		Iron	0.243	-	N	3	R
2026	12/07/88	3750	U	Lead	0.002	U	N	3	D
2026	03/14/89	3980	U	Lead	0.002	UJ	N	3	D
2036	08/23/88	3564	U	Lead	0.002	UJ	N	3	R
2036	12/07/88	3770	U	Lead	0.002	UJ	N	3	R
2036	03/14/89	3983		Lead	0.003	J	N	3	R
2043	08/05/88	3440	U	Lead	0.005	U	N	3	S
2043	11/04/88	3700		Lead	0.002	UJ	N	3	S
2043	02/02/89	3887		Lead	0.006	-	N	3	S
2043	06/26/89	66438		Lead	0.0026	-	N	3	S
2043	08/30/89	66572	UWN	Lead	0.002	UJ	N	4	S
2043	08/30/89	66577	BWN	Lead	0.0031	UJ	D	4	S
2043	04/07/93	GW930407-12	U	Lead	0.002	U	N	3	S
2050	12/05/88	3743		Lead	0.011	J	N	3	S
2050	03/13/89	3969	U	Lead	0.002	UJ	N	3	S
2050	05/20/93	GW930520-8	U	Lead	0.002	U	N	3	S
2056	08/25/88	3575		Lead	0.028	J	N	3	S
2056	12/07/88	3781	U	Lead	0.002	UJ	N	3	S
2056	03/13/89	3967	U	Lead	0.002	UJ	N	3	S
2056	03/13/89	4045	U	Lead	0.002	UJ	D	3	S
2057	08/25/88	3573	U	Lead	0.002	UJ	N	3	R

Table D-3 (Continued)
Validated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well	Sample		Lab		Validated		QA		
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type	ASL	Area
2057	12/13/88	3779	U	Lead	0.002	U	N	3	R
2057	03/14/89	3965	U	Lead	0.002	UJ	N	3	R
2066	03/14/89	3894		Lead	0.009	J	N	3	S
2066	06/27/89	66436	U	Lead	0.002	UJ	N	3	S
2066	08/09/89	66498		Lead	0.005	-	N	3	S
2066	04/07/93	GW930407-14	U	Lead	0.002	U	N	3	S
2096	12/07/88	3790	U	Lead	0.002	UJ	N	3	R
2096	02/09/89	3985	U	Lead	0.002	UJ	N	3	R
2096	04/25/90	4234	U	Lead	0.002	U	N	3	R
2096	05/06/93	GW930506-5	UW	Lead	0.001	UJ	N	3	R
2098	12/16/88	3796	U	Lead	0.002	UJ	N	3	D
2098	02/08/89	3990	U	Lead	0.002	UJ	N	3	D
2098	05/25/89	4087	U	Lead	0.002	UJ	N	3	D
2098	05/20/93	GW930520-9	UW	Lead	0.002	UJ	N	3	D
2104	12/06/88	3744		Lead	0.003	UJ	N	3	R
2104	03/15/89	3970	U	Lead	0.002	U	N	3	R
2104	04/22/90	4235	U	Lead	0.002	U	N	3	R
2104	04/22/90	4269	U	Lead	0.002	U	N	3	R
2104	05/13/93	GW930513-14	UW	Lead	0.002	UJ	N	3	R
2104	05/13/93	GW930513-18	UW	Lead	0.002	UJ	N	3	R
2105	03/15/89	3968	U	Lead	0.002	U	N	3	S
2121	08/25/88	3571	U	Lead	0.002	UJ	N	3	D
2121	12/13/88	3776	U	Lead	0.002	U	N	3	D
2121	03/14/89	3962	U	Lead	0.002	UJ	N	3	D
2122	12/07/88	3749	U	Lead	0.002	UJ	N	3	D
2122	03/15/89	3979	U	Lead	0.002	U	N	3	D
2123	08/23/88	3565		Lead	0.004	J	N	3	R
2123	12/06/88	3771	U	Lead	0.002	UJ	N	3	R
2123	03/14/89	3984	U	Lead	0.002	UJ	N	3	R
2728	05/24/93	GW930524-3	U	Lead	0.001	U	N	3	S
3024	11/02/88	3658		Lead	0.004	UJ	N	3	S
3024	01/24/89	3842	U	Lead	0.002	UJ	N	3	S
3024	06/26/89	66460	U	Lead	0.002	U	N	3	S
3024	08/10/89	66515	U	Lead	0.002	U	N	3	S
3024	04/12/93	GW930412-8	BWN	Lead	0.0024	UJ	N	3	S
3043	08/04/88	3397	U	Lead	0.005	U	N	3	S
3043	11/04/88	3694		Lead	0.005	UJ	N	3	S
3043	02/02/89	3886		Lead	0.029	-	N	3	S
3043	06/13/89	66439		Lead	0.0044	-	N	3	S
3043	08/30/89	66573	BWN	Lead	0.0027	UJ	N	4	S
3043	04/07/93	GW930407-13	U	Lead	0.002	U	N	3	S
3063	12/13/88	3741	U	Lead	0.002	U	N	3	D
3063	03/13/89	3966	U	Lead	0.002	UJ	N	3	D
3096	12/07/88	3789	U	Lead	0.002	UJ	N	3	R
3096	02/09/89	3974	U	Lead	0.002	UJ	N	3	R
3096	04/25/90	4257	U	Lead	0.002	U	N	3	R
3096	05/07/93	GW930507-1	B	Lead	0.0016	-	N	3	R
3098	09/21/88	3589		Lead	0.005	J	N	3	D
3098	12/16/88	3795	U	Lead	0.002	UJ	N	3	D
3098	02/08/89	3989	U	Lead	0.002	UJ	N	3	D

Table D-3 (Continued)
Validated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
3098	05/25/89	4088	U	Lead	0.008	UJ	N	3	D
3098	05/20/93	GW930520-10	U	Lead	0.002	U	N	3	D
3099	12/06/88	3742		Lead	0.004	UJ	N	3	D
3099	03/14/89	3977	U	Lead	0.002	UJ	N	3	D
3100	08/19/88	3517	U	Lead	0.002	UJ	N	3	D
3100	12/06/88	3761		Lead	0.003	UJ	N	3	D
3100	03/13/89	3978	U	Lead	0.002	UJ	N	3	D
4011	10/05/90	4345	U	Lead	0.002	U	N	3	S
4011	02/07/91	4382	U	Lead	0.002	U	N	3	S
4011	04/08/93	GW930408-3	U	Lead	0.001	U	N	3	S
4011	04/08/93	GW930408-2	U	Lead	0.001	U	D	3	S
4096	12/14/88	3788	U	Lead	0.002	UJ	N	3	R
4096	12/14/88	3474		Lead	0.006	J	D	3	R
4096	02/10/89	3975	U	Lead	0.002	UJ	N	3	R
4096	05/06/93	GW930506-7	U	Lead	0.001	U	N	3	R
2026	05/12/88	3186		Magnesium	28.6	-	N	3	D
2026	05/12/88	3187		Magnesium	28.3	-	D	3	D
2026	08/17/88	3505		Magnesium	30	-	N	3	D
2026	12/07/88	3750		Magnesium	18.3	-	N	3	D
2026	03/14/89	3980		Magnesium	33	J	N	3	D
2036	05/12/88	3184		Magnesium	25.5	-	N	3	R
2036	05/12/88	3185		Magnesium	24.7	-	D	3	R
2036	08/23/88	3564		Magnesium	26.2	-	N	3	R
2036	12/07/88	3770		Magnesium	24.7	-	N	3	R
2036	03/14/89	3983		Magnesium	25	J	N	3	R
2043	04/13/88	3091		Magnesium	36.4	J	N	3	S
2043	08/05/88	3440		Magnesium	38	-	N	3	S
2043	11/04/88	3700		Magnesium	25.9	-	N	3	S
2043	02/02/89	3887		Magnesium	38.8	-	N	3	S
2043	06/26/89	66438		Magnesium	38.5	-	N	3	S
2043	08/30/89	66572		Magnesium	41	-	N	4	S
2043	08/30/89	66577		Magnesium	38.7	-	D	4	S
2043	04/07/93	GW930407-12		Magnesium	41.5	-	N	3	S
2050	05/05/88	3147		Magnesium	28.3	-	N	3	S
2050	08/16/88	3497		Magnesium	29.1	-	N	3	S
2050	12/05/88	3743		Magnesium	27.8	-	N	3	S
2050	03/13/89	3969		Magnesium	27	J	N	3	S
2050	05/20/93	GW930520-8		Magnesium	33.1	-	N	3	S
2056	05/06/88	3159		Magnesium	22.5	-	N	3	S
2056	08/25/88	3575		Magnesium	25.9	-	N	3	S
2056	12/07/88	3781		Magnesium	26	-	N	3	S
2056	03/13/89	3967		Magnesium	25	J	N	3	S
2056	03/13/89	4045		Magnesium	26	J	D	3	S
2057	06/03/88	3265		Magnesium	23.1	-	N	3	R
2057	08/25/88	3573		Magnesium	22.7	-	N	3	R
2057	12/13/68	3779		Magnesium	22.8	-	N	3	R
2057	03/14/89	3965		Magnesium	22	J	N	3	R
2066	04/26/88	3124		Magnesium	27.2	-	N	3	S
2066	11/10/88	3710		Magnesium	26	-	N	3	S
2066	03/14/89	3894		Magnesium	28	J	N	3	S

Table D-3 (Continued)
Validated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
2066	06/27/89	66436		Magnesium	30.45	J	N	3	S
2066	08/09/89	66498		Magnesium	31.3	-	N	3	S
2066	04/07/93	GW930407-14		Magnesium	31.5	-	N	3	S
2096	09/12/88	3586		Magnesium	28.5	-	N	3	R
2096	12/07/88	3790		Magnesium	27.3	-	N	3	R
2096	02/09/89	3985		Magnesium	27.1	-	N	3	R
2096	04/30/89	4081		Magnesium	42.4	-	N	3	R
2096	04/25/90	4234		Magnesium	35.1	-	N	3	R
2096	05/06/93	GW930506-5	E	Magnesium	31.3	J	N	3	R
2098	09/22/88	3591		Magnesium	32.4	-	N	3	D
2098	12/16/88	3796		Magnesium	31.7	-	N	3	D
2098	02/08/89	3990		Magnesium	34.7	J	N	3	D
2098	05/25/89	4087		Magnesium	25.8	J	N	3	D
2098	05/20/93	GW930520-9		Magnesium	21.9	-	N	3	D
2104	05/05/88	3146		Magnesium	29.7	-	N	3	R
2104	08/16/88	3498		Magnesium	28.88	-	N	3	R
2104	12/06/88	3744		Magnesium	32.8	-	N	3	R
2104	03/15/89	3970		Magnesium	29	-	N	3	R
2104	04/22/90	4235		Magnesium	31.4	-	N	3	R
2104	04/22/90	4269		Magnesium	30.3	-	N	3	R
2104	05/13/93	GW930513-14		Magnesium	33.4	-	N	3	R
2104	05/13/93	GW930513-18		Magnesium	34.1	-	N	3	R
2105	06/05/88	3268		Magnesium	15.8	-	N	3	S
2105	08/28/88	3577		Magnesium	24.2	-	N	3	S
2105	03/15/89	3968		Magnesium	24	-	N	3	S
2121	05/06/88	3158		Magnesium	15.7	-	N	3	D
2121	08/25/88	3571		Magnesium	20.2	-	N	3	D
2121	12/13/88	3776		Magnesium	21.6	-	N	3	D
2121	03/14/89	3962		Magnesium	20	J	N	3	D
2122	05/06/88	3157		Magnesium	17	-	N	3	D
2122	08/17/88	3504		Magnesium	18.3	-	N	3	D
2122	12/07/88	3749		Magnesium	29.8	-	N	3	D
2122	03/15/89	3979		Magnesium	18	-	N	3	D
2123	05/06/88	3156		Magnesium	20.7	-	N	3	R
2123	08/23/88	3565		Magnesium	22.9	-	N	3	R
2123	12/06/88	3771		Magnesium	22.2	-	N	3	R
2123	03/14/89	3984		Magnesium	21	J	N	3	R
2728	05/24/93	GW930524-3		Magnesium	29.1	J	N	3	S
3024	04/20/88	3096		Magnesium	21.2	-	N	3	S
3024	07/26/88	3377		Magnesium	46	-	N	3	S
3024	11/02/88	3658		Magnesium	28.1	-	N	3	S
3024	01/24/89	3842		Magnesium	28.1	J	N	3	S
3024	06/26/89	66460		Magnesium	27.8	-	N	3	S
3024	08/10/89	66515		Magnesium	26.6	-	N	3	S
3024	04/12/93	GW930412-8		Magnesium	32.6	-	N	3	S
3043	04/13/88	3090		Magnesium	24.6	J	N	3	S
3043	08/04/88	3397		Magnesium	26	-	N	3	S
3043	11/04/88	3694		Magnesium	23.5	-	N	3	S
3043	02/02/89	3886		Magnesium	26.8	-	N	3	S
3043	06/13/89	66439		Magnesium	27.8	-	N	3	S

Table D-3 (Continued)
Validated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
3043	08/30/89	66573		Magnesium	29	-	N	4	S
3043	04/07/93	GW930407-13		Magnesium	28.7	-	N	3	S
3063	05/12/88	3190		Magnesium	22.1	-	N	3	D
3063	05/12/88	3191		Magnesium	22.8	-	D	3	D
3063	08/16/88	3495		Magnesium	24.36	-	N	3	D
3063	12/13/88	3741		Magnesium	24.4	-	N	3	D
3063	03/13/89	3966		Magnesium	24	J	N	3	D
3096	09/12/88	3585		Magnesium	22.4	-	N	3	R
3096	12/07/88	3789		Magnesium	22.8	-	N	3	R
3096	02/09/89	3974		Magnesium	24.5	-	N	3	R
3096	04/30/89	4082		Magnesium	23.9	-	N	3	R
3096	04/25/90	4257		Magnesium	22.6	-	N	3	R
3096	05/07/93	GW930507-1		Magnesium	22.5	-	N	3	R
3098	09/21/88	3589		Magnesium	30.9	J	N	3	D
3098	12/16/88	3795		Magnesium	29.8	-	N	3	D
3098	02/08/89	3989		Magnesium	31.4	J	N	3	D
3098	05/25/89	4088		Magnesium	32.9	J	N	3	D
3098	05/20/93	GW930520-10		Magnesium	30.7	-	N	3	D
3099	05/24/88	3237		Magnesium	31.9	-	N	3	D
3099	05/24/88	3238		Magnesium	31.3	-	D	3	D
3099	08/16/88	3496		Magnesium	32.88	-	N	3	D
3099	12/06/88	3742		Magnesium	32.4	-	N	3	D
3099	03/14/89	3977		Magnesium	33	J	N	3	D
3100	05/24/88	3239		Magnesium	28.8	-	N	3	D
3100	05/24/88	3240		Magnesium	26.8	-	D	3	D
3100	08/19/88	3517		Magnesium	29.4	-	N	3	D
3100	12/06/88	3761		Magnesium	29.6	-	N	3	D
3100	03/13/89	3978		Magnesium	28	J	N	3	D
4011	02/07/91	4382		Magnesium	20.1	-	N	3	S
4011	04/08/93	GW930408-3		Magnesium	34.8	-	N	3	S
4011	04/08/93	GW930408-2		Magnesium	34.7	-	D	3	S
4096	09/12/88	3584		Magnesium	21.2	-	N	3	R
4096	12/14/88	3788		Magnesium	20	J	N	3	R
4096	12/14/88	3474		Magnesium	19.8	J	D	3	R
4096	02/10/89	3975		Magnesium	22.6	-	N	3	R
4096	04/30/89	4083		Magnesium	20.7	-	N	3	R
4096	05/06/93	GW930506-7	E	Magnesium	20.2	J	N	3	R
2026	05/12/88	3186	U	Manganese	0.02	U	N	3	D
2026	05/12/88	3187	U	Manganese	0.02	U	D	3	D
2026	08/17/88	3505	U	Manganese	0.001	U	N	3	D
2026	12/07/88	3750	U	Manganese	0.001	U	N	3	D
2026	03/14/89	3980	U	Manganese	0.005	UJ	N	3	D
2036	05/12/88	3184	U	Manganese	0.02	U	N	3	R
2036	05/12/88	3185	U	Manganese	0.02	U	D	3	R
2036	08/23/88	3564	U	Manganese	0.001	U	N	3	R
2036	12/07/88	3770	U	Manganese	0.001	U	N	3	R
2036	03/14/89	3983	U	Manganese	0.005	UJ	N	3	R
2043	04/13/88	3091		Manganese	0.168	-	N	3	S
2043	08/05/88	3440		Manganese	0.15	-	N	3	S
2043	11/04/88	3700		Manganese	0.1	-	N	3	S

Table D-3 (Continued)
Validated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
2043	02/02/89	3887		Manganese	0.145	-	N	3	S
2043	08/30/89	66572		Manganese	0.192	-	N	4	S
2043	08/30/89	66577		Manganese	0.376	-	D	4	S
2043	04/07/93	GW930407-12		Manganese	0.153	J	N	3	S
2050	05/05/88	3147		Manganese	0.09	-	N	3	S
2050	08/16/88	3497		Manganese	0.088	-	N	3	S
2050	12/05/88	3743		Manganese	0.113	-	N	3	S
2050	03/13/89	3969		Manganese	0.1	J	N	3	S
2050	05/20/93	GW930520-8		Manganese	0.132	J	N	3	S
2056	05/06/88	3159		Manganese	0.014	-	N	3	S
2056	08/25/88	3575		Manganese	0.018	-	N	3	S
2056	12/07/88	3781		Manganese	0.018	-	N	3	S
2056	03/13/89	3967		Manganese	0.02	J	N	3	S
2056	03/13/89	4045		Manganese	0.021	J	D	3	S
2057	06/03/88	3265		Manganese	0.47	-	N	3	R
2057	08/25/88	3573		Manganese	0.453	-	N	3	R
2057	12/13/88	3779		Manganese	0.395	-	N	3	R
2057	03/14/89	3965		Manganese	0.48	J	N	3	R
2066	04/26/88	3124		Manganese	0.068	J	N	3	S
2066	11/10/88	3710		Manganese	0.036	-	N	3	S
2066	03/14/89	3894		Manganese	0.04	J	N	3	S
2066	04/07/93	GW930407-14		Manganese	0.0297	-	N	3	S
2096	09/12/88	3586		Manganese	0.6	-	N	3	R
2096	12/07/88	3790		Manganese	0.424	-	N	3	R
2096	02/09/89	3985		Manganese	0.218	-	N	3	R
2096	04/30/89	4081		Manganese	0.665	-	N	3	R
2096	04/25/90	4234		Manganese	0.409	-	N	3	R
2096	05/06/93	GW930506-5		Manganese	0.595	-	N	3	R
2098	09/22/88	3591		Manganese	0.02	-	N	3	D
2098	12/16/88	3796		Manganese	0.009	-	N	3	D
2098	02/08/89	3990		Manganese	0.014	J	N	3	D
2098	05/25/89	4087		Manganese	0.0135	J	N	3	D
2098	05/20/93	GW930520-9	U	Manganese	0.001	U	N	3	D
2104	05/05/88	3146		Manganese	0.28	-	N	3	R
2104	08/16/88	3498		Manganese	0.268	-	N	3	R
2104	12/06/88	3744		Manganese	0.312	-	N	3	R
2104	03/15/89	3970		Manganese	0.27	-	N	3	R
2104	04/22/90	4235		Manganese	0.281	-	N	3	R
2104	04/22/90	4269		Manganese	0.272	-	N	3	R
2104	05/13/93	GW930513-14		Manganese	0.302	-	N	3	R
2104	05/13/93	GW930513-18		Manganese	0.304	-	N	3	R
2105	06/05/88	3268		Manganese	0.02	-	N	3	S
2105	08/28/88	3577		Manganese	0.03	-	N	3	S
2105	03/15/89	3968		Manganese	0.019	-	N	3	S
2121	05/06/88	3158		Manganese	0.003	-	N	3	D
2121	08/25/88	3571		Manganese	0.002	-	N	3	D
2121	12/13/88	3776		Manganese	0.002	U	N	3	D
2121	03/14/89	3962		Manganese	0.073	J	N	3	D
2122	05/06/88	3157	U	Manganese	0.001	U	N	3	D
2122	08/17/88	3504	U	Manganese	0.001	U	N	3	D

Table D-3 (Continued)
Validated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
2122	12/07/88	3749	U	Manganese	0.001	U	N	3	D
2122	03/15/89	3979	U	Manganese	0.005	U	N	3	D
2123	05/06/88	3156		Manganese	0.005	-	N	3	R
2123	08/23/88	3565		Manganese	0.002	-	N	3	R
2123	12/06/88	3771	U	Manganese	0.001	U	N	3	R
2123	03/14/89	3984	U	Manganese	0.005	UJ	N	3	R
2728	05/24/93	GW930524-3		Manganese	0.162	-	N	3	S
3024	04/20/88	3096		Manganese	0.202	-	N	3	S
3024	07/26/88	3377		Manganese	0.78	J	N	3	S
3024	11/02/88	3658		Manganese	0.2	-	N	3	S
3024	01/24/89	3842		Manganese	0.149	J	N	3	S
3024	04/12/93	GW930412-8		Manganese	0.18	-	N	3	S
3043	04/13/88	3090		Manganese	0.06	-	N	3	S
3043	08/04/88	3397		Manganese	0.05	-	N	3	S
3043	11/04/88	3694		Manganese	0.05	-	N	3	S
3043	02/02/89	3886		Manganese	0.068	-	N	3	S
3043	08/30/89	66573		Manganese	0.078	-	N	4	S
3043	04/07/93	GW930407-13		Manganese	0.0648	-	N	3	S
3063	05/12/88	3190	U	Manganese	0.02	U	N	3	D
3063	05/12/88	3191	U	Manganese	0.02	U	D	3	D
3063	08/16/88	3495		Manganese	0.004	-	N	3	D
3063	12/13/88	3741		Manganese	0.011	-	N	3	D
3063	03/13/89	3966		Manganese	0.006	J	N	3	D
3096	09/12/88	3585		Manganese	0.06	-	N	3	R
3096	12/07/88	3789		Manganese	0.054	-	N	3	R
3096	02/09/89	3974		Manganese	0.081	-	N	3	R
3096	04/30/89	4082		Manganese	0.107	-	N	3	R
3096	04/25/90	4257		Manganese	0.074	-	N	3	R
3096	05/07/93	GW930507-1		Manganese	0.0607	-	N	3	R
3098	09/21/88	3589		Manganese	0.02	J	N	3	D
3098	12/16/88	3795		Manganese	0.02	-	N	3	D
3098	02/08/89	3989		Manganese	0.019	J	N	3	D
3098	05/25/89	4088		Manganese	0.0208	J	N	3	D
3098	05/20/93	GW930520-10	B	Manganese	0.0028	U	N	3	D
3099	05/24/88	3237	U	Manganese	0.02	U	N	3	D
3099	05/24/88	3238	U	Manganese	0.02	U	D	3	D
3099	08/16/88	3496	U	Manganese	0.001	U	N	3	D
3099	12/06/88	3742		Manganese	0.002	U	N	3	D
3099	03/14/89	3977		Manganese	0.009	J	N	3	D
3100	05/24/88	3239	U	Manganese	0.02	U	N	3	D
3100	05/24/88	3240	U	Manganese	0.02	U	D	3	D
3100	08/19/88	3517		Manganese	0.009	-	N	3	D
3100	12/06/88	3761		Manganese	0.006	U	N	3	D
3100	03/13/89	3978		Manganese	0.016	J	N	3	D
4011	10/05/90	4345		Manganese	0.154	-	N	3	S
4011	02/07/91	4382		Manganese	0.016	-	N	3	S
4011	04/08/93	GW930408-3		Manganese	0.189	-	N	3	S
4011	04/08/93	GW930408-2		Manganese	0.183	-	D	3	S
4096	09/12/88	3584		Manganese	0.8	-	N	3	R
4096	12/14/88	3788		Manganese	0.883	J	N	3	R

Table D-3 (Continued)
Validated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
4096	12/14/88	3474		Manganese	0.854	J	D	3	R
4096	02/10/89	3975		Manganese	0.895	-	N	3	R
4096	04/30/89	4083		Manganese	0.838	-	N	3	R
4096	05/06/93	GW930506-7		Manganese	0.916	-	N	3	R
2026	05/12/88	3186	U	Mercury	0.0002	U	N	3	D
2026	05/12/88	3187	U	Mercury	0.0002	U	D	3	D
2026	08/17/88	3505	U	Mercury	0.0002	UJ	N	3	D
2026	12/07/88	3750	U	Mercury	0.0002	U	N	3	D
2026	03/14/89	3980	U	Mercury	0.0002	UJ	N	3	D
2036	05/12/88	3184	U	Mercury	0.0002	U	N	3	R
2036	05/12/88	3185	U	Mercury	0.0002	U	D	3	R
2036	08/23/88	3564	U	Mercury	0.0002	U	N	3	R
2036	12/07/88	3770	U	Mercury	0.0002	U	N	3	R
2036	03/14/89	3983	U	Mercury	0.0002	UJ	N	3	R
2043	04/13/88	3091	U	Mercury	0.0002	UJ	N	3	S
2043	08/05/88	3440	U	Mercury	0.0003	U	N	3	S
2043	11/04/88	3700	U	Mercury	0.0002	U	N	3	S
2043	08/30/89	66572	U	Mercury	0.0002	U	N	4	S
2043	08/30/89	66577	U	Mercury	0.0002	U	D	4	S
2043	04/07/93	GW930407-12	U	Mercury	0.0002	U	N	3	S
2050	05/05/88	3147	U	Mercury	0.0002	U	N	3	S
2050	08/16/88	3497	U	Mercury	0.0002	UJ	N	3	S
2050	12/05/88	3743	U	Mercury	0.0002	UJ	N	3	S
2050	03/13/89	3969	U	Mercury	0.0002	UJ	N	3	S
2050	05/20/93	GW930520-8	U	Mercury	0.0002	U	N	3	S
2056	05/06/88	3159	U	Mercury	0.0002	U	N	3	S
2056	08/25/88	3575	U	Mercury	0.0002	UJ	N	3	S
2056	12/07/88	3781	U	Mercury	0.0002	U	N	3	S
2056	03/13/89	3967		Mercury	0.0002	J	N	3	S
2056	03/13/89	4045		Mercury	0.0004	J	D	3	S
2057	06/03/88	3265	U	Mercury	0.0002	U	N	3	R
2057	08/25/88	3573	U	Mercury	0.0002	UJ	N	3	R
2057	12/13/88	3779	U	Mercury	0.0002	U	N	3	R
2057	03/14/89	3965	U	Mercury	0.0002	UJ	N	3	R
2066	04/26/88	3124		Mercury	0.001	-	N	3	S
2066	11/10/88	3710	U	Mercury	0.0002	U	N	3	S
2066	03/14/89	3894	U	Mercury	0.0002	UJ	N	3	S
2066	04/07/93	GW930407-14	U	Mercury	0.0002	U	N	3	S
2096	09/12/88	3586	U	Mercury	0.0002	UJ	N	3	R
2096	12/07/88	3790	U	Mercury	0.0002	U	N	3	R
2096	02/09/89	3985		Mercury	0.0002	J	N	3	R
2096	04/30/89	4081		Mercury	0.0003	-	N	3	R
2096	04/25/90	4234	U	Mercury	0.0002	U	N	3	R
2096	05/06/93	GW930506-5	U	Mercury	0.0002	U	N	3	R
2098	09/22/88	3591	U	Mercury	0.0002	UJ	N	3	D
2098	12/16/88	3796	U	Mercury	0.0002	U	N	3	D
2098	02/08/89	3990	U	Mercury	0.0002	UJ	N	3	D
2098	05/25/89	4087		Mercury	0.0005	J	N	3	D
2098	05/20/93	GW930520-9	U	Mercury	0.0002	U	N	3	D
2104	05/05/88	3146	U	Mercury	0.0002	U	N	3	R

Table D-3 (Continued)
Validated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
2104	08/16/88	3498	U	Mercury	0.0002	UJ	N	3	R
2104	12/06/88	3744		Mercury	0.0004	J	N	3	R
2104	03/15/89	3970	U	Mercury	0.0002	UJ	N	3	R
2104	04/22/90	4235	U	Mercury	0.0002	U	N	3	R
2104	04/22/90	4269	U	Mercury	0.0002	U	N	3	R
2104	05/13/93	GW930513-14	U	Mercury	0.0002	U	N	3	R
2104	05/13/93	GW930513-18	U	Mercury	0.0002	U	N	3	R
2105	06/05/88	3268	U	Mercury	0.0002	U	N	3	S
2105	08/28/88	3577	U	Mercury	0.0002	U	N	3	S
2105	03/15/89	3968	U	Mercury	0.0002	UJ	N	3	S
2121	05/06/88	3158	U	Mercury	0.0002	U	N	3	D
2121	08/25/88	3571	U	Mercury	0.0002	UJ	N	3	D
2121	12/13/88	3776	U	Mercury	0.0002	U	N	3	D
2121	03/14/89	3962	U	Mercury	0.0002	UJ	N	3	D
2122	05/06/88	3157	U	Mercury	0.0002	U	N	3	D
2122	08/17/88	3504	U	Mercury	0.0002	UJ	N	3	D
2122	12/07/88	3749	U	Mercury	0.0002	U	N	3	D
2122	03/15/89	3979	U	Mercury	0.0002	UJ	N	3	D
2123	05/06/88	3156	U	Mercury	0.0002	U	N	3	R
2123	08/23/88	3565	U	Mercury	0.0002	U	N	3	R
2123	12/06/88	3771	U	Mercury	0.0002	U	N	3	R
2123	03/14/89	3984	U	Mercury	0.0002	UJ	N	3	R
2728	05/24/93	GW930524-3	U	Mercury	0.0002	U	N	3	S
3024	04/20/88	3096	U	Mercury	0.0002	U	N	3	S
3024	07/26/88	3377		Mercury	0.0005	-	N	3	S
3024	11/02/88	3658	U	Mercury	0.0002	U	N	3	S
3024	01/24/89	3842	U	Mercury	0.0002	UJ	N	3	S
3024	04/12/93	GW930412-8	U	Mercury	0.0002	U	N	3	S
3043	04/13/88	3090	U	Mercury	0.0002	UJ	N	3	S
3043	08/04/88	3397	U	Mercury	0.0003	U	N	3	S
3043	11/04/88	3694	U	Mercury	0.0002	U	N	3	S
3043	02/02/89	3886		Mercury	0.0002	UJ	N	3	S
3043	08/30/89	66573	U	Mercury	0.0002	U	N	4	S
3043	04/07/93	GW930407-13	U	Mercury	0.0002	U	N	3	S
3063	05/12/88	3190	U	Mercury	0.0002	U	N	3	D
3063	05/12/88	3191	U	Mercury	0.0002	U	D	3	D
3063	08/16/88	3495	U	Mercury	0.0002	UJ	N	3	D
3063	12/13/88	3741	U	Mercury	0.0002	U	N	3	D
3063	03/13/89	3966	U	Mercury	0.0002	UJ	N	3	D
3096	09/12/88	3585	U	Mercury	0.0002	UJ	N	3	R
3096	12/07/88	3789	U	Mercury	0.0002	U	N	3	R
3096	02/09/89	3974	U	Mercury	0.0002	UJ	N	3	R
3096	04/30/89	4082	U	Mercury	0.0002	U	N	3	R
3096	04/25/90	4257	U	Mercury	0.0002	U	N	3	R
3096	05/07/93	GW930507-1	U	Mercury	0.0002	U	N	3	R
3098	09/21/88	3589	U	Mercury	0.0002	UJ	N	3	D
3098	12/16/88	3795	U	Mercury	0.0002	U	N	3	D
3098	02/08/89	3989		Mercury	0.0005	J	N	3	D
3098	05/25/89	4088	U	Mercury	0.0002	UJ	N	3	D
3098	05/20/93	GW930520-10	U	Mercury	0.0002	U	N	3	D

Table D-3 (Continued)
Validated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
3099	05/24/88	3237	U	Mercury	0.0002	U	N	3	D
3099	05/24/88	3238	U	Mercury	0.0002	U	D	3	D
3099	08/16/88	3496	U	Mercury	0.0002	UJ	N	3	D
3099	12/06/88	3742		Mercury	0.0004	J	N	3	D
3099	03/14/89	3977		Mercury	0.0003	J	N	3	D
3100	05/24/88	3239	U	Mercury	0.0002	U	N	3	D
3100	05/24/88	3240	U	Mercury	0.0002	U	D	3	D
3100	08/19/88	3517	U	Mercury	0.0002	U	N	3	D
3100	12/06/88	3761	U	Mercury	0.0002	U	N	3	D
3100	03/13/89	3978	U	Mercury	0.0002	UJ	N	3	D
4011	10/05/90	4345	U	Mercury	0.0002	U	N	3	S
4011	04/08/93	GW930408-3	U	Mercury	0.0002	U	N	3	S
4011	04/08/93	GW930408-2	U	Mercury	0.0002	U	D	3	S
4096	09/12/88	3584	U	Mercury	0.0002	UJ	N	3	R
4096	12/14/88	3788	U	Mercury	0.0002	U	N	3	R
4096	12/14/88	3474	U	Mercury	0.0002	U	D	3	R
4096	02/10/89	3975	U	Mercury	0.0002	UJ	N	3	R
4096	04/30/89	4083	U	Mercury	0.0002	U	N	3	R
4096	05/06/93	GW930506-7	U	Mercury	0.0002	U	N	3	R
2026	05/12/88	3186	U	Molybdenum	0.02	U	N	3	D
2026	05/12/88	3187	U	Molybdenum	0.02	U	D	3	D
2026	08/17/88	3505	U	Molybdenum	0.02	U	N	3	D
2026	12/07/88	3750	U	Molybdenum	0.02	U	N	3	D
2026	03/14/89	3980		Molybdenum	0.01	J	N	3	D
2036	05/12/88	3184	U	Molybdenum	0.02	U	N	3	R
2036	05/12/88	3185	U	Molybdenum	0.02	U	D	3	R
2036	08/23/88	3564	U	Molybdenum	0.02	U	N	3	R
2036	12/07/88	3770	U	Molybdenum	0.02	U	N	3	R
2036	03/14/89	3983	U	Molybdenum	0.01	UJ	N	3	R
2043	04/13/88	3091	U	Molybdenum	0.02	U	N	3	S
2043	11/04/88	3700	U	Molybdenum	0.02	U	N	3	S
2043	02/02/89	3887	U	Molybdenum	0.02	U	N	3	S
2050	05/05/88	3147	U	Molybdenum	0.02	U	N	3	S
2050	08/16/88	3497	U	Molybdenum	0.02	U	N	3	S
2050	12/05/88	3743	U	Molybdenum	0.02	U	N	3	S
2050	03/13/89	3969		Molybdenum	0.01	J	N	3	S
2050	05/20/93	GW930520-8	U	Molybdenum	0.011	U	N	3	S
2056	05/06/88	3159	U	Molybdenum	0.02	U	N	3	S
2056	08/25/88	3575	U	Molybdenum	0.02	U	N	3	S
2056	12/07/88	3781	U	Molybdenum	0.02	U	N	3	S
2056	03/13/89	3967		Molybdenum	0.02	J	N	3	S
2056	03/13/89	4045		Molybdenum	0.02	J	D	3	S
2057	06/03/88	3265	U	Molybdenum	0.02	U	N	3	R
2057	08/25/88	3573	U	Molybdenum	0.02	U	N	3	R
2057	12/13/88	3779	U	Molybdenum	0.02	U	N	3	R
2057	03/14/89	3965		Molybdenum	0.01	J	N	3	R
2066	04/26/88	3124	U	Molybdenum	0.02	U	N	3	S
2066	11/10/88	3710	U	Molybdenum	0.02	U	N	3	S
2066	03/14/89	3894		Molybdenum	0.02	J	N	3	S
2096	09/12/88	3586	U	Molybdenum	0.02	U	N	3	R

Table D-3 (Continued)
Validated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
2096	12/07/88	3790	U	Molybdenum	0.02	U	N	3	R
2096	02/09/89	3985		Molybdenum	0.004	-	N	3	R
2096	04/30/89	4081	U	Molybdenum	0.01	U	N	3	R
2096	04/25/90	4234		Molybdenum	0.01	-	N	3	R
2098	09/22/88	3591	U	Molybdenum	0.02	U	N	3	D
2098	02/08/89	3990	U	Molybdenum	0.02	UJ	N	3	D
2098	05/25/89	4087	U	Molybdenum	0.01	UJ	N	3	D
2098	05/20/93	GW930520-9	U	Molybdenum	0.011	U	N	3	D
2104	05/05/88	3146	U	Molybdenum	0.02	U	N	3	R
2104	08/16/88	3498	U	Molybdenum	0.02	U	N	3	R
2104	03/15/89	3970		Molybdenum	0.01	-	N	3	R
2104	04/22/90	4235	U	Molybdenum	0.01	U	N	3	R
2104	04/22/90	4269	U	Molybdenum	0.01	U	N	3	R
2104	05/13/93	GW930513-14	U	Molybdenum	0.011	U	N	3	R
2104	05/13/93	GW930513-18	U	Molybdenum	0.011	U	N	3	R
2105	06/05/88	3268	U	Molybdenum	0.02	U	N	3	S
2105	08/28/88	3577	U	Molybdenum	0.02	U	N	3	S
2105	03/15/89	3968		Molybdenum	0.01	-	N	3	S
2121	05/06/88	3158	U	Molybdenum	0.02	U	N	3	D
2121	08/25/88	3571	U	Molybdenum	0.02	U	N	3	D
2121	12/13/88	3776	U	Molybdenum	0.02	U	N	3	D
2121	03/14/89	3962	U	Molybdenum	0.01	UJ	N	3	D
2122	05/06/88	3157	U	Molybdenum	0.02	U	N	3	D
2122	08/17/88	3504		Molybdenum	0.025	-	N	3	D
2122	12/07/88	3749		Molybdenum	0.04	-	N	3	D
2122	03/15/89	3979	U	Molybdenum	0.01	U	N	3	D
2123	05/06/88	3156	U	Molybdenum	0.02	U	N	3	R
2123	08/23/88	3565	U	Molybdenum	0.02	U	N	3	R
2123	12/06/88	3771	U	Molybdenum	0.02	U	N	3	R
2123	03/14/89	3984	U	Molybdenum	0.01	UJ	N	3	R
3024	04/20/88	3096	U	Molybdenum	0.02	U	N	3	S
3024	11/02/88	3658	U	Molybdenum	0.02	U	N	3	S
3024	01/24/89	3842	U	Molybdenum	0.02	UJ	N	3	S
3043	04/13/88	3090		Molybdenum	0.03	-	N	3	S
3043	11/04/88	3694	U	Molybdenum	0.02	U	N	3	S
3043	02/02/89	3886	U	Molybdenum	0.02	U	N	3	S
3063	05/12/88	3190	U	Molybdenum	0.02	U	N	3	D
3063	05/12/88	3191	U	Molybdenum	0.02	U	D	3	D
3063	08/16/88	3495		Molybdenum	0.027	-	N	3	D
3063	03/13/89	3966		Molybdenum	0.01	J	N	3	D
3096	09/12/88	3585	U	Molybdenum	0.02	U	N	3	R
3096	12/07/88	3789	U	Molybdenum	0.02	U	N	3	R
3096	02/09/89	3974		Molybdenum	0.01	-	N	3	R
3096	04/30/89	4082	U	Molybdenum	0.01	U	N	3	R
3096	04/25/90	4257	U	Molybdenum	0.01	U	N	3	R
3098	09/21/88	3589	U	Molybdenum	0.02	UJ	N	3	D
3098	12/16/88	3795	U	Molybdenum	0.02	U	N	3	D
3098	02/08/89	3989	U	Molybdenum	0.02	UJ	N	3	D
3098	05/25/89	4088	U	Molybdenum	0.01	UJ	N	3	D
3098	05/20/93	GW930520-10	U	Molybdenum	0.011	U	N	3	D

Table D-3 (Continued)
Validated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well	Sample		Lab		Validated		QA		
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type	ASL	Area
3099	05/24/88	3237	U	Molybdenum	0.02	U	N	3	D
3099	05/24/88	3238	U	Molybdenum	0.02	U	D	3	D
3099	08/16/88	3496		Molybdenum	0.025	-	N	3	D
3099	12/06/88	3742	U	Molybdenum	0.02	U	N	3	D
3099	03/14/89	3977		Molybdenum	0.01	J	N	3	D
3100	05/24/88	3239	U	Molybdenum	0.02	U	N	3	D
3100	05/24/88	3240		Molybdenum	0.038	-	D	3	D
3100	08/19/88	3517	U	Molybdenum	0.02	U	N	3	D
3100	12/06/88	3761	U	Molybdenum	0.02	U	N	3	D
3100	03/13/89	3978		Molybdenum	0.01	J	N	3	D
4011	10/05/90	4345	U	Molybdenum	0.01	U	N	3	S
4011	02/07/91	4382	U	Molybdenum	0.01	U	N	3	S
4011	04/08/93	GW930408-3	U	Molybdenum	0.015	U	N	3	S
4011	04/08/93	GW930408-2	U	Molybdenum	0.015	U	D	3	S
4096	09/12/88	3584		Molybdenum	0.02	-	N	3	R
4096	12/14/88	3788	U	Molybdenum	0.02	U	N	3	R
4096	12/14/88	3474	U	Molybdenum	0.02	U	D	3	R
4096	02/10/89	3975		Molybdenum	0.004	-	N	3	R
4096	04/30/89	4083	U	Molybdenum	0.01	U	N	3	R
2026	05/12/88	3186	U	Nickel	0.02	U	N	3	D
2026	05/12/88	3187	U	Nickel	0.02	U	D	3	D
2026	08/17/88	3505	U	Nickel	0.02	U	N	3	D
2026	12/07/88	3750	U	Nickel	0.02	U	N	3	D
2026	03/14/89	3980	U	Nickel	0.03	UJ	N	3	D
2036	05/12/88	3184	U	Nickel	0.02	U	N	3	R
2036	05/12/88	3185	U	Nickel	0.02	U	D	3	R
2036	08/23/88	3564	U	Nickel	0.02	U	N	3	R
2036	12/07/88	3770	U	Nickel	0.02	U	N	3	R
2036	03/14/89	3983	U	Nickel	0.03	UJ	N	3	R
2043	04/13/88	3091	U	Nickel	0.02	U	N	3	S
2043	08/05/88	3440	U	Nickel	0.04	U	N	3	S
2043	11/04/88	3700	U	Nickel	0.02	U	N	3	S
2043	02/02/89	3887		Nickel	0.023	-	N	3	S
2043	06/26/89	66438		Nickel	0.0212	-	N	3	S
2043	08/30/89	66572	B	Nickel	0.0262	-	N	4	S
2043	08/30/89	66577	B	Nickel	0.0232	-	D	4	S
2043	04/07/93	GW930407-12	U	Nickel	0.031	U	N	3	S
2050	05/05/88	3147	U	Nickel	0.02	U	N	3	S
2050	08/16/88	3497	U	Nickel	0.02	U	N	3	S
2050	12/05/88	3743	U	Nickel	0.02	U	N	3	S
2050	03/13/89	3969	U	Nickel	0.03	UJ	N	3	S
2050	05/20/93	GW930520-8	U	Nickel	0.011	U	N	3	S
2056	05/06/88	3159	U	Nickel	0.02	U	N	3	S
2056	08/25/88	3575	U	Nickel	0.02	U	N	3	S
2056	12/07/88	3781	U	Nickel	0.02	U	N	3	S
2056	03/13/89	3967	U	Nickel	0.03	UJ	N	3	S
2056	03/13/89	4045	U	Nickel	0.03	UJ	D	3	S
2057	06/03/88	3265	U	Nickel	0.02	U	N	3	R
2057	08/25/88	3573	U	Nickel	0.02	U	N	3	R
2057	12/13/88	3779	U	Nickel	0.02	U	N	3	R

Table D-3 (Continued)
Validated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
2057	03/14/89	3965	U	Nickel	0.03	UJ	N	3	R
2066	04/26/88	3124	U	Nickel	0.02	U	N	3	S
2066	11/10/88	3710	U	Nickel	0.02	U	N	3	S
2066	03/14/89	3894	U	Nickel	0.03	UJ	N	3	S
2066	06/27/89	66436	U	Nickel	0.02	UJ	N	3	S
2066	08/09/89	66498	U	Nickel	0.02	U	N	3	S
2066	04/07/93	GW930407-14	U	Nickel	0.031	U	N	3	S
2096	09/12/88	3586	U	Nickel	0.02	U	N	3	R
2096	12/07/88	3790	U	Nickel	0.02	U	N	3	R
2096	02/09/89	3985		Nickel	0.012	-	N	3	R
2096	04/30/89	4081	U	Nickel	0.02	U	N	3	R
2096	04/25/90	4234	U	Nickel	0.02	U	N	3	R
2096	05/06/93	GW930506-5	U	Nickel	0.019	U	N	3	R
2098	09/22/88	3591	U	Nickel	0.02	U	N	3	D
2098	12/16/88	3796	U	Nickel	0.02	U	N	3	D
2098	02/08/89	3990	U	Nickel	0.02	UJ	N	3	D
2098	05/25/89	4087	U	Nickel	0.02	UJ	N	3	D
2098	05/20/93	GW930520-9	U	Nickel	0.011	U	N	3	D
2104	05/05/88	3146		Nickel	0.02	-	N	3	R
2104	08/16/88	3498	U	Nickel	0.02	U	N	3	R
2104	12/06/88	3744	U	Nickel	0.02	U	N	3	R
2104	03/15/89	3970	U	Nickel	0.03	U	N	3	R
2104	04/22/90	4235	U	Nickel	0.02	U	N	3	R
2104	04/22/90	4269	U	Nickel	0.02	U	N	3	R
2104	05/13/93	GW930513-14	U	Nickel	0.011	U	N	3	R
2104	05/13/93	GW930513-18	U	Nickel	0.011	U	N	3	R
2105	06/05/88	3268	U	Nickel	0.02	U	N	3	S
2105	08/28/88	3577	U	Nickel	0.02	U	N	3	S
2105	03/15/89	3968	U	Nickel	0.03	U	N	3	S
2121	05/06/88	3158	U	Nickel	0.02	U	N	3	D
2121	08/25/88	3571	U	Nickel	0.02	U	N	3	D
2121	12/13/88	3776	U	Nickel	0.02	U	N	3	D
2121	03/14/89	3962	U	Nickel	0.03	UJ	N	3	D
2122	05/06/88	3157	U	Nickel	0.02	U	N	3	D
2122	08/17/88	3504	U	Nickel	0.02	U	N	3	D
2122	12/07/88	3749	U	Nickel	0.02	U	N	3	D
2122	03/15/89	3979	U	Nickel	0.03	U	N	3	D
2123	05/06/88	3156	U	Nickel	0.02	U	N	3	R
2123	08/23/88	3565	U	Nickel	0.02	U	N	3	R
2123	12/06/88	3771	U	Nickel	0.02	U	N	3	R
2123	03/14/89	3984	U	Nickel	0.03	UJ	N	3	R
2728	05/24/93	GW930524-3	U	Nickel	0.02	U	N	3	S
3024	04/20/88	3096	U	Nickel	0.02	U	N	3	S
3024	11/02/88	3658	U	Nickel	0.02	U	N	3	S
3024	01/24/89	3842	U	Nickel	0.02	UJ	N	3	S
3024	06/26/89	66460		Nickel	0.0231	-	N	3	S
3024	08/10/89	66515	U	Nickel	0.02	U	N	3	S
3024	04/12/93	GW930412-8	U	Nickel	0.02	U	N	3	S
3043	04/13/88	3090	U	Nickel	0.02	U	N	3	S
3043	08/04/88	3397	U	Nickel	0.04	U	N	3	S

Table D-3 (Continued)
Validated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well	Sample		Lab		Validated		QA		
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type	ASL	Area
3043	11/04/88	3694	U	Nickel	0.02	U	N	3	S
3043	02/02/89	3886		Nickel	0.02	-	N	3	S
3043	06/13/89	66439	U	Nickel	0.02	U	N	3	S
3043	08/30/89	66573	B	Nickel	0.0224	-	N	4	S
3043	04/07/93	GW930407-13	U	Nickel	0.031	U	N	3	S
3063	05/12/88	3190	U	Nickel	0.02	U	N	3	D
3063	05/12/88	3191	U	Nickel	0.02	U	D	3	D
3063	08/16/88	3495	U	Nickel	0.02	U	N	3	D
3063	12/13/88	3741		Nickel	0.024	-	N	3	D
3063	03/13/89	3966	U	Nickel	0.03	UJ	N	3	D
3096	09/12/88	3585	U	Nickel	0.02	U	N	3	R
3096	12/07/88	3789	U	Nickel	0.02	U	N	3	R
3096	02/09/89	3974		Nickel	0.018	-	N	3	R
3096	04/30/89	4082	U	Nickel	0.02	U	N	3	R
3096	04/25/90	4257	U	Nickel	0.02	U	N	3	R
3096	05/07/93	GW930507-1	U	Nickel	0.019	U	N	3	R
3098	09/21/88	3589	U	Nickel	0.02	UJ	N	3	D
3098	12/16/88	3795	U	Nickel	0.02	U	N	3	D
3098	02/08/89	3989	U	Nickel	0.02	UJ	N	3	D
3098	05/25/89	4088	U	Nickel	0.02	UJ	N	3	D
3098	05/20/93	GW930520-10	U	Nickel	0.011	U	N	3	D
3099	05/24/88	3237		Nickel	0.026	-	N	3	D
3099	05/24/88	3238		Nickel	0.021	-	D	3	D
3099	08/16/88	3496	U	Nickel	0.02	U	N	3	D
3099	12/06/88	3742	U	Nickel	0.02	U	N	3	D
3099	03/14/89	3977	U	Nickel	0.03	UJ	N	3	D
3100	05/24/88	3239	U	Nickel	0.02	U	N	3	D
3100	05/24/88	3240	U	Nickel	0.02	U	D	3	D
3100	08/19/88	3517	U	Nickel	0.02	U	N	3	D
3100	12/06/88	3761	U	Nickel	0.02	U	N	3	D
3100	03/13/89	3978	U	Nickel	0.03	UJ	N	3	D
4011	10/05/90	4345	B	Nickel	0.0279	-	N	3	S
4011	02/07/91	4382	U	Nickel	0.02	U	N	3	S
4011	04/08/93	GW930408-3	U	Nickel	0.031	U	N	3	S
4011	04/08/93	GW930408-2	U	Nickel	0.031	U	D	3	S
4096	09/12/88	3584		Nickel	0.02	-	N	3	R
4096	12/14/88	3788	U	Nickel	0.02	U	N	3	R
4096	12/14/88	3474	U	Nickel	0.02	U	D	3	R
4096	02/10/89	3975		Nickel	0.014	-	N	3	R
4096	04/30/89	4083	U	Nickel	0.02	U	N	3	R
4096	05/06/93	GW930506-7	U	Nickel	0.019	U	N	3	R
2043	08/30/89	66572	U	Osmium	0.05	U	N	4	S
2043	08/30/89	66577	U	Osmium	0.05	U	D	4	S
3043	08/30/89	66573	U	Osmium	0.05	U	N	4	S
2026	05/12/88	3186		Potassium	2.16	-	N	3	D
2026	05/12/88	3187		Potassium	2.25	-	D	3	D
2026	08/17/88	3505		Potassium	2.4	-	N	3	D
2026	12/07/88	3750		Potassium	2.57	-	N	3	D
2026	03/14/89	3980		Potassium	2.7	J	N	3	D
2036	05/12/88	3184		Potassium	1.34	-	N	3	R

Table D-3 (Continued)
Validated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
2036	05/12/88	3185		Potassium	1.28	-	D	3	R
2036	08/23/88	3564		Potassium	1.7	-	N	3	R
2036	12/07/88	3770		Potassium	1.27	-	N	3	R
2036	03/14/89	3983		Potassium	1.3	J	N	3	R
2043	04/13/88	3091		Potassium	1.82	J	N	3	S
2043	11/04/88	3700		Potassium	0.777	UJ	N	3	S
2043	02/02/89	3887		Potassium	1.46	-	N	3	S
2043	08/30/89	66572	B	Potassium	1.33	-	N	4	S
2043	08/30/89	66577	B	Potassium	1.42	-	D	4	S
2043	04/07/93	GW930407-12	B	Potassium	1.07	-	N	3	S
2050	05/05/88	3147		Potassium	1.58	-	N	3	S
2050	08/16/88	3497		Potassium	2	-	N	3	S
2050	12/05/88	3743		Potassium	1.52	-	N	3	S
2050	03/13/89	3969		Potassium	1.4	J	N	3	S
2050	05/20/93	GW930520-8	B	Potassium	1.23	-	N	3	S
2056	05/06/88	3159		Potassium	1.33	-	N	3	S
2056	08/25/88	3575		Potassium	1.9	-	N	3	S
2056	03/13/89	3967		Potassium	1.3	J	N	3	S
2056	03/13/89	4045		Potassium	1.3	J	D	3	S
2057	06/03/88	3265		Potassium	0.91	-	N	3	R
2057	08/25/88	3573		Potassium	1.6	-	N	3	R
2057	12/13/88	3779		Potassium	0.801	-	N	3	R
2057	03/14/89	3965		Potassium	0.86	J	N	3	R
2066	04/26/88	3124		Potassium	1.67	-	N	3	S
2066	11/10/88	3710		Potassium	1.23	-	N	3	S
2066	03/14/89	3894		Potassium	1.6	J	N	3	S
2066	04/07/93	GW930407-14	B	Potassium	1.16	-	N	3	S
2096	09/12/88	3586		Potassium	1.65	-	N	3	R
2096	12/07/88	3790		Potassium	1.62	-	N	3	R
2096	02/09/89	3985		Potassium	1.31	-	N	3	R
2096	04/30/89	4081		Potassium	1.69	-	N	3	R
2096	04/25/90	4234		Potassium	1.72	-	N	3	R
2096	05/06/93	GW930506-5	B	Potassium	1.74	U	N	3	R
2098	09/22/88	3591		Potassium	1.62	-	N	3	D
2098	12/16/88	3796		Potassium	1.58	-	N	3	D
2098	02/08/89	3990		Potassium	1.84	J	N	3	D
2098	05/25/89	4087		Potassium	1.37	J	N	3	D
2098	05/20/93	GW930520-9	B	Potassium	1.51	-	N	3	D
2104	05/05/88	3146		Potassium	2.76	-	N	3	R
2104	08/16/88	3498		Potassium	2.5	-	N	3	R
2104	12/06/88	3744		Potassium	2.36	-	N	3	R
2104	03/15/89	3970		Potassium	2	-	N	3	R
2104	04/22/90	4235		Potassium	2.24	-	N	3	R
2104	04/22/90	4269		Potassium	2.25	-	N	3	R
2104	05/13/93	GW930513-14	B	Potassium	2.01	-	N	3	R
2104	05/13/93	GW930513-18	B	Potassium	1.57	-	N	3	R
2105	06/05/88	3268		Potassium	3.12	-	N	3	S
2105	08/28/88	3577		Potassium	1.13	-	N	3	S
2105	03/15/89	3968		Potassium	1.2	-	N	3	S
2121	05/06/88	3158		Potassium	3.01	-	N	3	D

Table D-3 (Continued)
Validated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
2121	08/25/88	3571		Potassium	3	-	N	3	D
2121	12/13/88	3776		Potassium	3	-	N	3	D
2121	03/14/89	3962		Potassium	3	J	N	3	D
2122	05/06/88	3157		Potassium	2.54	-	N	3	D
2122	08/17/88	3504		Potassium	2.8	-	N	3	D
2122	12/07/88	3749		Potassium	2.07	-	N	3	D
2122	03/15/89	3979		Potassium	2.7	-	N	3	D
2123	05/06/88	3156		Potassium	1.28	-	N	3	R
2123	08/23/88	3565		Potassium	1.7	-	N	3	R
2123	12/06/88	3771		Potassium	1.27	-	N	3	R
2123	03/14/89	3984		Potassium	1.2	J	N	3	R
2728	05/24/93	GW930524-3	B	Potassium	1.2	-	N	3	S
3024	04/20/88	3096		Potassium	4.03	J	N	3	S
3024	11/02/88	3658		Potassium	1.09	U	N	3	S
3024	01/24/89	3842		Potassium	0.92	J	N	3	S
3024	04/12/93	GW930412-8	B	Potassium	1.25	-	N	3	S
3043	04/13/88	3090		Potassium	1.09	J	N	3	S
3043	11/04/88	3694		Potassium	1.05	J	N	3	S
3043	02/02/89	3886		Potassium	1.22	-	N	3	S
3043	08/30/89	66573	B	Potassium	1.01	-	N	4	S
3043	04/07/93	GW930407-13	U	Potassium	0.82	U	N	3	S
3063	05/12/88	3190		Potassium	2.57	-	N	3	D
3063	05/12/88	3191		Potassium	2.58	-	D	3	D
3063	08/16/88	3495		Potassium	3.28	-	N	3	D
3063	12/13/88	3741		Potassium	2.56	-	N	3	D
3063	03/13/89	3966		Potassium	2.5	J	N	3	D
3096	09/12/88	3585		Potassium	1.36	-	N	3	R
3096	02/09/89	3974		Potassium	1.35	-	N	3	R
3096	04/30/89	4082		Potassium	1.37	-	N	3	R
3096	04/25/90	4257		Potassium	1.33	-	N	3	R
3096	05/07/93	GW930507-1	B	Potassium	1.44	U	N	3	R
3098	09/21/88	3589		Potassium	2.42	J	N	3	D
3098	12/16/88	3795		Potassium	1.7	-	N	3	D
3098	02/08/89	3989		Potassium	1.76	J	N	3	D
3098	05/25/89	4088		Potassium	1.87	J	N	3	D
3098	05/20/93	GW930520-10	B	Potassium	2.05	-	N	3	D
3099	05/24/88	3237		Potassium	2.66	-	N	3	D
3099	05/24/88	3238		Potassium	2.55	-	D	3	D
3099	08/16/88	3496		Potassium	2.86	-	N	3	D
3099	12/06/88	3742		Potassium	2.54	-	N	3	D
3099	03/14/89	3977		Potassium	2.3	J	N	3	D
3100	05/24/88	3239		Potassium	2.3	-	N	3	D
3100	05/24/88	3240		Potassium	2.56	-	D	3	D
3100	08/19/88	3517		Potassium	2.4	-	N	3	D
3100	12/06/88	3761		Potassium	2.42	-	N	3	D
3100	03/13/89	3978		Potassium	2.4	J	N	3	D
4011	10/05/90	4345	B	Potassium	0.664	-	N	3	S
4011	02/07/91	4382		Potassium	3	U	N	3	S
4011	04/08/93	GW930408-3	B	Potassium	1.04	-	N	3	S
4011	04/08/93	GW930408-2	B	Potassium	1.01	-	D	3	S

Table D-3 (Continued)
Validated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
4096	09/12/88	3584		Potassium	1.8	-	N	3	R
4096	12/14/88	3788		Potassium	1.11	J	N	3	R
4096	12/14/88	3474		Potassium	1.05	J	D	3	R
4096	02/10/89	3975		Potassium	1.12	J	N	3	R
4096	04/30/89	4083		Potassium	1.18	-	N	3	R
4096	05/06/93	GW930506-7	B	Potassium	1.28	U	N	3	R
2026	12/07/88	3750	U	Selenium	0.002	UJ	N	3	D
2026	03/14/89	3980	U	Selenium	0.005	UJ	N	3	D
2036	08/23/88	3564	U	Selenium	0.002	UJ	N	3	R
2036	12/07/88	3770	U	Selenium	0.002	UJ	N	3	R
2036	03/14/89	3983	U	Selenium	0.005	UJ	N	3	R
2043	08/05/88	3440	U	Selenium	0.005	U	N	3	S
2043	11/04/88	3700	U	Selenium	0.002	UJ	N	3	S
2043	02/02/89	3887		Selenium	0.006	J	N	3	S
2043	08/30/89	66572	UW	Selenium	0.002	UJ	N	4	S
2043	08/30/89	66577	UW	Selenium	0.002	UJ	D	4	S
2043	04/07/93	GW930407-12	UW	Selenium	0.002	UJ	N	3	S
2050	12/05/88	3743	U	Selenium	0.002	U	N	3	S
2050	03/13/89	3969	U	Selenium	0.005	UJ	N	3	S
2050	05/20/93	GW930520-8	UW	Selenium	0.001	UJ	N	3	S
2056	08/25/88	3575	U	Selenium	0.002	U	N	3	S
2056	12/07/88	3781	U	Selenium	0.002	UJ	N	3	S
2056	03/13/89	3967	U	Selenium	0.005	UJ	N	3	S
2056	03/13/89	4045	U	Selenium	0.005	UJ	D	3	S
2057	08/25/88	3573	U	Selenium	0.002	U	N	3	R
2057	12/13/88	3779	U	Selenium	0.002	UJ	N	3	R
2057	03/14/89	3965	U	Selenium	0.005	UJ	N	3	R
2066	03/14/89	3894	U	Selenium	0.005	UJ	N	3	S
2066	04/07/93	GW930407-14	U	Selenium	0.002	UJ	N	3	S
2096	09/12/88	3586	U	Selenium	0.002	UJ	N	3	R
2096	12/07/88	3790	U	Selenium	0.002	UJ	N	3	R
2096	02/09/89	3985	U	Selenium	0.002	U	N	3	R
2096	04/25/90	4234	U	Selenium	0.003	U	N	3	R
2096	05/06/93	GW930506-5	UW	Selenium	0.001	UJ	N	3	R
2098	09/22/88	3591		Selenium	0.006	-	N	3	D
2098	12/16/88	3796	U	Selenium	0.002	UJ	N	3	D
2098	02/08/89	3990		Selenium	0.005	J	N	3	D
2098	05/25/89	4087	U	Selenium	0.002	UJ	N	3	D
2098	05/20/93	GW930520-9	UW	Selenium	0.001	UJ	N	3	D
2104	12/06/88	3744	U	Selenium	0.002	UJ	N	3	R
2104	03/15/89	3970	U	Selenium	0.005	U	N	3	R
2104	04/22/90	4235	U	Selenium	0.003	UJ	N	3	R
2104	04/22/90	4269	U	Selenium	0.003	UJ	N	3	R
2104	05/13/93	GW930513-14	UWN	Selenium	0.001	UJ	N	3	R
2104	05/13/93	GW930513-18	UWN	Selenium	0.001	UJ	N	3	R
2105	08/28/88	3577	U	Selenium	0.002	U	N	3	S
2105	03/15/89	3968	U	Selenium	0.005	U	N	3	S
2121	08/25/88	3571	U	Selenium	0.002	U	N	3	D
2121	12/13/88	3776	U	Selenium	0.002	UJ	N	3	D
2121	03/14/89	3962	U	Selenium	0.005	UJ	N	3	D

Table D-3 (Continued)
Validated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
2122	12/07/88	3749	U	Selenium	0.002	UJ	N	3	D
2122	03/15/89	3979	U	Selenium	0.005	U	N	3	D
2123	08/23/88	3565	U	Selenium	0.002	UJ	N	3	R
2123	12/06/88	3771	U	Selenium	0.002	UJ	N	3	R
2123	03/14/89	3984	U	Selenium	0.005	UJ	N	3	R
2728	05/24/93	GW930524-3	U	Selenium	0.001	U	N	3	S
3024	07/26/88	3377	U	Selenium	0.005	UJ	N	3	S
3024	11/02/88	3658	U	Selenium	0.002	UJ	N	3	S
3024	01/24/89	3842	U	Selenium	0.002	UJ	N	3	S
3024	04/12/93	GW930412-8	U	Selenium	0.001	U	N	3	S
3043	08/04/88	3397	U	Selenium	0.005	U	N	3	S
3043	11/04/88	3694	U	Selenium	0.002	UJ	N	3	S
3043	02/02/89	3886	U	Selenium	0.005	UJ	N	3	S
3043	08/30/89	66573	UE	Selenium	0.002	UJ	N	4	S
3043	04/07/93	GW930407-13	UW	Selenium	0.002	UJ	N	3	S
3063	12/13/88	3741	U	Selenium	0.002	UJ	N	3	D
3063	03/13/89	3966	U	Selenium	0.005	UJ	N	3	D
3096	09/12/88	3585	U	Selenium	0.002	UJ	N	3	R
3096	12/07/88	3789	U	Selenium	0.002	UJ	N	3	R
3096	02/09/89	3974	U	Selenium	0.002	U	N	3	R
3096	04/25/90	4257	U	Selenium	0.003	U	N	3	R
3096	05/07/93	GW930507-1	UW	Selenium	0.002	UJ	N	3	R
3098	09/21/88	3589	U	Selenium	0.002	UJ	N	3	D
3098	12/16/88	3795	U	Selenium	0.002	UJ	N	3	D
3098	02/08/89	3989		Selenium	0.004	J	N	3	D
3098	05/25/89	4088	U	Selenium	0.002	UJ	N	3	D
3098	05/20/93	GW930520-10	U	Selenium	0.001	UJ	N	3	D
3099	12/06/88	3742	U	Selenium	0.002	UJ	N	3	D
3099	03/14/89	3977	U	Selenium	0.005	UJ	N	3	D
3100	08/19/88	3517	U	Selenium	0.002	U	N	3	D
3100	12/06/88	3761	U	Selenium	0.002	UJ	N	3	D
3100	03/13/89	3978	U	Selenium	0.005	UJ	N	3	D
4011	10/05/90	4345	UWN	Selenium	0.002	UJ	N	3	S
4011	02/07/91	4382	U	Selenium	0.002	U	N	3	S
4011	04/08/93	GW930408-3	UWN	Selenium	0.001	UJ	N	3	S
4011	04/08/93	GW930408-2	BWN	Selenium	0.0016	J	D	3	S
4096	09/12/88	3584	U	Selenium	0.002	UJ	N	3	R
4096	12/14/88	3788	U	Selenium	0.002	UJ	N	3	R
4096	12/14/88	3474	U	Selenium	0.002	UJ	D	3	R
4096	02/10/89	3975		Selenium	0.002	J	N	3	R
4096	05/06/93	GW930506-7	UW	Selenium	0.001	UJ	N	3	R
2096	04/25/90	4234		Silicon	3.3	-	N	3	R
2098	05/25/89	4087		Silicon	3.46	J	N	3	D
2104	04/22/90	4235		Silicon	2.5	-	N	3	R
2104	04/22/90	4269		Silicon	2.7	-	N	3	R
3096	04/25/90	4257		Silicon	2.9	-	N	3	R
2026	05/12/88	3186	U	Silver	0.02	U	N	3	D
2026	05/12/88	3187	U	Silver	0.02	U	D	3	D
2026	08/17/88	3505		Silver	0.033	-	N	3	D
2026	12/07/88	3750	U	Silver	0.0005	UJ	N	3	D

Table D-3 (Continued)
Validated Filtered Inorganic Data for Background
Monitoring Wells in the Great Miami Aquifer

Well	Sample		Lab		Validated		QA		
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type	ASL	Area
2026	03/14/89	3980	U	Silver	0.01	UJ	N	3	D
2036	05/12/88	3185	U	Silver	0.02	U	D	3	R
2036	08/23/88	3564	U	Silver	0.01	U	N	3	R
2036	12/07/88	3770	U	Silver	0.0005	UJ	N	3	R
2036	03/14/89	3983	U	Silver	0.01	UJ	N	3	R
2043	04/13/88	3091	U	Silver	0.01	UJ	N	3	S
2043	08/05/88	3440	U	Silver	0.01	U	N	3	S
2043	11/04/88	3700	U	Silver	0.01	U	N	3	S
2043	02/02/89	3887	U	Silver	0.0005	U	N	3	S
2043	06/26/89	66438		Silver	0.0127	-	N	3	S
2043	08/30/89	66572		Silver	0.0132	-	N	4	S
2043	08/30/89	66577		Silver	0.0125	-	D	4	S
2043	04/07/93	GW930407-12	B	Silver	0.0031	-	N	3	S
2050	05/05/88	3147	U	Silver	0.01	U	N	3	S
2050	08/16/88	3497	U	Silver	0.01	U	N	3	S
2050	12/05/88	3743	U	Silver	0.02	U	N	3	S
2050	03/13/89	3969	U	Silver	0.01	UJ	N	3	S
2050	05/20/93	GW930520-8	U	Silver	0.004	U	N	3	S
2056	05/06/88	3159	U	Silver	0.01	U	N	3	S
2056	08/25/88	3575	U	Silver	0.01	U	N	3	S
2056	12/07/88	3781	U	Silver	0.0005	UJ	N	3	S
2056	03/13/89	3967	U	Silver	0.01	UJ	N	3	S
2056	03/13/89	4045	U	Silver	0.01	UJ	D	3	S
2057	06/03/88	3265		Silver	0.034	-	N	3	R
2057	08/25/88	3573	U	Silver	0.01	U	N	3	R
2057	12/13/88	3779	U	Silver	0.01	UJ	N	3	R
2057	03/14/89	3965	U	Silver	0.01	UJ	N	3	R
2066	04/26/88	3124	U	Silver	0.01	U	N	3	S
2066	11/10/88	3710	U	Silver	0.01	U	N	3	S
2066	03/14/89	3894	U	Silver	0.01	UJ	N	3	S
2066	06/27/89	66436		Silver	0.014	J	N	3	S
2066	08/09/89	66498	U	Silver	0.01	U	N	3	S
2066	04/07/93	GW930407-14	U	Silver	0.003	U	N	3	S
2096	09/12/88	3586	U	Silver	0.01	U	N	3	R
2096	12/07/88	3790	U	Silver	0.0005	UJ	N	3	R
2096	02/09/89	3985	U	Silver	0.0005	UJ	N	3	R
2096	04/30/89	4081	U	Silver	0.0005	U	N	3	R
2096	04/25/90	4234	U	Silver	0.01	U	N	3	R
2096	05/06/93	GW930506-5	UN	Silver	0.003	UJ	N	3	R
2098	09/22/88	3591	U	Silver	0.01	U	N	3	D
2098	02/08/89	3990	U	Silver	0.0005	UJ	N	3	D
2098	05/25/89	4087		Silver	0.0128	J	N	3	D
2098	05/20/93	GW930520-9	U	Silver	0.004	U	N	3	D
2104	05/05/88	3146	U	Silver	0.01	U	N	3	R
2104	08/16/88	3498	U	Silver	0.01	U	N	3	R
2104	12/06/88	3744	U	Silver	0.02	U	N	3	R
2104	03/15/89	3970	U	Silver	0.01	U	N	3	R
2104	04/22/90	4235	U	Silver	0.01	U	N	3	R
2104	04/22/90	4269	U	Silver	0.01	U	N	3	R
2104	05/13/93	GW930513-14	U	Silver	0.004	U	N	3	R

Table D-3 (Continued)
Validated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
2104	05/13/93	GW930513-18	U	Silver	0.004	U	N	3	R
2105	06/05/88	3268	U	Silver	0.01	U	N	3	S
2105	08/28/88	3577	U	Silver	0.01	U	N	3	S
2105	03/15/89	3968	U	Silver	0.01	U	N	3	S
2121	05/06/88	3158	U	Silver	0.01	U	N	3	D
2121	08/25/88	3571	U	Silver	0.01	U	N	3	D
2121	12/13/88	3776	U	Silver	0.01	UJ	N	3	D
2121	03/14/89	3962	U	Silver	0.01	UJ	N	3	D
2122	05/06/88	3157	U	Silver	0.01	U	N	3	D
2122	08/17/88	3504	U	Silver	0.01	U	N	3	D
2122	12/07/88	3749	U	Silver	0.0005	UJ	N	3	D
2122	03/15/89	3979	U	Silver	0.01	U	N	3	D
2123	05/06/88	3156	U	Silver	0.01	U	N	3	R
2123	08/23/88	3565	U	Silver	0.01	U	N	3	R
2123	12/06/88	3771	U	Silver	0.02	U	N	3	R
2123	03/14/89	3984	U	Silver	0.01	UJ	N	3	R
2728	05/24/93	GW930524-3	U	Silver	0.007	U	N	3	S
3024	04/20/88	3096	U	Silver	0.01	UJ	N	3	S
3024	07/26/88	3377	U	Silver	0.01	UJ	N	3	S
3024	11/02/88	3658	U	Silver	0.01	U	N	3	S
3024	01/24/89	3842	U	Silver	0.0005	UJ	N	3	S
3024	06/26/89	66460		Silver	0.0138	-	N	3	S
3024	08/10/89	66515		Silver	0.012	-	N	3	S
3024	04/12/93	GW930412-8	U	Silver	0.007	U	N	3	S
3043	04/13/88	3090	U	Silver	0.01	UJ	N	3	S
3043	08/04/88	3397	U	Silver	0.01	U	N	3	S
3043	11/04/88	3694	U	Silver	0.01	U	N	3	S
3043	02/02/89	3886	U	Silver	0.0005	U	N	3	S
3043	06/13/89	66439	U	Silver	0.01	U	N	3	S
3043	08/30/89	66573		Silver	0.0138	-	N	4	S
3043	04/07/93	GW930407-13	U	Silver	0.003	U	N	3	S
3063	05/12/88	3190	U	Silver	0.02	U	N	3	D
3063	05/12/88	3191	U	Silver	0.02	U	D	3	D
3063	08/16/88	3495	U	Silver	0.01	U	N	3	D
3063	12/13/88	3741	U	Silver	0.01	UJ	N	3	D
3063	03/13/89	3966	U	Silver	0.01	UJ	N	3	D
3096	09/12/88	3585	U	Silver	0.01	U	N	3	R
3096	12/07/88	3789	U	Silver	0.0005	UJ	N	3	R
3096	02/09/89	3974	U	Silver	0.0005	UJ	N	3	R
3096	04/30/89	4082	U	Silver	0.0005	U	N	3	R
3096	04/25/90	4257	U	Silver	0.01	U	N	3	R
3096	05/07/93	GW930507-1	UN	Silver	0.003	UJ	N	3	R
3098	09/21/88	3589	U	Silver	0.01	UJ	N	3	D
3098	02/08/89	3989	U	Silver	0.0005	UJ	N	3	D
3098	05/25/89	4088		Silver	0.0142	J	N	3	D
3098	05/20/93	GW930520-10	U	Silver	0.004	U	N	3	D
3099	05/24/88	3237	U	Silver	0.01	U	N	3	D
3099	05/24/88	3238	U	Silver	0.01	U	D	3	D
3099	08/16/88	3496	U	Silver	0.01	U	N	3	D
3099	12/06/88	3742	U	Silver	0.02	U	N	3	D

Table D-3 (Continued)
Validated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
3099	03/14/89	3977	U	Silver	0.01	UJ	N	3	D
3100	05/24/88	3239	U	Silver	0.01	U	N	3	D
3100	05/24/88	3240	U	Silver	0.01	U	D	3	D
3100	08/19/88	3517	U	Silver	0.01	U	N	3	D
3100	12/06/88	3761	U	Silver	0.02	U	N	3	D
3100	03/13/89	3978	U	Silver	0.01	UJ	N	3	D
4011	10/05/90	4345		Silver	0.0126	-	N	3	S
4011	02/07/91	4382	U	Silver	0.005	U	N	3	S
4011	04/08/93	GW930408-3	U	Silver	0.003	U	N	3	S
4011	04/08/93	GW930408-2	U	Silver	0.003	U	D	3	S
4096	09/12/88	3584	U	Silver	0.01	U	N	3	R
4096	12/14/88	3788		Silver	0.012	J	N	3	R
4096	12/14/88	3474	U	Silver	0.01	U	D	3	R
4096	02/10/89	3975	U	Silver	0.0005	UJ	N	3	R
4096	04/30/89	4083	U	Silver	0.0005	U	N	3	R
4096	05/06/93	GW930506-7	UN	Silver	0.003	UJ	N	3	R
2026	05/12/88	3186		Sodium	26.7	-	N	3	D
2026	05/12/88	3187		Sodium	27.1	-	D	3	D
2026	08/17/88	3505		Sodium	21.5	-	N	3	D
2026	12/07/88	3750		Sodium	11.7	-	N	3	D
2026	03/14/89	3980		Sodium	55	J	N	3	D
2036	05/12/88	3184		Sodium	3.41	-	N	3	R
2036	05/12/88	3185		Sodium	3.37	-	D	3	R
2036	08/23/88	3564		Sodium	3.3	-	N	3	R
2036	12/07/88	3770		Sodium	3.28	-	N	3	R
2036	03/14/89	3983		Sodium	3.1	J	N	3	R
2043	04/13/88	3091		Sodium	35.3	J	N	3	S
2043	08/05/88	3440		Sodium	40	-	N	3	S
2043	11/04/88	3700		Sodium	7.6	-	N	3	S
2043	02/02/89	3887		Sodium	39.2	-	N	3	S
2043	08/30/89	66572		Sodium	35.3	-	N	4	S
2043	08/30/89	66577		Sodium	33.3	-	D	4	S
2043	04/07/93	GW930407-12		Sodium	40.2	J	N	3	S
2050	05/05/88	3147		Sodium	46.3	-	N	3	S
2050	08/16/88	3497		Sodium	47.84	J	N	3	S
2050	12/05/88	3743		Sodium	47.5	-	N	3	S
2050	03/13/89	3969		Sodium	54	J	N	3	S
2050	05/20/93	GW930520-8		Sodium	51	-	N	3	S
2056	05/06/88	3159		Sodium	28.1	-	N	3	S
2056	08/25/88	3575		Sodium	36.2	-	N	3	S
2056	12/07/88	3781		Sodium	36.4	-	N	3	S
2056	03/13/89	3967		Sodium	40	J	N	3	S
2056	03/13/89	4045		Sodium	41	J	D	3	S
2057	06/03/88	3265		Sodium	3.99	-	N	3	R
2057	08/25/88	3573		Sodium	3.86	-	N	3	R
2057	12/13/88	3779		Sodium	3.64	-	N	3	R
2057	03/14/89	3965		Sodium	3.9	J	N	3	R
2066	04/26/88	3124		Sodium	46.6	-	N	3	S
2066	11/10/88	3710		Sodium	42.7	-	N	3	S
2066	03/14/89	3894		Sodium	47	J	N	3	S

Table D-3 (Continued)
Validated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
2066	04/07/93	GW930407-14		Sodium	51	-	N	3	S
2096	09/12/88	3586		Sodium	6.1	-	N	3	R
2096	12/07/88	3790		Sodium	6.34	-	N	3	R
2096	02/09/89	3985		Sodium	4.28	-	N	3	R
2096	04/30/89	4081		Sodium	7.88	-	N	3	R
2096	04/25/90	4234		Sodium	6.75	-	N	3	R
2096	05/06/93	GW930506-5		Sodium	6.27	-	N	3	R
2098	09/22/88	3591		Sodium	9.4	-	N	3	D
2098	12/16/88	3796		Sodium	9.81	-	N	3	D
2098	02/08/89	3990		Sodium	12.6	J	N	3	D
2098	05/25/89	4087		Sodium	17.2	J	N	3	D
2098	05/20/93	GW930520-9		Sodium	17.6	-	N	3	D
2104	05/05/88	3146		Sodium	11.4	-	N	3	R
2104	08/16/88	3498		Sodium	11.08	J	N	3	R
2104	12/06/88	3744		Sodium	11.4	-	N	3	R
2104	03/15/89	3970		Sodium	11	-	N	3	R
2104	04/22/90	4235		Sodium	12.2	-	N	3	R
2104	04/22/90	4269		Sodium	11.6	-	N	3	R
2104	05/13/93	GW930513-14		Sodium	11.1	-	N	3	R
2104	05/13/93	GW930513-18		Sodium	11.3	-	N	3	R
2105	06/05/88	3268		Sodium	101	-	N	3	S
2105	08/28/88	3577		Sodium	33	-	N	3	S
2105	03/15/89	3968		Sodium	34	-	N	3	S
2121	05/06/88	3158		Sodium	11.6	-	N	3	D
2121	08/25/88	3571		Sodium	16.7	-	N	3	D
2121	12/13/88	3776		Sodium	16.2	-	N	3	D
2121	03/14/89	3962		Sodium	16	J	N	3	D
2122	05/06/88	3157		Sodium	9.41	-	N	3	D
2122	08/17/88	3504		Sodium	10.9	-	N	3	D
2122	12/07/88	3749		Sodium	22.4	-	N	3	D
2122	03/15/89	3979		Sodium	12	-	N	3	D
2123	05/06/88	3156		Sodium	1.96	-	N	3	R
2123	08/23/88	3565		Sodium	2.9	-	N	3	R
2123	12/06/88	3771		Sodium	2.75	-	N	3	R
2123	03/14/89	3984		Sodium	2.7	J	N	3	R
2728	05/24/93	GW930524-3		Sodium	26.6	J	N	3	S
3024	04/20/88	3096		Sodium	24.8	-	N	3	S
3024	07/26/88	3377		Sodium	38	-	N	3	S
3024	11/02/88	3658		Sodium	12.1	-	N	3	S
3024	01/24/89	3842		Sodium	9.97	J	N	3	S
3024	04/12/93	GW930412-8		Sodium	10.2	-	N	3	S
3043	04/13/88	3090		Sodium	13.8	J	N	3	S
3043	08/04/88	3397		Sodium	16	-	N	3	S
3043	11/04/88	3694		Sodium	14.9	-	N	3	S
3043	02/02/89	3886		Sodium	15	-	N	3	S
3043	08/30/89	66573		Sodium	16.3	-	N	4	S
3043	04/07/93	GW930407-13		Sodium	14.6	-	N	3	S
3063	05/12/88	3190		Sodium	12.1	-	N	3	D
3063	05/12/88	3191		Sodium	12.4	-	D	3	D
3063	08/16/88	3495		Sodium	14.46	J	N	3	D

Table D-3 (Continued)
Validated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
3063	12/13/88	3741		Sodium	14.7	-	N	3	D
3063	03/13/89	3966		Sodium	13	J	N	3	D
3096	09/12/88	3585		Sodium	2.9	-	N	3	R
3096	12/07/88	3789		Sodium	2.91	-	N	3	R
3096	02/09/89	3974		Sodium	6.1	-	N	3	R
3096	04/30/89	4082		Sodium	4.95	-	N	3	R
3096	04/25/90	4257		Sodium	2.75	-	N	3	R
3096	05/07/93	GW930507-1	B	Sodium	3.15	-	N	3	R
3098	09/21/88	3589		Sodium	8.2	J	N	3	D
3098	12/16/88	3795		Sodium	7.2	-	N	3	D
3098	02/08/89	3989		Sodium	6.44	J	N	3	D
3098	05/25/89	4088		Sodium	8.16	J	N	3	D
3098	05/20/93	GW930520-10		Sodium	10.4	-	N	3	D
3099	05/24/88	3237		Sodium	15.6	-	N	3	D
3099	05/24/88	3238		Sodium	15.2	-	D	3	D
3099	08/16/88	3496		Sodium	17.52	J	N	3	D
3099	12/06/88	3742		Sodium	14.5	-	N	3	D
3099	03/14/89	3977		Sodium	13	J	N	3	D
3100	05/24/88	3239		Sodium	17.3	-	N	3	D
3100	05/24/88	3240		Sodium	16.2	-	D	3	D
3100	08/19/88	3517		Sodium	13.7	-	N	3	D
3100	12/06/88	3761		Sodium	16.6	-	N	3	D
3100	03/13/89	3978		Sodium	21	J	N	3	D
4011	10/05/90	4345		Sodium	23.8	-	N	3	S
4011	02/07/91	4382		Sodium	14	-	N	3	S
4011	04/08/93	GW930408-3		Sodium	34.1	-	N	3	S
4011	04/08/93	GW930408-2		Sodium	35.1	-	D	3	S
4096	09/12/88	3584		Sodium	5.1	-	N	3	R
4096	12/14/88	3788		Sodium	3.93	J	N	3	R
4096	12/14/88	3474		Sodium	4.15	J	D	3	R
4096	02/10/89	3975		Sodium	4.14	-	N	3	R
4096	04/30/89	4083		Sodium	4.69	-	N	3	R
4096	05/06/93	GW930506-7	B	Sodium	3.81	-	N	3	R
2043	08/30/89	66572	U	Thallium	0.001	U	N	4	S
2043	08/30/89	66577	U	Thallium	0.001	U	D	4	S
2043	04/07/93	GW930407-12	UWN	Thallium	0.003	UJ	N	3	S
2050	05/20/93	GW930520-8	U	Thallium	0.003	UJ	N	3	S
2066	04/07/93	GW930407-14	UWN	Thallium	0.003	UJ	N	3	S
2096	05/06/93	GW930506-5	UW	Thallium	0.001	UJ	N	3	R
2098	05/20/93	GW930520-9	U	Thallium	0.003	UJ	N	3	D
2104	05/13/93	GW930513-14	U	Thallium	0.003	U	N	3	R
2104	05/13/93	GW930513-18	U	Thallium	0.003	U	N	3	R
2728	05/24/93	GW930524-3	UW	Thallium	0.002	UJ	N	3	S
3024	04/12/93	GW930412-8	U	Thallium	0.002	U	N	3	S
3043	08/30/89	66573	U	Thallium	0.001	U	N	4	S
3043	04/07/93	GW930407-13	UN	Thallium	0.003	UJ	N	3	S
3096	05/07/93	GW930507-1	U	Thallium	0.001	U	N	3	R
3098	05/20/93	GW930520-10	U	Thallium	0.003	UJ	N	3	D
4011	10/05/90	4345	U	Thallium	0.002	U	N	3	S
4011	04/08/93	GW930408-3	UW	Thallium	0.002	UJ	N	3	S

Table D-3 (Continued)
Validated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well	Sample		Lab		Validated		QA		
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type	ASL	Area
4011	04/08/93	GW930408-2	U	Thallium	0.002	U	D	3	S
4096	05/06/93	GW930506-7	U	Thallium	0.001	U	N	3	R
2043	08/30/89	66572	U	Tin	0.03	U	N	4	S
2043	08/30/89	66577	U	Tin	0.03	U	D	4	S
3043	08/30/89	66573	U	Tin	0.03	U	N	4	S
2043	04/07/93	GW930407-12		TDS	540	-	N	3	S
2050	05/20/93	GW930520-8		TDS	450	-	N	3	S
2050	08/03/93	GW930803-3		TDS	484	-	N	3	S
2066	04/07/93	GW930407-14		TDS	440	-	N	3	S
2096	05/06/93	GW930506-5		TDS	630	-	N	3	R
2096	08/04/93	GW930804-1		TDS	548	-	N	3	R
2098	05/20/93	GW930520-9		TDS	380	-	N	3	D
2104	05/13/93	GW930513-14		TDS	570	-	N	3	R
2104	05/13/93	GW930513-18		TDS	590	-	N	3	R
2104	08/02/93	GW930802-5		TDS	544	-	N	3	R
2728	05/24/93	GW930524-3		TDS	544	-	N	3	S
3024	04/12/93	GW930412-8		TDS	673	-	N	3	S
3043	04/07/93	GW930407-13		TDS	360	-	N	3	S
3096	05/07/93	GW930507-1		TDS	330	-	N	3	R
3096	08/11/93	GW930811-2		TDS	328	-	N	3	R
3096	08/11/93	GW930811-3		TDS	318	-	N	3	R
3098	05/20/93	GW930520-10		TDS	480	-	N	3	D
4011	10/05/90	4345		TDS	600	-	N	3	S
4011	02/07/91	4382		TDS	472	J	N	3	S
4011	04/08/93	GW930408-3		TDS	550	-	N	3	S
4011	04/08/93	GW930408-2		TDS	550	-	D	3	S
4096	05/06/93	GW930506-7		TDS	320	-	N	3	R
4096	08/04/93	GW930804-2		TDS	344	-	N	3	R
2043	06/26/89	66438		Vanadium	0.0234	-	N	3	S
2043	08/30/89	66572	B	Vanadium	0.0226	-	N	4	S
2043	08/30/89	66577	B	Vanadium	0.0205	-	D	4	S
2043	04/07/93	GW930407-12	U	Vanadium	0.007	U	N	3	S
2050	05/20/93	GW930520-8	U	Vanadium	0.004	U	N	3	S
2066	06/27/89	66436		Vanadium	0.0167	J	N	3	S
2066	08/09/89	66498		Vanadium	0.016	-	N	3	S
2066	04/07/93	GW930407-14	U	Vanadium	0.007	U	N	3	S
2096	04/25/90	4234		Vanadium	0.014	-	N	3	R
2096	05/06/93	GW930506-5	U	Vanadium	0.004	U	N	3	R
2098	05/25/89	4087		Vanadium	0.0179	J	N	3	D
2098	05/20/93	GW930520-9	U	Vanadium	0.004	U	N	3	D
2104	04/22/90	4235	U	Vanadium	0.01	U	N	3	R
2104	04/22/90	4269	U	Vanadium	0.01	U	N	3	R
2104	05/13/93	GW930513-14	U	Vanadium	0.004	U	N	3	R
2104	05/13/93	GW930513-18	U	Vanadium	0.004	U	N	3	R
2728	05/24/93	GW930524-3	U	Vanadium	0.003	U	N	3	S
3024	06/26/89	66460		Vanadium	0.0244	-	N	3	S
3024	08/10/89	66515		Vanadium	0.021	-	N	3	S
3024	04/12/93	GW930412-8	U	Vanadium	0.003	U	N	3	S
3043	06/13/89	66439		Vanadium	0.0143	-	N	3	S
3043	08/30/89	66573	B	Vanadium	0.0227	-	N	4	S

Table D-3 (Continued)
Validated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
3043	04/07/93	GW930407-13	U	Vanadium	0.007	U	N	3	S
3096	04/25/90	4257		Vanadium	0.01	-	N	3	R
3096	05/07/93	GW930507-1	U	Vanadium	0.004	U	N	3	R
3098	05/20/93	GW930520-10	U	Vanadium	0.004	U	N	3	D
4011	10/05/90	4345	B	Vanadium	0.0116	-	N	3	S
4011	02/07/91	4382	U	Vanadium	0.01	U	N	3	S
4011	04/08/93	GW930408-3	U	Vanadium	0.007	U	N	3	S
4011	04/08/93	GW930408-2	U	Vanadium	0.007	U	D	3	S
4096	05/06/93	GW930506-7	U	Vanadium	0.004	U	N	3	R
2043	06/26/89	66438		Zinc	0.0568	-	N	3	S
2043	08/30/89	66572	E	Zinc	0.056	J	N	4	S
2043	08/30/89	66577	E	Zinc	0.0388	J	D	4	S
2043	04/07/93	GW930407-12	U	Zinc	0.002	U	N	3	S
2050	05/20/93	GW930520-8	U	Zinc	0.003	U	N	3	S
2066	06/27/89	66436		Zinc	0.0202	J	N	3	S
2066	08/09/89	66498		Zinc	0.052	-	N	3	S
2066	04/07/93	GW930407-14	U	Zinc	0.002	U	N	3	S
2096	05/06/93	GW930506-5	U	Zinc	0.006	U	N	3	R
2098	05/20/93	GW930520-9	U	Zinc	0.003	U	N	3	D
2104	05/13/93	GW930513-14	B	Zinc	0.0072	U	N	3	R
2104	05/13/93	GW930513-18	U	Zinc	0.003	U	N	3	R
2728	05/24/93	GW930524-3	B	Zinc	0.0161	U	N	3	S
3024	06/26/89	66460		Zinc	0.0371	-	N	3	S
3024	08/10/89	66515		Zinc	0.133	-	N	3	S
3024	04/12/93	GW930412-8	U	Zinc	0.005	U	N	3	S
3043	06/13/89	66439		Zinc	0.0318	-	N	3	S
3043	08/30/89	66573	E	Zinc	0.0271	J	N	4	S
3043	04/07/93	GW930407-13	U	Zinc	0.002	U	N	3	S
3096	05/07/93	GW930507-1	B	Zinc	0.0068	J	N	3	R
3098	05/20/93	GW930520-10	U	Zinc	0.003	U	N	3	D
4011	10/05/90	4345		Zinc	0.0228	J	N	3	S
4011	02/07/91	4382		Zinc	0.024	U	N	3	S
4011	04/08/93	GW930408-3	B	Zinc	0.0046	U	N	3	S
4011	04/08/93	GW930408-2	B	Zinc	0.005	U	D	3	S
4096	05/06/93	GW930506-7	B	Zinc	0.0128	UJ	N	3	R

Table D-4
Validated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well	Sample		Lab		Validated		QA		
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type	ASL	Area
2043	04/07/93	GW930407-12		Alkalinity as CaCO3	430	-	N	3	S
2050	05/20/93	GW930520-8		Alkalinity as CaCO3	390	-	N	3	S
2050	08/03/93	GW930803-3		Alkalinity as CaCO3	364	-	N	3	S
2066	04/07/93	GW930407-14		Alkalinity as CaCO3	350	-	N	3	S
2096	05/06/93	GW930506-5		Alkalinity as CaCO3	300	-	N	3	R
2096	08/04/93	GW930804-1		Alkalinity as CaCO3	288	-	N	3	R
2098	05/20/93	GW930520-9		Alkalinity as CaCO3	270	-	N	3	D
2104	05/13/93	GW930513-14		Alkalinity as CaCO3	320	-	N	3	R
2104	05/13/93	GW930513-18		Alkalinity as CaCO3	320	-	N	3	R
2104	08/02/93	GW930802-5		Alkalinity as CaCO3	284	-	N	3	R
2728	04/04/93	113514		Alkalinity as CaCO3	370	J	N	3	S
2728	05/24/93	GW930524-3		Alkalinity as CaCO3	344	J	N	3	S
3024	04/12/93	GW930412-8		Alkalinity as CaCO3	316	-	N	3	S
3043	04/07/93	GW930407-13		Alkalinity as CaCO3	350	-	N	3	S
3096	05/07/93	GW930507-1		Alkalinity as CaCO3	260	-	N	3	R
3096	08/11/93	GW930811-2		Alkalinity as CaCO3	208	-	N	3	R
3096	08/11/93	GW930811-3		Alkalinity as CaCO3	212	-	N	3	R
3098	05/20/93	GW930520-10		Alkalinity as CaCO3	340	-	N	3	D
4011	10/05/90	4345		Alkalinity as CaCO3	383	-	N	3	S
4011	02/07/91	4382		Alkalinity as CaCO3	373	J	N	3	S
4011	04/08/93	GW930408-3		Alkalinity as CaCO3	410	-	N	3	S
4011	04/08/93	GW930408-2		Alkalinity as CaCO3	410	-	D	3	S
4096	05/06/93	GW930506-7		Alkalinity as CaCO3	280	-	N	3	R
4096	08/04/93	GW930804-2		Alkalinity as CaCO3	240	-	N	3	R
2043	04/07/93	GW930407-12	U	Aluminum	0.036	U	N	3	S
2050	05/20/93	GW930520-8	U	Aluminum	0.024	U	N	3	S
2066	04/07/93	GW930407-14	U	Aluminum	0.036	U	N	3	S
2096	05/06/93	GW930506-5	U	Aluminum	0.014	U	N	3	R
2098	05/20/93	GW930520-9		Aluminum	0.225	-	N	3	D
2104	05/13/93	GW930513-14	U	Aluminum	0.024	U	N	3	R
2104	05/13/93	GW930513-18	U	Aluminum	0.024	U	N	3	R
2728	05/24/93	GW930524-3	B	Aluminum	0.0712	-	N	3	S
3024	04/12/93	GW930412-8	B	Aluminum	0.0761	U	N	3	S
3043	04/07/93	GW930407-13	U	Aluminum	0.036	U	N	3	S
3096	05/07/93	GW930507-1	U	Aluminum	0.014	U	N	3	R
3098	05/20/93	GW930520-10	U	Aluminum	0.024	U	N	3	D
4011	10/05/90	4345	B	Aluminum	0.0825	-	N	3	S
4011	02/07/91	4382		Aluminum	0.06	-	N	3	S
4011	04/08/93	GW930408-3	B	Aluminum	0.097	U	N	3	S
4011	04/08/93	GW930408-2	B	Aluminum	0.1	U	D	3	S
4096	05/06/93	GW930506-7	U	Aluminum	0.014	U	N	3	R
2026	05/12/88	3186	U	Ammonia	0.1	UJ	N	3	D
2026	05/12/88	3187	U	Ammonia	0.1	UJ	D	3	D
2026	08/17/88	3505		Ammonia	0.1	-	N	3	D
2026	12/07/88	3750	U	Ammonia	0.1	UJ	N	3	D
2026	03/14/89	3980	U	Ammonia	0.1	UJ	N	3	D
2036	05/12/88	3184	U	Ammonia	0.1	UJ	N	3	R
2036	05/12/88	3185	U	Ammonia	0.1	UJ	D	3	R
2036	08/23/88	3564	U	Ammonia	0.1	UJ	N	3	R
2036	12/07/88	3770	U	Ammonia	0.1	UJ	N	3	R

Table D-4 (Continued)
Validated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
2036	03/14/89	3983	U	Ammonia	0.1	UJ	N	3	R
2043	04/13/88	3091		Ammonia	1.82	J	N	3	S
2043	08/05/88	3440	U	Ammonia	0.1	U	N	3	S
2043	11/04/88	3700		Ammonia	2.73	-	N	3	S
2043	02/02/89	3887		Ammonia	1.73	-	N	3	S
2043	04/07/93	GW930407-12		Ammonia	2.6	-	N	3	S
2050	08/16/88	3497		Ammonia	1.5	-	N	3	S
2050	03/13/89	3969		Ammonia	0.3	U	N	3	S
2050	05/20/93	GW930520-8		Ammonia	3.9	-	N	3	S
2056	05/06/88	3159		Ammonia	2.7	-	N	3	S
2056	08/25/88	3575		Ammonia	3.1	-	N	3	S
2056	12/07/88	3781		Ammonia	3.24	J	N	3	S
2056	03/13/89	3967		Ammonia	3.2	-	N	3	S
2056	03/13/89	4045		Ammonia	3.1	-	D	3	S
2057	06/03/88	3265		Ammonia	0.1	-	N	3	R
2057	08/25/88	3573		Ammonia	0.2	-	N	3	R
2057	12/13/88	3779		Ammonia	0.12	-	N	3	R
2057	03/14/89	3965	U	Ammonia	0.4	UJ	N	3	R
2066	04/26/88	3124		Ammonia	4.1	-	N	3	S
2066	11/10/88	3710		Ammonia	4.22	J	N	3	S
2066	03/14/89	3894		Ammonia	4.2	J	N	3	S
2066	04/07/93	GW930407-14		Ammonia	4.2	-	N	3	S
2096	09/12/88	3586	U	Ammonia	0.1	U	N	3	R
2096	12/07/88	3790	U	Ammonia	0.1	UJ	N	3	R
2096	02/09/89	3985	U	Ammonia	0.1	UJ	N	3	R
2096	04/30/89	4081	U	Ammonia	0.1	U	N	3	R
2096	04/25/90	4234		Ammonia	0.1	-	N	3	R
2096	05/06/93	GW930506-5		Ammonia	0.06	-	N	3	R
2098	09/22/88	3591	U	Ammonia	0.1	UJ	N	3	D
2098	12/16/88	3796	U	Ammonia	0.1	U	N	3	D
2098	02/08/89	3990		Ammonia	0.331	J	N	3	D
2098	05/25/89	4087	U	Ammonia	0.1	UJ	N	3	D
2098	05/20/93	GW930520-9	U	Ammonia	0.05	U	N	3	D
2104	08/16/88	3498	U	Ammonia	0.1	U	N	3	R
2104	12/06/88	3744	U	Ammonia	0.1	UJ	N	3	R
2104	03/15/89	3970		Ammonia	0.1	-	N	3	R
2104	04/22/90	4235	U	Ammonia	0.1	U	N	3	R
2104	04/22/90	4269	U	Ammonia	0.1	U	N	3	R
2104	05/13/93	GW930513-14		Ammonia	0.065	-	N	3	R
2104	05/13/93	GW930513-18	U	Ammonia	0.05	U	N	3	R
2105	06/05/88	3268		Ammonia	8	J	N	3	S
2105	08/28/88	3577		Ammonia	3.6	J	N	3	S
2105	03/15/89	3968		Ammonia	4	-	N	3	S
2121	05/06/88	3158	U	Ammonia	0.1	U	N	3	D
2121	08/25/88	3571	U	Ammonia	0.1	U	N	3	D
2121	12/13/88	3776	U	Ammonia	0.1	U	N	3	D
2121	03/14/89	3962	U	Ammonia	0.2	UJ	N	3	D
2122	05/06/88	3157	U	Ammonia	0.1	U	N	3	D
2122	08/17/88	3504	U	Ammonia	0.1	U	N	3	D
2122	12/07/88	3749	U	Ammonia	0.1	UJ	N	3	D

Table D-4 (Continued)
Validated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
2122	03/15/89	3979	U	Ammonia	0.1	U	N	3	D
2123	05/06/88	3156	U	Ammonia	0.1	U	N	3	R
2123	08/23/88	3565	U	Ammonia	0.1	UJ	N	3	R
2123	12/06/88	3771	U	Ammonia	0.1	UJ	N	3	R
2123	03/14/89	3984	U	Ammonia	0.1	UJ	N	3	R
2728	04/04/93	113514		Ammonia	1.83	-	N	3	S
2728	05/24/93	GW930524-3		Ammonia	1.77	-	N	3	S
3024	04/20/88	3096	U	Ammonia	0.1	U	N	3	S
3024	07/26/88	3377	U	Ammonia	0.1	U	N	3	S
3024	11/02/88	3658		Ammonia	0.65	-	N	3	S
3024	01/24/89	3842	U	Ammonia	0.3	UJ	N	3	S
3043	04/13/88	3090		Ammonia	3.18	J	N	3	S
3043	08/04/88	3397		Ammonia	3.2	J	N	3	S
3043	11/04/88	3694		Ammonia	4.39	-	N	3	S
3043	02/02/89	3886		Ammonia	12.6	-	N	3	S
3043	04/07/93	GW930407-13		Ammonia	3.4	-	N	3	S
3063	05/12/88	3190	U	Ammonia	0.1	UJ	N	3	D
3063	05/12/88	3191	U	Ammonia	0.1	UJ	D	3	D
3063	08/16/88	3495	U	Ammonia	0.1	U	N	3	D
3063	12/13/88	3741	U	Ammonia	0.1	U	N	3	D
3063	03/13/89	3966		Ammonia	0.1	U	N	3	D
3096	09/12/88	3585	U	Ammonia	0.1	U	N	3	R
3096	12/07/88	3789	U	Ammonia	0.1	UJ	N	3	R
3096	02/09/89	3974	U	Ammonia	0.1	UJ	N	3	R
3096	04/30/89	4082	U	Ammonia	0.1	U	N	3	R
3096	04/25/90	4257	U	Ammonia	0.1	U	N	3	R
3096	05/07/93	GW930507-1	U	Ammonia	0.05	U	N	3	R
3098	09/21/88	3589	U	Ammonia	0.1	UJ	N	3	D
3098	12/16/88	3795	U	Ammonia	0.1	U	N	3	D
3098	02/08/89	3989	U	Ammonia	0.1	UJ	N	3	D
3098	05/25/89	4088	U	Ammonia	0.1	UJ	N	3	D
3098	05/20/93	GW930520-10	U	Ammonia	0.05	U	N	3	D
3099	05/24/88	3237		Ammonia	0.1	-	N	3	D
3099	05/24/88	3238	U	Ammonia	0.1	U	D	3	D
3099	08/16/88	3496	U	Ammonia	0.1	U	N	3	D
3099	12/06/88	3742	U	Ammonia	0.1	UJ	N	3	D
3099	03/14/89	3977	U	Ammonia	0.2	UJ	N	3	D
3100	05/24/88	3239		Ammonia	0.2	-	N	3	D
3100	05/24/88	3240		Ammonia	0.1	-	D	3	D
3100	08/19/88	3517	U	Ammonia	0.1	UJ	N	3	D
3100	12/06/88	3761	U	Ammonia	0.1	UJ	N	3	D
3100	03/13/89	3978		Ammonia	0.1	U	N	3	D
4011	10/05/90	4345		Ammonia	1.06	-	N	3	S
4011	02/07/91	4382		Ammonia	0.92	-	N	3	S
4011	04/08/93	GW930408-3		Ammonia	1	-	N	3	S
4011	04/08/93	GW930408-2		Ammonia	0.97	-	D	3	S
4096	09/12/88	3584	U	Ammonia	0.1	U	N	3	R
4096	12/14/88	3788		Ammonia	0.11	J	N	3	R
4096	12/14/88	3474	U	Ammonia	0.1	U	D	3	R
4096	02/10/89	3975	U	Ammonia	0.1	U	N	3	R

Table D-4 (Continued)
Validated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
4096	04/30/89	4083	U	Ammonia	0.1	U	N	3	R
4096	05/06/93	GW930506-7	U	Ammonia	0.05	U	N	3	R
2043	04/07/93	GW930407-12	U	Antimony	0.031	UJ	N	3	S
2050	05/20/93	GW930520-8	U	Antimony	0.027	U	N	3	S
2066	04/07/93	GW930407-14	U	Antimony	0.031	UJ	N	3	S
2098	05/20/93	GW930520-9	U	Antimony	0.027	U	N	3	D
2104	05/13/93	GW930513-14	U	Antimony	0.027	U	N	3	R
2104	05/13/93	GW930513-18	U	Antimony	0.027	U	N	3	R
2728	04/04/93	113514	UW	Antimony	0.005	UJ	N	3	S
3043	04/07/93	GW930407-13	U	Antimony	0.031	UJ	N	3	S
3098	05/20/93	GW930520-10	U	Antimony	0.027	U	N	3	D
4011	10/05/90	4345	U	Antimony	0.03	U	N	3	S
4011	02/07/91	4382	U	Antimony	0.03	U	N	3	S
4011	04/08/93	GW930408-3	U	Antimony	0.031	U	N	3	S
4011	04/08/93	GW930408-2	U	Antimony	0.031	U	D	3	S
2043	04/07/93	GW930407-12	U	Arsenic	0.002	U	N	3	S
2050	05/20/93	GW930520-8	B	Arsenic	0.0072	-	N	3	S
2066	04/07/93	GW930407-14		Arsenic	0.0294	-	N	3	S
2096	05/06/93	GW930506-5	U	Arsenic	0.001	U	N	3	R
2098	05/20/93	GW930520-9	B	Arsenic	0.0021	-	N	3	D
2104	05/13/93	GW930513-14	U	Arsenic	0.002	U	N	3	R
2104	05/13/93	GW930513-18	UW	Arsenic	0.002	U	N	3	R
2728	04/04/93	113514	U	Arsenic	0.002	U	N	3	S
2728	05/24/93	GW930524-3	UW	Arsenic	0.002	UJ	N	3	S
3024	04/12/93	GW930412-8	B	Arsenic	0.0058	-	N	3	S
3043	04/07/93	GW930407-13		Arsenic	0.0141	J	N	3	S
3096	05/07/93	GW930507-1	B	Arsenic	0.0011	-	N	3	R
3098	05/20/93	GW930520-10	U	Arsenic	0.002	U	N	3	D
4011	10/05/90	4345	U	Arsenic	0.002	U	N	3	S
4011	02/07/91	4382	U	Arsenic	0.002	U	N	3	S
4011	04/08/93	GW930408-3	U	Arsenic	0.002	U	N	3	S
4011	04/08/93	GW930408-2	U	Arsenic	0.002	U	D	3	S
4096	05/06/93	GW930506-7	B	Arsenic	0.0012	-	N	3	R
2043	04/07/93	GW930407-12		Barium	0.261	-	N	3	S
2050	05/20/93	GW930520-8		Barium	0.677	-	N	3	S
2066	04/07/93	GW930407-14		Barium	0.768	-	N	3	S
2096	05/06/93	GW930506-5	B	Barium	0.0737	U	N	3	R
2098	05/20/93	GW930520-9	B	Barium	0.0368	-	N	3	D
2104	05/13/93	GW930513-14	B	Barium	0.0658	-	N	3	R
2104	05/13/93	GW930513-18	B	Barium	0.0693	-	N	3	R
2728	04/04/93	113514	B	Barium	0.198	-	N	3	S
2728	05/24/93	GW930524-3	B	Barium	0.161	-	N	3	S
3024	04/12/93	GW930412-8		Barium	0.38	-	N	3	S
3043	04/07/93	GW930407-13		Barium	0.292	-	N	3	S
3096	05/07/93	GW930507-1	B	Barium	0.042	-	N	3	R
3098	05/20/93	GW930520-10	B	Barium	0.0587	-	N	3	D
4011	10/05/90	4345		Barium	0.408	-	N	3	S
4011	02/07/91	4382		Barium	0.35	-	N	3	S
4011	04/08/93	GW930408-3		Barium	0.367	-	N	3	S
4011	04/08/93	GW930408-2		Barium	0.358	-	D	3	S

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Table D-4 (Continued)
Validated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
4096	05/06/93	GW930506-7	B	Barium	0.0231	U	N	3	R
2043	04/07/93	GW930407-12	U	Beryllium	0.001	U	N	3	S
2050	05/20/93	GW930520-8	U	Beryllium	0.001	U	N	3	S
2066	04/07/93	GW930407-14	U	Beryllium	0.001	U	N	3	S
2096	05/06/93	GW930506-5	U	Beryllium	0.001	U	N	3	R
2098	05/20/93	GW930520-9	U	Beryllium	0.001	U	N	3	D
2104	05/13/93	GW930513-14	U	Beryllium	0.001	U	N	3	R
2104	05/13/93	GW930513-18	U	Beryllium	0.001	U	N	3	R
2728	04/04/93	113514	U	Beryllium	0.002	U	N	3	S
2728	05/24/93	GW930524-3	U	Beryllium	0.001	U	N	3	S
3024	04/12/93	GW930412-8	U	Beryllium	0.001	U	N	3	S
3043	04/07/93	GW930407-13	U	Beryllium	0.001	U	N	3	S
3096	05/07/93	GW930507-1	U	Beryllium	0.001	U	N	3	R
3098	05/20/93	GW930520-10	U	Beryllium	0.001	U	N	3	D
4011	10/05/90	4345	U	Beryllium	0.002	U	N	3	S
4011	02/07/91	4382	U	Beryllium	0.001	U	N	3	S
4011	04/08/93	GW930408-3	U	Beryllium	0.001	U	N	3	S
4011	04/08/93	GW930408-2	U	Beryllium	0.001	U	D	3	S
4096	05/06/93	GW930506-7	U	Beryllium	0.001	U	N	3	R
2043	04/07/93	GW930407-12	U	Cadmium	0.003	U	N	3	S
2050	05/20/93	GW930520-8	B	Cadmium	0.0022	J	N	3	S
2066	04/07/93	GW930407-14	U	Cadmium	0.003	U	N	3	S
2096	05/06/93	GW930506-5	B	Cadmium	0.0033	U	N	3	R
2098	05/20/93	GW930520-9	U	Cadmium	0.002	U	N	3	D
2104	05/13/93	GW930513-14	U	Cadmium	0.002	U	N	3	R
2104	05/13/93	GW930513-18	U	Cadmium	0.002	U	N	3	R
2728	04/04/93	113514	U	Cadmium	0.005	U	N	3	S
2728	05/24/93	GW930524-3	U	Cadmium	0.003	U	N	3	S
3024	04/12/93	GW930412-8		Cadmium	0.0135	-	N	3	S
3043	04/07/93	GW930407-13	U	Cadmium	0.003	U	N	3	S
3096	05/07/93	GW930507-1	U	Cadmium	0.003	U	N	3	R
3098	05/20/93	GW930520-10	U	Cadmium	0.002	U	N	3	D
4011	10/05/90	4345		Cadmium	0.0052	J	N	3	S
4011	02/07/91	4382	U	Cadmium	0.005	U	N	3	S
4011	04/08/93	GW930408-3	U	Cadmium	0.002	U	N	3	S
4011	04/08/93	GW930408-2	U	Cadmium	0.002	U	D	3	S
4096	05/06/93	GW930506-7	U	Cadmium	0.003	U	N	3	R
2043	04/07/93	GW930407-12		Calcium	112	-	N	3	S
2050	05/20/93	GW930520-8		Calcium	92	-	N	3	S
2066	04/07/93	GW930407-14		Calcium	78	-	N	3	S
2096	05/06/93	GW930506-5		Calcium	152	-	N	3	R
2098	05/20/93	GW930520-9		Calcium	99.6	-	N	3	D
2104	05/13/93	GW930513-14		Calcium	138	-	N	3	R
2104	05/13/93	GW930513-18		Calcium	142	-	N	3	R
2728	04/04/93	113514		Calcium	129	-	N	3	S
2728	05/24/93	GW930524-3		Calcium	102	J	N	3	S
3024	04/12/93	GW930412-8		Calcium	162	-	N	3	S
3043	04/07/93	GW930407-13		Calcium	94.8	-	N	3	S
3096	05/07/93	GW930507-1		Calcium	90	-	N	3	R
3098	05/20/93	GW930520-10		Calcium	123	-	N	3	D

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Table D-4 (Continued)
Validated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
4011	10/05/90	4345		Calcium	125	J	N	3	S
4011	02/07/91	4382		Calcium	119	-	N	3	S
4011	04/08/93	GW930408-3		Calcium	129	-	N	3	S
4011	04/08/93	GW930408-2		Calcium	125	-	D	3	S
4096	05/06/93	GW930506-7		Calcium	85.4	-	N	3	R
2026	05/12/88	3186		Chloride	44.9	J	N	3	D
2026	05/12/88	3187		Chloride	45.4	J	D	3	D
2026	08/17/88	3505		Chloride	41	J	N	3	D
2026	12/07/88	3750		Chloride	3	-	N	3	D
2026	03/14/89	3980		Chloride	120	J	N	3	D
2036	05/12/88	3184		Chloride	12.3	J	N	3	R
2036	05/12/88	3185		Chloride	11.5	J	D	3	R
2036	08/23/88	3564		Chloride	11	-	N	3	R
2036	12/07/88	3770		Chloride	2	-	N	3	R
2036	03/14/89	3983	U	Chloride	12	UJ	N	3	R
2043	04/13/88	3091		Chloride	51.1	J	N	3	S
2043	08/05/88	3440		Chloride	66	-	N	3	S
2043	11/04/88	3700		Chloride	54.2	-	N	3	S
2043	06/26/89	66438		Chloride	2.75	-	N	3	S
2043	08/30/89	66542		Chloride	51.2	-	N	3	S
2043	08/30/89	66547		Chloride	51	-	D	3	S
2043	04/07/93	GW930407-12		Chloride	57	-	N	3	S
2050	05/05/88	3147		Chloride	78.9	-	N	3	S
2050	08/16/88	3497		Chloride	100	J	N	3	S
2050	03/13/89	3969		Chloride	76	-	N	3	S
2050	05/20/93	GW930520-8		Chloride	73	-	N	3	S
2056	05/06/88	3159		Chloride	39.5	-	N	3	S
2056	08/25/88	3575		Chloride	44	-	N	3	S
2056	12/07/88	3781		Chloride	6	-	N	3	S
2056	03/13/89	3967		Chloride	46	-	N	3	S
2056	03/13/89	4045		Chloride	47	-	D	3	S
2057	06/03/88	3265		Chloride	20.1	-	N	3	R
2057	08/25/88	3573		Chloride	3	-	N	3	R
2057	12/13/88	3779		Chloride	5	J	N	3	R
2057	03/14/89	3965	U	Chloride	3.5	UJ	N	3	R
2066	04/26/88	3124		Chloride	96	-	N	3	S
2066	11/10/88	3710		Chloride	64	-	N	3	S
2066	03/14/89	3894		Chloride	69	J	N	3	S
2066	06/27/89	66436		Chloride	62	J	N	3	S
2066	08/09/89	66498		Chloride	56.5	-	N	3	S
2066	04/07/93	GW930407-14		Chloride	69	-	N	3	S
2096	09/12/88	3586		Chloride	2.5	-	N	3	R
2096	12/07/88	3790		Chloride	1.5	-	N	3	R
2096	02/09/89	3985		Chloride	0.75	U	N	3	R
2096	04/30/89	4081		Chloride	7.5	-	N	3	R
2096	04/25/90	4234		Chloride	4.1	J	N	3	R
2096	05/06/93	GW930506-5		Chloride	4.7	-	N	3	R
2098	09/22/88	3591		Chloride	20.5	-	N	3	D
2098	12/16/88	3796		Chloride	9	J	N	3	D
2098	02/08/89	3990		Chloride	33	J	N	3	D

Table D-4 (Continued)
Validated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well	Sample		Lab		Validated		QA		
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type	ASL	Area
2098	05/25/89	4087		Chloride	24	J	N	3	D
2098	05/20/93	GW930520-9		Chloride	26	-	N	3	D
2104	05/05/88	3146		Chloride	23	-	N	3	R
2104	08/16/88	3498		Chloride	25	J	N	3	R
2104	12/06/88	3744		Chloride	6	U	N	3	R
2104	03/15/89	3970		Chloride	26	-	N	3	R
2104	04/22/90	4235		Chloride	28	-	N	3	R
2104	04/22/90	4269		Chloride	26	-	N	3	R
2104	05/13/93	GW930513-14		Chloride	24	-	N	3	R
2104	05/13/93	GW930513-18		Chloride	24	-	N	3	R
2105	06/05/88	3268		Chloride	65	-	N	3	S
2105	08/28/88	3577		Chloride	60	J	N	3	S
2105	03/15/89	3968		Chloride	54	-	N	3	S
2121	05/06/88	3158		Chloride	0.02	-	N	3	D
2121	08/25/88	3571		Chloride	25	-	N	3	D
2121	12/13/88	3776		Chloride	7	J	N	3	D
2121	03/14/89	3962	U	Chloride	28	UJ	N	3	D
2122	05/06/88	3157		Chloride	20.2	-	N	3	D
2122	08/17/88	3504		Chloride	20	J	N	3	D
2122	12/07/88	3749		Chloride	5	-	N	3	D
2122	03/15/89	3979		Chloride	23	-	N	3	D
2123	05/06/88	3156		Chloride	11.9	-	N	3	R
2123	08/23/88	3565		Chloride	11.5	-	N	3	R
2123	12/06/88	3771		Chloride	1	U	N	3	R
2123	03/14/89	3984	U	Chloride	13	UJ	N	3	R
2728	04/04/93	113514		Chloride	54.8	-	N	3	S
2728	05/24/93	GW930524-3		Chloride	54	-	N	3	S
3024	04/20/88	3096		Chloride	9	-	N	3	S
3024	07/26/88	3377		Chloride	3.7	-	N	3	S
3024	11/02/88	3658		Chloride	19.4	-	N	3	S
3024	01/24/89	3842		Chloride	20	J	N	3	S
3024	06/26/89	66460		Chloride	17.8	-	N	3	S
3024	08/10/89	66515		Chloride	22	-	N	3	S
3024	04/12/93	GW930412-8		Chloride	21	-	N	3	S
3043	04/13/88	3090		Chloride	2.75	J	N	3	S
3043	08/04/88	3397		Chloride	11.5	-	N	3	S
3043	11/04/88	3694		Chloride	15.1	-	N	3	S
3043	06/13/89	66439		Chloride	11.8	-	N	3	S
3043	08/30/89	66543		Chloride	23	-	N	3	S
3043	04/07/93	GW930407-13		Chloride	21	-	N	3	S
3063	05/12/88	3190		Chloride	22.5	J	N	3	D
3063	05/12/88	3191		Chloride	6.2	J	D	3	D
3063	08/16/88	3495		Chloride	24.5	J	N	3	D
3063	12/13/88	3741		Chloride	6	J	N	3	D
3063	03/13/89	3966		Chloride	26	U	N	3	D
3096	09/12/88	3585		Chloride	5	-	N	3	R
3096	12/07/88	3789		Chloride	2.5	-	N	3	R
3096	02/09/89	3974		Chloride	0.75	U	N	3	R
3096	04/30/89	4082		Chloride	9	-	N	3	R
3096	04/25/90	4257		Chloride	6.4	J	N	3	R

Table D-4 (Continued)
Validated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
3096	05/07/93	GW930507-1		Chloride	7.1	-	N	3	R
3098	09/21/88	3589		Chloride	17.5	J	N	3	D
3098	12/16/88	3795		Chloride	8	J	N	3	D
3098	02/08/89	3989		Chloride	16	J	N	3	D
3098	05/25/89	4088		Chloride	26	J	N	3	D
3098	05/20/93	GW930520-10		Chloride	25	-	N	3	D
3099	05/24/88	3237		Chloride	49.5	-	N	3	D
3099	05/24/88	3238		Chloride	37.5	-	D	3	D
3099	08/16/88	3496		Chloride	41	J	N	3	D
3099	12/06/88	3742		Chloride	1.5	U	N	3	D
3099	03/14/89	3977	U	Chloride	35	UJ	N	3	D
3100	05/24/88	3239		Chloride	42.5	-	N	3	D
3100	05/24/88	3240		Chloride	28	-	D	3	D
3100	08/19/88	3517		Chloride	28	-	N	3	D
3100	12/06/88	3761		Chloride	2.5	U	N	3	D
3100	03/13/89	3978		Chloride	39	-	N	3	D
4011	10/05/90	4345		Chloride	38.8	-	N	3	S
4011	02/07/91	4382		Chloride	37.9	-	N	3	S
4011	04/08/93	GW930408-3		Chloride	37	-	N	3	S
4011	04/08/93	GW930408-2		Chloride	37	-	D	3	S
4096	09/12/88	3584		Chloride	7.5	-	N	3	R
4096	12/14/88	3788		Chloride	3	J	N	3	R
4096	12/14/88	3474		Chloride	8	J	D	3	R
4096	02/10/89	3975		Chloride	4	-	N	3	R
4096	04/30/89	4083		Chloride	4.8	-	N	3	R
4096	05/06/93	GW930506-7		Chloride	3.4	-	N	3	R
2043	04/07/93	GW930407-12	U	Chromium	0.003	U	N	3	S
2050	05/20/93	GW930520-8	U	Chromium	0.004	U	N	3	S
2066	04/07/93	GW930407-14	U	Chromium	0.003	U	N	3	S
2096	05/06/93	GW930506-5	U	Chromium	0.004	U	N	3	R
2098	05/20/93	GW930520-9	B	Chromium	0.0067	-	N	3	D
2104	05/13/93	GW930513-14	U	Chromium	0.004	U	N	3	R
2104	05/13/93	GW930513-18	U	Chromium	0.004	U	N	3	R
2728	04/04/93	113514	U	Chromium	0.01	U	N	3	S
2728	05/24/93	GW930524-3	U	Chromium	0.005	U	N	3	S
3024	04/12/93	GW930412-8	U	Chromium	0.005	U	N	3	S
3043	04/07/93	GW930407-13	B	Chromium	0.0032	U	N	3	S
3096	05/07/93	GW930507-1	U	Chromium	0.004	U	N	3	R
3098	05/20/93	GW930520-10	U	Chromium	0.004	U	N	3	D
4011	10/05/90	4345		Chromium	0.0211	-	N	3	S
4011	02/07/91	4382	U	Chromium	0.01	U	N	3	S
4011	04/08/93	GW930408-3	U	Chromium	0.003	U	N	3	S
4011	04/08/93	GW930408-2	U	Chromium	0.003	U	D	3	S
4096	05/06/93	GW930506-7		Chromium	0.0214	UJ	N	3	R
2043	04/07/93	GW930407-12	U	Cobalt	0.009	U	N	3	S
2050	05/20/93	GW930520-8	U	Cobalt	0.005	U	N	3	S
2066	04/07/93	GW930407-14	U	Cobalt	0.009	U	N	3	S
2096	05/06/93	GW930506-5	U	Cobalt	0.006	U	N	3	R
2098	05/20/93	GW930520-9	U	Cobalt	0.005	U	N	3	D
2104	05/13/93	GW930513-14	U	Cobalt	0.005	U	N	3	R

Table D-4 (Continued)
Validated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well	Sample		Lab		Validated		QA		
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type	ASL	Area
2104	05/13/93	GW930513-18	U	Cobalt	0.005	U	N	3	R
2728	04/04/93	113514	U	Cobalt	0.01	U	N	3	S
2728	05/24/93	GW930524-3	U	Cobalt	0.008	U	N	3	S
3024	04/12/93	GW930412-8	B	Cobalt	0.0086	-	N	3	S
3043	04/07/93	GW930407-13	U	Cobalt	0.009	U	N	3	S
3096	05/07/93	GW930507-1	U	Cobalt	0.006	U	N	3	R
3098	05/20/93	GW930520-10	U	Cobalt	0.005	U	N	3	D
4011	10/05/90	4345	U	Cobalt	0.01	U	N	3	S
4011	04/08/93	GW930408-3	U	Cobalt	0.008	U	N	3	S
4011	04/08/93	GW930408-2	U	Cobalt	0.008	U	D	3	S
4096	05/06/93	GW930506-7	U	Cobalt	0.006	U	N	3	R
2043	04/07/93	GW930407-12	U	Copper	0.005	U	N	3	S
2050	05/20/93	GW930520-8		Copper	0.0354	-	N	3	S
2066	04/07/93	GW930407-14	U	Copper	0.005	U	N	3	S
2096	05/06/93	GW930506-5	B	Copper	0.0058	U	N	3	R
2098	05/20/93	GW930520-9	U	Copper	0.003	U	N	3	D
2104	05/13/93	GW930513-14	U	Copper	0.003	U	N	3	R
2104	05/13/93	GW930513-18	B	Copper	0.0035	U	N	3	R
2728	04/04/93	113514	U	Copper	0.01	U	N	3	S
2728	05/24/93	GW930524-3	B	Copper	0.0041	U	N	3	S
3024	04/12/93	GW930412-8	U	Copper	0.003	U	N	3	S
3043	04/07/93	GW930407-13	U	Copper	0.005	U	N	3	S
3096	05/07/93	GW930507-1	U	Copper	0.004	U	N	3	R
3098	05/20/93	GW930520-10	U	Copper	0.003	U	N	3	D
4011	10/05/90	4345	B	Copper	0.0113	-	N	3	S
4011	02/07/91	4382	U	Copper	0.01	U	N	3	S
4011	04/08/93	GW930408-3	U	Copper	0.004	U	N	3	S
4011	04/08/93	GW930408-2	U	Copper	0.004	U	D	3	S
4096	05/06/93	GW930506-7	U	Copper	0.004	U	N	3	R
2043	08/30/89	66572	U	Cyanide	0.005	U	N	4	S
2043	08/30/89	66577	U	Cyanide	0.005	U	D	4	S
2043	04/07/93	GW930407-12	U	Cyanide	0.00002	U	N	3	S
2050	05/20/93	GW930520-8	U	Cyanide	0.02	U	N	3	S
2066	04/07/93	GW930407-14	U	Cyanide	0.00002	U	N	3	S
2096	05/06/93	GW930506-5	U	Cyanide	0.01	U	N	3	R
2098	05/20/93	GW930520-9	U	Cyanide	0.02	U	N	3	D
2104	05/13/93	GW930513-14	U	Cyanide	0.02	UJ	N	3	R
2104	05/13/93	GW930513-18	U	Cyanide	0.02	UJ	N	3	R
2728	05/24/93	GW930524-3	U	Cyanide	0.01	UJ	N	3	S
3024	04/12/93	GW930412-8	UN	Cyanide	0.01	UJ	N	3	S
3043	08/30/89	66573	U	Cyanide	0.005	UJ	N	4	S
3043	04/07/93	GW930407-13	U	Cyanide	0.00002	U	N	3	S
3096	05/07/93	GW930507-1	U	Cyanide	0.01	U	N	3	R
3098	05/20/93	GW930520-10	U	Cyanide	0.02	U	N	3	D
4011	10/05/90	4345	U	Cyanide	0.002	U	N	3	S
4011	02/07/91	4382	U	Cyanide	0.002	U	N	3	S
4096	05/06/93	GW930506-7	U	Cyanide	0.01	U	N	3	R
2026	05/12/88	3186		Fluoride	0.34	-	N	3	D
2026	05/12/88	3187		Fluoride	0.35	-	D	3	D
2026	08/17/88	3505		Fluoride	0.23	-	N	3	D

Table D-4 (Continued)
Validated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
2026	12/07/88	3750		Fluoride	0.25	-	N	3	D
2026	03/14/89	3980		Fluoride	0.2	J	N	3	D
2036	05/12/88	3184		Fluoride	0.27	-	N	3	R
2036	05/12/88	3185		Fluoride	0.28	-	D	3	R
2036	08/23/88	3564		Fluoride	0.26	J	N	3	R
2036	12/07/88	3770		Fluoride	0.15	-	N	3	R
2036	03/14/89	3983		Fluoride	0.1	J	N	3	R
2043	04/13/88	3091		Fluoride	0.58	-	N	3	S
2043	08/05/88	3440		Fluoride	0.58	-	N	3	S
2043	11/04/88	3700		Fluoride	0.28	J	N	3	S
2043	02/02/89	3887		Fluoride	0.49	-	N	3	S
2043	06/26/89	66438		Fluoride	0.52	-	N	3	S
2043	08/30/89	66542		Fluoride	0.55	-	N	3	S
2043	08/30/89	66547		Fluoride	0.54	-	D	3	S
2043	04/07/93	GW930407-12		Fluoride	0.54	-	N	3	S
2050	05/05/88	3147		Fluoride	1.2	-	N	3	S
2050	08/16/88	3497		Fluoride	0.82	-	N	3	S
2050	12/05/88	3743		Fluoride	0.8	-	N	3	S
2050	03/13/89	3969		Fluoride	0.7	-	N	3	S
2050	05/20/93	GW930520-8		Fluoride	0.71	-	N	3	S
2056	05/06/88	3159		Fluoride	1.1	-	N	3	S
2056	08/25/88	3575		Fluoride	1.25	-	N	3	S
2056	12/07/88	3781		Fluoride	1.05	-	N	3	S
2056	03/13/89	3967		Fluoride	0.9	-	N	3	S
2056	03/13/89	4045		Fluoride	0.9	-	D	3	S
2057	06/03/88	3265		Fluoride	0.3	J	N	3	R
2057	08/25/88	3573		Fluoride	0.38	-	N	3	R
2057	12/13/88	3779		Fluoride	0.34	-	N	3	R
2057	03/14/89	3965		Fluoride	0.2	J	N	3	R
2066	04/26/88	3124		Fluoride	0.94	-	N	3	S
2066	11/10/88	3710		Fluoride	0.78	J	N	3	S
2066	03/14/89	3894		Fluoride	1	J	N	3	S
2066	06/27/89	66436		Fluoride	0.4	J	N	3	S
2066	08/09/89	66498		Fluoride	0.88	-	N	3	S
2066	04/07/93	GW930407-14		Fluoride	0.94	-	N	3	S
2096	09/12/88	3586		Fluoride	0.27	-	N	3	R
2096	12/07/88	3790		Fluoride	0.175	-	N	3	R
2096	02/09/89	3985		Fluoride	0.19	-	N	3	R
2096	04/30/89	4081		Fluoride	0.3	-	N	3	R
2096	04/25/90	4234		Fluoride	0.2	-	N	3	R
2096	05/06/93	GW930506-5		Fluoride	0.2	-	N	3	R
2098	09/22/88	3591		Fluoride	0.28	-	N	3	D
2098	12/16/88	3796		Fluoride	0.26	-	N	3	D
2098	02/08/89	3990		Fluoride	0.17	J	N	3	D
2098	05/25/89	4087		Fluoride	0.28	J	N	3	D
2098	05/20/93	GW930520-9		Fluoride	0.26	-	N	3	D
2104	05/05/88	3146		Fluoride	0.29	-	N	3	R
2104	08/16/88	3498		Fluoride	0.23	-	N	3	R
2104	12/06/88	3744		Fluoride	0.19	-	N	3	R
2104	03/15/89	3970		Fluoride	0.2	-	N	3	R

Table D-4 (Continued)
Validated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well	Sample		Lab		Validated		QA		
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type	ASL	Area
2104	04/22/90	4235		Fluoride	0.2	-	N	3	R
2104	04/22/90	4269		Fluoride	0.2	-	N	3	R
2104	05/13/93	GW930513-14		Fluoride	0.16	-	N	3	R
2104	05/13/93	GW930513-18		Fluoride	0.17	-	N	3	R
2105	06/05/88	3268		Fluoride	0.64	-	N	3	S
2105	08/28/88	3577		Fluoride	0.75	-	N	3	S
2105	03/15/89	3968		Fluoride	0.5	-	N	3	S
2121	05/06/88	3158		Fluoride	0.35	-	N	3	D
2121	08/25/88	3571		Fluoride	0.32	-	N	3	D
2121	12/13/88	3776		Fluoride	0.29	-	N	3	D
2121	03/14/89	3962		Fluoride	0.2	J	N	3	D
2122	05/06/88	3157		Fluoride	0.34	-	N	3	D
2122	08/17/88	3504		Fluoride	0.22	-	N	3	D
2122	12/07/88	3749		Fluoride	0.21	-	N	3	D
2122	03/15/89	3979		Fluoride	0.2	-	N	3	D
2123	05/06/88	3156		Fluoride	0.32	-	N	3	R
2123	08/23/88	3565		Fluoride	0.3	J	N	3	R
2123	12/06/88	3771		Fluoride	0.19	-	N	3	R
2123	03/14/89	3984		Fluoride	0.2	J	N	3	R
2728	04/04/93	113514		Fluoride	0.6	-	N	3	S
2728	05/24/93	GW930524-3		Fluoride	0.68	-	N	3	S
3024	04/20/88	3096		Fluoride	0.73	J	N	3	S
3024	07/26/88	3377		Fluoride	1.9	-	N	3	S
3024	11/02/88	3658	U	Fluoride	0.5	U	N	3	S
3024	01/24/89	3842		Fluoride	0.4	J	N	3	S
3024	06/26/89	66460		Fluoride	0.44	-	N	3	S
3024	08/10/89	66515		Fluoride	0.43	-	N	3	S
3024	04/12/93	GW930412-8		Fluoride	0.43	-	N	3	S
3043	04/13/88	3090		Fluoride	0.46	-	N	3	S
3043	08/04/88	3397		Fluoride	0.34	-	N	3	S
3043	11/04/88	3694		Fluoride	0.19	J	N	3	S
3043	02/02/89	3886		Fluoride	0.3	-	N	3	S
3043	06/13/89	66439		Fluoride	0.37	-	N	3	S
3043	08/30/89	66543		Fluoride	0.32	-	N	3	S
3043	04/07/93	GW930407-13		Fluoride	0.25	-	N	3	S
3063	05/12/88	3190		Fluoride	0.37	-	N	3	D
3063	05/12/88	3191		Fluoride	0.36	-	D	3	D
3063	08/16/88	3495		Fluoride	0.28	-	N	3	D
3063	12/13/88	3741		Fluoride	0.25	-	N	3	D
3063	03/13/89	3966		Fluoride	0.2	-	N	3	D
3096	09/12/88	3585		Fluoride	0.22	-	N	3	R
3096	12/07/88	3789		Fluoride	0.19	-	N	3	R
3096	02/09/89	3974		Fluoride	0.12	-	N	3	R
3096	04/30/89	4082		Fluoride	0.24	-	N	3	R
3096	04/25/90	4257		Fluoride	0.2	-	N	3	R
3096	05/07/93	GW930507-1		Fluoride	0.2	-	N	3	R
3098	09/21/88	3589	U	Fluoride	0.1	UJ	N	3	D
3098	12/16/88	3795		Fluoride	0.19	-	N	3	D
3098	02/08/89	3989		Fluoride	0.12	J	N	3	D
3098	05/25/89	4088		Fluoride	0.16	J	N	3	D

Table D-4 (Continued)
Validated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
3098	05/20/93	GW930520-10	U	Fluoride	0.15	U	N	3	D
3099	05/24/88	3237		Fluoride	0.29	J	N	3	D
3099	05/24/88	3238		Fluoride	0.28	J	D	3	D
3099	08/16/88	3496		Fluoride	0.23	-	N	3	D
3099	12/06/88	3742		Fluoride	0.2	-	N	3	D
3099	03/14/89	3977		Fluoride	0.2	J	N	3	D
3100	05/24/88	3239		Fluoride	0.27	J	N	3	D
3100	05/24/88	3240		Fluoride	0.29	J	D	3	D
3100	08/19/88	3517		Fluoride	0.23	-	N	3	D
3100	12/06/88	3761		Fluoride	0.18	-	N	3	D
3100	03/13/89	3978		Fluoride	0.2	-	N	3	D
4011	10/05/90	4345		Fluoride	0.14	-	N	3	S
4011	02/07/91	4382		Fluoride	0.36	-	N	3	S
4011	04/08/93	GW930408-3		Fluoride	0.38	-	N	3	S
4011	04/08/93	GW930408-2		Fluoride	0.38	-	D	3	S
4096	09/12/88	3584		Fluoride	0.52	-	N	3	R
4096	12/14/88	3788		Fluoride	0.21	J	N	3	R
4096	12/14/88	3474		Fluoride	0.23	J	D	3	R
4096	02/10/89	3975		Fluoride	0.12	-	N	3	R
4096	04/30/89	4083		Fluoride	0.2	-	N	3	R
4096	05/06/93	GW930506-7		Fluoride	0.2	-	N	3	R
2043	04/07/93	GW930407-12		Iron	1.28	-	N	3	S
2050	05/20/93	GW930520-8		Iron	3.24	J	N	3	S
2066	04/07/93	GW930407-14		Iron	2.07	-	N	3	S
2096	05/06/93	GW930506-5		Iron	5.48	-	N	3	R
2098	05/20/93	GW930520-9		Iron	0.782	-	N	3	D
2104	05/13/93	GW930513-14		Iron	3.54	-	N	3	R
2104	05/13/93	GW930513-18		Iron	3.73	-	N	3	R
2728	04/04/93	113514		Iron	3.02	-	N	3	S
2728	05/24/93	GW930524-3		Iron	3.69	-	N	3	S
3043	04/07/93	GW930407-13		Iron	4.6	-	N	3	S
3096	05/07/93	GW930507-1		Iron	0.587	-	N	3	R
3098	05/20/93	GW930520-10	B	Iron	0.0481	U	N	3	D
4011	10/05/90	4345		Iron	3.68	-	N	3	S
4011	02/07/91	4382		Iron	5.5	-	N	3	S
4011	04/08/93	GW930408-3		Iron	3.16	-	N	3	S
4011	04/08/93	GW930408-2		Iron	3.09	-	D	3	S
4096	05/06/93	GW930506-7		Iron	0.312	-	N	3	R
2043	04/07/93	GW930407-12	U	Lead	0.002	U	N	3	S
2066	04/07/93	GW930407-14	B	Lead	0.002	J	N	3	S
2096	05/06/93	GW930506-5	UW	Lead	0.001	UJ	N	3	R
2098	05/20/93	GW930520-9	U	Lead	0.002	U	N	3	D
2104	05/13/93	GW930513-14	U	Lead	0.002	U	N	3	R
2104	05/13/93	GW930513-18	B	Lead	0.002	U	N	3	R
2728	04/04/93	113514	U	Lead	0.002	U	N	3	S
2728	05/24/93	GW930524-3	U	Lead	0.001	U	N	3	S
3024	04/12/93	GW930412-8	WN	Lead	0.003	UJ	N	3	S
3043	04/07/93	GW930407-13	U	Lead	0.002	U	N	3	S
3096	05/07/93	GW930507-1	U	Lead	0.001	U	N	3	R
3098	05/20/93	GW930520-10	U	Lead	0.002	U	N	3	D

Table D-4 (Continued)
Validated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
4011	10/05/90	4345	UW	Lead	0.002	U	N	3	S
4011	02/07/91	4382	U	Lead	0.002	U	N	3	S
4011	04/08/93	GW930408-3	U	Lead	0.001	U	N	3	S
4011	04/08/93	GW930408-2	U	Lead	0.001	U	D	3	S
4096	05/06/93	GW930506-7	U	Lead	0.001	U	N	3	R
2043	04/07/93	GW930407-12		Magnesium	39	-	N	3	S
2050	05/20/93	GW930520-8		Magnesium	32.4	-	N	3	S
2066	04/07/93	GW930407-14		Magnesium	30.1	-	N	3	S
2096	05/06/93	GW930506-5	E	Magnesium	31.3	J	N	3	R
2098	05/20/93	GW930520-9		Magnesium	25.9	-	N	3	D
2104	05/13/93	GW930513-14		Magnesium	35.8	-	N	3	R
2104	05/13/93	GW930513-18		Magnesium	37.2	-	N	3	R
2728	04/04/93	113514		Magnesium	29.5	-	N	3	S
2728	05/24/93	GW930524-3		Magnesium	25.8	J	N	3	S
3024	04/12/93	GW930412-8		Magnesium	35.3	-	N	3	S
3043	04/07/93	GW930407-13		Magnesium	27.9	-	N	3	S
3096	05/07/93	GW930507-1		Magnesium	22.4	-	N	3	R
3098	05/20/93	GW930520-10		Magnesium	34.3	-	N	3	D
4011	10/05/90	4345		Magnesium	29.3	J	N	3	S
4011	02/07/91	4382		Magnesium	26.6	-	N	3	S
4011	04/08/93	GW930408-3		Magnesium	34.5	-	N	3	S
4011	04/08/93	GW930408-2		Magnesium	33.4	-	D	3	S
4096	05/06/93	GW930506-7	E	Magnesium	20.1	J	N	3	R
2043	04/07/93	GW930407-12		Manganese	0.135	J	N	3	S
2050	05/20/93	GW930520-8		Manganese	0.108	J	N	3	S
2066	04/07/93	GW930407-14		Manganese	0.0272	-	N	3	S
2096	05/06/93	GW930506-5		Manganese	0.624	-	N	3	R
2098	05/20/93	GW930520-9		Manganese	0.0268	-	N	3	D
2104	05/13/93	GW930513-14		Manganese	0.315	-	N	3	R
2104	05/13/93	GW930513-18		Manganese	0.325	-	N	3	R
2728	04/04/93	113514		Manganese	0.171	-	N	3	S
2728	05/24/93	GW930524-3		Manganese	0.159	-	N	3	S
3024	04/12/93	GW930412-8		Manganese	0.269	-	N	3	S
3043	04/07/93	GW930407-13		Manganese	0.0617	-	N	3	S
3096	05/07/93	GW930507-1		Manganese	0.0621	-	N	3	R
3098	05/20/93	GW930520-10	B	Manganese	0.0043	-	N	3	D
4011	10/05/90	4345		Manganese	0.147	-	N	3	S
4011	02/07/91	4382		Manganese	0.15	-	N	3	S
4011	04/08/93	GW930408-3		Manganese	0.189	-	N	3	S
4011	04/08/93	GW930408-2		Manganese	0.183	-	D	3	S
4096	05/06/93	GW930506-7		Manganese	0.904	-	N	3	R
2043	04/07/93	GW930407-12	U	Mercury	0.0002	U	N	3	S
2050	05/20/93	GW930520-8	U	Mercury	0.0002	U	N	3	S
2066	04/07/93	GW930407-14	U	Mercury	0.0002	U	N	3	S
2096	05/06/93	GW930506-5	U	Mercury	0.0002	U	N	3	R
2098	05/20/93	GW930520-9	U	Mercury	0.0002	U	N	3	D
2104	05/13/93	GW930513-14	U	Mercury	0.0002	U	N	3	R
2104	05/13/93	GW930513-18	U	Mercury	0.0002	U	N	3	R
2728	04/04/93	113514	U	Mercury	0.0002	U	N	3	S
2728	05/24/93	GW930524-3	UN	Mercury	0.0002	U	N	3	S

Table D-4 (Continued)
Validated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
3024	04/12/93	GW930412-8	U	Mercury	0.0002	U	N	3	S
3043	04/07/93	GW930407-13	U	Mercury	0.0002	U	N	3	S
3096	05/07/93	GW930507-1	U	Mercury	0.0002	U	N	3	R
3098	05/20/93	GW930520-10	U	Mercury	0.0002	U	N	3	D
4011	10/05/90	4345	U	Mercury	0.0002	U	N	3	S
4011	04/08/93	GW930408-3	U	Mercury	0.0002	U	N	3	S
4011	04/08/93	GW930408-2	U	Mercury	0.0002	U	D	3	S
4096	05/06/93	GW930506-7	U	Mercury	0.0002	U	N	3	R
2050	05/20/93	GW930520-8	U	Molybdenum	0.011	U	N	3	S
2098	05/20/93	GW930520-9	U	Molybdenum	0.011	U	N	3	D
2104	05/13/93	GW930513-14	U	Molybdenum	0.011	U	N	3	R
2104	05/13/93	GW930513-18	U	Molybdenum	0.011	U	N	3	R
2728	04/04/93	113514	U	Molybdenum	0.02	U	N	3	S
3098	05/20/93	GW930520-10	U	Molybdenum	0.011	U	N	3	D
4011	10/05/90	4345	U	Molybdenum	0.01	U	N	3	S
4011	02/07/91	4382	U	Molybdenum	0.01	U	N	3	S
4011	04/08/93	GW930408-3	U	Molybdenum	0.015	U	N	3	S
4011	04/08/93	GW930408-2	U	Molybdenum	0.015	U	D	3	S
2043	04/07/93	GW930407-12	U	Nickel	0.031	U	N	3	S
2050	05/20/93	GW930520-8		Nickel	0.0514	-	N	3	S
2066	04/07/93	GW930407-14	U	Nickel	0.031	U	N	3	S
2096	05/06/93	GW930506-5	U	Nickel	0.019	U	N	3	R
2098	05/20/93	GW930520-9	U	Nickel	0.011	U	N	3	D
2104	05/13/93	GW930513-14	U	Nickel	0.011	U	N	3	R
2104	05/13/93	GW930513-18	U	Nickel	0.011	U	N	3	R
2728	04/04/93	113514	U	Nickel	0.02	U	N	3	S
2728	05/24/93	GW930524-3	U	Nickel	0.02	U	N	3	S
3024	04/12/93	GW930412-8	U	Nickel	0.02	U	N	3	S
3043	04/07/93	GW930407-13	U	Nickel	0.031	U	N	3	S
3096	05/07/93	GW930507-1	U	Nickel	0.019	U	N	3	R
3098	05/20/93	GW930520-10	U	Nickel	0.011	U	N	3	D
4011	10/05/90	4345	U	Nickel	0.02	U	N	3	S
4011	02/07/91	4382	U	Nickel	0.02	U	N	3	S
4011	04/08/93	GW930408-3	U	Nickel	0.031	U	N	3	S
4011	04/08/93	GW930408-2	U	Nickel	0.031	U	D	3	S
4096	05/06/93	GW930506-7	U	Nickel	0.019	U	N	3	R
2026	05/12/88	3186		Nitrate	6.8	J	N	3	D
2026	05/12/88	3187		Nitrate	8.9	J	D	3	D
2026	08/17/88	3505		Nitrate	16	J	N	3	D
2026	12/07/88	3750		Nitrate	7.98	J	N	3	D
2026	03/14/89	3980		Nitrate	8.4	J	N	3	D
2036	05/12/88	3184		Nitrate	11.2	J	N	3	R
2036	05/12/88	3185		Nitrate	9	J	D	3	R
2036	08/23/88	3564		Nitrate	14.4	J	N	3	R
2036	12/07/88	3770		Nitrate	2.88	J	N	3	R
2036	03/14/89	3983		Nitrate	6.2	J	N	3	R
2043	11/04/88	3700	U	Nitrate	0.1	UJ	N	3	S
2043	08/30/89	66542		Nitrate	0.869	J	N	3	S
2050	12/05/88	3743	U	Nitrate	0.1	U	N	3	S
2056	08/25/88	3575	U	Nitrate	0.1	U	N	3	S

Table D-4 (Continued)
Validated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well	Sample		Lab		Validated		QA		
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type	ASL	Area
2056	12/07/88	3781		Nitrate	0.016	J	N	3	S
2056	03/13/89	4045	U	Nitrate	0.02	UJ	D	3	S
2057	08/25/88	3573	U	Nitrate	0.1	U	N	3	R
2057	03/14/89	3965		Nitrate	0.03	J	N	3	R
2066	04/26/88	3124	U	Nitrate	0.1	U	N	3	S
2066	06/27/89	66436		Nitrate	0.1	J	N	3	S
2096	12/07/88	3790		Nitrate	0.014	J	N	3	R
2096	02/09/89	3985		Nitrate	0.23	J	N	3	R
2098	09/22/88	3591	U	Nitrate	0.1	U	N	3	D
2098	12/16/88	3796		Nitrate	11.1	J	N	3	D
2098	02/08/89	3990		Nitrate	1.96	J	N	3	D
2098	05/25/89	4087		Nitrate	1.74	J	N	3	D
2104	05/05/88	3146		Nitrate	0.1	J	N	3	R
2104	04/22/90	4235		Nitrate	0.09	J	N	3	R
2105	06/05/88	3268		Nitrate	0.1	J	N	3	S
2121	05/06/88	3158		Nitrate	0.4	J	N	3	D
2121	08/25/88	3571		Nitrate	2	-	N	3	D
2121	12/13/88	3776		Nitrate	6.75	J	N	3	D
2121	03/14/89	3962		Nitrate	1.3	J	N	3	D
2122	05/06/88	3157		Nitrate	0.8	J	N	3	D
2122	08/17/88	3504		Nitrate	5.7	J	N	3	D
2122	12/07/88	3749		Nitrate	9.32	J	N	3	D
2122	03/15/89	3979		Nitrate	1.2	J	N	3	D
2123	05/06/88	3156		Nitrate	10	J	N	3	R
2123	08/23/88	3565		Nitrate	0.5	J	N	3	R
2123	12/06/88	3771		Nitrate	11.4	J	N	3	R
2123	03/14/89	3984		Nitrate	3.7	J	N	3	R
2728	04/04/93	113514	U	Nitrate	0.1	U	N	3	S
3024	04/20/88	3096		Nitrate	0.24	J	N	3	S
3024	11/02/88	3658		Nitrate	0.15	J	N	3	S
3024	06/26/89	66460		Nitrate	0.604	J	N	3	S
3024	08/10/89	66515		Nitrate	0.65	J	N	3	S
3043	04/13/88	3090		Nitrate	0.12	J	N	3	S
3043	08/04/88	3397	U	Nitrate	0.1	U	N	3	S
3043	11/04/88	3694	U	Nitrate	0.1	UJ	N	3	S
3063	05/12/88	3190		Nitrate	0.8	J	N	3	D
3063	05/12/88	3191		Nitrate	0.7	J	D	3	D
3063	12/13/88	3741		Nitrate	5.44	J	N	3	D
3063	03/13/89	3966		Nitrate	1.5	J	N	3	D
3096	09/12/88	3585		Nitrate	0.35	J	N	3	R
3096	12/07/88	3789		Nitrate	0.023	J	N	3	R
3098	09/21/88	3589		Nitrate	1.88	J	N	3	D
3098	12/16/88	3795		Nitrate	4.61	J	N	3	D
3098	02/08/89	3989		Nitrate	1.74	J	N	3	D
3098	05/25/89	4088		Nitrate	2.7	J	N	3	D
3099	05/24/88	3237		Nitrate	4.5	-	N	3	D
3099	05/24/88	3238		Nitrate	2.9	-	D	3	D
3099	12/06/88	3742		Nitrate	24.9	J	N	3	D
3099	03/14/89	3977		Nitrate	0.45	J	N	3	D
3100	05/24/88	3239		Nitrate	1.6	-	N	3	D

Table D-4 (Continued)
Validated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well	Sample		Lab		Validated		QA		
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type	ASL	Area
3100	05/24/88	3240		Nitrate	1.5	-	D	3	D
3100	12/06/88	3761		Nitrate	10.9	J	N	3	D
3100	03/13/89	3978		Nitrate	2.3	J	N	3	D
4011	02/07/91	4382	U	Nitrate	0.1	U	N	3	S
4096	12/14/88	3788	U	Nitrate	0.1	UJ	N	3	R
4096	12/14/88	3474	U	Nitrate	0.1	UJ	D	3	R
2043	04/07/93	GW930407-12		Nitrate/Nitrite	0.051	-	N	3	S
2050	05/20/93	GW930520-8	U	Nitrate/Nitrite	0.05	U	N	3	S
2066	04/07/93	GW930407-14	U	Nitrate/Nitrite	0.05	U	N	3	S
2096	05/06/93	GW930506-5	U	Nitrate/Nitrite	0.05	U	N	3	R
2098	05/20/93	GW930520-9		Nitrate/Nitrite	0.4	-	N	3	D
2104	05/13/93	GW930513-14	U	Nitrate/Nitrite	0.05	U	N	3	R
2104	05/13/93	GW930513-18	U	Nitrate/Nitrite	0.05	U	N	3	R
3024	04/12/93	GW930412-8		Nitrate/Nitrite	0.02	-	N	3	S
3043	04/07/93	GW930407-13	U	Nitrate/Nitrite	0.05	U	N	3	S
3096	05/07/93	GW930507-1	U	Nitrate/Nitrite	0.05	U	N	3	R
3098	05/20/93	GW930520-10		Nitrate/Nitrite	4.1	-	N	3	D
4011	04/08/93	GW930408-3	U	Nitrate/Nitrite	0.05	U	N	3	S
4011	04/08/93	GW930408-2	U	Nitrate/Nitrite	0.05	U	D	3	S
4096	05/06/93	GW930506-7	U	Nitrate/Nitrite	0.05	U	N	3	R
2728	05/24/93	GW930524-3		Nitrite, as Nitrogen	0.04	-	N	3	S
4011	10/05/90	4345	U	Nitrite, as Nitrogen	0.1	U	N	3	S
4011	02/07/91	4382	U	Nitrite, as Nitrogen	0.1	U	N	3	S
2105	08/28/88	3577		Phosphate	0.56	J	N	3	S
2026	05/12/88	3186	U	Phosphorus	0.05	U	N	3	D
2026	05/12/88	3187	U	Phosphorus	0.05	U	D	3	D
2026	08/17/88	3505	U	Phosphorus	0.05	U	N	3	D
2026	12/07/88	3750	U	Phosphorus	0.02	U	N	3	D
2026	03/14/89	3980		Phosphorus	0.01	J	N	3	D
2036	05/12/88	3184		Phosphorus	0.052	-	N	3	R
2036	05/12/88	3185		Phosphorus	0.05	-	D	3	R
2036	08/23/88	3564		Phosphorus	0.06	-	N	3	R
2036	12/07/88	3770		Phosphorus	0.036	-	N	3	R
2036	03/14/89	3983		Phosphorus	0.05	J	N	3	R
2043	04/13/88	3091		Phosphorus	0.1	J	N	3	S
2043	08/05/88	3440		Phosphorus	0.06	-	N	3	S
2043	11/04/88	3700	U	Phosphorus	0.02	U	N	3	S
2043	02/02/89	3887		Phosphorus	1.07	J	N	3	S
2043	04/07/93	GW930407-12		Phosphorus	0.17	-	N	3	S
2050	05/05/88	3147		Phosphorus	0.12	-	N	3	S
2050	08/16/88	3497		Phosphorus	0.085	J	N	3	S
2050	12/05/88	3743		Phosphorus	0.902	-	N	3	S
2050	03/13/89	3969		Phosphorus	0.08	-	N	3	S
2050	05/20/93	GW930520-8		Phosphorus	0.079	-	N	3	S
2056	05/06/88	3159		Phosphorus	0.11	J	N	3	S
2056	08/25/88	3575		Phosphorus	0.125	-	N	3	S
2056	12/07/88	3781		Phosphorus	0.098	-	N	3	S
2056	03/13/89	3967		Phosphorus	0.07	J	N	3	S
2056	03/13/89	4045		Phosphorus	0.04	J	D	3	S
2057	06/03/88	3265		Phosphorus	0.195	-	N	3	R

Table D-4 (Continued)
Validated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well	Sample		Lab		Validated		QA		
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type	ASL	Area
2057	08/25/88	3573	U	Phosphorus	0.05	U	N	3	R
2057	12/13/88	3779		Phosphorus	0.175	-	N	3	R
2057	03/14/89	3965		Phosphorus	0.08	J	N	3	R
2066	04/26/88	3124		Phosphorus	0.125	-	N	3	S
2066	11/10/88	3710	U	Phosphorus	0.02	U	N	3	S
2066	03/14/89	3894		Phosphorus	0.18	J	N	3	S
2066	04/07/93	GW930407-14		Phosphorus	0.044	-	N	3	S
2096	09/12/88	3586		Phosphorus	0.095	-	N	3	R
2096	12/07/88	3790		Phosphorus	1.74	-	N	3	R
2096	02/09/89	3985		Phosphorus	0.27	J	N	3	R
2096	04/30/89	4081		Phosphorus	1.62	-	N	3	R
2096	04/25/90	4234		Phosphorus	0.03	-	N	3	R
2096	05/06/93	GW930506-5		Phosphorus	0.09	-	N	3	R
2098	09/22/88	3591	U	Phosphorus	0.01	U	N	3	D
2098	12/16/88	3796		Phosphorus	3.08	-	N	3	D
2098	02/08/89	3990		Phosphorus	0.2	J	N	3	D
2098	05/25/89	4087		Phosphorus	0.479	J	N	3	D
2098	05/20/93	GW930520-9		Phosphorus	0.19	-	N	3	D
2104	05/05/88	3146		Phosphorus	0.065	-	N	3	R
2104	08/16/88	3498	U	Phosphorus	0.05	UJ	N	3	R
2104	12/06/88	3744		Phosphorus	0.04	U	N	3	R
2104	03/15/89	3970		Phosphorus	0.02	-	N	3	R
2104	04/22/90	4235		Phosphorus	0.01	UJ	N	3	R
2104	04/22/90	4269		Phosphorus	0.01	UJ	N	3	R
2104	05/13/93	GW930513-14	U	Phosphorus	0.03	U	N	3	R
2104	05/13/93	GW930513-18	U	Phosphorus	0.03	U	N	3	R
2105	06/05/88	3268		Phosphorus	0.115	-	N	3	S
2105	03/15/89	3968		Phosphorus	0.1	-	N	3	S
2121	05/06/88	3158	U	Phosphorus	0.05	UJ	N	3	D
2121	08/25/88	3571		Phosphorus	0.055	-	N	3	D
2121	12/13/88	3776		Phosphorus	0.045	-	N	3	D
2121	03/14/89	3962		Phosphorus	0.02	J	N	3	D
2122	05/06/88	3157	U	Phosphorus	0.05	UJ	N	3	D
2122	08/17/88	3504	U	Phosphorus	0.05	U	N	3	D
2122	12/07/88	3749		Phosphorus	0.184	-	N	3	D
2122	03/15/89	3979		Phosphorus	0.02	-	N	3	D
2123	05/06/88	3156	U	Phosphorus	0.05	UJ	N	3	R
2123	08/23/88	3565	U	Phosphorus	0.05	U	N	3	R
2123	12/06/88	3771		Phosphorus	0.018	U	N	3	R
2123	03/14/89	3984		Phosphorus	0.02	J	N	3	R
2728	04/04/93	113514	U	Phosphorus	0.02	UJ	N	3	S
2728	05/24/93	GW930524-3		Phosphorus	0.11	J	N	3	S
3024	04/20/88	3096	U	Phosphorus	0.05	U	N	3	S
3024	07/26/88	3377		Phosphorus	0.01	-	N	3	S
3024	11/02/88	3658		Phosphorus	0.02	-	N	3	S
3024	01/24/89	3842		Phosphorus	0.3	J	N	3	S
3043	04/13/88	3090		Phosphorus	0.08	J	N	3	S
3043	08/04/88	3397		Phosphorus	0.3	-	N	3	S
3043	11/04/88	3694		Phosphorus	0.404	-	N	3	S
3043	02/02/89	3886		Phosphorus	0.52	J	N	3	S

Table D-4 (Continued)
Validated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
3043	04/07/93	GW930407-13		Phosphorus	0.3	-	N	3	S
3063	05/12/88	3190	U	Phosphorus	0.05	U	N	3	D
3063	05/12/88	3191	U	Phosphorus	0.05	U	D	3	D
3063	08/16/88	3495		Phosphorus	0.05	J	N	3	D
3063	12/13/88	3741		Phosphorus	0.031	-	N	3	D
3063	03/13/89	3966		Phosphorus	0.05	-	N	3	D
3096	09/12/88	3585		Phosphorus	0.05	-	N	3	R
3096	12/07/88	3789		Phosphorus	0.954	-	N	3	R
3096	02/09/89	3974		Phosphorus	0.09	J	N	3	R
3096	04/30/89	4082		Phosphorus	0.077	-	N	3	R
3096	04/25/90	4257		Phosphorus	0.02	-	N	3	R
3096	05/07/93	GW930507-1		Phosphorus	0.05	-	N	3	R
3098	09/21/88	3589	U	Phosphorus	0.01	UJ	N	3	D
3098	12/16/88	3795	U	Phosphorus	0.02	U	N	3	D
3098	02/08/89	3989		Phosphorus	0.13	J	N	3	D
3098	05/25/89	4088		Phosphorus	0.113	J	N	3	D
3098	05/20/93	GW930520-10		Phosphorus	0.03	-	N	3	D
3099	05/24/88	3237		Phosphorus	0.07	-	N	3	D
3099	05/24/88	3238		Phosphorus	0.06	-	D	3	D
3099	08/16/88	3496	U	Phosphorus	0.05	UJ	N	3	D
3099	12/06/88	3742	U	Phosphorus	0.02	U	N	3	D
3099	03/14/89	3977	U	Phosphorus	0.01	UJ	N	3	D
3100	05/24/88	3239		Phosphorus	0.06	-	N	3	D
3100	05/24/88	3240	U	Phosphorus	0.05	U	D	3	D
3100	08/19/88	3517	U	Phosphorus	0.05	UJ	N	3	D
3100	03/13/89	3978	U	Phosphorus	0.01	U	N	3	D
4011	10/05/90	4345		Phosphorus	1.27	-	N	3	S
4011	02/07/91	4382		Phosphorus	0.38	-	N	3	S
4011	04/08/93	GW930408-3		Phosphorus	0.27	-	N	3	S
4011	04/08/93	GW930408-2		Phosphorus	0.12	-	D	3	S
4096	09/12/88	3584		Phosphorus	0.045	-	N	3	R
4096	12/14/88	3788		Phosphorus	0.39	J	N	3	R
4096	12/14/88	3474		Phosphorus	1.33	J	D	3	R
4096	02/10/89	3975		Phosphorus	0.02	J	N	3	R
4096	04/30/89	4083		Phosphorus	0.067	-	N	3	R
4096	05/06/93	GW930506-7		Phosphorus	0.09	-	N	3	R
2043	04/07/93	GW930407-12	B	Potassium	1.23	-	N	3	S
2050	05/20/93	GW930520-8	B	Potassium	1.51	-	N	3	S
2066	04/07/93	GW930407-14	B	Potassium	1.41	-	N	3	S
2096	05/06/93	GW930506-5	B	Potassium	2.09	U	N	3	R
2098	05/20/93	GW930520-9	B	Potassium	1.69	-	N	3	D
2104	05/13/93	GW930513-14	B	Potassium	2.26	-	N	3	R
2104	05/13/93	GW930513-18	B	Potassium	1.63	-	N	3	R
2728	04/04/93	113514	B	Potassium	1.3	-	N	3	S
2728	05/24/93	GW930524-3	B	Potassium	0.922	-	N	3	S
3024	04/12/93	GW930412-8	B	Potassium	1.05	-	N	3	S
3043	04/07/93	GW930407-13	B	Potassium	1.03	-	N	3	S
3096	05/07/93	GW930507-1	B	Potassium	1.56	U	N	3	R
3098	05/20/93	GW930520-10	B	Potassium	1.96	-	N	3	D
4011	10/05/90	4345	B	Potassium	0.675	-	N	3	S

Table D-4 (Continued)
Validated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
4011	02/07/91	4382		Potassium	1	-	N	3	S
4011	04/08/93	GW930408-3	U	Potassium	0.82	U	N	3	S
4011	04/08/93	GW930408-2	B	Potassium	0.886	-	D	3	S
4096	05/06/93	GW930506-7	B	Potassium	1.44	U	N	3	R
2043	04/07/93	GW930407-12	U	Selenium	0.002	U	N	3	S
2050	05/20/93	GW930520-8	UN	Selenium	0.001	UJ	N	3	S
2066	04/07/93	GW930407-14	UW	Selenium	0.002	UJ	N	3	S
2096	05/06/93	GW930506-5	UW	Selenium	0.001	UJ	N	3	R
2098	05/20/93	GW930520-9	UN	Selenium	0.001	UJ	N	3	D
2104	05/13/93	GW930513-14	BWN	Selenium	0.001	J	N	3	R
2104	05/13/93	GW930513-18	UN	Selenium	0.001	UJ	N	3	R
2728	05/24/93	GW930524-3	UN	Selenium	0.001	UJ	N	3	S
3024	04/12/93	GW930412-8	UWN	Selenium	0.001	UJ	N	3	S
3043	04/07/93	GW930407-13	UW	Selenium	0.002	UJ	N	3	S
3096	05/07/93	GW930507-1	U	Selenium	0.002	U	N	3	R
3098	05/20/93	GW930520-10	UN	Selenium	0.001	UJ	N	3	D
4011	10/05/90	4345	UWN	Selenium	0.002	UJ	N	3	S
4011	02/07/91	4382	U	Selenium	0.002	U	N	3	S
4011	04/08/93	GW930408-3	UWN	Selenium	0.001	UJ	N	3	S
4011	04/08/93	GW930408-2	UWN	Selenium	0.001	UJ	D	3	S
4096	05/06/93	GW930506-7	UW	Selenium	0.001	UJ	N	3	R
2728	04/04/93	113514		Silicon	5.81	-	N	3	S
2043	04/07/93	GW930407-12	U	Silver	0.003	U	N	3	S
2050	05/20/93	GW930520-8	U	Silver	0.004	U	N	3	S
2066	04/07/93	GW930407-14	U	Silver	0.003	U	N	3	S
2096	05/06/93	GW930506-5	UN	Silver	0.003	UJ	N	3	R
2098	05/20/93	GW930520-9	U	Silver	0.004	U	N	3	D
2104	05/13/93	GW930513-14	U	Silver	0.004	U	N	3	R
2104	05/13/93	GW930513-18	U	Silver	0.004	U	N	3	R
2728	04/04/93	113514	U	Silver	0.01	U	N	3	S
2728	05/24/93	GW930524-3	U	Silver	0.007	U	N	3	S
3024	04/12/93	GW930412-8	U	Silver	0.007	U	N	3	S
3043	04/07/93	GW930407-13	U	Silver	0.003	U	N	3	S
3096	05/07/93	GW930507-1	UN	Silver	0.003	UJ	N	3	R
3098	05/20/93	GW930520-10	U	Silver	0.004	U	N	3	D
4011	10/05/90	4345		Silver	0.0117	-	N	3	S
4011	02/07/91	4382	U	Silver	0.005	U	N	3	S
4011	04/08/93	GW930408-3	U	Silver	0.003	U	N	3	S
4011	04/08/93	GW930408-2	U	Silver	0.003	U	D	3	S
4096	05/06/93	GW930506-7	UN	Silver	0.003	UJ	N	3	R
2043	04/07/93	GW930407-12		Sodium	36.5	J	N	3	S
2050	05/20/93	GW930520-8		Sodium	50.4	-	N	3	S
2066	04/07/93	GW930407-14		Sodium	46.6	-	N	3	S
2096	05/06/93	GW930506-5		Sodium	6.14	-	N	3	R
2098	05/20/93	GW930520-9		Sodium	19.5	-	N	3	D
2104	05/13/93	GW930513-14		Sodium	12.4	-	N	3	R
2104	05/13/93	GW930513-18		Sodium	13.2	-	N	3	R
2728	04/04/93	113514		Sodium	36	-	N	3	S
2728	05/24/93	GW930524-3		Sodium	23	J	N	3	S
3024	04/12/93	GW930412-8		Sodium	10.9	-	N	3	S

Table D-4 (Continued)
Validated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
3043	04/07/93	GW930407-13		Sodium	13.4	-	N	3	S
3096	05/07/93	GW930507-1	B	Sodium	3.08	-	N	3	R
3098	05/20/93	GW930520-10		Sodium	11.3	-	N	3	D
4011	10/05/90	4345		Sodium	23.7	-	N	3	S
4011	02/07/91	4382		Sodium	30.3	-	N	3	S
4011	04/08/93	GW930408-3		Sodium	33.8	-	N	3	S
4011	04/08/93	GW930408-2		Sodium	32.7	-	D	3	S
4096	05/06/93	GW930506-7	B	Sodium	3.76	-	N	3	R
2026	05/12/88	3186		Sulfate	39	-	N	3	D
2026	05/12/88	3187		Sulfate	40	-	D	3	D
2026	08/17/88	3505		Sulfate	24	J	N	3	D
2026	12/07/88	3750		Sulfate	202	-	N	3	D
2026	03/14/89	3980		Sulfate	40	J	N	3	D
2036	05/12/88	3184		Sulfate	7	-	N	3	R
2036	05/12/88	3185		Sulfate	35	-	D	3	R
2036	08/23/88	3564		Sulfate	25	J	N	3	R
2036	12/07/88	3770		Sulfate	39.9	-	N	3	R
2036	03/14/89	3983		Sulfate	34	J	N	3	R
2043	04/13/88	3091		Sulfate	40	J	N	3	S
2043	08/05/88	3440		Sulfate	13	-	N	3	S
2043	11/04/88	3700		Sulfate	166	-	N	3	S
2043	02/02/89	3887		Sulfate	5.4	-	N	3	S
2043	06/26/89	66438		Sulfate	16.1	-	N	3	S
2043	08/30/89	66542		Sulfate	38.8	-	N	3	S
2043	08/30/89	66547		Sulfate	20.7	-	D	3	S
2043	04/07/93	GW930407-12		Sulfate	25	-	N	3	S
2050	05/05/88	3147		Sulfate	4	-	N	3	S
2050	08/16/88	3497	U	Sulfate	2	UJ	N	3	S
2050	12/05/88	3743		Sulfate	197	-	N	3	S
2050	03/13/89	3969	U	Sulfate	2	U	N	3	S
2056	05/06/88	3159		Sulfate	6	-	N	3	S
2056	08/25/88	3575	U	Sulfate	2	UJ	N	3	S
2056	12/07/88	3781		Sulfate	54.4	-	N	3	S
2056	03/13/89	3967	U	Sulfate	2	U	N	3	S
2056	03/13/89	4045	U	Sulfate	2	U	D	3	S
2057	06/03/88	3265		Sulfate	24	-	N	3	R
2057	08/25/88	3573		Sulfate	23	J	N	3	R
2057	12/13/88	3779		Sulfate	43.7	J	N	3	R
2057	03/14/89	3965		Sulfate	24	J	N	3	R
2066	04/26/88	3124	U	Sulfate	2	U	N	3	S
2066	11/10/88	3710		Sulfate	133	-	N	3	S
2066	03/14/89	3894	U	Sulfate	2	UJ	N	3	S
2066	06/27/89	66436		Sulfate	2.79	J	N	3	S
2066	08/09/89	66498		Sulfate	13.4	-	N	3	S
2096	09/12/88	3586		Sulfate	154	-	N	3	R
2096	12/07/88	3790		Sulfate	76.3	-	N	3	R
2096	02/09/89	3985		Sulfate	92.8	-	N	3	R
2096	04/30/89	4081		Sulfate	321	J	N	3	R
2096	04/25/90	4234		Sulfate	258	-	N	3	R
2096	05/06/93	GW930506-5		Sulfate	200	-	N	3	R

Table D-4 (Continued)
Validated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well	Sample		Lab		Validated		QA		
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type	ASL	Area
2098	09/22/88	3591		Sulfate	27	-	N	3	D
2098	12/16/88	3796		Sulfate	132	J	N	3	D
2098	02/08/89	3990		Sulfate	81.6	J	N	3	D
2098	05/25/89	4087		Sulfate	80.9	J	N	3	D
2098	05/20/93	GW930520-9		Sulfate	65	-	N	3	D
2104	05/05/88	3146		Sulfate	112	-	N	3	R
2104	08/16/88	3498		Sulfate	96	J	N	3	R
2104	12/06/88	3744		Sulfate	81.2	-	N	3	R
2104	03/15/89	3970		Sulfate	100	-	N	3	R
2104	04/22/90	4235		Sulfate	59.4	-	N	3	R
2104	04/22/90	4269		Sulfate	136	-	N	3	R
2104	05/13/93	GW930513-14		Sulfate	160	-	N	3	R
2104	05/13/93	GW930513-18		Sulfate	160	-	N	3	R
2105	06/05/88	3268		Sulfate	7	-	N	3	S
2105	08/28/88	3577	U	Sulfate	2	U	N	3	S
2105	03/15/89	3968	U	Sulfate	2	U	N	3	S
2121	05/06/88	3158		Sulfate	47	-	N	3	D
2121	08/25/88	3571		Sulfate	64	J	N	3	D
2121	12/13/88	3776		Sulfate	43	J	N	3	D
2121	03/14/89	3962		Sulfate	49	J	N	3	D
2122	05/06/88	3157		Sulfate	52	-	N	3	D
2122	08/17/88	3504		Sulfate	18	J	N	3	D
2122	12/07/88	3749		Sulfate	3.08	-	N	3	D
2122	03/15/89	3979		Sulfate	58	-	N	3	D
2123	05/06/88	3156		Sulfate	35	-	N	3	R
2123	08/23/88	3565		Sulfate	36	J	N	3	R
2123	12/06/88	3771		Sulfate	3.24	-	N	3	R
2123	03/14/89	3984		Sulfate	34	J	N	3	R
2728	04/04/93	113514		Sulfate	3.09	-	N	3	S
2728	05/24/93	GW930524-3		Sulfate	107	J	N	3	S
3024	04/20/88	3096		Sulfate	63	-	N	3	S
3024	07/26/88	3377		Sulfate	58	-	N	3	S
3024	11/02/88	3658		Sulfate	112	J	N	3	S
3024	01/24/89	3842		Sulfate	160	J	N	3	S
3024	06/26/89	66460		Sulfate	122	-	N	3	S
3024	08/10/89	66515		Sulfate	130	-	N	3	S
3024	04/12/93	GW930412-8		Sulfate	218	-	N	3	S
3043	04/13/88	3090		Sulfate	8	J	N	3	S
3043	08/04/88	3397		Sulfate	12	J	N	3	S
3043	11/04/88	3694		Sulfate	182	-	N	3	S
3043	02/02/89	3886		Sulfate	5.5	-	N	3	S
3043	06/13/89	66439		Sulfate	4.75	-	N	3	S
3043	08/30/89	66543	U	Sulfate	2	U	N	3	S
3063	05/12/88	3190		Sulfate	65	-	N	3	D
3063	05/12/88	3191		Sulfate	65	-	D	3	D
3063	08/16/88	3495		Sulfate	8	J	N	3	D
3063	12/13/88	3741		Sulfate	42.2	J	N	3	D
3063	03/13/89	3966		Sulfate	65	-	N	3	D
3096	09/12/88	3585		Sulfate	28	-	N	3	R
3096	12/07/88	3789		Sulfate	48.7	-	N	3	R

Table D-4 (Continued)
Validated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
3096	02/09/89	3974		Sulfate	52.9	-	N	3	R
3096	04/30/89	4082		Sulfate	47.2	J	N	3	R
3096	04/25/90	4257		Sulfate	39.2	-	N	3	R
3096	05/07/93	GW930507-1		Sulfate	43	-	N	3	R
3098	09/21/88	3589		Sulfate	116	J	N	3	D
3098	12/16/88	3795		Sulfate	65.2	J	N	3	D
3098	02/08/89	3989		Sulfate	71.8	J	N	3	D
3098	05/25/89	4088		Sulfate	62.7	J	N	3	D
3098	05/20/93	GW930520-10		Sulfate	56	-	N	3	D
3099	05/24/88	3237		Sulfate	60	-	N	3	D
3099	05/24/88	3238		Sulfate	72	-	D	3	D
3099	08/16/88	3496		Sulfate	4	J	N	3	D
3099	12/06/88	3742		Sulfate	68.2	-	N	3	D
3099	03/14/89	3977		Sulfate	72	J	N	3	D
3100	05/24/88	3239		Sulfate	54	-	N	3	D
3100	05/24/88	3240		Sulfate	60	-	D	3	D
3100	08/19/88	3517		Sulfate	35	-	N	3	D
3100	12/06/88	3761		Sulfate	3.08	-	N	3	D
3100	03/13/89	3978		Sulfate	50	-	N	3	D
4011	10/05/90	4345		Sulfate	62.8	-	N	3	S
4011	02/07/91	4382		Sulfate	49.2	-	N	3	S
4011	04/08/93	GW930408-3		Sulfate	88	-	N	3	S
4011	04/08/93	GW930408-2		Sulfate	88	-	D	3	S
4096	09/12/88	3584		Sulfate	85	-	N	3	R
4096	12/14/88	3788		Sulfate	22.6	J	N	3	R
4096	12/14/88	3474		Sulfate	22.2	J	D	3	R
4096	02/10/89	3975		Sulfate	16.4	-	N	3	R
4096	04/30/89	4083		Sulfate	25.9	J	N	3	R
4096	05/06/93	GW930506-7		Sulfate	19	-	N	3	R
2043	08/30/89	66572	U	Sulfide	0.5	U	N	3	S
2043	08/30/89	66577	U	Sulfide	0.5	U	D	3	S
2096	04/25/90	4234	U	Sulfide	0.5	U	N	3	R
2104	04/22/90	4235	U	Sulfide	0.5	U	N	3	R
2104	04/22/90	4269	U	Sulfide	0.5	U	N	3	R
2728	04/04/93	113514	U	Sulfide	0.5	U	N	3	S
3043	08/30/89	66573	U	Sulfide	0.5	U	N	3	S
3096	04/25/90	4257	U	Sulfide	0.5	U	N	3	R
2043	04/07/93	GW930407-12	U	Thallium	0.003	U	N	3	S
2050	05/20/93	GW930520-8	U	Thallium	0.003	U	N	3	S
2066	04/07/93	GW930407-14	UWN	Thallium	0.003	U	N	3	S
2096	05/06/93	GW930506-5	UW	Thallium	0.001	UJ	N	3	R
2098	05/20/93	GW930520-9	U	Thallium	0.003	U	N	3	D
2104	05/13/93	GW930513-14	U	Thallium	0.003	U	N	3	R
2104	05/13/93	GW930513-18	U	Thallium	0.003	U	N	3	R
2728	04/04/93	113514	U	Thallium	0.002	U	N	3	S
2728	05/24/93	GW930524-3	U	Thallium	0.002	U	N	3	S
3024	04/12/93	GW930412-8	U	Thallium	0.002	U	N	3	S
3043	04/07/93	GW930407-13	U	Thallium	0.003	U	N	3	S
3096	05/07/93	GW930507-1	U	Thallium	0.001	U	N	3	R
3098	05/20/93	GW930520-10	U	Thallium	0.003	U	N	3	D

Table D-4 (Continued)
Validated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well	Sample		Lab		Validated		QA		
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type	ASL	Area
4011	10/05/90	4345	U	Thallium	0.002	U	N	3	S
4011	04/08/93	GW930408-3	U	Thallium	0.002	U	N	3	S
4011	04/08/93	GW930408-2	U	Thallium	0.002	U	D	3	S
4096	05/06/93	GW930506-7	U	Thallium	0.001	U	N	3	R
2026	12/07/88	3750		TKN	0.48	J	N	3	D
2026	03/14/89	3980	U	TKN	0.2	UJ	N	3	D
2036	12/07/88	3770		TKN	0.21	J	N	3	R
2036	03/14/89	3983	U	TKN	0.2	UJ	N	3	R
2043	11/04/88	3700		TKN	2.9	J	N	3	S
2043	02/02/89	3887		TKN	1.63	J	N	3	S
2050	03/13/89	3969		TKN	0.6	-	N	3	S
2056	12/07/88	3781		TKN	3.5	J	N	3	S
2056	03/13/89	3967		TKN	2.7	-	N	3	S
2056	03/13/89	4045		TKN	2.8	-	D	3	S
2057	12/13/88	3779		TKN	0.23	J	N	3	R
2057	03/14/89	3965	U	TKN	0.4	UJ	N	3	R
2066	11/10/88	3710		TKN	4.74	J	N	3	S
2066	03/14/89	3894		TKN	4	J	N	3	S
2096	12/07/88	3790		TKN	0.77	J	N	3	R
2096	02/09/89	3985		TKN	0.163	J	N	3	R
2096	04/30/89	4081		TKN	0.676	-	N	3	R
2096	05/06/93	GW930506-5		TKN	0.2	-	N	3	R
2098	12/16/88	3796		TKN	0.17	J	N	3	D
2098	02/08/89	3990		TKN	0.231	J	N	3	D
2098	05/25/89	4087		TKN	0.459	J	N	3	D
2104	12/06/88	3744		TKN	0.11	UJ	N	3	R
2104	03/15/89	3970		TKN	0.2	U	N	3	R
2105	03/15/89	3968		TKN	4.2	-	N	3	S
2121	12/13/88	3776		TKN	0.28	J	N	3	D
2121	03/14/89	3962		TKN	0.6	J	N	3	D
2122	12/07/88	3749		TKN	0.22	J	N	3	D
2122	03/15/89	3979		TKN	0.2	U	N	3	D
2123	12/06/88	3771		TKN	0.11	UJ	N	3	R
2123	03/14/89	3984	U	TKN	0.2	UJ	N	3	R
2728	04/04/93	113514		TKN	1.74	-	N	3	S
2728	05/24/93	GW930524-3		TKN	1.79	-	N	3	S
3024	11/02/88	3658		TKN	0.83	-	N	3	S
3024	01/24/89	3842		TKN	0.6	J	N	3	S
3024	04/12/93	GW930412-8		TKN	0.72	-	N	3	S
3043	11/04/88	3694		TKN	4	J	N	3	S
3043	02/02/89	3886		TKN	3.44	J	N	3	S
3063	12/13/88	3741		TKN	0.26	J	N	3	D
3063	03/13/89	3966		TKN	0.2	U	N	3	D
3096	12/07/88	3789		TKN	0.52	J	N	3	R
3096	02/09/89	3974		TKN	0.163	J	N	3	R
3096	04/30/89	4082		TKN	0.116	-	N	3	R
3096	05/07/93	GW930507-1		TKN	0.1	-	N	3	R
3098	12/16/88	3795		TKN	1.37	J	N	3	D
3098	02/08/89	3989		TKN	0.262	J	N	3	D
3098	05/25/89	4088		TKN	0.138	J	N	3	D

Table D-4 (Continued)
Validated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
3099	12/06/88	3742	U	TKN	0.1	UJ	N	3	D
3099	03/14/89	3977	U	TKN	0.3	UJ	N	3	D
3100	12/06/88	3761	U	TKN	0.21	UJ	N	3	D
3100	03/13/89	3978		TKN	0.2	U	N	3	D
4096	12/14/88	3788		TKN	0.67	J	N	3	R
4096	12/14/88	3474		TKN	0.28	J	D	3	R
4096	02/10/89	3975	U	TKN	0.1	UJ	N	3	R
4096	04/30/89	4083	U	TKN	0.1	U	N	3	R
4096	05/06/93	GW930506-7		TKN	0.2	-	N	3	R
2043	04/07/93	GW930407-12		Total Solids	530	-	N	3	S
2050	05/20/93	GW930520-8		Total Solids	470	-	N	3	S
2050	08/03/93	GW930803-3		Total Solids	522	-	N	3	S
2066	04/07/93	GW930407-14		Total Solids	390	-	N	3	S
2096	05/06/93	GW930506-5		Total Solids	650	-	N	3	R
2096	08/04/93	GW930804-1		Total Solids	590	-	N	3	R
2098	05/20/93	GW930520-9		Total Solids	410	-	N	3	D
2104	05/13/93	GW930513-14		Total Solids	550	-	N	3	R
2104	05/13/93	GW930513-18		Total Solids	570	-	N	3	R
2104	08/02/93	GW930802-5		Total Solids	576	-	N	3	R
2728	05/24/93	GW930524-3		Total Solids	544	-	N	3	S
3024	04/12/93	GW930412-8		Total Solids	773	-	N	3	S
3043	04/07/93	GW930407-13		Total Solids	370	-	N	3	S
3096	05/07/93	GW930507-1		Total Solids	350	-	N	3	R
3096	08/11/93	GW930811-2		Total Solids	356	-	N	3	R
3096	08/11/93	GW930811-3		Total Solids	356	-	N	3	R
3098	05/20/93	GW930520-10		Total Solids	450	-	N	3	D
4011	04/08/93	GW930408-3		Total Solids	560	-	N	3	S
4011	04/08/93	GW930408-2		Total Solids	580	-	D	3	S
4096	05/06/93	GW930506-7		Total Solids	330	-	N	3	R
4096	08/04/93	GW930804-2		Total Solids	381	-	N	3	R
2043	04/07/93	GW930407-12	U	Vanadium	0.007	U	N	3	S
2050	05/20/93	GW930520-8	U	Vanadium	0.004	U	N	3	S
2066	04/07/93	GW930407-14	U	Vanadium	0.007	U	N	3	S
2096	05/06/93	GW930506-5	U	Vanadium	0.004	U	N	3	R
2098	05/20/93	GW930520-9	B	Vanadium	0.0076	-	N	3	D
2104	05/13/93	GW930513-14	U	Vanadium	0.004	U	N	3	R
2104	05/13/93	GW930513-18	U	Vanadium	0.004	U	N	3	R
2728	04/04/93	113514	U	Vanadium	0.01	U	N	3	S
2728	05/24/93	GW930524-3	U	Vanadium	0.003	U	N	3	S
3024	04/12/93	GW930412-8	U	Vanadium	0.003	U	N	3	S
3043	04/07/93	GW930407-13	U	Vanadium	0.007	U	N	3	S
3096	05/07/93	GW930507-1	U	Vanadium	0.004	U	N	3	R
3098	05/20/93	GW930520-10	U	Vanadium	0.004	U	N	3	D
4011	10/05/90	4345	B	Vanadium	0.0117	-	N	3	S
4011	02/07/91	4382	U	Vanadium	0.01	U	N	3	S
4011	04/08/93	GW930408-3	U	Vanadium	0.007	U	N	3	S
4011	04/08/93	GW930408-2	U	Vanadium	0.007	U	D	3	S
4096	05/06/93	GW930506-7	U	Vanadium	0.004	U	N	3	R
2043	04/07/93	GW930407-12	B	Zinc	0.0041	U	N	3	S
2066	04/07/93	GW930407-14	B	Zinc	0.0034	U	N	3	S

Table D-4 (Continued)
Validated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
2096	05/06/93	GW930506-5		Zinc	0.0229	UJ	N	3	R
2098	05/20/93	GW930520-9	B	Zinc	0.0139	U	N	3	D
2104	05/13/93	GW930513-14	B	Zinc	0.005	U	N	3	R
2104	05/13/93	GW930513-18	B	Zinc	0.0075	U	N	3	R
2728	04/04/93	113514	U	Zinc	0.005	U	N	3	S
2728	05/24/93	GW930524-3	B	Zinc	0.0083	U	N	3	S
3024	04/12/93	GW930412-8		Zinc	0.0378	U	N	3	S
3043	04/07/93	GW930407-13	B	Zinc	0.0044	U	N	3	S
3096	05/07/93	GW930507-1		Zinc	0.021	J	N	3	R
3098	05/20/93	GW930520-10	B	Zinc	0.0144	U	N	3	D
4011	10/05/90	4345	B	Zinc	0.0087	J	N	3	S
4011	04/08/93	GW930408-3	B	Zinc	0.0083	U	N	3	S
4011	04/08/93	GW930408-2	B	Zinc	0.0064	U	D	3	S
4096	05/06/93	GW930506-7		Zinc	0.0209	UJ	N	3	R

Table D-5
Validated Filtered Inorganic Data for Background Surface Water in the Great Miami River

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL
W-1	05/20/93	120065-2	B	Aluminum	0.0934	-	N	3
W-1	05/20/93	120069-2	B	Aluminum	0.0712	-	D	3
W-1	05/20/93	120073	B	Aluminum	0.0937	-	T	3
W-1	06/23/93	120414F	B	Aluminum	0.112	-	N	3
W-1	06/23/93	120416F	B	Aluminum	0.117	-	N	3
W-1	05/20/93	120065-2	U	Antimony	0.005	U	N	3
W-1	05/20/93	120069-2	U	Antimony	0.005	U	D	3
W-1	05/20/93	120073	UW	Antimony	0.005	U	T	3
W-1	06/23/93	120414F	U	Antimony	0.005	U	N	3
W-1	06/23/93	120416F	UW	Antimony	0.005	UJ	N	3
W-1	08/29/88	1092	U	Arsenic	0.002	U	N	4
W-1	05/20/93	120065-2	B	Arsenic	0.0021	-	N	3
W-1	05/20/93	120069-2	B	Arsenic	0.0027	-	D	3
W-1	05/20/93	120073	B	Arsenic	0.0024	-	T	3
W-1	06/23/93	120414F	U	Arsenic	0.002	U	N	3
W-1	06/23/93	120416F	BW	Arsenic	0.0023	J	N	3
W-1	06/16/88	1035		Barium	0.089	-	N	3
W-1	08/29/88	1092		Barium	0.1	-	N	4
W-1	05/20/93	120065-2	B	Barium	0.0824	-	N	3
W-1	05/20/93	120069-2	B	Barium	0.083	-	D	3
W-1	05/20/93	120073	B	Barium	0.0813	-	T	3
W-1	06/23/93	120414F	B	Barium	0.0749	-	N	3
W-1	06/23/93	120416F	B	Barium	0.0748	-	N	3
W-1	05/20/93	120065-2	U	Beryllium	0.002	U	N	3
W-1	05/20/93	120069-2	U	Beryllium	0.002	U	D	3
W-1	05/20/93	120073	U	Beryllium	0.002	U	T	3
W-1	06/23/93	120414F	U	Beryllium	0.002	U	N	3
W-1	06/23/93	120416F	U	Beryllium	0.002	U	N	3
W-1	06/16/88	1035	U	Cadmium	0.005	U	N	3
W-1	08/29/88	1092	U	Cadmium	0.002	U	N	4
W-1	05/20/93	120065-2	U	Cadmium	0.005	U	N	3
W-1	05/20/93	120069-2	U	Cadmium	0.005	U	D	3
W-1	05/20/93	120073	U	Cadmium	0.005	U	T	3
W-1	06/23/93	120414F	U	Cadmium	0.005	U	N	3
W-1	06/23/93	120416F	U	Cadmium	0.005	U	N	3
W-1	06/16/88	1035		Calcium	74.9	-	N	3
W-1	08/29/88	1092		Calcium	66	-	N	4
W-1	05/20/93	120065-2		Calcium	79.1	-	N	3
W-1	05/20/93	120069-2		Calcium	80	-	D	3
W-1	05/20/93	120073		Calcium	78.9	-	T	3
W-1	06/23/93	120414F		Calcium	68.1	-	N	3
W-1	06/23/93	120416F		Calcium	69.5	-	N	3
W-1	06/16/88	1035	U	Chromium	0.02	U	N	3
W-1	08/29/88	1092	U	Chromium	0.02	U	N	4
W-1	05/20/93	120065-2	U	Chromium	0.01	U	N	3
W-1	05/20/93	120069-2	U	Chromium	0.01	U	D	3
W-1	05/20/93	120073	U	Chromium	0.01	U	T	3
W-1	06/23/93	120414F	U	Chromium	0.01	U	N	3
W-1	06/23/93	120416F	U	Chromium	0.01	U	N	3
W-1	05/20/93	120065-2	U	Cobalt	0.01	U	N	3

Table D-5 (Continued)
Validated Filtered Inorganic Data for Background Surface Water in the Great Miami River

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL
W-1	05/20/93	120069-2	U	Cobalt	0.01	U	D	3
W-1	05/20/93	120073	U	Cobalt	0.01	U	T	3
W-1	06/23/93	120414F	U	Cobalt	0.01	U	N	3
W-1	06/23/93	120416F	U	Cobalt	0.01	U	N	3
W-1	06/16/88	1035	U	Copper	0.01	U	N	3
W-1	08/29/88	1092	U	Copper	0.01	U	N	4
W-1	05/20/93	120065-2	U	Copper	0.01	U	N	3
W-1	05/20/93	120069-2	U	Copper	0.01	U	D	3
W-1	05/20/93	120073	U	Copper	0.01	U	T	3
W-1	06/23/93	120414F	U	Copper	0.01	U	N	3
W-1	06/23/93	120416F	U	Copper	0.01	U	N	3
W-1	05/20/93	120065-2	U	Cyanide	0.002	UJ	N	3
W-1	05/20/93	120069-2	B	Cyanide	0.0025	J	D	3
W-1	05/20/93	120073	B	Cyanide	0.003	J	T	3
W-1	06/23/93	120414F	B	Cyanide	0.006	-	N	3
W-1	06/23/93	120416F	B	Cyanide	0.0022	-	N	3
W-1	06/16/88	1035	U	Iron	0.05	U	N	3
W-1	08/29/88	1092	U	Iron	0.005	U	N	4
W-1	05/20/93	120065-2	U	Iron	0.02	U	N	3
W-1	05/20/93	120069-2	U	Iron	0.02	U	D	3
W-1	05/20/93	120073	U	Iron	0.02	U	T	3
W-1	06/23/93	120414F	U	Iron	0.02	U	N	3
W-1	06/23/93	120416F	U	Iron	0.02	U	N	3
W-1	08/29/88	1092	U	Lead	0.004	UJ	N	4
W-1	05/20/93	120065-2	UW	Lead	0.002	UJ	N	3
W-1	05/20/93	120069-2	UW	Lead	0.002	UJ	D	3
W-1	05/20/93	120073	UW	Lead	0.002	UJ	T	3
W-1	06/23/93	120414F	U	Lead	0.002	U	N	3
W-1	06/23/93	120416F	U	Lead	0.002	U	N	3
W-1	06/16/88	1035		Magnesium	34.9	-	N	3
W-1	08/29/88	1092		Magnesium	28.2	-	N	4
W-1	05/20/93	120065-2		Magnesium	30.4	-	N	3
W-1	05/20/93	120069-2		Magnesium	30.9	-	D	3
W-1	05/20/93	120073		Magnesium	30.4	-	T	3
W-1	06/23/93	120414F		Magnesium	27	-	N	3
W-1	06/23/93	120416F		Magnesium	27.3	-	N	3
W-1	06/16/88	1035	U	Manganese	0.02	U	N	3
W-1	08/29/88	1092	U	Manganese	0.001	U	N	4
W-1	05/20/93	120065-2	U	Manganese	0.01	U	N	3
W-1	05/20/93	120069-2	U	Manganese	0.01	U	D	3
W-1	05/20/93	120073	U	Manganese	0.01	U	T	3
W-1	06/23/93	120414F	U	Manganese	0.01	U	N	3
W-1	06/23/93	120416F	U	Manganese	0.01	U	N	3
W-1	06/16/88	1035	U	Mercury	0.0002	U	N	3
W-1	08/29/88	1092	U	Mercury	0.0002	UJ	N	4
W-1	05/20/93	120065-2	U	Mercury	0.0002	U	N	3
W-1	05/20/93	120069-2	U	Mercury	0.0002	U	D	3
W-1	05/20/93	120073	U	Mercury	0.0002	U	T	3
W-1	06/23/93	120414F	U	Mercury	0.0002	U	N	3
W-1	06/23/93	120416F	U	Mercury	0.0002	U	N	3

Table D-5 (Continued)
Validated Filtered Inorganic Data for Background Surface Water in the Great Miami River

Well	Sample		Lab		Validated		QA	
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type	ASL
W-1	06/16/88	1035	U	Molybdenum	0.02	U	N	3
W-1	08/29/88	1092	U	Molybdenum	0.02	U	N	4
W-1	05/20/93	120065-2	U	Molybdenum	0.01	U	N	3
W-1	05/20/93	120069-2	U	Molybdenum	0.01	U	D	3
W-1	05/20/93	120073	U	Molybdenum	0.01	U	T	3
W-1	06/23/93	120414F	U	Molybdenum	0.02	UJ	N	3
W-1	06/23/93	120416F	U	Molybdenum	0.02	UJ	N	3
W-1	06/16/88	1035	U	Nickel	0.02	U	N	3
W-1	08/29/88	1092	U	Nickel	0.02	U	N	4
W-1	05/20/93	120065-2	U	Nickel	0.02	U	N	3
W-1	05/20/93	120069-2	U	Nickel	0.02	U	D	3
W-1	05/20/93	120073	U	Nickel	0.02	U	T	3
W-1	06/23/93	120414F	U	Nickel	0.02	U	N	3
W-1	06/23/93	120416F	U	Nickel	0.02	U	N	3
W-1	06/16/88	1035		Potassium	3.98	J	N	3
W-1	08/29/88	1092		Potassium	6.2	-	N	4
W-1	05/20/93	120065-2	B	Potassium	3.37	-	N	3
W-1	05/20/93	120069-2	B	Potassium	3.4	-	D	3
W-1	05/20/93	120073	B	Potassium	3.4	-	T	3
W-1	06/23/93	120414F	B	Potassium	3.49	-	N	3
W-1	06/23/93	120416F	B	Potassium	3.52	-	N	3
W-1	08/29/88	1092	U	Selenium	0.002	UJ	N	4
W-1	05/20/93	120065-2	UW	Selenium	0.002	UJ	N	3
W-1	05/20/93	120069-2	U	Selenium	0.002	U	D	3
W-1	05/20/93	120073	U	Selenium	0.002	U	T	3
W-1	06/23/93	120414F	U	Selenium	0.002	U	N	3
W-1	06/23/93	120416F	U	Selenium	0.002	U	N	3
W-1	05/20/93	120065-2		Silicon	2.52	-	N	3
W-1	05/20/93	120069-2		Silicon	2.49	-	D	3
W-1	05/20/93	120073		Silicon	2.5	-	T	3
W-1	06/23/93	120414F		Silicon	2.95	-	N	3
W-1	06/23/93	120416F		Silicon	3.13	-	N	3
W-1	08/29/88	1092	U	Silver	0.01	U	N	4
W-1	05/20/93	120065-2	U	Silver	0.01	U	N	3
W-1	05/20/93	120069-2	U	Silver	0.01	U	D	3
W-1	05/20/93	120073	U	Silver	0.01	U	T	3
W-1	06/23/93	120414F	U	Silver	0.01	U	N	3
W-1	06/23/93	120416F	U	Silver	0.01	U	N	3
W-1	06/16/88	1035		Sodium	76.4	-	N	3
W-1	08/29/88	1092		Sodium	77.2	-	N	4
W-1	05/20/93	120065-2		Sodium	28.8	-	N	3
W-1	05/20/93	120069-2		Sodium	29.1	-	D	3
W-1	05/20/93	120073		Sodium	28.6	-	T	3
W-1	06/23/93	120414F		Sodium	27	-	N	3
W-1	06/23/93	120416F		Sodium	27.1	-	N	3
W-1	05/20/93	120065-2	U	Thallium	0.002	UJ	N	3
W-1	05/20/93	120069-2	U	Thallium	0.002	UJ	D	3
W-1	05/20/93	120073	U	Thallium	0.002	UJ	T	3
W-1	06/23/93	120414F	U	Thallium	0.002	U	N	3
W-1	06/23/93	120416F	U	Thallium	0.002	U	N	3

Table D-5 (Continued)
Validated Filtered Inorganic Data for Background Surface Water in the Great Miami River

Well	Sample		Lab		Validated		QA	
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type	ASL
W-1	05/20/93	120065-2	U	Vanadium	0.01	U	N	3
W-1	05/20/93	120069-2	U	Vanadium	0.01	U	D	3
W-1	05/20/93	120073	U	Vanadium	0.01	U	T	3
W-1	06/23/93	120414F	U	Vanadium	0.01	U	N	3
W-1	06/23/93	120416F	U	Vanadium	0.01	U	N	3
W-1	05/20/93	120065-2	B	Zinc	0.0064	U	N	3
W-1	05/20/93	120069-2	B	Zinc	0.0074	U	D	3
W-1	05/20/93	120073	B	Zinc	0.0051	U	T	3
W-1	06/23/93	120414F	B	Zinc	0.0143	U	N	3
W-1	06/23/93	120416F	B	Zinc	0.0152	U	N	3

Table D-6
Validated Unfiltered Inorganic Data for Background Surface Water in the Great Miami River

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL
W-1	05/20/93	120068-1		Alkalinity as CaCO3	245	J	D	3
W-1	05/20/93	120072-2		Alkalinity as CaCO3	245	J	T	3
W-1	06/23/93	120416		Alkalinity as CaCO3	233	-	N	3
W-1	06/23/93	120414		Alkalinity as CaCO3	230	-	D	3
W-1	05/20/93	120068-1		Aluminum	1.27	-	D	3
W-1	05/20/93	120072-2		Aluminum	1.33	-	T	3
W-1	06/23/93	120416		Aluminum	2.14	-	N	3
W-1	06/23/93	120414		Aluminum	1.64	-	D	3
W-1	08/29/88	1092		Ammonia	0.1	J	N	3
W-1	04/03/89	1178		Ammonia	0.11	-	N	3
W-1	05/20/93	120064-2	U	Ammonia	0.1	UJ	N	3
W-1	05/20/93	120068-1	U	Ammonia	0.1	UJ	D	3
W-1	05/20/93	120072-2	U	Ammonia	0.1	UJ	T	3
W-1	06/23/93	120416	U	Ammonia	0.1	U	N	3
W-1	06/23/93	120414	U	Ammonia	0.1	U	D	3
W-1	05/20/93	120068-1	U	Antimony	0.005	U	D	3
W-1	05/20/93	120072-2	U	Antimony	0.005	U	T	3
W-1	06/23/93	120416	UW	Antimony	0.005	UJ	N	3
W-1	06/23/93	120414	UW	Antimony	0.005	UJ	D	3
W-1	08/29/88	1092	U	Arsenic	0.005	U	N	4
W-1	04/03/89	1178	U	Arsenic	0.002	U	N	3
W-1	05/20/93	120068-1	B	Arsenic	0.0039	-	D	3
W-1	05/20/93	120072-2	B	Arsenic	0.0032	-	T	3
W-1	06/23/93	120416	BW	Arsenic	0.0025	J	N	3
W-1	06/23/93	120414	U	Arsenic	0.002	U	D	3
W-1	06/16/88	1035		Barium	0.089	-	N	3
W-1	08/29/88	1092		Barium	0.1	-	N	4
W-1	04/03/89	1178		Barium	0.0493	-	N	3
W-1	05/20/93	120068-1	B	Barium	0.0884	-	D	3
W-1	05/20/93	120072-2	B	Barium	0.0893	-	T	3
W-1	06/23/93	120416	B	Barium	0.0906	-	N	3
W-1	06/23/93	120414	B	Barium	0.0847	-	D	3
W-1	05/20/93	120068-1	U	Beryllium	0.002	U	D	3
W-1	05/20/93	120072-2	U	Beryllium	0.002	U	T	3
W-1	06/23/93	120416	U	Beryllium	0.002	U	N	3
W-1	06/23/93	120414	U	Beryllium	0.002	U	D	3
W-1	06/16/88	1035		Cadmium	0.006	-	N	3
W-1	08/29/88	1092	U	Cadmium	0.002	U	N	4
W-1	04/03/89	1178		Cadmium	0.0098	-	N	3
W-1	05/20/93	120068-1	U	Cadmium	0.005	U	D	3
W-1	05/20/93	120072-2	U	Cadmium	0.005	U	T	3
W-1	06/23/93	120416	U	Cadmium	0.005	U	N	3
W-1	06/23/93	120414	U	Cadmium	0.005	U	D	3
W-1	06/16/88	1035		Calcium	77	-	N	3
W-1	08/29/88	1092		Calcium	70.1	-	N	4
W-1	04/03/89	1178		Calcium	61.2	-	N	3
W-1	05/20/93	120068-1		Calcium	76.5	-	D	3
W-1	05/20/93	120072-2		Calcium	77.1	-	T	3
W-1	06/23/93	120416		Calcium	72.3	-	N	3
W-1	06/23/93	120414		Calcium	68.4	-	D	3

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Table D-6 (Continued)
Validated Unfiltered Inorganic Data for Background Surface Water in the Great Miami River

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL
W-1	06/16/88	1035		Chloride	325	-	N	3
W-1	08/29/88	1092		Chloride	135	J	N	3
W-1	04/03/89	1178		Chloride	17.99	-	N	3
W-1	05/20/93	120068-1		Chloride	47.6	J	D	3
W-1	05/20/93	120072-2		Chloride	50	J	T	3
W-1	06/23/93	120416		Chloride	53.1	-	N	3
W-1	06/23/93	120414		Chloride	53.1	-	D	3
W-1	06/16/88	1035	U	Chromium	0.02	U	N	3
W-1	08/29/88	1092	U	Chromium	0.02	U	N	4
W-1	04/03/89	1178	U	Chromium	0.002	U	N	3
W-1	05/20/93	120068-1	U	Chromium	0.01	U	D	3
W-1	05/20/93	120072-2	U	Chromium	0.01	U	T	3
W-1	06/23/93	120416	U	Chromium	0.01	U	N	3
W-1	06/23/93	120414	U	Chromium	0.01	U	D	3
W-1	05/20/93	120068-1	U	Cobalt	0.01	U	D	3
W-1	05/20/93	120072-2	U	Cobalt	0.01	U	T	3
W-1	06/23/93	120416	U	Cobalt	0.01	U	N	3
W-1	06/23/93	120414	U	Cobalt	0.01	U	D	3
W-1	06/16/88	1035	U	Copper	0.01	U	N	3
W-1	08/29/88	1092	U	Copper	0.01	U	N	4
W-1	04/03/89	1178		Copper	0.0091	U	N	3
W-1	05/20/93	120068-1	B	Copper	0.0128	-	D	3
W-1	05/20/93	120072-2	B	Copper	0.0107	-	T	3
W-1	06/23/93	120416	U	Copper	0.01	U	N	3
W-1	06/23/93	120414	U	Copper	0.01	U	D	3
W-1	05/20/93	120068-1	B	Cyanide	0.0032	J	D	3
W-1	05/20/93	120072-2	B	Cyanide	0.0027	J	T	3
W-1	06/23/93	120416	B	Cyanide	0.0026	-	N	3
W-1	06/23/93	120414	B	Cyanide	0.0078	-	D	3
W-1	06/16/88	1035		Fluoride	0.82	-	N	3
W-1	08/29/88	1092		Fluoride	0.9	J	N	3
W-1	04/03/89	1178		Fluoride	0.31	-	N	3
W-1	05/20/93	120068-1		Fluoride	0.27	J	D	3
W-1	05/20/93	120072-2		Fluoride	0.26	J	T	3
W-1	06/23/93	120416		Fluoride	0.33	-	N	3
W-1	06/23/93	120414		Fluoride	0.33	-	D	3
W-1	06/16/88	1035		Iron	0.22	-	N	3
W-1	08/29/88	1092		Iron	0.7	-	N	4
W-1	04/03/89	1178		Iron	0.164	-	N	3
W-1	05/20/93	120068-1		Iron	1.31	-	D	3
W-1	05/20/93	120072-2		Iron	1.34	-	T	3
W-1	06/23/93	120416		Iron	2.55	-	N	3
W-1	06/23/93	120414		Iron	1.9	-	D	3
W-1	08/29/88	1092		Lead	0.01	UJ	N	4
W-1	04/03/89	1178		Lead	0.0054	U	N	3
W-1	05/20/93	120068-1	U	Lead	0.002	U	D	3
W-1	05/20/93	120072-2	U	Lead	0.002	U	T	3
W-1	06/23/93	120416		Lead	0.013	-	N	3
W-1	06/23/93	120414	S	Lead	0.0077	-	D	3

Table D-6 (Continued)
Validated Unfiltered Inorganic Data for Background Surface Water in the Great Miami River

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL
W-1	06/16/88	1035		Magnesium	33.9	-	N	3
W-1	08/29/88	1092		Magnesium	28.7	-	N	4
W-1	04/03/89	1178		Magnesium	21.5	-	N	3
W-1	05/20/93	120068-1		Magnesium	29.3	-	D	3
W-1	05/20/93	120072-2		Magnesium	29.6	-	T	3
W-1	06/23/93	120416		Magnesium	28.2	-	N	3
W-1	06/23/93	120414		Magnesium	27.1	-	D	3
W-1	06/16/88	1035		Manganese	0.08	-	N	3
W-1	08/29/88	1092		Manganese	0.07	-	N	4
W-1	04/03/89	1178		Manganese	0.0089	-	N	3
W-1	05/20/93	120068-1		Manganese	0.0544	-	D	3
W-1	05/20/93	120072-2		Manganese	0.0556	-	T	3
W-1	06/23/93	120416		Manganese	0.0943	-	N	3
W-1	06/23/93	120414		Manganese	0.0694	-	D	3
W-1	06/16/88	1035	U	Mercury	0.0002	U	N	3
W-1	08/29/88	1092	U	Mercury	0.0002	UJ	N	4
W-1	05/20/93	120068-1	U	Mercury	0.0002	U	D	3
W-1	05/20/93	120072-2	U	Mercury	0.0002	U	T	3
W-1	06/23/93	120416	U	Mercury	0.0002	U	N	3
W-1	06/23/93	120414	U	Mercury	0.0002	U	D	3
W-1	06/16/88	1035		Molybdenum	0.02	-	N	3
W-1	08/29/88	1092	U	Molybdenum	0.02	U	N	4
W-1	04/03/89	1178	U	Molybdenum	0.003	U	N	3
W-1	05/20/93	120068-1	U	Molybdenum	0.01	U	D	3
W-1	05/20/93	120072-2	U	Molybdenum	0.01	U	T	3
W-1	06/23/93	120416	U	Molybdenum	0.02	UJ	N	3
W-1	06/23/93	120414	U	Molybdenum	0.02	UJ	D	3
W-1	06/16/88	1035	U	Nickel	0.02	U	N	3
W-1	08/29/88	1092	U	Nickel	0.02	U	N	4
W-1	04/03/89	1178		Nickel	0.0105	-	N	3
W-1	05/20/93	120068-1	B	Nickel	0.036	-	D	3
W-1	05/20/93	120072-2	U	Nickel	0.02	U	T	3
W-1	06/23/93	120416	U	Nickel	0.02	U	N	3
W-1	06/23/93	120414	U	Nickel	0.02	U	D	3
W-1	06/16/88	1035		Nitrate	0.4	J	N	3
W-1	08/29/88	1092		Nitrate	3.2	J	N	3
W-1	04/03/89	1178		Nitrate	6.58	J	N	3
W-1	05/20/93	120068-1		Nitrate	4.94	J	D	3
W-1	05/20/93	120072-2		Nitrate	4.76	J	T	3
W-1	06/23/93	120416		Nitrate	3.72	-	N	3
W-1	06/23/93	120414		Nitrate	3.68	-	D	3
W-1	06/16/88	1035		Phosphorus	0.59	-	N	3
W-1	08/29/88	1092		Phosphorus	1.1	J	N	3
W-1	04/03/89	1178		Phosphorus	0.299	-	N	3
W-1	05/20/93	120068-1		Phosphorus	0.1	J	D	3
W-1	05/20/93	120072-2		Phosphorus	0.14	J	T	3
W-1	06/23/93	120416		Phosphorus	0.3	-	N	3
W-1	06/23/93	120414		Phosphorus	0.24	-	D	3
W-1	06/16/88	1035		Potassium	4.03	J	N	3
W-1	08/29/88	1092		Potassium	6.08	-	N	4

Table D-6 (Continued)
Validated Unfiltered Inorganic Data for Background Surface Water in the Great Miami River

Well	Sample		Lab		Validated		QA	
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type	ASL
W-1	04/03/89	1178		Potassium	2.3	J	N	3
W-1	05/20/93	120068-1	B	Potassium	3.51	-	D	3
W-1	05/20/93	120072-2	B	Potassium	3.59	-	T	3
W-1	06/23/93	120416	B	Potassium	4	-	N	3
W-1	06/23/93	120414	B	Potassium	3.64	-	D	3
W-1	08/29/88	1092	U	Selenium	0.002	UJ	N	4
W-1	04/03/89	1178	U	Selenium	0.002	UJ	N	3
W-1	05/20/93	120068-1	U	Selenium	0.002	U	D	3
W-1	05/20/93	120072-2	U	Selenium	0.002	U	T	3
W-1	06/23/93	120416	UW	Selenium	0.002	UJ	N	3
W-1	06/23/93	120414	U	Selenium	0.002	U	D	3
W-1	05/20/93	120068-1		Silicon	4.42	-	D	3
W-1	05/20/93	120072-2		Silicon	4.51	-	T	3
W-1	06/23/93	120416		Silicon	6.36	-	N	3
W-1	06/23/93	120414		Silicon	5.43	-	D	3
W-1	06/16/88	1035		Silver	0.03	U	N	3
W-1	08/29/88	1092	U	Silver	0.01	U	N	4
W-1	04/03/89	1178	U	Silver	0.0005	U	N	3
W-1	05/20/93	120068-1	U	Silver	0.01	U	D	3
W-1	05/20/93	120072-2	U	Silver	0.01	U	T	3
W-1	06/23/93	120416	U	Silver	0.01	U	N	3
W-1	06/23/93	120414	U	Silver	0.01	U	D	3
W-1	06/16/88	1035		Sodium	69.4	-	N	3
W-1	08/29/88	1092		Sodium	75.8	-	N	4
W-1	04/03/89	1178		Sodium	12.9	-	N	3
W-1	05/20/93	120068-1		Sodium	27	-	D	3
W-1	05/20/93	120072-2		Sodium	27.4	-	T	3
W-1	06/23/93	120416		Sodium	26.1	-	N	3
W-1	06/23/93	120414		Sodium	25.9	-	D	3
W-1	06/16/88	1035		Sulfate	138	-	N	3
W-1	04/03/89	1178		Sulfate	114.9	J	N	3
W-1	05/20/93	120068-1		Sulfate	46.6	J	D	3
W-1	05/20/93	120072-2		Sulfate	44.6	J	T	3
W-1	06/23/93	120416		Sulfate	69.1	-	N	3
W-1	06/23/93	120414		Sulfate	58.3	-	D	3
W-1	06/23/93	120414	U	Sulfide	0.5	U	D	3
W-1	05/20/93	120068-1	U	Thallium	0.002	UJ	D	3
W-1	05/20/93	120072-2	U	Thallium	0.002	UJ	T	3
W-1	06/23/93	120416	U	Thallium	0.002	U	N	3
W-1	06/23/93	120414	U	Thallium	0.002	U	D	3
W-1	04/03/89	1178		TKN	1.84	-	N	3
W-1	06/23/93	120416		TKN	1.17	-	N	3
W-1	06/23/93	120414		TKN	1.04	-	D	3
W-1	05/20/93	120068-1	U	Vanadium	0.01	U	D	3
W-1	05/20/93	120072-2	U	Vanadium	0.01	U	T	3
W-1	06/23/93	120416	U	Vanadium	0.01	U	N	3
W-1	06/23/93	120414	U	Vanadium	0.01	U	D	3

Table D-6 (Continued)
Validated Unfiltered Inorganic Data for Background Surface Water in the Great Miami River

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL
W-1	05/20/93	120068-1		Zinc	0.033	U	D	3
W-1	05/20/93	120072-2		Zinc	0.0317	U	T	3
W-1	06/23/93	120416		Zinc	0.0684	-	N	3
W-1	06/23/93	120414		Zinc	0.0417	U	D	3

Table D-7
Validated Filtered Inorganic Data for Background Surface Water in Paddys Run

Well	Sample		Lab		Validated		QA	
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type	ASL
W-5	03/25/93	113493	B	Aluminum	0.132	-	N	3
W-5	06/24/93	120408	B	Aluminum	0.141	U	N	3
W-5	06/24/93	120409	B	Aluminum	0.105	U	D	3
W-5	03/25/93	113493	UW	Antimony	0.005	UJ	N	3
W-5	06/24/93	120408	UN	Antimony	0.014	U	N	3
W-5	06/24/93	120409	UN	Antimony	0.014	U	D	3
W-5	03/25/93	113493	U	Arsenic	0.002	U	N	3
W-5	06/24/93	120408	B	Arsenic	0.0023	U	N	3
W-5	06/24/93	120409	B	Arsenic	0.0018	U	D	3
W-5	03/25/93	113493	B	Barium	0.0304	-	N	3
W-5	06/24/93	120408	B	Barium	0.0537	-	N	3
W-5	06/24/93	120409	B	Barium	0.0515	-	D	3
W-5	03/25/93	113493	U	Beryllium	0.002	U	N	3
W-5	03/25/93	113493	U	Cadmium	0.005	U	N	3
W-5	06/24/93	120408	U	Cadmium	0.005	U	N	3
W-5	03/25/93	113493		Calcium	85.3	-	N	3
W-5	06/24/93	120408		Calcium	107	-	N	3
W-5	06/24/93	120409		Calcium	106	-	D	3
W-5	03/25/93	113493	U	Chromium	0.01	U	N	3
W-5	06/24/93	120408	U	Chromium	0.006	U	N	3
W-5	06/24/93	120409	U	Chromium	0.006	U	D	3
W-5	03/25/93	113493	U	Cobalt	0.01	U	N	3
W-5	03/25/93	113493	U	Copper	0.01	U	N	3
W-5	06/24/93	120408	U	Cyanide	0.005	U	N	3
W-5	06/24/93	120409	U	Cyanide	0.005	U	D	3
W-5	03/25/93	113493	U	Iron	0.02	U	N	3
W-5	06/24/93	120408	U	Iron	0.022	U	N	3
W-5	06/24/93	120409	U	Iron	0.022	U	D	3
W-5	03/25/93	113493	U	Lead	0.002	U	N	3
W-5	06/24/93	120408	BN	Lead	0.0017	U	N	3
W-5	06/24/93	120409	BN	Lead	0.0015	U	D	3
W-5	03/25/93	113493		Magnesium	20.4	-	N	3
W-5	06/24/93	120408		Magnesium	27.9	-	N	3
W-5	06/24/93	120409		Magnesium	27.5	-	D	3
W-5	03/25/93	113493		Manganese	0.0257	-	N	3
W-5	03/25/93	113493	U	Mercury	0.0002	U	N	3
W-5	06/24/93	120408	U	Mercury	0.0001	U	N	3
W-5	06/24/93	120409	U	Mercury	0.0001	U	D	3
W-5	03/25/93	113493	U	Molybdenum	0.02	U	N	3
W-5	06/24/93	120408	U	Molybdenum	0.017	U	N	3
W-5	06/24/93	120409	U	Molybdenum	0.017	U	D	3
W-5	03/25/93	113493	U	Nickel	0.02	U	N	3
W-5	03/25/93	113493	B	Potassium	1.96	-	N	3
W-5	06/24/93	120408	B	Potassium	3.51	-	N	3
W-5	06/24/93	120409	B	Potassium	3.48	-	D	3
W-5	03/25/93	113493	U	Selenium	0.002	U	N	3
W-5	06/24/93	120408	UN	Selenium	0.005	UJ	N	3
W-5	06/24/93	120409	UNW	Selenium	0.001	UJ	D	3

Table D-7 (Continued)
Validated Filtered Inorganic Data for Background
Surface Water in Paddys Run

Well	Sample		Lab		Validated		QA	
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type	ASL
W-5	03/25/93	113493		Silicon	2.43	-	N	3
W-5	06/24/93	120408		Silicon	3.03	-	N	3
W-5	06/24/93	120409		Silicon	2.98	-	D	3
W-5	03/25/93	113493	U	Silver	0.01	U	N	3
W-5	06/24/93	120408	U	Silver	0.002	U	N	3
W-5	06/24/93	120409	U	Silver	0.002	U	D	3
W-5	03/25/93	113493		Sodium	12.9	-	N	3
W-5	06/24/93	120408		Sodium	18.4	-	N	3
W-5	06/24/93	120409		Sodium	18.1	-	D	3
W-5	03/25/93	113493	UW	Thallium	0.002	UJ	N	3
W-5	03/25/93	113493	U	Vanadium	0.01	U	N	3
W-5	03/25/93	113493	U	Zinc	0.005	U	N	3

Table D-8
Validated Unfiltered Inorganic Data for Background Surface Water in Paddys Run

Well	Sample		Lab		Validated		QA	
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type	ASL
W-5	03/25/93	113493		Alkalinity as CaCO3	235.3	-	N	3
W-5	06/24/93	120408		Alkalinity as CaCO3	294	-	N	3
W-5	06/24/93	120409		Alkalinity as CaCO3	390	-	D	3
W-5	03/25/93	113493		Aluminum	0.64	-	N	3
W-5	06/24/93	120408	B	Aluminum	0.132	U	N	3
W-5	06/24/93	120409		Aluminum	0.324	-	D	3
W-5	03/25/93	113493	U	Ammonia	0.1	U	N	3
W-5	06/24/93	120408		Ammonia	0.0405	-	N	3
W-5	06/24/93	120409		Ammonia	0.0368	-	D	3
W-5	03/25/93	113493	UW	Antimony	0.005	UJ	N	3
W-5	06/24/93	120408	UNW	Antimony	0.014	UJ	N	3
W-5	06/24/93	120409	UN	Antimony	0.014	U	D	3
W-5	03/25/93	113493	U	Arsenic	0.002	U	N	3
W-5	06/24/93	120408	U	Arsenic	0.001	U	N	3
W-5	06/24/93	120409	B	Arsenic	0.0027	U	D	3
W-5	03/25/93	113493	B	Barium	0.034	-	N	3
W-5	06/24/93	120408	B	Barium	0.0529	-	N	3
W-5	06/24/93	120409	B	Barium	0.0539	-	D	3
W-5	03/25/93	113493	U	Beryllium	0.002	U	N	3
W-5	03/25/93	113493	U	Cadmium	0.005	U	N	3
W-5	06/24/93	120408	U	Cadmium	0.005	U	N	3
W-5	06/24/93	120409	U	Cadmium	0.005	U	D	3
W-5	03/25/93	113493		Calcium	86.6	-	N	3
W-5	06/24/93	120408		Calcium	108	-	N	3
W-5	06/24/93	120409		Calcium	106	-	D	3
W-5	03/25/93	113493		Chloride	27.8	-	N	3
W-5	06/24/93	120408		Chloride	31.8	-	N	3
W-5	06/24/93	120409		Chloride	31.4	-	D	3
W-5	03/25/93	113493	U	Chromium	0.01	U	N	3
W-5	06/24/93	120408	U	Chromium	0.006	U	N	3
W-5	06/24/93	120409	U	Chromium	0.006	U	D	3
W-5	03/25/93	113493	U	Cobalt	0.01	U	N	3
W-5	03/25/93	113493	U	Copper	0.01	U	N	3
W-5	03/25/93	113493	U	Cyanide	0.002	U	N	3
W-5	06/24/93	120408	U	Cyanide	0.005	U	N	3
W-5	06/24/93	120409	U	Cyanide	0.005	U	D	3
W-5	03/25/93	113493		Fluoride	0.22	-	N	3
W-5	06/24/93	120408		Fluoride	0.22	-	N	3
W-5	06/24/93	120409		Fluoride	0.21	-	D	3
W-5	03/25/93	113493		Iron	0.513	-	N	3
W-5	06/24/93	120408	B	Iron	0.06	U	N	3
W-5	06/24/93	120409		Iron	0.228	-	D	3
W-5	03/25/93	113493	U	Lead	0.002	U	N	3
W-5	06/24/93	120408	N	Lead	0.0046	U	N	3
W-5	06/24/93	120409	N	Lead	0.0033	U	D	3
W-5	03/25/93	113493		Magnesium	20.7	-	N	3
W-5	06/24/93	120408		Magnesium	27.9	-	N	3
W-5	06/24/93	120409		Magnesium	27.6	-	D	3
W-5	03/25/93	113493		Manganese	0.035	-	N	3

Table D-8 (Continued)
Validated Unfiltered Inorganic Data for Background Surface Water in Paddys Run

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL
W-5	03/25/93	113493	U	Mercury	0.0002	U	N	3
W-5	06/24/93	120408	U	Mercury	0.0001	U	N	3
W-5	06/24/93	120409	U	Mercury	0.0001	U	D	3
W-5	03/25/93	113493	U	Molybdenum	0.02	U	N	3
W-5	06/24/93	120408	U	Molybdenum	0.017	U	N	3
W-5	06/24/93	120409	U	Molybdenum	0.017	U	D	3
W-5	03/25/93	113493	U	Nickel	0.02	U	N	3
W-5	03/25/93	113493		Nitrate	1.66	-	N	3
W-5	06/24/93	120408		Nitrate	1.7	U	N	3
W-5	06/24/93	120409		Nitrate	1.74	U	D	3
W-5	06/24/93	120408		Phosphate	0.137	-	N	3
W-5	06/24/93	120409		Phosphate	0.103	-	D	3
W-5	03/25/93	113493		Phosphorus	0.228	-	N	3
W-5	03/25/93	113493	B	Potassium	2.12	-	N	3
W-5	06/24/93	120408	B	Potassium	3.53	-	N	3
W-5	06/24/93	120409	B	Potassium	3.63	-	D	3
W-5	03/25/93	113493	U	Selenium	0.002	U	N	3
W-5	06/24/93	120408	UNW	Selenium	0.001	UJ	N	3
W-5	06/24/93	120409	UNW	Selenium	0.001	UJ	D	3
W-5	03/25/93	113493		Silicon	3.36	-	N	3
W-5	06/24/93	120408		Silicon	2.84	-	N	3
W-5	06/24/93	120409		Silicon	3.05	-	D	3
W-5	03/25/93	113493	U	Silver	0.01	U	N	3
W-5	06/24/93	120408	U	Silver	0.002	U	N	3
W-5	06/24/93	120409	U	Silver	0.002	U	D	3
W-5	03/25/93	113493		Sodium	13	-	N	3
W-5	06/24/93	120408		Sodium	18.2	-	N	3
W-5	06/24/93	120409		Sodium	18.2	-	D	3
W-5	03/25/93	113493		Sulfate	55.65	-	N	3
W-5	06/24/93	120408		Sulfate	45.7	-	N	3
W-5	06/24/93	120409		Sulfate	47.8	-	D	3
W-5	03/25/93	113493	U	Sulfide	0.5	U	N	3
W-5	06/24/93	120408	U	Sulfide	1	U	N	3
W-5	06/24/93	120409	U	Sulfide	1	U	D	3
W-5	03/25/93	113493	UW	Thallium	0.002	UJ	N	3
W-5	03/25/93	113493		TKN	0.288	-	N	3
W-5	06/24/93	120408		TKN	0.282	U	N	3
W-5	06/24/93	120409		TKN	0.22	U	D	3
W-5	03/25/93	113493	U	Vanadium	0.01	U	N	3
W-5	03/25/93	113493	U	Zinc	0.005	U	N	3

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Table D-9
Outlier/High Nondetect Filtered Inorganic Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL
				High Nondetects				
1024	04/12/93	GW930412-6	U	Antimony	0.045	U	N	3
1024	04/21/88	3106	U	Arsenic	0.2	UJ	N	3
1040	05/21/88	3218	U	Arsenic	0.2	U	N	3
1040	05/21/88	3219	U	Arsenic	0.2	U	D	3
1059	05/12/88	3188	U	Arsenic	0.2	U	N	3
1059	05/12/88	3189	U	Arsenic	0.2	U	D	3
1059	08/18/88	3562	U	Arsenic	0.2	U	N	3
1060	06/02/88	3255	U	Arsenic	0.2	UJ	N	3
1065	04/14/88	3136	U	Arsenic	0.2	UJ	N	C
1024	07/26/88	3376	U	Barium	0.2	U	N	3
1060	08/04/88	3398	U	Barium	0.2	U	N	3
1060	02/01/89	3888	U	Cadmium	0.02	UJ	N	3
1059	12/06/88	3751		Copper	0.044	U	N	3
1024	04/21/88	3106	U	Lead	0.05	UJ	N	3
1024	07/26/88	3376	U	Lead	0.2	U	N	3
1040	05/21/88	3219	U	Lead	0.05	U	D	3
1059	05/12/88	3188	U	Lead	0.05	U	N	3
1059	05/12/88	3189	U	Lead	0.05	U	D	3
1059	08/18/88	3562	U	Lead	0.05	U	N	3
1060	06/02/88	3255	U	Lead	0.05	U	N	3
1065	04/14/88	3136	U	Lead	0.05	UJ	N	C
1024	07/26/88	3376	U	Molybdenum	0.05	U	N	3
1060	08/04/88	3398	U	Molybdenum	0.05	U	N	3
1024	04/21/88	3106	U	Selenium	0.2	UJ	N	3
1040	05/21/88	3218	U	Selenium	0.2	U	N	3
1040	05/21/88	3219	U	Selenium	0.2	U	D	3
1059	05/12/88	3188	U	Selenium	0.2	U	N	3
1059	05/12/88	3189	U	Selenium	0.2	U	D	3
1059	08/18/88	3562	U	Selenium	0.2	U	N	3
1060	06/02/88	3255	U	Selenium	0.2	U	N	3
1065	04/14/88	3136	U	Selenium	0.2	UJ	N	3
				Result Outliers				
1024	07/26/88	3376		Chromium	0.12	-	N	3
1059	03/14/89	3981		Copper	0.19	J	N	3
1040	05/21/88	3218		Lead	0.05	-	N	3
1060	02/01/89	3888		Mercury	0.0037	J	N	3
1024	07/26/88	3376		Nickel	0.18	-	N	3

Table D-10
Outlier/High Nondetect Unfiltered Inorganic Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL
High Nondetects								
1024	04/12/93	GW930412-6	U	Antimony	0.045	U	N	3
1059	09/29/93	30929U1059-02	U	Antimony	0.0222	U	N	3
1060	09/29/93	30929U1060-02	U	Antimony	0.0222	U	N	3
Result Outliers								
1065	05/04/93	112013		Cadmium	0.034	-	N	C
1060	09/29/93	30929U1060-02		Lead	0.141	-	N	3
1060	09/29/93	30929-1060-02		Phosphorus	3.2	J	N	3

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Table D-11
Outlier/High Nondetect Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
				High Nondetects					
2096	05/06/93	GW930506-5	U	Antimony	0.045	U	N	3	D
2728	05/24/93	GW930524-3	U	Antimony	0.045	U	N	3	S
3024	04/12/93	GW930412-8	U	Antimony	0.045	U	N	3	S
3096	05/07/93	GW930507-1	U	Antimony	0.045	U	N	3	D
4096	05/06/93	GW930506-7	U	Antimony	0.045	U	N	3	D
2036	05/12/88	3184	U	Arsenic	0.2	U	N	3	D
2043	04/13/88	3091	U	Arsenic	0.2	UJ	N	3	S
2050	05/05/88	3147	U	Arsenic	0.2	U	N	3	S
2056	05/06/88	3159	U	Arsenic	0.2	U	N	3	S
2057	06/03/88	3265	U	Arsenic	0.2	U	N	3	D
2066	04/26/88	3124	U	Arsenic	0.2	U	N	3	S
2104	05/05/88	3146	U	Arsenic	0.2	U	N	3	D
2105	06/05/88	3268	U	Arsenic	0.2	U	N	3	S
2121	05/06/88	3158	U	Arsenic	0.2	U	N	3	R
2122	05/06/88	3157	U	Arsenic	0.2	U	N	3	R
2122	08/17/88	3504	U	Arsenic	0.2	U	N	3	R
2123	05/06/88	3156	U	Arsenic	0.2	U	N	3	D
3024	04/20/88	3096	U	Arsenic	0.2	U	N	3	S
3043	04/13/88	3090	U	Arsenic	0.2	UJ	N	3	S
3063	05/12/88	3191	U	Arsenic	0.2	U	D	3	R
3063	08/16/88	3495	U	Arsenic	0.2	U	N	3	R
3099	05/24/88	3237	U	Arsenic	0.2	U	N	3	R
3099	05/24/88	3238	U	Arsenic	0.2	U	D	3	R
3099	08/16/88	3496	U	Arsenic	0.2	U	N	3	R
3100	05/24/88	3239	U	Arsenic	0.2	U	N	3	R
3100	05/24/88	3240	U	Arsenic	0.2	U	D	3	R
3099	12/06/88	3742		Copper	0.056	U	N	3	R
2026	05/12/88	3186	U	Lead	0.05	U	N	3	R
2026	05/12/88	3187	U	Lead	0.05	U	D	3	R
2026	08/17/88	3505	U	Lead	0.05	U	N	3	R
2036	05/12/88	3184	U	Lead	0.05	U	N	3	D
2036	05/12/88	3185	U	Lead	0.05	U	D	3	D
2043	04/13/88	3091	U	Lead	0.05	UJ	N	3	S
2050	05/05/88	3147	U	Lead	0.05	U	N	3	S
2050	08/16/88	3497	U	Lead	0.05	U	N	3	S
2056	05/06/88	3159	U	Lead	0.05	U	N	3	S
2057	06/03/88	3265	U	Lead	0.05	U	N	3	D
2066	04/26/88	3124	U	Lead	0.05	U	N	3	S
2104	05/05/88	3146	U	Lead	0.05	U	N	3	D
2104	08/16/88	3498	U	Lead	0.05	U	N	3	D
2105	06/05/88	3268	U	Lead	0.05	U	N	3	S
2105	08/28/88	3577		Lead	0.056	UJ	N	3	S
2122	08/17/88	3504	U	Lead	0.05	U	N	3	R
2123	05/06/88	3156	U	Lead	0.05	U	N	3	D
3024	04/20/88	3096	U	Lead	0.05	UJ	N	3	S
3024	07/26/88	3377	U	Lead	0.2	UJ	N	3	S
3043	04/13/88	3090	U	Lead	0.05	UJ	N	3	S
3063	05/12/88	3190	U	Lead	0.05	U	N	3	R

Table D-11 (Continued)
Outlier/High Nondetect Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
				High Nondetects					
3063	05/12/88	3191	U	Lead	0.05	U	D	3	R
3063	08/16/88	3495	U	Lead	0.05	U	N	3	R
3099	05/24/88	3237	U	Lead	0.05	U	N	3	R
3099	05/24/88	3238	U	Lead	0.05	U	D	3	R
3099	08/16/88	3496	U	Lead	0.05	U	N	3	R
3100	05/24/88	3239	U	Lead	0.05	U	N	3	R
3100	05/24/88	3240	U	Lead	0.05	U	D	3	R
2043	02/02/89	3887		Mercury	0.0062	UJ	N	3	S
4011	02/07/91	4382	U	Mercury	0.001	U	N	3	S
2043	08/05/88	3440	U	Molybdenum	0.05	U	N	3	S
2098	12/16/88	3796		Molybdenum	0.057	U	N	3	R
2104	12/06/88	3744		Molybdenum	0.042	U	N	3	D
3024	07/26/88	3377	U	Molybdenum	0.05	U	N	3	S
3043	08/04/88	3397	U	Molybdenum	0.05	U	N	3	S
3063	12/13/88	3741		Molybdenum	0.092	U	N	3	R
2043	08/05/88	3440	U	Potassium	5	U	N	3	S
3024	07/26/88	3377	U	Potassium	5	UJ	N	3	S
3043	08/04/88	3397	U	Potassium	5	U	N	3	S
2026	05/12/88	3186	U	Selenium	0.2	U	N	3	R
2026	05/12/88	3187	U	Selenium	0.2	U	D	3	R
2026	08/17/88	3505	U	Selenium	0.2	U	N	3	R
2036	05/12/88	3184	U	Selenium	0.2	U	N	3	D
2036	05/12/88	3185	U	Selenium	0.2	U	D	3	D
2043	04/13/88	3091	U	Selenium	0.2	UJ	N	3	S
2050	05/05/88	3147	U	Selenium	0.2	U	N	3	S
2050	08/16/88	3497	U	Selenium	0.2	U	N	3	S
2056	05/06/88	3159	U	Selenium	0.2	U	N	3	S
2057	06/03/88	3265	U	Selenium	0.2	U	N	3	D
2066	04/26/88	3124	U	Selenium	0.2	U	N	3	S
2104	05/05/88	3146	U	Selenium	0.2	U	N	3	D
2104	08/16/88	3498	U	Selenium	0.2	U	N	3	D
2105	06/05/88	3268	U	Selenium	0.2	U	N	3	S
2121	05/06/88	3158	U	Selenium	0.2	U	N	3	R
2122	05/06/88	3157	U	Selenium	0.2	U	N	3	R
2122	08/17/88	3504	U	Selenium	0.2	U	N	3	R
2123	05/06/88	3156	U	Selenium	0.2	U	N	3	D
3024	04/20/88	3096	U	Selenium	0.2	U	N	3	S
3043	04/13/88	3090	U	Selenium	0.2	UJ	N	3	S
3063	05/12/88	3190	U	Selenium	0.2	U	N	3	R
3063	05/12/88	3191	U	Selenium	0.2	U	D	3	R
3063	08/16/88	3495	U	Selenium	0.2	U	N	3	R
3099	05/24/88	3237	U	Selenium	0.2	U	N	3	R
3099	05/24/88	3238	U	Selenium	0.2	U	D	3	R
3099	08/16/88	3496	U	Selenium	0.2	U	N	3	R
3100	05/24/88	3239	U	Selenium	0.2	U	N	3	R
3100	05/24/88	3240	U	Selenium	0.2	U	D	3	R
4011	02/07/91	4382	U	Thallium	0.04	U	N	3	S

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Table D-11 (Continued)
Outlier/High Nondetect Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
				Result Outliers					
2066	04/07/93	GW930407-14	B	Antimony	0.0439	J	N	3	D
4011	10/05/90	4345	B	Antimony	0.0384	-	N	3	D
2105	06/05/88	3268		Calcium	30.4	-	N	3	D
3024	07/26/88	3377		Chromium	0.56	J	N	3	D
2036	03/14/89	3983		Copper	0.27	J	N	3	D
2121	05/06/88	3158		Lead	0.08	-	N	3	D
2122	05/06/88	3157		Lead	0.06	-	N	3	D
3024	07/26/88	3377		Nickel	0.78	J	N	3	D
2056	12/07/88	3781		Potassium	13.4	-	N	3	D
3096	12/07/88	3789		Potassium	13.5	-	N	3	D
2036	05/12/88	3184		Silver	0.11	-	N	3	D
				Deleted Samples					
2105	12/13/88	3782		Arsenic	0.017	U	N	3	S
2105	12/13/88	3782	U	Barium	0.002	U	N	3	S
2105	12/13/88	3782	U	Cadmium	0.002	U	N	3	S
2105	12/13/88	3782	U	Calcium	0.01	U	N	3	S
2105	12/13/88	3782	U	Chromium	0.02	U	N	3	S
2105	12/13/88	3782	U	Copper	0.01	U	N	3	S
2105	12/13/88	3782		Iron	0.017	-	N	3	S
2105	12/13/88	3782	U	Lead	0.002	U	N	3	S
2105	12/13/88	3782	U	Magnesium	0.005	U	N	3	S
2105	12/13/88	3782		Manganese	0.014	-	N	3	S
2105	12/13/88	3782	U	Mercury	0.0002	U	N	3	S
2105	12/13/88	3782		Molybdenum	0.03	U	N	3	S
2105	12/13/88	3782	U	Nickel	0.02	U	N	3	S
2105	12/13/88	3782		Potassium	0.169	-	N	3	S
2105	12/13/88	3782	U	Selenium	0.002	UJ	N	3	S
2105	12/13/88	3782		Silver	0.01	J	N	3	S
2105	12/13/88	3782		Sodium	179	-	N	3	S

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Table D-12
Outlier/High Nondetect Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
				High Nondetects					
2728	04/04/93	113514		Aluminum	0.231	U	N	3	S
2096	05/06/93	GW930506-5	U	Antimony	0.045	U	N	3	D
2728	05/24/93	GW930524-3	U	Antimony	0.045	UJ	N	3	S
3024	04/12/93	GW930412-8	U	Antimony	0.045	U	N	3	S
3096	05/07/93	GW930507-1	U	Antimony	0.045	U	N	3	D
4096	05/06/93	GW930506-7	U	Antimony	0.045	U	N	3	D
4011	02/07/91	4382	U	Cobalt	0.02	U	N	3	S
2105	08/28/88	3577	U	Nitrate	2.5	U	N	3	S
3100	12/06/88	3761		Phosphorus	0.299	U	N	3	R
4011	02/07/91	4382	U	Thallium	0.04	U	N	3	S
				Low Nondetects					
3043	04/07/93	GW930407-13	U	Sulfate	0.059	U	N	3	S
				Result Outliers					
3024	04/12/93	GW930412-8		Iron	78.9	-	N	3	D
2050	05/20/93	GW930520-8		Lead	0.0216	J	N	3	D
2050	05/20/93	GW930520-8		Sulfate	0.099	-	N	3	D
2066	04/07/93	GW930407-14		Sulfate	0.062	-	N	3	D
2098	05/25/89	4087		Sulfide	30.4	J	N	3	D
3098	05/25/89	4088		Sulfide	28.04	J	N	3	D
2050	05/20/93	GW930520-8		Zinc	0.185	-	N	3	D
4011	02/07/91	4382		Zinc	3	-	N	3	D
				Deleted Samples					
2105	12/13/88	3782		Ammonia	0.4	-	N	3	S
2105	12/13/88	3782		Chloride	8	J	N	3	S
2105	12/13/88	3782		Fluoride	0.7	-	N	3	S
2105	12/13/88	3782		Phosphorus	0.459	-	N	3	S
2105	12/13/88	3782		Sulfate	20.3	J	N	3	S
2105	12/13/88	3782		TKN	0.53	J	N	3	S

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Table D-13
Outlier/High Nondetect Filtered Inorganic Data for Background Surface Water in the Great Miami River

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL
High Nondetects								
W-1	06/16/88	1035	U	Arsenic	0.2	U	N	3
W-1	06/16/88	1035	U	Lead	0.05	U	N	3
W-1	06/16/88	1035	U	Selenium	0.2	UJ	N	3
W-1	06/16/88	1035		Silver	0.1	U	N	3

Table D-14
Outlier/High Nondetect Unfiltered Inorganic Data for Background Surface Water in the Great Miami River

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL
				High Nondetects				
W-1	06/16/88	1035	U	Arsenic	0.2	U	N	3
W-1	06/16/88	1035	U	Lead	0.05	U	N	3
W-1	06/16/88	1035	U	Selenium	0.2	UJ	N	3
				Result Outliers				
W-1	06/16/88	1035		Ammonia	1.2	-	N	3
W-1	04/03/89	1178		Mercury	0.0095	-	N	3
W-1	08/29/88	1092		Sulfate	4310	J	N	3
W-1	05/20/93	120064-2		Sulfide	31.83	J	N	3
W-1	05/20/93	120068-1		Sulfide	31.97	J	D	3
W-1	05/20/93	120072-2		Sulfide	14.6	J	T	3
W-1	06/23/93	120416		Sulfide	12.9	-	N	3

Table D-15
Outlier/High Nondetect Filtered Inorganic Data for Background Surface Water in Paddys Run

Well No.	Sample		Lab qualifier	Constituent	Validated		QA type	ASL
	Date	ID			Result	Qualifier		
No Outlier/High Nondetect Data Identified								

Table D-16
Outlier/High Nondetect Unfiltered Inorganic Data for Background Surface Water in Paddys Run

Well No.	Sample		Lab qualifier	Constituent	Validated		QA type	ASL
	Date	ID			Result	Qualifier		
No Outlier/High Nondetect Data Identified								

Table D-17
Rejected/Nonvalidated Filtered Inorganic Data for Background Monitoring Wells in the Glacial Overburden

Well	Sample		Lab		Validated		QA
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type
1024	11/21/89	66651		Aluminum	0.294	NV	N
1024	02/18/90	EMGW_SYSGEN_34	U	Aluminum	0.05	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Aluminum	0.05	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	Aluminum	0.5	NV	N
1024	11/13/90	EMGW_SYSGEN_37	U	Aluminum	0.5	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	Aluminum	0.5	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	Aluminum	0.5	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	Aluminum	0.2	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	Aluminum	0.2	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	Aluminum	0.2	NV	N
1024	01/13/93	GW930113-6	U	Aluminum	0.2	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Antimony	0.025	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	Antimony	0.025	NV	N
1024	11/13/90	EMGW_SYSGEN_37	U	Antimony	0.025	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	Antimony	0.025	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	Antimony	0.025	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	Antimony	0.02	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	Antimony	0.02	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	Antimony	0.02	NV	N
1024	01/13/93	GW930113-6	U	Antimony	0.02	NV	N
1024	11/21/89	66651	U	Arsenic	0.0025	NV	N
1024	02/18/90	EMGW_SYSGEN_34		Arsenic	0.005	NV	N
1024	05/15/90	EMGW_SYSGEN_35		Arsenic	0.005	NV	N
1024	08/08/90	EMGW_SYSGEN_36		Arsenic	0.004	NV	N
1024	11/13/90	EMGW_SYSGEN_37		Arsenic	0.005	NV	N
1024	02/27/91	EMGW_SYSGEN_38		Arsenic	0.005	NV	N
1024	02/27/91	EMGW_SYSGEN_38D		Arsenic	0.006	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	Arsenic	0.005	NV	N
1024	10/01/91	EMGW_SYSGEN_41		Arsenic	0.005	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	Arsenic	0.005	NV	N
1024	01/13/93	GW930113-6		Arsenic	0.006	NV	N
1060	12/05/87	3045	U	Arsenic	0.0025	NV	N
1024	11/21/89	66651	U	Barium	0.2	NV	N
1024	02/18/90	EMGW_SYSGEN_34	U	Barium	0.2	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Barium	0.2	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	Barium	0.2	NV	N
1024	11/13/90	EMGW_SYSGEN_37	U	Barium	0.2	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	Barium	0.2	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	Barium	0.2	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	Barium	0.2	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	Barium	0.2	NV	N
1024	01/02/92	EMGW_SYSGEN_42		Barium	0.23	NV	N
1024	01/13/93	GW930113-6	U	Barium	0.2	NV	N
1060	12/05/87	3045	U	Barium	0.2	NV	N
1024	11/21/89	66651	U	Beryllium	0.01	NV	N
1024	02/18/90	EMGW_SYSGEN_34	U	Beryllium	0.01	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Beryllium	0.01	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	Beryllium	0.01	NV	N
1024	11/13/90	EMGW_SYSGEN_37	U	Beryllium	0.01	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	Beryllium	0.01	NV	N

Table D-17 (Continued)
Rejected/Nonvalidated Filtered Inorganic Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type
1024	02/27/91	EMGW_SYSGEN_38D	U	Beryllium	0.01	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	Beryllium	0.05	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	Beryllium	0.005	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	Beryllium	0.005	NV	N
1024	01/13/93	GW930113-6	U	Beryllium	0.005	NV	N
1040	09/28/93	30928F1040-02	U	Beryllium	0.004	R	N
1024	05/15/90	EMGW_SYSGEN_35	U	Cadmium	0.001	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	Cadmium	0.001	NV	N
1024	11/13/90	EMGW_SYSGEN_37	U	Cadmium	0.001	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	Cadmium	0.001	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	Cadmium	0.001	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	Cadmium	0.001	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	Cadmium	0.001	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	Cadmium	0.001	NV	N
1024	01/13/93	GW930113-6	U	Cadmium	0.001	NV	N
1060	12/05/87	3045	U	Cadmium	0.001	NV	N
1024	11/21/89	66651		Calcium	85.2	NV	N
1024	02/18/90	EMGW_SYSGEN_34		Calcium	88.9	NV	N
1024	05/15/90	EMGW_SYSGEN_35		Calcium	95.2	NV	N
1024	08/08/90	EMGW_SYSGEN_36		Calcium	74	NV	N
1024	11/13/90	EMGW_SYSGEN_37		Calcium	78.4	NV	N
1024	02/27/91	EMGW_SYSGEN_38		Calcium	71.6	NV	N
1024	02/27/91	EMGW_SYSGEN_38D		Calcium	75.7	NV	D
1024	07/15/91	EMGW_SYSGEN_40		Calcium	84	NV	N
1024	10/01/91	EMGW_SYSGEN_41		Calcium	84	NV	N
1024	01/02/92	EMGW_SYSGEN_42		Calcium	84.3	NV	N
1024	01/13/93	GW930113-6		Calcium	96	NV	N
1060	12/05/87	3045		Calcium	99.2	NV	N
1024	11/21/89	66651	U	Chromium	0.005	NV	N
1024	01/13/93	GW930113-6	U	Chromium	0.002	NV	N
1060	12/05/87	3045	U	Chromium	0.005	NV	N
1024	11/21/89	66651	U	Cobalt	0.025	NV	N
1024	02/18/90	EMGW_SYSGEN_34	U	Cobalt	0.025	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Cobalt	0.025	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	Cobalt	0.025	NV	N
1024	11/13/90	EMGW_SYSGEN_37	U	Cobalt	0.025	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	Cobalt	0.025	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	Cobalt	0.025	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	Cobalt	0.005	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	Cobalt	0.005	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	Cobalt	0.005	NV	N
1024	01/13/93	GW930113-6	U	Cobalt	0.005	NV	N
1024	11/21/89	66651	U	Copper	0.025	NV	N
1024	02/18/90	EMGW_SYSGEN_34	U	Copper	0.025	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Copper	0.025	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	Copper	0.025	NV	N
1024	11/13/90	EMGW_SYSGEN_37	U	Copper	0.025	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	Copper	0.025	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	Copper	0.025	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	Copper	0.02	NV	N

Table D-17 (Continued)
Rejected/Nonvalidated Filtered Inorganic Data for Background Monitoring Wells in the Glacial Overburden

Well	Sample		Lab		Validated		QA
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type
1024	10/01/91	EMGW_SYSGEN_41	U	Copper	0.02	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	Copper	0.02	NV	N
1024	01/13/93	GW930113-6	U	Copper	0.02	NV	N
1060	12/05/87	3045	U	Copper	0.025	NV	N
1024	11/21/89	66651		Iron	0.627	NV	N
1024	02/18/90	EMGW_SYSGEN_34		Iron	1.48	NV	N
1024	05/15/90	EMGW_SYSGEN_35		Iron	1.48	NV	N
1024	08/08/90	EMGW_SYSGEN_36		Iron	1.62	NV	N
1024	11/13/90	EMGW_SYSGEN_37		Iron	1.31	NV	N
1024	02/27/91	EMGW_SYSGEN_38		Iron	1.5	NV	N
1024	02/27/91	EMGW_SYSGEN_38D		Iron	1.53	NV	D
1024	07/15/91	EMGW_SYSGEN_40		Iron	0.91	NV	N
1024	10/01/91	EMGW_SYSGEN_41		Iron	1.5	NV	N
1024	01/02/92	EMGW_SYSGEN_42		Iron	1.13	NV	N
1024	01/13/93	GW930113-6		Iron	1.77	NV	N
1060	12/05/87	3045	U	Iron	0.05	NV	N
1024	11/02/88	3657		Lead	0.004	R	N
1024	11/21/89	66651	U	Lead	0.005	NV	N
1024	02/18/90	EMGW_SYSGEN_34	U	Lead	0.005	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Lead	0.005	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	Lead	0.005	NV	N
1024	11/13/90	EMGW_SYSGEN_37	U	Lead	0.005	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	Lead	0.005	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	Lead	0.005	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	Lead	0.005	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	Lead	0.003	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	Lead	0.003	NV	N
1024	01/13/93	GW930113-6	U	Lead	0.003	NV	N
1060	12/05/87	3045	U	Lead	0.005	NV	N
1024	11/21/89	66651		Magnesium	40.7	NV	N
1024	02/18/90	EMGW_SYSGEN_34		Magnesium	43.3	NV	N
1024	05/15/90	EMGW_SYSGEN_35		Magnesium	28	NV	N
1024	08/08/90	EMGW_SYSGEN_36		Magnesium	43.2	NV	N
1024	11/13/90	EMGW_SYSGEN_37		Magnesium	38	NV	N
1024	02/27/91	EMGW_SYSGEN_38		Magnesium	35	NV	N
1024	02/27/91	EMGW_SYSGEN_38D		Magnesium	33	NV	D
1024	07/15/91	EMGW_SYSGEN_40		Magnesium	22	NV	N
1024	10/01/91	EMGW_SYSGEN_41		Magnesium	43	NV	N
1024	01/02/92	EMGW_SYSGEN_42		Magnesium	41.2	NV	N
1024	01/13/93	GW930113-6		Magnesium	45.9	NV	N
1060	12/05/87	3045		Magnesium	30.2	NV	N
1024	11/21/89	66651		Manganese	0.146	NV	N
1024	02/18/90	EMGW_SYSGEN_34		Manganese	0.08	NV	N
1024	05/15/90	EMGW_SYSGEN_35		Manganese	0.063	NV	N
1024	08/08/90	EMGW_SYSGEN_36		Manganese	0.068	NV	N
1024	11/13/90	EMGW_SYSGEN_37		Manganese	0.063	NV	N
1024	02/27/91	EMGW_SYSGEN_38		Manganese	0.058	NV	N
1024	02/27/91	EMGW_SYSGEN_38D		Manganese	0.057	NV	D
1024	07/15/91	EMGW_SYSGEN_40		Manganese	0.079	NV	N
1024	10/01/91	EMGW_SYSGEN_41		Manganese	0.08	NV	N

Table D-17 (Continued)
Rejected/Nonvalidated Filtered Inorganic Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type
1024	01/02/92	EMGW_SYSGEN_42		Manganese	0.062	NV	N
1024	01/13/93	GW930113-6		Manganese	0.054	NV	N
1060	12/05/87	3045	U	Manganese	0.015	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Mercury	0.0002	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	Mercury	0.0002	NV	N
1024	11/13/90	EMGW_SYSGEN_37	U	Mercury	0.0002	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	Mercury	0.0002	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	Mercury	0.0002	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	Mercury	0.0002	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	Mercury	0.0002	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	Mercury	0.0002	NV	N
1024	01/13/93	GW930113-6	U	Mercury	0.0002	NV	N
1060	12/05/87	3045	U	Mercury	0.0002	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Molybdenum	0.025	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	Molybdenum	0.025	NV	N
1024	11/13/90	EMGW_SYSGEN_37	U	Molybdenum	0.025	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	Molybdenum	0.025	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	Molybdenum	0.025	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	Molybdenum	0.01	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	Molybdenum	0.01	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	Molybdenum	0.01	NV	N
1024	01/13/93	GW930113-6	U	Molybdenum	0.01	NV	N
1024	11/21/89	66651	U	Nickel	0.005	NV	N
1024	02/18/90	EMGW_SYSGEN_34	U	Nickel	0.005	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Nickel	0.005	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	Nickel	0.005	NV	N
1024	11/13/90	EMGW_SYSGEN_37	U	Nickel	0.005	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	Nickel	0.005	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	Nickel	0.005	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	Nickel	0.01	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	Nickel	0.01	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	Nickel	0.01	NV	N
1024	01/13/93	GW930113-6	U	Nickel	0.01	NV	N
1060	12/05/87	3045	U	Nickel	0.005	NV	N
1024	05/15/90	EMGW_SYSGEN_35		Potassium	1.35	NV	N
1024	08/08/90	EMGW_SYSGEN_36		Potassium	1.38	NV	N
1024	11/13/90	EMGW_SYSGEN_37		Potassium	1.48	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	Potassium	1	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	Potassium	1	NV	D
1024	07/15/91	EMGW_SYSGEN_40		Potassium	1.5	NV	N
1024	10/01/91	EMGW_SYSGEN_41		Potassium	1.2	NV	N
1024	01/02/92	EMGW_SYSGEN_42		Potassium	1.3	NV	N
1060	12/05/87	3045		Potassium	18.2	NV	N
1024	11/02/88	3657	U	Selenium	0.002	R	N
1024	05/15/90	EMGW_SYSGEN_35	U	Selenium	0.0025	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	Selenium	0.0025	NV	N
1024	11/13/90	EMGW_SYSGEN_37	U	Selenium	0.0025	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	Selenium	0.0025	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	Selenium	0.0025	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	Selenium	0.005	NV	N

Table D-17 (Continued)
Rejected/Nonvalidated Filtered Inorganic Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type
1024	10/01/91	EMGW_SYSGEN_41	U	Selenium	0.005	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	Selenium	0.005	NV	N
1024	01/13/93	GW930113-6	U	Selenium	0.005	NV	N
1060	12/05/87	3045	U	Selenium	0.0025	NV	N
1024	11/21/89	66651	U	Silver	0.001	NV	N
1024	02/18/90	EMGW_SYSGEN_34	U	Silver	0.001	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Silver	0.001	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	Silver	0.001	NV	N
1024	11/13/90	EMGW_SYSGEN_37	U	Silver	0.001	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	Silver	0.001	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	Silver	0.001	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	Silver	0.001	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	Silver	0.001	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	Silver	0.001	NV	N
1024	01/13/93	GW930113-6	U	Silver	0.001	NV	N
1060	12/05/87	3045	U	Silver	0.03	NV	N
1024	11/21/89	66651		Sodium	31.8	NV	N
1024	02/18/90	EMGW_SYSGEN_34		Sodium	26.3	NV	N
1024	05/15/90	EMGW_SYSGEN_35		Sodium	11.8	NV	N
1024	08/08/90	EMGW_SYSGEN_36		Sodium	16.1	NV	N
1024	11/13/90	EMGW_SYSGEN_37		Sodium	8.2	NV	N
1024	02/27/91	EMGW_SYSGEN_38		Sodium	10.7	NV	N
1024	02/27/91	EMGW_SYSGEN_38D		Sodium	12.2	NV	D
1024	07/15/91	EMGW_SYSGEN_40		Sodium	15	NV	N
1024	10/01/91	EMGW_SYSGEN_41		Sodium	12	NV	N
1024	01/02/92	EMGW_SYSGEN_42		Sodium	13	NV	N
1060	12/05/87	3045		Sodium	20.9	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Thallium	0.01	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	Thallium	0.01	NV	N
1024	11/13/90	EMGW_SYSGEN_37	U	Thallium	0.01	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	Thallium	0.01	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	Thallium	0.01	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	Thallium	0.01	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	Thallium	0.01	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	Thallium	0.01	NV	N
1024	01/13/93	GW930113-6	U	Thallium	0.01	NV	N
1024	01/13/93	GW930113-6		TDS	460	NV	N
1060	11/30/87	3001		TDS	490	NV	N
1060	12/05/87	3045		TDS	484	NV	N
1024	11/21/89	66651	U	Vanadium	0.05	NV	N
1024	02/18/90	EMGW_SYSGEN_34	U	Vanadium	0.05	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Vanadium	0.05	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	Vanadium	0.05	NV	N
1024	11/13/90	EMGW_SYSGEN_37	U	Vanadium	0.05	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	Vanadium	0.05	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	Vanadium	0.05	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	Vanadium	0.05	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	Vanadium	0.05	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	Vanadium	0.05	NV	N
1024	01/13/93	GW930113-6	U	Vanadium	0.05	NV	N

Table D-17 (Continued)
Rejected/Nonvalidated Filtered Inorganic Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type
1024	11/21/89	66651	U	Zinc	0.02	NV	N
1024	02/18/90	EMGW_SYSGEN_34	U	Zinc	0.02	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Zinc	0.02	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	Zinc	0.02	NV	N
1024	11/13/90	EMGW_SYSGEN_37	U	Zinc	0.02	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	Zinc	0.02	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	Zinc	0.02	NV	D
1024	07/15/91	EMGW_SYSGEN_40		Zinc	0.032	NV	N
1024	10/01/91	EMGW_SYSGEN_41		Zinc	0.039	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	Zinc	0.02	NV	N
1024	01/13/93	GW930113-6	U	Zinc	0.02	NV	N
1060	12/05/87	3045	U	Zinc	0.02	NV	N

Table D-18
Rejected/Nonvalidated Unfiltered Inorganic Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type
1024	11/13/90	EMGW_SYSGEN_37		Alkalinity as CaCO3	347	NV	N
1024	02/27/91	EMGW_SYSGEN_38		Alkalinity as CaCO3	389	NV	N
1024	02/27/91	EMGW_SYSGEN_38D		Alkalinity as CaCO3	384	NV	D
1024	07/15/91	EMGW_SYSGEN_40		Alkalinity as CaCO3	392	NV	N
1024	10/01/91	EMGW_SYSGEN_41		Alkalinity as CaCO3	383	NV	N
1024	01/02/92	EMGW_SYSGEN_42		Alkalinity as CaCO3	377	NV	N
1024	01/13/93	GW930113-6		Alkalinity as CaCO3	366	NV	N
1040	10/18/90	EMGW_SYSGEN_116		Alkalinity as CaCO3	299	NV	N
1060	11/27/90	EMGW_SYSGEN_161		Alkalinity as CaCO3	297	NV	N
1060	11/27/90	EMGW_SYSGEN_161D		Alkalinity as CaCO3	289	NV	D
1060	03/11/91	EMGW_SYSGEN_162		Alkalinity as CaCO3	317	NV	N
1065	10/16/90	EMGW_SYSGEN_168		Alkalinity as CaCO3	326	NV	N
1065	10/16/90	EMGW_SYSGEN_168D		Alkalinity as CaCO3	312	NV	D
1024	11/21/89	66651		Aluminum	3.11	NV	N
1024	02/18/90	EMGW_SYSGEN_34		Aluminum	0.261	NV	N
1024	05/15/90	EMGW_SYSGEN_35		Aluminum	2.29	NV	N
1024	08/08/90	EMGW_SYSGEN_36		Aluminum	2.54	NV	N
1024	11/13/90	EMGW_SYSGEN_37		Aluminum	15.8	NV	N
1024	02/27/91	EMGW_SYSGEN_38		Aluminum	0.8	NV	N
1024	02/27/91	EMGW_SYSGEN_38D		Aluminum	0.74	NV	D
1024	07/15/91	EMGW_SYSGEN_40		Aluminum	0.72	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	Aluminum	0.2	NV	N
1024	01/02/92	EMGW_SYSGEN_42		Aluminum	0.57	NV	N
1024	01/13/93	GW930113-6	U	Aluminum	0.2	NV	N
1060	03/11/91	EMGW_SYSGEN_162	U	Aluminum	0.5	NV	N
1024	11/13/90	EMGW_SYSGEN_37		Ammonia	0.57	NV	N
1024	02/27/91	EMGW_SYSGEN_38		Ammonia	0.48	NV	N
1024	02/27/91	EMGW_SYSGEN_38D		Ammonia	0.54	NV	D
1024	07/15/91	EMGW_SYSGEN_40		Ammonia	0.34	NV	N
1024	10/01/91	EMGW_SYSGEN_41		Ammonia	0.41	NV	N
1024	01/02/92	EMGW_SYSGEN_42		Ammonia	0.45	NV	N
1024	01/13/93	GW930113-6		Ammonia	0.41	NV	N
1024	04/12/93	GW930412-6		Ammonia	0.27	R	N
1040	10/18/90	EMGW_SYSGEN_116		Ammonia	4.16	NV	N
1060	11/27/90	EMGW_SYSGEN_161	U	Ammonia	0.02	NV	N
1060	11/27/90	EMGW_SYSGEN_161D		Ammonia	0.04	NV	D
1060	03/11/91	EMGW_SYSGEN_162	U	Ammonia	0.02	NV	N
1065	10/16/90	EMGW_SYSGEN_168	U	Ammonia	0.02	NV	N
1065	10/16/90	EMGW_SYSGEN_168D		Ammonia	0.03	NV	D
1024	05/15/90	EMGW_SYSGEN_35	U	Antimony	0.025	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	Antimony	0.025	NV	N
1024	11/13/90	EMGW_SYSGEN_37	U	Antimony	0.025	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	Antimony	0.025	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	Antimony	0.025	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	Antimony	0.02	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	Antimony	0.02	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	Antimony	0.02	NV	N
1024	01/13/93	GW930113-6	U	Antimony	0.02	NV	N
1060	03/11/91	EMGW_SYSGEN_162	U	Antimony	0.025	NV	N

Table D-18 (Continued)
Rejected/Nonvalidated Unfiltered Inorganic Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type
1024	11/21/89	66651		Arsenic	0.006	NV	N
1024	02/18/90	EMGW_SYSGEN_34		Arsenic	0.006	NV	N
1024	05/15/90	EMGW_SYSGEN_35		Arsenic	0.006	NV	N
1024	08/08/90	EMGW_SYSGEN_36		Arsenic	0.009	NV	N
1024	11/13/90	EMGW_SYSGEN_37		Arsenic	0.035	NV	N
1024	02/27/91	EMGW_SYSGEN_38		Arsenic	0.007	NV	N
1024	02/27/91	EMGW_SYSGEN_38D		Arsenic	0.006	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	Arsenic	0.005	NV	N
1024	10/01/91	EMGW_SYSGEN_41		Arsenic	0.0051	NV	N
1024	01/02/92	EMGW_SYSGEN_42		Arsenic	0.0051	NV	N
1024	01/13/93	GW930113-6		Arsenic	0.0061	NV	N
1060	11/30/87	3001		Arsenic	0.003	NV	N
1060	03/11/91	EMGW_SYSGEN_162	U	Arsenic	0.0025	NV	N
1024	11/21/89	66651		Barium	0.254	NV	N
1024	02/18/90	EMGW_SYSGEN_34		Barium	0.253	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Barium	0.2	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	Barium	0.02	NV	N
1024	11/13/90	EMGW_SYSGEN_37		Barium	0.342	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	Barium	0.2	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	Barium	0.2	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	Barium	0.2	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	Barium	0.2	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	Barium	0.2	NV	N
1024	01/13/93	GW930113-6	U	Barium	0.2	NV	N
1060	11/30/87	3001	U	Barium	0.2	NV	N
1060	03/11/91	EMGW_SYSGEN_162	U	Barium	0.2	NV	N
1024	11/21/89	66651	U	Beryllium	0.01	NV	N
1024	02/18/90	EMGW_SYSGEN_34	U	Beryllium	0.01	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Beryllium	0.01	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	Beryllium	0.01	NV	N
1024	11/13/90	EMGW_SYSGEN_37	U	Beryllium	0.01	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	Beryllium	0.01	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	Beryllium	0.01	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	Beryllium	0.05	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	Beryllium	0.005	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	Beryllium	0.005	NV	N
1024	01/13/93	GW930113-6	U	Beryllium	0.005	NV	N
1040	09/28/93	30928U1040-02	U	Beryllium	0.004	R	N
1060	03/11/91	EMGW_SYSGEN_162	U	Beryllium	0.01	NV	N
1024	01/13/93	GW930113-6		Bicarbonate Alkalinity	506	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Cadmium	0.001	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	Cadmium	0.001	NV	N
1024	11/13/90	EMGW_SYSGEN_37		Cadmium	0.002	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	Cadmium	0.001	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	Cadmium	0.001	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	Cadmium	0.001	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	Cadmium	0.001	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	Cadmium	0.001	NV	N
1024	01/13/93	GW930113-6	U	Cadmium	0.001	NV	N
1060	11/30/87	3001	U	Cadmium	0.001	NV	N

Table D-18 (Continued)
Rejected/Nonvalidated Unfiltered Inorganic Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type
1060	03/11/91	EMGW_SYSGEN_162	U	Cadmium	0.001	NV	N
1024	11/21/89	66651		Calcium	98.2	NV	N
1024	02/18/90	EMGW_SYSGEN_34		Calcium	95.8	NV	N
1024	05/15/90	EMGW_SYSGEN_35		Calcium	104	NV	N
1024	08/08/90	EMGW_SYSGEN_36		Calcium	99.6	NV	N
1024	11/13/90	EMGW_SYSGEN_37		Calcium	146	NV	N
1024	02/27/91	EMGW_SYSGEN_38		Calcium	74.4	NV	N
1024	02/27/91	EMGW_SYSGEN_38D		Calcium	68.1	NV	D
1024	07/15/91	EMGW_SYSGEN_40		Calcium	89	NV	N
1024	10/01/91	EMGW_SYSGEN_41		Calcium	90	NV	N
1024	01/02/92	EMGW_SYSGEN_42		Calcium	96.6	NV	N
1024	01/13/93	GW930113-6		Calcium	93	NV	N
1060	11/30/87	3001		Calcium	113	NV	N
1060	03/11/91	EMGW_SYSGEN_162		Calcium	82.3	NV	N
1024	01/13/93	GW930113-6	U	Carbonate Alkalinity	3	NV	N
1060	11/30/87	3001	U	Chemical Oxygen Demand	10	NV	N
1060	12/05/87	3045	U	Chemical Oxygen Demand	10	NV	N
1024	11/21/89	66651		Chloride	2	NV	N
1024	02/18/90	EMGW_SYSGEN_34		Chloride	2	NV	N
1024	05/15/90	EMGW_SYSGEN_35		Chloride	2	NV	N
1024	08/08/90	EMGW_SYSGEN_36		Chloride	3	NV	N
1024	11/13/90	EMGW_SYSGEN_37		Chloride	2	NV	N
1024	02/27/91	EMGW_SYSGEN_38		Chloride	2	NV	N
1024	02/27/91	EMGW_SYSGEN_38D		Chloride	2	NV	D
1024	07/15/91	EMGW_SYSGEN_40		Chloride	2	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	Chloride	1	NV	N
1024	01/02/92	EMGW_SYSGEN_42		Chloride	2	NV	N
1024	01/13/93	GW930113-6		Chloride	4	NV	N
1040	10/18/90	EMGW_SYSGEN_116		Chloride	48	NV	N
1060	11/30/87	3001		Chloride	27	NV	N
1060	12/05/87	3045		Chloride	20	NV	N
1060	06/04/90	EMGW_SYSGEN_159		Chloride	35	NV	N
1060	06/04/90	EMGW_SYSGEN_159D		Chloride	35	NV	D
1060	11/27/90	EMGW_SYSGEN_161		Chloride	25	NV	N
1060	11/27/90	EMGW_SYSGEN_161D		Chloride	23	NV	D
1060	03/11/91	EMGW_SYSGEN_162		Chloride	25	NV	N
1065	04/16/90	EMGW_SYSGEN_167		Chloride	8	NV	N
1065	10/16/90	EMGW_SYSGEN_168		Chloride	4	NV	N
1065	10/16/90	EMGW_SYSGEN_168D		Chloride	6	NV	D
1024	11/21/89	66651		Chromium	0.005	NV	N
1024	02/18/90	EMGW_SYSGEN_34	U	Chromium	0.005	NV	N
1024	02/18/90	EMGW_SYSGEN_34	U	Chromium	0.005	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Chromium	0.005	NV	N
1024	05/15/90	EMGW_SYSGEN_35		Chromium	0.008	NV	N
1024	08/08/90	EMGW_SYSGEN_36		Chromium	0.008	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	Chromium	0.005	NV	N
1024	11/13/90	EMGW_SYSGEN_37	U	Chromium	0.005	NV	N
1024	11/13/90	EMGW_SYSGEN_37	U	Chromium	0.005	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	Chromium	0.005	NV	N
1024	02/27/91	EMGW_SYSGEN_38		Chromium	0.007	NV	N

Table D-18 (Continued)
Rejected/Nonvalidated Unfiltered Inorganic Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type
1024	02/27/91	EMGW_SYSGEN_38D	U	Chromium	0.005	NV	D
1024	02/27/91	EMGW_SYSGEN_38D		Chromium	0.007	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	Chromium	0.002	NV	N
1024	07/15/91	EMGW_SYSGEN_40		Chromium	0.0077	NV	N
1024	10/01/91	EMGW_SYSGEN_41		Chromium	0.0031	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	Chromium	0.002	NV	N
1024	01/02/92	EMGW_SYSGEN_42		Chromium	0.0025	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	Chromium	0.002	NV	N
1024	01/13/93	GW930113-6	U	Chromium	0.002	NV	N
1060	11/30/87	3001	U	Chromium	0.005	NV	N
1060	03/11/91	EMGW_SYSGEN_162	U	Chromium	0.005	NV	N
1024	11/21/89	66651	U	Cobalt	0.025	NV	N
1024	02/18/90	EMGW_SYSGEN_34	U	Cobalt	0.025	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Cobalt	0.025	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	Cobalt	0.025	NV	N
1024	11/13/90	EMGW_SYSGEN_37	U	Cobalt	0.025	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	Cobalt	0.025	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	Cobalt	0.025	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	Cobalt	0.005	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	Cobalt	0.005	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	Cobalt	0.005	NV	N
1024	01/13/93	GW930113-6	U	Cobalt	0.005	NV	N
1060	03/11/91	EMGW_SYSGEN_162	U	Cobalt	0.025	NV	N
1024	11/21/89	66651	U	Copper	0.025	NV	N
1024	02/18/90	EMGW_SYSGEN_34	U	Copper	0.025	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Copper	0.025	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	Copper	0.025	NV	N
1024	11/13/90	EMGW_SYSGEN_37		Copper	0.085	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	Copper	0.025	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	Copper	0.025	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	Copper	0.02	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	Copper	0.02	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	Copper	0.02	NV	N
1024	01/13/93	GW930113-6	U	Copper	0.02	NV	N
1060	11/30/87	3001	U	Copper	0.025	NV	N
1060	03/11/91	EMGW_SYSGEN_162	U	Copper	0.025	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Cyanide	0.005	NV	N
1024	11/13/90	EMGW_SYSGEN_37	U	Cyanide	0.005	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	Cyanide	0.005	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	Cyanide	0.005	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	Cyanide	0.005	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	Cyanide	0.005	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	Cyanide	0.005	NV	N
1024	01/13/93	GW930113-6	U	Cyanide	0.005	NV	N
1040	10/18/90	EMGW_SYSGEN_116	U	Cyanide	0.005	NV	N
1060	11/30/87	3001		Cyanide	0.006	NV	N
1060	12/05/87	3045	U	Cyanide	0.005	NV	N
1060	11/27/90	EMGW_SYSGEN_161	U	Cyanide	0.005	NV	N
1060	11/27/90	EMGW_SYSGEN_161D	U	Cyanide	0.005	NV	D
1060	03/11/91	EMGW_SYSGEN_162	U	Cyanide	0.005	NV	N

Table D-18 (Continued)
Rejected/Nonvalidated Unfiltered Inorganic Data for Background Monitoring Wells in the Glacial Overburden

Well	Sample		Lab		Validated		QA
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type
1065	10/16/90	EMGW_SYSGEN_168	U	Cyanide	0.005	NV	N
1065	10/16/90	EMGW_SYSGEN_168D	U	Cyanide	0.005	NV	D
1065	05/04/93	112014	U	Cyanide	0.001	R	N
1024	11/21/89	66651		Fluoride	0.85	NV	N
1024	02/18/90	EMGW_SYSGEN_34		Fluoride	0.68	NV	N
1024	05/15/90	EMGW_SYSGEN_35		Fluoride	0.62	NV	N
1024	08/08/90	EMGW_SYSGEN_36		Fluoride	0.92	NV	N
1024	11/13/90	EMGW_SYSGEN_37		Fluoride	0.82	NV	N
1024	02/27/91	EMGW_SYSGEN_38		Fluoride	0.87	NV	N
1024	02/27/91	EMGW_SYSGEN_38D		Fluoride	0.83	NV	D
1024	07/15/91	EMGW_SYSGEN_40		Fluoride	0.93	NV	N
1024	10/01/91	EMGW_SYSGEN_41		Fluoride	0.95	NV	N
1024	01/02/92	EMGW_SYSGEN_42		Fluoride	1.04	NV	N
1024	01/13/93	GW930113-6		Fluoride	1.17	NV	N
1040	10/18/90	EMGW_SYSGEN_116		Fluoride	0.4	NV	N
1060	11/30/87	3001		Fluoride	0.18	NV	N
1060	12/05/87	3045		Fluoride	0.61	NV	N
1060	11/27/90	EMGW_SYSGEN_161		Fluoride	0.16	NV	N
1060	11/27/90	EMGW_SYSGEN_161D		Fluoride	0.23	NV	D
1060	03/11/91	EMGW_SYSGEN_162		Fluoride	0.18	NV	N
1065	10/16/90	EMGW_SYSGEN_168		Fluoride	1	NV	N
1065	10/16/90	EMGW_SYSGEN_168D		Fluoride	1.03	NV	D
1060	11/30/87	3001	U	Hexavalent Chromium	0.005	NV	N
1060	12/05/87	3045	U	Hexavalent Chromium	0.005	NV	N
1024	11/21/89	66651		Iron	4.66	NV	N
1024	02/18/90	EMGW_SYSGEN_34		Iron	2.12	NV	N
1024	05/15/90	EMGW_SYSGEN_35		Iron	5.05	NV	N
1024	08/08/90	EMGW_SYSGEN_36		Iron	7.9	NV	N
1024	11/13/90	EMGW_SYSGEN_37		Iron	78.3	NV	N
1024	02/27/91	EMGW_SYSGEN_38		Iron	3.54	NV	N
1024	02/27/91	EMGW_SYSGEN_38D		Iron	3.21	NV	D
1024	07/15/91	EMGW_SYSGEN_40		Iron	2.32	NV	N
1024	10/01/91	EMGW_SYSGEN_41		Iron	1.6	NV	N
1024	01/02/92	EMGW_SYSGEN_42		Iron	3.1	NV	N
1024	01/13/93	GW930113-6		Iron	1.97	NV	N
1060	11/30/87	3001		Iron	2.73	NV	N
1060	03/11/91	EMGW_SYSGEN_162		Iron	0.406	NV	N
1024	11/21/89	66651	U	Lead	0.005	NV	N
1024	02/18/90	EMGW_SYSGEN_34	U	Lead	0.005	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Lead	0.005	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	Lead	0.005	NV	N
1024	11/13/90	EMGW_SYSGEN_37		Lead	0.046	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	Lead	0.005	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	Lead	0.005	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	Lead	0.005	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	Lead	0.003	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	Lead	0.003	NV	N
1024	01/13/93	GW930113-6	U	Lead	0.003	NV	N
1060	11/30/87	3001	U	Lead	0.005	NV	N
1060	03/11/91	EMGW_SYSGEN_162	U	Lead	0.005	NV	N

Table D-18 (Continued)
Rejected/Nonvalidated Unfiltered Inorganic Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type
1024	11/21/89	66651		Magnesium	43.8	NV	N
1024	02/18/90	EMGW_SYSGEN_34		Magnesium	43.4	NV	N
1024	05/15/90	EMGW_SYSGEN_35		Magnesium	58	NV	N
1024	08/08/90	EMGW_SYSGEN_36		Magnesium	53.6	NV	N
1024	11/13/90	EMGW_SYSGEN_37		Magnesium	41	NV	N
1024	02/27/91	EMGW_SYSGEN_38		Magnesium	44	NV	N
1024	02/27/91	EMGW_SYSGEN_38D		Magnesium	42	NV	D
1024	07/15/91	EMGW_SYSGEN_40		Magnesium	40	NV	N
1024	10/01/91	EMGW_SYSGEN_41		Magnesium	48	NV	N
1024	01/02/92	EMGW_SYSGEN_42		Magnesium	39.1	NV	N
1024	01/13/93	GW930113-6		Magnesium	45.8	NV	N
1060	11/30/87	3001		Magnesium	25.1	NV	N
1060	03/11/91	EMGW_SYSGEN_162		Magnesium	28.2	NV	N
1024	11/21/89	66651		Manganese	0.245	NV	N
1024	02/18/90	EMGW_SYSGEN_34		Manganese	0.115	NV	N
1024	05/15/90	EMGW_SYSGEN_35		Manganese	0.15	NV	N
1024	08/08/90	EMGW_SYSGEN_36		Manganese	0.174	NV	N
1024	11/13/90	EMGW_SYSGEN_37		Manganese	1.05	NV	N
1024	02/27/91	EMGW_SYSGEN_38		Manganese	0.119	NV	N
1024	02/27/91	EMGW_SYSGEN_38D		Manganese	0.117	NV	D
1024	07/15/91	EMGW_SYSGEN_40		Manganese	0.103	NV	N
1024	10/01/91	EMGW_SYSGEN_41		Manganese	0.078	NV	N
1024	01/02/92	EMGW_SYSGEN_42		Manganese	0.113	NV	N
1024	01/13/93	GW930113-6		Manganese	0.06	NV	N
1060	11/30/87	3001		Manganese	0.343	NV	N
1060	03/11/91	EMGW_SYSGEN_162		Manganese	0.031	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Mercury	0.0002	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	Mercury	0.0002	NV	N
1024	11/13/90	EMGW_SYSGEN_37	U	Mercury	0.0002	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	Mercury	0.0002	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	Mercury	0.0002	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	Mercury	0.0002	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	Mercury	0.0002	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	Mercury	0.0002	NV	N
1024	01/13/93	GW930113-6	U	Mercury	0.0002	NV	N
1060	11/30/87	3001	U	Mercury	0.0003	NV	N
1060	03/11/91	EMGW_SYSGEN_162	U	Mercury	0.0002	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Molybdenum	0.025	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	Molybdenum	0.025	NV	N
1024	11/13/90	EMGW_SYSGEN_37		Molybdenum	0.039	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	Molybdenum	0.025	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	Molybdenum	0.025	NV	D
1024	07/15/91	EMGW_SYSGEN_40		Molybdenum	0.014	NV	N
1024	10/01/91	EMGW_SYSGEN_41		Molybdenum	0.01	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	Molybdenum	0.01	NV	N
1024	01/13/93	GW930113-6		Molybdenum	0.0109	NV	N
1060	03/11/91	EMGW_SYSGEN_162	U	Molybdenum	0.025	NV	N
1024	11/21/89	66651	U	Nickel	0.005	NV	N
1024	02/18/90	EMGW_SYSGEN_34	U	Nickel	0.005	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Nickel	0.005	NV	N

Table D-18 (Continued)
Rejected/Nonvalidated Unfiltered Inorganic Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type
1024	08/08/90	EMGW_SYSGEN_36	U	Nickel	0.005	NV	N
1024	11/13/90	EMGW_SYSGEN_37		Nickel	0.083	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	Nickel	0.005	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	Nickel	0.005	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	Nickel	0.01	NV	N
1024	10/01/91	EMGW_SYSGEN_41		Nickel	0.011	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	Nickel	0.01	NV	N
1024	01/13/93	GW930113-6	U	Nickel	0.01	NV	N
1060	11/30/87	3001	U	Nickel	0.005	NV	N
1060	03/11/91	EMGW_SYSGEN_162	U	Nickel	0.005	NV	N
1024	04/21/88	3106	U	Nitrate	0.1	R	N
1024	07/26/88	3376	U	Nitrate	0.1	R	N
1024	11/02/88	3657	U	Nitrate	0.1	R	N
1024	01/22/89	3847	U	Nitrate	0.05	R	N
1024	06/26/89	66420	U	Nitrate	0.1	R	N
1024	08/10/89	66497	U	Nitrate	0.1	R	N
1024	11/21/89	66651		Nitrate	0.44	NV	N
1024	01/13/93	GW930113-6	U	Nitrate	0.02	NV	N
1040	03/15/89	3964	U	Nitrate	0.02	R	N
1059	08/18/88	3562		Nitrate	0.26	R	N
1059	12/06/88	3751	U	Nitrate	0.151	R	N
1060	11/30/87	3001	U	Nitrate	0.02	NV	N
1060	12/05/87	3045		Nitrate	1.14	NV	N
1065	05/04/93	112013	U	Nitrate	0.1	R	N
1024	02/18/90	EMGW_SYSGEN_34		Nitrate, as Nitrogen	0.02	NV	N
1024	05/15/90	EMGW_SYSGEN_35		Nitrate, as Nitrogen	0.07	NV	N
1024	08/08/90	EMGW_SYSGEN_36		Nitrate, as Nitrogen	0.05	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	Nitrate, as Nitrogen	0.02	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	Nitrate, as Nitrogen	0.02	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	Nitrate, as Nitrogen	0.02	NV	N
1024	10/01/91	EMGW_SYSGEN_41		Nitrate, as Nitrogen	0.03	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	Nitrate, as Nitrogen	0.02	NV	N
1060	06/04/90	EMGW_SYSGEN_159		Nitrate, as Nitrogen	0.48	NV	N
1060	06/04/90	EMGW_SYSGEN_159D		Nitrate, as Nitrogen	0.5	NV	D
1060	03/11/91	EMGW_SYSGEN_162		Nitrate, as Nitrogen	1.17	NV	N
1065	04/16/90	EMGW_SYSGEN_167		Nitrate, as Nitrogen	0.02	NV	N
1024	11/13/90	EMGW_SYSGEN_37	U	Nitrate/Nitrite	0.02	NV	N
1040	10/18/90	EMGW_SYSGEN_116	U	Nitrate/Nitrite	0.02	NV	N
1060	11/27/90	EMGW_SYSGEN_161		Nitrate/Nitrite	0.03	NV	N
1060	11/27/90	EMGW_SYSGEN_161D		Nitrate/Nitrite	0.03	NV	D
1065	10/16/90	EMGW_SYSGEN_168		Nitrate/Nitrite	0.07	NV	N
1065	10/16/90	EMGW_SYSGEN_168D		Nitrate/Nitrite	0.07	NV	D
1024	01/13/93	GW930113-6	U	Nitrite, as Nitrogen	0.02	NV	N
1024	11/13/90	EMGW_SYSGEN_37		pH	7.08	NV	N
1024	02/27/91	EMGW_SYSGEN_38		pH	7.18	NV	N
1024	02/27/91	EMGW_SYSGEN_38D		pH	7.14	NV	D
1024	07/15/91	EMGW_SYSGEN_40		pH	7.34	NV	N
1024	10/01/91	EMGW_SYSGEN_41		pH	7.2	NV	N
1024	01/02/92	EMGW_SYSGEN_42		pH	7.16	NV	N
1024	01/13/93	GW930113-6		pH	7.25	NV	N

Table D-18 (Continued)
Rejected/Nonvalidated Unfiltered Inorganic Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type
1040	10/18/90	EMGW_SYSGEN_116		pH	7.3	NV	N
1060	11/30/87	3001		pH	7.44	NV	N
1060	12/05/87	3045		pH	7.66	NV	N
1060	11/27/90	EMGW_SYSGEN_161		pH	7.04	NV	N
1060	11/27/90	EMGW_SYSGEN_161D		pH	7.1	NV	D
1060	03/11/91	EMGW_SYSGEN_162		pH	7.25	NV	N
1065	10/16/90	EMGW_SYSGEN_168		pH	6.97	NV	N
1065	10/16/90	EMGW_SYSGEN_168D		pH	6.99	NV	D
1024	11/13/90	EMGW_SYSGEN_37		Phosphorus	0.06	NV	N
1024	02/27/91	EMGW_SYSGEN_38		Phosphorus	0.18	NV	N
1024	02/27/91	EMGW_SYSGEN_38D		Phosphorus	0.21	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	Phosphorus	0.1	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	Phosphorus	0.1	NV	N
1024	01/02/92	EMGW_SYSGEN_42		Phosphorus	0.11	NV	N
1024	01/13/93	GW930113-6	U	Phosphorus	0.1	NV	N
1024	04/12/93	GW930412-6	U	Phosphorus	0.1	R	N
1040	10/18/90	EMGW_SYSGEN_116		Phosphorus	0.28	NV	N
1060	11/30/87	3001	U	Phosphorus	0.02	NV	N
1060	12/05/87	3045		Phosphorus	0.09	NV	N
1060	11/27/90	EMGW_SYSGEN_161		Phosphorus	0.12	NV	N
1060	11/27/90	EMGW_SYSGEN_161D		Phosphorus	0.14	NV	D
1060	03/11/91	EMGW_SYSGEN_162		Phosphorus	0.1	NV	N
1065	10/16/90	EMGW_SYSGEN_168		Phosphorus	2.23	NV	N
1065	10/16/90	EMGW_SYSGEN_168D		Phosphorus	1.32	NV	D
1024	05/15/90	EMGW_SYSGEN_35		Potassium	1.82	NV	N
1024	08/08/90	EMGW_SYSGEN_36		Potassium	2.26	NV	N
1024	11/13/90	EMGW_SYSGEN_37		Potassium	4.84	NV	N
1024	02/27/91	EMGW_SYSGEN_38		Potassium	1.43	NV	N
1024	02/27/91	EMGW_SYSGEN_38D		Potassium	1.24	NV	D
1024	07/15/91	EMGW_SYSGEN_40		Potassium	1.7	NV	N
1024	10/01/91	EMGW_SYSGEN_41		Potassium	1.3	NV	N
1024	01/02/92	EMGW_SYSGEN_42		Potassium	1.6	NV	N
1024	01/13/93	GW930113-6		Potassium	1.3	NV	N
1060	11/30/87	3001		Potassium	1.64	NV	N
1060	03/11/91	EMGW_SYSGEN_162		Potassium	15.6	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Selenium	0.0025	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	Selenium	0.0025	NV	N
1024	11/13/90	EMGW_SYSGEN_37	U	Selenium	0.0025	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	Selenium	0.0025	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	Selenium	0.0025	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	Selenium	0.005	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	Selenium	0.005	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	Selenium	0.005	NV	N
1024	01/13/93	GW930113-6	U	Selenium	0.005	NV	N
1060	11/30/87	3001	U	Selenium	0.0025	NV	N
1060	03/11/91	EMGW_SYSGEN_162	U	Selenium	0.0025	NV	N
1024	11/21/89	66651	U	Silver	0.001	NV	N
1024	02/18/90	EMGW_SYSGEN_34	U	Silver	0.001	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Silver	0.001	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	Silver	0.001	NV	N

Table D-18 (Continued)
Rejected/Nonvalidated Unfiltered Inorganic Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type
1024	11/13/90	EMGW_SYSGEN_37	U	Silver	0.001	NV	N
1024	02/27/91	EMGW_SYSGEN_38		Silver	0.002	NV	N
1024	02/27/91	EMGW_SYSGEN_38D		Silver	0.003	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	Silver	0.001	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	Silver	0.001	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	Silver	0.001	NV	N
1024	01/13/93	GW930113-6	U	Silver	0.001	NV	N
1060	11/30/87	3001	U	Silver	0.03	NV	N
1060	03/11/91	EMGW_SYSGEN_162	U	Silver	0.001	NV	N
1024	11/21/89	66651		Sodium	27.9	NV	N
1024	02/18/90	EMGW_SYSGEN_34		Sodium	25.7	NV	N
1024	05/15/90	EMGW_SYSGEN_35		Sodium	15.9	NV	N
1024	08/08/90	EMGW_SYSGEN_36		Sodium	14.9	NV	N
1024	11/13/90	EMGW_SYSGEN_37		Sodium	13	NV	N
1024	02/27/91	EMGW_SYSGEN_38		Sodium	11.6	NV	N
1024	02/27/91	EMGW_SYSGEN_38D		Sodium	11.6	NV	D
1024	07/15/91	EMGW_SYSGEN_40		Sodium	18	NV	N
1024	10/01/91	EMGW_SYSGEN_41		Sodium	16	NV	N
1024	01/02/92	EMGW_SYSGEN_42		Sodium	12.6	NV	N
1024	01/13/93	GW930113-6		Sodium	11.2	NV	N
1060	11/30/87	3001		Sodium	7.19	NV	N
1060	03/11/91	EMGW_SYSGEN_162		Sodium	11.1	NV	N
1024	11/13/90	EMGW_SYSGEN_37		Specific Conductivity	712	NV	N
1024	02/27/91	EMGW_SYSGEN_38		Specific Conductivity	733	NV	N
1024	02/27/91	EMGW_SYSGEN_38D		Specific Conductivity	740	NV	D
1024	07/15/91	EMGW_SYSGEN_40		Specific Conductivity	743	NV	N
1024	10/01/91	EMGW_SYSGEN_41		Specific Conductivity	731	NV	N
1024	01/02/92	EMGW_SYSGEN_42		Specific Conductivity	748	NV	N
1024	01/13/93	GW930113-6		Specific Conductivity	792	NV	N
1040	10/18/90	EMGW_SYSGEN_116		Specific Conductivity	684	NV	N
1060	11/30/87	3001		Specific Conductivity	620	NV	N
1060	12/05/87	3045		Specific Conductivity	837	NV	N
1060	11/27/90	EMGW_SYSGEN_161		Specific Conductivity	620	NV	N
1060	11/27/90	EMGW_SYSGEN_161D		Specific Conductivity	602	NV	D
1060	03/11/91	EMGW_SYSGEN_162		Specific Conductivity	746	NV	N
1065	10/16/90	EMGW_SYSGEN_168		Specific Conductivity	820	NV	N
1065	10/16/90	EMGW_SYSGEN_168D		Specific Conductivity	818	NV	D
1024	11/21/89	66651		Sulfate	48	NV	N
1024	02/18/90	EMGW_SYSGEN_34		Sulfate	43	NV	N
1024	05/15/90	EMGW_SYSGEN_35		Sulfate	46	NV	N
1024	08/08/90	EMGW_SYSGEN_36		Sulfate	50	NV	N
1024	11/13/90	EMGW_SYSGEN_37		Sulfate	44	NV	N
1024	02/27/91	EMGW_SYSGEN_38		Sulfate	61	NV	N
1024	02/27/91	EMGW_SYSGEN_38D		Sulfate	58	NV	D
1024	07/15/91	EMGW_SYSGEN_40		Sulfate	67	NV	N
1024	10/01/91	EMGW_SYSGEN_41		Sulfate	54	NV	N
1024	01/02/92	EMGW_SYSGEN_42		Sulfate	43	NV	N
1024	01/13/93	GW930113-6		Sulfate	64	NV	N
1040	10/18/90	EMGW_SYSGEN_116		Sulfate	8	NV	N
1060	11/30/87	3001		Sulfate	88	NV	N

Table D-18 (Continued)
Rejected/Nonvalidated Unfiltered Inorganic Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type
1060	12/05/87	3045		Sulfate	84	NV	N
1060	06/04/90	EMGW_SYSGEN_159		Sulfate	148	NV	N
1060	06/04/90	EMGW_SYSGEN_159D		Sulfate	132	NV	D
1060	11/27/90	EMGW_SYSGEN_161		Sulfate	79	NV	N
1060	11/27/90	EMGW_SYSGEN_161D		Sulfate	78	NV	D
1060	03/11/91	EMGW_SYSGEN_162		Sulfate	83	NV	N
1065	04/16/90	EMGW_SYSGEN_167		Sulfate	58	NV	N
1065	10/16/90	EMGW_SYSGEN_168		Sulfate	52	NV	N
1065	10/16/90	EMGW_SYSGEN_168D		Sulfate	60	NV	D
1024	05/15/90	EMGW_SYSGEN_35	U	Thallium	0.01	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	Thallium	0.01	NV	N
1024	11/13/90	EMGW_SYSGEN_37	U	Thallium	0.01	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	Thallium	0.01	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	Thallium	0.01	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	Thallium	0.01	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	Thallium	0.01	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	Thallium	0.01	NV	N
1024	01/13/93	GW930113-6	U	Thallium	0.01	NV	N
1060	03/11/91	EMGW_SYSGEN_162	U	Thallium	0.01	NV	N
1060	12/05/87	3045		Total Coliform	325	NV	N
1024	11/13/90	EMGW_SYSGEN_37		TDS	508	NV	N
1024	02/27/91	EMGW_SYSGEN_38		TDS	418	NV	N
1024	02/27/91	EMGW_SYSGEN_38D		TDS	424	NV	D
1024	07/15/91	EMGW_SYSGEN_40		TDS	372	NV	N
1024	10/01/91	EMGW_SYSGEN_41		TDS	430	NV	N
1024	01/02/92	EMGW_SYSGEN_42		TDS	416	NV	N
1040	10/18/90	EMGW_SYSGEN_116		TDS	387	NV	N
1060	11/27/90	EMGW_SYSGEN_161		TDS	464	NV	N
1060	11/27/90	EMGW_SYSGEN_161D		TDS	496	NV	D
1060	03/11/91	EMGW_SYSGEN_162		TDS	406	NV	N
1065	10/16/90	EMGW_SYSGEN_168		TDS	690	NV	N
1065	10/16/90	EMGW_SYSGEN_168D		TDS	580	NV	D
1024	01/13/93	GW930113-6		Total Solids	468	NV	N
1024	11/21/89	66651	U	Vanadium	0.05	NV	N
1024	02/18/90	EMGW_SYSGEN_34	U	Vanadium	0.05	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Vanadium	0.05	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	Vanadium	0.05	NV	N
1024	11/13/90	EMGW_SYSGEN_37		Vanadium	0.178	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	Vanadium	0.05	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	Vanadium	0.05	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	Vanadium	0.05	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	Vanadium	0.05	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	Vanadium	0.05	NV	N
1024	01/13/93	GW930113-6	U	Vanadium	0.05	NV	N
1060	03/11/91	EMGW_SYSGEN_162	U	Vanadium	0.05	NV	N
1024	11/21/89	66651		Zinc	0.028	NV	N
1024	02/18/90	EMGW_SYSGEN_34	U	Zinc	0.02	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Zinc	0.02	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	Zinc	0.02	NV	N
1024	11/13/90	EMGW_SYSGEN_37		Zinc	0.147	NV	N

Table D-18 (Continued)
Rejected/Nonvalidated Unfiltered Inorganic Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type
1024	02/27/91	EMGW_SYSGEN_38	U	Zinc	0.02	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	Zinc	0.02	NV	D
1024	07/15/91	EMGW_SYSGEN_40		Zinc	0.048	NV	N
1024	10/01/91	EMGW_SYSGEN_41		Zinc	0.039	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	Zinc	0.02	NV	N
1024	01/13/93	GW930113-6	U	Zinc	0.02	NV	N
1060	11/30/87	3001		Zinc	0.092	NV	N
1060	03/11/91	EMGW_SYSGEN_162		Zinc	0.045	NV	N

Table D-19
Rejected/Nonvalidated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2043	11/14/89	66683	U	Aluminum	0.05	NV	N	S
2043	02/20/90	EMGW_SYSGEN_522	U	Aluminum	0.05	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Aluminum	0.05	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	U	Aluminum	0.5	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	U	Aluminum	0.5	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	Aluminum	0.5	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	Aluminum	0.5	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	Aluminum	0.2	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	Aluminum	0.2	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	Aluminum	0.2	NV	N	S
2043	01/18/93	GW930118-12	U	Aluminum	0.2	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559	U	Aluminum	0.2	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560	U	Aluminum	0.2	NV	N	S
2050	08/10/92	2050-08/10/92-B-N	B	Aluminum	0.0632	NV	N	S
2050	02/10/93	GW930210-8	U	Aluminum	0.018	NV	N	S
2066	11/06/89	66687	U	Aluminum	0.05	NV	N	S
2066	02/22/90	EMGW_SYSGEN_628	U	Aluminum	0.05	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Aluminum	0.05	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	Aluminum	0.5	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	Aluminum	0.5	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	Aluminum	0.5	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	Aluminum	0.5	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	Aluminum	0.2	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	Aluminum	0.2	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	Aluminum	0.2	NV	N	S
2066	01/06/93	GW930106-7	U	Aluminum	0.2	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703	U	Aluminum	0.2	NV	N	R
2096	08/18/92	2096-08/18/92-B-N	B	Aluminum	0.0593	NV	N	R
2096	11/04/92	2096-11/04/92-A-N	U	Aluminum	0.2	NV	N	R
2096	02/02/93	GW930202-8	U	Aluminum	0.0156	NV	N	R
2098	11/05/91	EMGW_SYSGEN_715	U	Aluminum	0.2	NV	N	D
2098	02/04/93	GW930204-7	B	Aluminum	0.0311	NV	N	D
2104	11/07/91	EMGW_SYSGEN_722	U	Aluminum	0.2	NV	N	R
2104	08/10/92	2104-08/10/92-B-N	U	Aluminum	0.02	NV	N	R
2104	02/02/93	GW930202-12	U	Aluminum	0.0156	NV	N	R
2728	02/10/93	GW930210-5	U	Aluminum	0.018	NV	N	S
3024	11/30/89	66735	U	Aluminum	0.05	NV	N	S
3024	02/18/90	EMGW_SYSGEN_992	U	Aluminum	0.05	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993		Aluminum	0.392	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D		Aluminum	0.071	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	U	Aluminum	0.5	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	Aluminum	0.5	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	Aluminum	0.5	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	Aluminum	0.2	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	Aluminum	0.2	NV	N	S
3024	01/13/93	GW930113-8	U	Aluminum	0.2	NV	N	S
3043	11/14/89	66685	U	Aluminum	0.05	NV	N	S
3043	02/20/90	EMGW_SYSGEN_1018	U	Aluminum	0.05	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Aluminum	0.05	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	Aluminum	0.5	NV	N	S

Table D-19 (Continued)
Rejected/Nonvalidated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well	Sample		Lab		Validated		QA	
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type	Area
3043	11/05/90	EMGW_SYSGEN_1021	U	Aluminum	0.5	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	Aluminum	0.5	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	Aluminum	0.2	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	Aluminum	0.2	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	Aluminum	0.2	NV	N	S
3043	01/18/93	GW930118-14	U	Aluminum	0.02	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138	U	Aluminum	0.2	NV	N	R
3096	08/18/92	3096-08/18/92-B-N	B	Aluminum	0.035	NV	N	R
3096	11/04/92	3096-11/04/92-A-N	U	Aluminum	0.2	NV	N	R
3096	02/02/93	GW930202-9	B	Aluminum	0.0458	NV	N	R
3098	11/05/91	EMGW_SYSGEN_1149	U	Aluminum	0.2	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D	U	Aluminum	0.2	NV	D	D
3098	08/13/92	3098-08/13/92-A-D1-5	B	Aluminum	0.0341	NV	D	D
3098	02/04/93	GW930204-10	B	Aluminum	0.0345	NV	N	D
3098	02/04/93	GW930204-12	U	Aluminum	0.018	NV	D	D
4011	11/14/90	EMGW_SYSGEN_1244	U	Aluminum	0.5	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Aluminum	0.05	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	Aluminum	0.2	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	Aluminum	0.2	NV	N	S
4011	01/05/93	GW930105-7	U	Aluminum	0.2	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297	U	Aluminum	0.2	NV	N	R
4096	08/18/92	4096-08/18/92-B-N	B	Aluminum	0.0508	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5	B	Aluminum	0.031	NV	D	R
4096	11/04/92	4096-11/04/92-A-N	U	Aluminum	0.2	NV	N	R
4096	11/04/92	4096-11/04/92-A-D1-7	U	Aluminum	0.2	NV	D	R
4096	02/02/93	GW930202-10	B	Aluminum	0.0219	NV	N	R
2043	05/17/90	EMGW_SYSGEN_523	U	Antimony	0.025	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	U	Antimony	0.025	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	U	Antimony	0.025	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	Antimony	0.025	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	Antimony	0.025	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	Antimony	0.02	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	Antimony	0.02	NV	N	S
2043	01/18/93	GW930118-12	U	Antimony	0.02	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559	U	Antimony	0.02	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560	U	Antimony	0.02	NV	N	S
2050	08/10/92	2050-08/10/92-B-N	U	Antimony	0.0422	NV	N	S
2050	02/10/93	GW930210-8	B	Antimony	0.0298	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Antimony	0.025	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	Antimony	0.025	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	Antimony	0.025	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	Antimony	0.025	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	Antimony	0.025	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	Antimony	0.02	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	Antimony	0.02	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	Antimony	0.02	NV	N	S
2066	01/06/93	GW930106-7	U	Antimony	0.02	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703	U	Antimony	0.02	NV	N	R
2096	08/18/92	2096-08/18/92-B-N	B	Antimony	0.0439	NV	N	R
2096	02/02/93	GW930202-8		Antimony	0.0906	NV	N	R

Table D-19 (Continued)
Rejected/Nonvalidated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2098	11/05/91	EMGW_SYSGEN_715	U	Antimony	0.02	NV	N	D
2098	02/04/93	GW930204-7		Antimony	0.113	NV	N	D
2104	11/07/91	EMGW_SYSGEN_722	U	Antimony	0.02	NV	N	R
2104	08/10/92	2104-08/10/92-B-N	U	Antimony	0.0422	NV	N	R
2104	02/02/93	GW930202-12	U	Antimony	0.05	NV	N	R
2728	02/10/93	GW930210-5	U	Antimony	0.017	NV	N	S
3024	08/08/90	EMGW_SYSGEN_994	U	Antimony	0.025	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	Antimony	0.025	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	Antimony	0.025	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	Antimony	0.02	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	Antimony	0.02	NV	N	S
3024	01/13/93	GW930113-8	U	Antimony	0.02	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Antimony	0.025	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	Antimony	0.025	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	Antimony	0.025	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	Antimony	0.025	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	Antimony	0.02	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	Antimony	0.02	NV	N	S
3043	01/18/93	GW930118-14	U	Antimony	0.02	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138	U	Antimony	0.02	NV	N	R
3096	08/18/92	3096-08/18/92-B-N	U	Antimony	0.0422	NV	N	R
3096	02/02/93	GW930202-9	U	Antimony	0.05	NV	N	R
3098	11/05/91	EMGW_SYSGEN_1149	U	Antimony	0.02	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D	U	Antimony	0.02	NV	D	D
3098	02/04/93	GW930204-10	B	Antimony	0.0505	NV	N	D
3098	02/04/93	GW930204-12	U	Antimony	0.017	NV	D	D
4011	11/14/90	EMGW_SYSGEN_1244	U	Antimony	0.025	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Antimony	0.025	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	Antimony	0.02	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	Antimony	0.02	NV	N	S
4011	01/05/93	GW930105-7	U	Antimony	0.02	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297	U	Antimony	0.02	NV	N	R
4096	08/18/92	4096-08/18/92-B-N	U	Antimony	0.0422	NV	N	R
4096	02/02/93	GW930202-10	U	Antimony	0.05	NV	N	R
2043	11/14/89	66683	U	Arsenic	0.0025	NV	N	S
2043	02/20/90	EMGW_SYSGEN_522	U	Arsenic	0.0025	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Arsenic	0.0025	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	U	Arsenic	0.0025	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	U	Arsenic	0.0025	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	Arsenic	0.0025	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	Arsenic	0.0025	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	Arsenic	0.005	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	Arsenic	0.005	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	Arsenic	0.005	NV	N	S
2043	01/18/93	GW930118-12	U	Arsenic	0.005	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559	U	Arsenic	0.005	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560	U	Arsenic	0.005	NV	N	S
2050	08/10/92	2050-08/10/92-B-N	B	Arsenic	0.005	NV	N	S
2050	02/10/93	GW930210-8	B	Arsenic	0.0069	NV	N	S
2066	08/07/88	3443		Arsenic	0.03	R	N	S

Table D-19 (Continued)
Rejected/Nonvalidated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2066	11/06/89	66687		Arsenic	0.023	NV	N	S
2066	02/22/90	EMGW_SYSGEN_628		Arsenic	0.019	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629		Arsenic	0.024	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630		Arsenic	0.027	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631		Arsenic	0.027	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633		Arsenic	0.023	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D		Arsenic	0.023	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635		Arsenic	0.022	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636		Arsenic	0.0213	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637		Arsenic	0.0233	NV	N	S
2066	01/06/93	GW930106-7		Arsenic	0.0249	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703	U	Arsenic	0.005	NV	N	R
2096	08/18/92	2096-08/18/92-B-N	B	Arsenic	0.0011	NV	N	R
2096	11/04/92	2096-11/04/92-A-N	U	Arsenic	0.005	NV	N	R
2096	02/02/93	GW930202-8	U	Arsenic	0.0011	NV	N	R
2098	11/05/91	EMGW_SYSGEN_715		Arsenic	0.0057	NV	N	D
2098	02/04/93	GW930204-7	B	Arsenic	0.0021	NV	N	D
2104	11/07/91	EMGW_SYSGEN_722	U	Arsenic	0.005	NV	N	R
2104	08/10/92	2104-08/10/92-B-N	U	Arsenic	0.0011	NV	N	R
2104	02/02/93	GW930202-12	U	Arsenic	0.0011	NV	N	R
2728	02/10/93	GW930210-5		Arsenic	0.01	NV	N	S
3024	11/30/89	66735	U	Arsenic	0.0025	NV	N	S
3024	02/18/90	EMGW_SYSGEN_992	U	Arsenic	0.0025	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993	U	Arsenic	0.0025	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	U	Arsenic	0.0025	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	U	Arsenic	0.0025	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	Arsenic	0.0025	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	Arsenic	0.0025	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	Arsenic	0.005	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	Arsenic	0.005	NV	N	S
3024	01/13/93	GW930113-8	U	Arsenic	0.005	NV	N	S
3043	11/14/89	66685		Arsenic	0.01	NV	N	S
3043	02/20/90	EMGW_SYSGEN_1018		Arsenic	0.011	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019		Arsenic	0.012	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020		Arsenic	0.012	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021		Arsenic	0.012	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	Arsenic	0.0025	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024		Arsenic	0.0098	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025		Arsenic	0.0065	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8		Arsenic	0.0111	NV	N	S
3043	01/18/93	GW930118-14		Arsenic	0.0123	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138	U	Arsenic	0.005	NV	N	R
3096	08/18/92	3096-08/18/92-B-N	UW	Arsenic	0.0011	NV	N	R
3096	11/04/92	3096-11/04/92-A-N	U	Arsenic	0.005	NV	N	R
3096	02/02/93	GW930202-9	U	Arsenic	0.0011	NV	N	R
3098	11/05/91	EMGW_SYSGEN_1149	U	Arsenic	0.005	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D	U	Arsenic	0.005	NV	D	D
3098	08/13/92	3098-08/13/92-A-D1-5	U	Arsenic	0.001	NV	D	D
3098	02/04/93	GW930204-10	B	Arsenic	0.0013	NV	N	D
3098	02/04/93	GW930204-12	U	Arsenic	0.002	NV	D	D

Table D-19 (Continued)
Rejected/Nonvalidated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well	Sample		Lab		Validated		QA	
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type	Area
4011	11/14/90	EMGW_SYSGEN_1244	U	Arsenic	0.0025	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Arsenic	0.0025	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	Arsenic	0.005	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	Arsenic	0.005	NV	N	S
4011	01/05/93	GW930105-7	U	Arsenic	0.005	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297	U	Arsenic	0.005	NV	N	R
4096	08/18/92	4096-08/18/92-B-N	UW	Arsenic	0.0011	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5	U	Arsenic	0.001	NV	D	R
4096	11/04/92	4096-11/04/92-A-N	U	Arsenic	0.005	NV	N	R
4096	11/04/92	4096-11/04/92-A-D1-7	U	Arsenic	0.01	NV	D	R
4096	02/02/93	GW930202-10	U	Arsenic	0.0011	NV	N	R
2043	04/13/88	3091		Barium	0.195	R	N	S
2043	11/14/89	66683		Barium	0.283	NV	N	S
2043	02/20/90	EMGW_SYSGEN_522		Barium	0.287	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523		Barium	0.227	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524		Barium	0.27	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	U	Barium	0.2	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526		Barium	0.312	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D		Barium	0.316	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528		Barium	0.26	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	Barium	0.2	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8		Barium	0.25	NV	N	S
2043	01/18/93	GW930118-12		Barium	0.28	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559		Barium	0.59	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560		Barium	0.6	NV	N	S
2050	08/10/92	2050-08/10/92-B-N		Barium	0.589	NV	N	S
2050	02/10/93	GW930210-8		Barium	0.703	NV	N	S
2066	08/07/88	3443		Barium	0.8	R	N	S
2066	11/06/89	66687		Barium	0.844	NV	N	S
2066	02/22/90	EMGW_SYSGEN_628		Barium	0.788	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629		Barium	0.668	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630		Barium	0.774	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631		Barium	0.758	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633		Barium	0.79	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D		Barium	0.768	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635		Barium	0.82	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636		Barium	0.75	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637		Barium	0.86	NV	N	S
2066	01/06/93	GW930106-7		Barium	0.8	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703	U	Barium	0.2	NV	N	R
2096	08/18/92	2096-08/18/92-B-N	B	Barium	0.0821	NV	N	R
2096	11/04/92	2096-11/04/92-A-N		Barium	0.07	NV	N	R
2096	02/02/93	GW930202-8	B	Barium	0.0513	NV	N	R
2098	11/05/91	EMGW_SYSGEN_715	U	Barium	0.2	NV	N	D
2098	02/04/93	GW930204-7	B	Barium	0.0412	NV	N	D
2104	11/07/91	EMGW_SYSGEN_722	U	Barium	0.2	NV	N	R
2104	08/10/92	2104-08/10/92-B-N	B	Barium	0.0552	NV	N	R
2104	02/02/93	GW930202-12	B	Barium	0.0574	NV	N	R
2728	02/10/93	GW930210-5	B	Barium	0.157	NV	N	S
3024	11/30/89	66735	U	Barium	0.2	NV	N	S

Table D-19 (Continued)
Rejected/Nonvalidated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well	Sample		Lab		Validated		QA	
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type	Area
3024	02/18/90	EMGW_SYSGEN_992	U	Barium	0.2	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993	U	Barium	0.2	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	U	Barium	0.2	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	U	Barium	0.2	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	Barium	0.2	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	Barium	0.2	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	Barium	0.2	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	Barium	0.2	NV	N	S
3024	01/13/93	GW930113-8		Barium	0.22	NV	N	S
3043	04/13/88	3090		Barium	0.214	R	N	S
3043	11/14/89	66685		Barium	0.299	NV	N	S
3043	02/20/90	EMGW_SYSGEN_1018		Barium	0.333	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019		Barium	0.273	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020		Barium	0.313	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021		Barium	0.287	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022		Barium	0.379	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024		Barium	0.33	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025		Barium	0.22	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8		Barium	0.28	NV	N	S
3043	01/18/93	GW930118-14		Barium	0.31	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138	U	Barium	0.2	NV	N	R
3096	08/18/92	3096-08/18/92-B-N	B	Barium	0.0365	NV	N	R
3096	11/04/92	3096-11/04/92-A-N	U	Barium	0.05	NV	N	R
3096	02/02/93	GW930202-9	B	Barium	0.0385	NV	N	R
3098	11/05/91	EMGW_SYSGEN_1149	U	Barium	0.2	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D	U	Barium	0.2	NV	D	D
3098	08/13/92	3098-08/13/92-A-D1-5	B	Barium	0.0519	NV	D	D
3098	02/04/93	GW930204-10	B	Barium	0.05	NV	N	D
3098	02/04/93	GW930204-12	B	Barium	0.0558	NV	D	D
4011	11/14/90	EMGW_SYSGEN_1244	U	Barium	0.2	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245		Barium	0.464	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247		Barium	0.45	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248		Barium	0.31	NV	N	S
4011	01/05/93	GW930105-7		Barium	0.44	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297	U	Barium	0.2	NV	N	R
4096	08/18/92	4096-08/18/92-B-N	B	Barium	0.0117	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5	U	Barium	0.017	NV	D	R
4096	11/04/92	4096-11/04/92-A-N	U	Barium	0.05	NV	N	R
4096	11/04/92	4096-11/04/92-A-D1-7	U	Barium	0.02	NV	D	R
4096	02/02/93	GW930202-10	B	Barium	0.0223	NV	N	R
2043	11/14/89	66683	U	Beryllium	0.01	NV	N	S
2043	02/20/90	EMGW_SYSGEN_522	U	Beryllium	0.01	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Beryllium	0.01	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	U	Beryllium	0.01	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	U	Beryllium	0.01	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	Beryllium	0.01	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	Beryllium	0.01	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	Beryllium	0.05	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	Beryllium	0.005	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	Beryllium	0.005	NV	N	S

Table D-19 (Continued)
Rejected/Nonvalidated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2043	01/18/93	GW930118-12	U	Beryllium	0.005	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559	U	Beryllium	0.005	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560	U	Beryllium	0.005	NV	N	S
2050	08/10/92	2050-08/10/92-B-N	U	Beryllium	0.0011	NV	N	S
2050	02/10/93	GW930210-8	U	Beryllium	0.001	NV	N	S
2066	11/06/89	66687	U	Beryllium	0.01	NV	N	S
2066	02/22/90	EMGW_SYSGEN_628	U	Beryllium	0.01	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Beryllium	0.01	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	Beryllium	0.01	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	Beryllium	0.01	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	Beryllium	0.01	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	Beryllium	0.01	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	Beryllium	0.05	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	Beryllium	0.005	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	Beryllium	0.005	NV	N	S
2066	01/06/93	GW930106-7	U	Beryllium	0.005	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703	U	Beryllium	0.005	NV	N	R
2096	08/18/92	2096-08/18/92-B-N	U	Beryllium	0.0011	NV	N	R
2096	11/04/92	2096-11/04/92-A-N	U	Beryllium	0.005	NV	N	R
2096	02/02/93	GW930202-8	U	Beryllium	0.0011	NV	N	R
2098	11/05/91	EMGW_SYSGEN_715	U	Beryllium	0.005	NV	N	D
2098	02/04/93	GW930204-7	U	Beryllium	0.0011	NV	N	D
2104	11/07/91	EMGW_SYSGEN_722	U	Beryllium	0.005	NV	N	R
2104	08/10/92	2104-08/10/92-B-N	U	Beryllium	0.0011	NV	N	R
2104	02/02/93	GW930202-12	U	Beryllium	0.0011	NV	N	R
2728	02/10/93	GW930210-5	U	Beryllium	0.001	NV	N	S
3024	11/30/89	66735	U	Beryllium	0.01	NV	N	S
3024	02/18/90	EMGW_SYSGEN_992	U	Beryllium	0.01	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993	U	Beryllium	0.01	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	U	Beryllium	0.01	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	U	Beryllium	0.01	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	Beryllium	0.01	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	Beryllium	0.01	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	Beryllium	0.05	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	Beryllium	0.005	NV	N	S
3024	01/13/93	GW930113-8	U	Beryllium	0.005	NV	N	S
3043	11/14/89	66685	U	Beryllium	0.01	NV	N	S
3043	02/20/90	EMGW_SYSGEN_1018	U	Beryllium	0.01	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Beryllium	0.01	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	Beryllium	0.01	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	Beryllium	0.01	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	Beryllium	0.01	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	Beryllium	0.05	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	Beryllium	0.005	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	Beryllium	0.005	NV	N	S
3043	01/18/93	GW930118-14	U	Beryllium	0.005	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138	U	Beryllium	0.005	NV	N	R
3096	08/18/92	3096-08/18/92-B-N	U	Beryllium	0.0011	NV	N	R
3096	11/04/92	3096-11/04/92-A-N	U	Beryllium	0.005	NV	N	R
3096	02/02/93	GW930202-9	U	Beryllium	0.0011	NV	N	R

Table D-19 (Continued)
Rejected/Nonvalidated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well	Sample		Lab		Validated		QA	
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type	Area
3098	11/05/91	EMGW_SYSGEN_1149	U	Beryllium	0.005	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D	U	Beryllium	0.005	NV	D	D
3098	08/13/92	3098-08/13/92-A-D1-5	U	Beryllium	0.001	NV	D	D
3098	02/04/93	GW930204-10	U	Beryllium	0.0011	NV	N	D
3098	02/04/93	GW930204-12	U	Beryllium	0.001	NV	D	D
4011	11/14/90	EMGW_SYSGEN_1244	U	Beryllium	0.01	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Beryllium	0.01	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	Beryllium	0.05	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	Beryllium	0.005	NV	N	S
4011	01/05/93	GW930105-7	U	Beryllium	0.005	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297	U	Beryllium	0.005	NV	N	R
4096	08/18/92	4096-08/18/92-B-N	U	Beryllium	0.0011	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5	U	Beryllium	0.001	NV	D	R
4096	11/04/92	4096-11/04/92-A-N	U	Beryllium	0.005	NV	N	R
4096	11/04/92	4096-11/04/92-A-D1-7	U	Beryllium	0.005	NV	D	R
4096	02/02/93	GW930202-10	U	Beryllium	0.0011	NV	N	R
2043	05/17/90	EMGW_SYSGEN_523	U	Cadmium	0.001	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	U	Cadmium	0.001	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	U	Cadmium	0.001	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	Cadmium	0.001	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	Cadmium	0.001	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	Cadmium	0.001	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	Cadmium	0.001	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	Cadmium	0.01	NV	N	S
2043	01/18/93	GW930118-12	U	Cadmium	0.001	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559	U	Cadmium	0.001	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560	U	Cadmium	0.001	NV	N	S
2050	08/10/92	2050-08/10/92-B-N	U	Cadmium	0.0033	NV	N	S
2050	02/10/93	GW930210-8	U	Cadmium	0.002	NV	N	S
2066	08/07/88	3443	U	Cadmium	0.005	R	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Cadmium	0.001	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	Cadmium	0.001	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	Cadmium	0.001	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	Cadmium	0.001	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	Cadmium	0.001	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	Cadmium	0.001	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	Cadmium	0.001	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	Cadmium	0.001	NV	N	S
2066	01/06/93	GW930106-7	U	Cadmium	0.001	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703	U	Cadmium	0.001	NV	N	R
2096	08/18/92	2096-08/18/92-B-N	U	Cadmium	0.0033	NV	N	R
2096	11/04/92	2096-11/04/92-A-N		Cadmium	0.004	NV	N	R
2096	02/02/93	GW930202-8	B	Cadmium	0.0049	NV	N	R
2098	11/05/91	EMGW_SYSGEN_715	U	Cadmium	0.001	NV	N	D
2098	02/04/93	GW930204-7	U	Cadmium	0.0033	NV	N	D
2104	11/07/91	EMGW_SYSGEN_722	U	Cadmium	0.001	NV	N	R
2104	08/10/92	2104-08/10/92-B-N	U	Cadmium	0.0033	NV	N	R
2104	02/02/93	GW930202-12	U	Cadmium	0.0033	NV	N	R
2728	02/10/93	GW930210-5	U	Cadmium	0.002	NV	N	S
3024	08/08/90	EMGW_SYSGEN_994	U	Cadmium	0.001	NV	N	S

Table D-19 (Continued)
Rejected/Nonvalidated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
3024	11/13/90	EMGW_SYSGEN_995	U	Cadmium	0.001	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	Cadmium	0.001	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	Cadmium	0.001	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	Cadmium	0.001	NV	N	S
3024	01/13/93	GW930113-8	U	Cadmium	0.001	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Cadmium	0.001	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	Cadmium	0.001	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	Cadmium	0.001	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	Cadmium	0.001	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	Cadmium	0.001	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	Cadmium	0.001	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	Cadmium	0.001	NV	N	S
3043	01/18/93	GW930118-14	U	Cadmium	0.001	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138	U	Cadmium	0.001	NV	N	R
3096	08/18/92	3096-08/18/92-B-N	U	Cadmium	0.0033	NV	N	R
3096	11/04/92	3096-11/04/92-A-N	U	Cadmium	0.001	NV	N	R
3096	02/02/93	GW930202-9	B	Cadmium	0.0033	NV	N	R
3098	11/05/91	EMGW_SYSGEN_1149	U	Cadmium	0.001	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D	U	Cadmium	0.001	NV	D	D
3098	08/13/92	3098-08/13/92-A-D1-5	U	Cadmium	0.002	NV	D	D
3098	02/04/93	GW930204-10	U	Cadmium	0.0033	NV	N	D
3098	02/04/93	GW930204-12	U	Cadmium	0.002	NV	D	D
4011	11/14/90	EMGW_SYSGEN_1244	U	Cadmium	0.001	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Cadmium	0.001	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	Cadmium	0.001	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	Cadmium	0.001	NV	N	S
4011	01/05/93	GW930105-7	U	Cadmium	0.001	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297	U	Cadmium	0.001	NV	N	R
4096	08/18/92	4096-08/18/92-B-N	U	Cadmium	0.0033	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5	UN	Cadmium	0.002	NV	D	R
4096	11/04/92	4096-11/04/92-A-N	U	Cadmium	0.001	NV	N	R
4096	11/04/92	4096-11/04/92-A-D1-7	U	Cadmium	0.005	NV	D	R
4096	02/02/93	GW930202-10	B	Cadmium	0.0049	NV	N	R
2043	11/14/89	66683		Calcium	96.7	NV	N	S
2043	02/20/90	EMGW_SYSGEN_522		Calcium	98.3	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523		Calcium	99.7	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524		Calcium	44.4	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525		Calcium	79.6	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526		Calcium	84.3	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D		Calcium	84.5	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528		Calcium	117	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529		Calcium	130	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8		Calcium	120	NV	N	S
2043	01/18/93	GW930118-12		Calcium	118	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559		Calcium	77	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560		Calcium	63.3	NV	N	S
2050	08/10/92	2050-08/10/92-B-N		Calcium	84.7	NV	N	S
2050	02/10/93	GW930210-8		Calcium	106	NV	N	S
2066	08/07/88	3443		Calcium	73	R	N	S
2066	11/06/89	66687		Calcium	70.6	NV	N	S

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Table D-19 (Continued)
Rejected/Nonvalidated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2066	02/22/90	EMGW_SYSGEN_628		Calcium	70.6	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629		Calcium	81.1	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630		Calcium	25.2	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631		Calcium	56.7	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633		Calcium	54.4	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D		Calcium	58.3	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635		Calcium	66	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636		Calcium	69	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637		Calcium	68.9	NV	N	S
2066	01/06/93	GW930106-7		Calcium	76	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703		Calcium	149	NV	N	R
2096	08/18/92	2096-08/18/92-B-N		Calcium	169	NV	N	R
2096	11/04/92	2096-11/04/92-A-N		Calcium	150	NV	N	R
2096	02/02/93	GW930202-8		Calcium	112	NV	N	R
2098	11/05/91	EMGW_SYSGEN_715		Calcium	88.9	NV	N	D
2098	02/04/93	GW930204-7		Calcium	108	NV	N	D
2104	11/07/91	EMGW_SYSGEN_722		Calcium	93	NV	N	R
2104	08/10/92	2104-08/10/92-B-N		Calcium	110	NV	N	R
2104	02/02/93	GW930202-12		Calcium	117	NV	N	R
2728	02/10/93	GW930210-5		Calcium	149	NV	N	S
3024	11/30/89	66735		Calcium	119	NV	N	S
3024	02/18/90	EMGW_SYSGEN_992		Calcium	124	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993		Calcium	117	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D		Calcium	118	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994		Calcium	97.6	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995		Calcium	32	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996		Calcium	46.6	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998		Calcium	40	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999		Calcium	42	NV	N	S
3024	01/13/93	GW930113-8		Calcium	155	NV	N	S
3043	11/14/89	66685		Calcium	79.4	NV	N	S
3043	02/20/90	EMGW_SYSGEN_1018		Calcium	78.1	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019		Calcium	87.9	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020		Calcium	36.4	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021		Calcium	66	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022		Calcium	71.1	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024		Calcium	59	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025		Calcium	75	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8		Calcium	81.4	NV	N	S
3043	01/18/93	GW930118-14		Calcium	88	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138		Calcium	83.4	NV	N	R
3096	08/18/92	3096-08/18/92-B-N		Calcium	84.5	NV	N	R
3096	11/04/92	3096-11/04/92-A-N		Calcium	88	NV	N	R
3096	02/02/93	GW930202-9		Calcium	85.7	NV	N	R
3098	11/05/91	EMGW_SYSGEN_1149		Calcium	89.9	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D		Calcium	80	NV	D	D
3098	08/13/92	3098-08/13/92-A-D1-5		Calcium	119	NV	D	D
3098	02/04/93	GW930204-10		Calcium	109	NV	N	D
3098	02/04/93	GW930204-12		Calcium	128	NV	D	D
4011	11/14/90	EMGW_SYSGEN_1244		Calcium	29.5	NV	N	S

Table D-19 (Continued)
Rejected/Nonvalidated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
4011	02/21/91	EMGW_SYSGEN_1245		Calcium	87.3	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247		Calcium	79	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248		Calcium	100	NV	N	S
4011	01/05/93	GW930105-7		Calcium	121	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297		Calcium	79.7	NV	N	R
4096	08/18/92	4096-08/18/92-B-N		Calcium	61.1	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5		Calcium	67.5	NV	D	R
4096	11/04/92	4096-11/04/92-A-N		Calcium	85	NV	N	R
4096	11/04/92	4096-11/04/92-A-D1-7		Calcium	97	NV	D	R
4096	02/02/93	GW930202-10		Calcium	81.7	NV	N	R
2043	11/14/89	66683	U	Chromium	0.005	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8		Chromium	0.0033	NV	N	S
2043	01/18/93	GW930118-12	U	Chromium	0.002	NV	N	S
2050	02/10/93	GW930210-8	U	Chromium	0.005	NV	N	S
2066	08/07/88	3443	U	Chromium	0.01	R	N	S
2066	11/06/89	66687	U	Chromium	0.005	NV	N	S
2066	01/06/93	GW930106-7	U	Chromium	0.002	NV	N	S
2096	08/18/92	2096-08/18/92-B-N	U	Chromium	0.0044	NV	N	R
2096	02/02/93	GW930202-8	U	Chromium	0.0044	NV	N	R
2098	02/04/93	GW930204-7	B	Chromium	0.005	NV	N	D
2104	02/02/93	GW930202-12	U	Chromium	0.0044	NV	N	R
2728	02/10/93	GW930210-5	U	Chromium	0.005	NV	N	S
3024	11/30/89	66735	U	Chromium	0.005	NV	N	S
3024	01/13/93	GW930113-8	U	Chromium	0.002	NV	N	S
3043	11/14/89	66685	U	Chromium	0.005	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	Chromium	0.002	NV	N	S
3043	01/18/93	GW930118-14	U	Chromium	0.002	NV	N	S
3096	08/18/92	3096-08/18/92-B-N	U	Chromium	0.0044	NV	N	R
3096	02/02/93	GW930202-9	U	Chromium	0.0044	NV	N	R
3098	08/13/92	3098-08/13/92-A-D1-5	U	Chromium	0.005	NV	D	D
3098	02/04/93	GW930204-10	U	Chromium	0.0044	NV	N	D
3098	02/04/93	GW930204-12	U	Chromium	0.005	NV	D	D
4011	01/05/93	GW930105-7	U	Chromium	0.002	NV	N	S
4096	08/18/92	4096-08/18/92-B-N	B	Chromium	0.0049	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5		Chromium	0.01	NV	D	R
4096	02/02/93	GW930202-10	U	Chromium	0.0044	NV	N	R
2050	08/10/92	2050-08/10/92-B-N	U	Chromium, Total (Dissd.)	0.0044	NV	N	S
2096	11/04/92	2096-11/04/92-A-N	U	Chromium, Total (Dissd.)	0.01	NV	N	R
2104	08/10/92	2104-08/10/92-B-N	B	Chromium, Total (Dissd.)	0.0074	NV	N	R
3096	11/04/92	3096-11/04/92-A-N	U	Chromium, Total (Dissd.)	0.01	NV	N	R
4096	11/04/92	4096-11/04/92-A-N	U	Chromium, Total (Dissd.)	0.01	NV	N	R
4096	11/04/92	4096-11/04/92-A-D1-7	U	Chromium, Total (Dissd.)	0.01	NV	D	R
2043	11/14/89	66683	U	Cobalt	0.025	NV	N	S
2043	02/20/90	EMGW_SYSGEN_522	U	Cobalt	0.025	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Cobalt	0.025	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	U	Cobalt	0.025	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	U	Cobalt	0.025	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	Cobalt	0.025	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	Cobalt	0.025	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	Cobalt	0.005	NV	N	S

Table D-19 (Continued)
Rejected/Nonvalidated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well	Sample		Lab		Validated		QA	
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type	Area
2043	10/01/91	EMGW_SYSGEN_529	U	Cobalt	0.005	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	Cobalt	0.005	NV	N	S
2043	01/18/93	GW930118-12	U	Cobalt	0.005	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559	U	Cobalt	0.005	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560	U	Cobalt	0.005	NV	N	S
2050	08/10/92	2050-08/10/92-B-N	U	Cobalt	0.0078	NV	N	S
2050	02/10/93	GW930210-8	U	Cobalt	0.004	NV	N	S
2066	11/06/89	66687	U	Cobalt	0.025	NV	N	S
2066	02/22/90	EMGW_SYSGEN_628	U	Cobalt	0.025	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Cobalt	0.025	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	Cobalt	0.025	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	Cobalt	0.025	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	Cobalt	0.025	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	Cobalt	0.025	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	Cobalt	0.005	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	Cobalt	0.005	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	Cobalt	0.005	NV	N	S
2066	01/06/93	GW930106-7	U	Cobalt	0.005	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703	U	Cobalt	0.005	NV	N	R
2096	08/18/92	2096-08/18/92-B-N	U	Cobalt	0.0078	NV	N	R
2096	11/04/92	2096-11/04/92-A-N	U	Cobalt	0.05	NV	N	R
2096	02/02/93	GW930202-8	U	Cobalt	0.0067	NV	N	R
2098	11/05/91	EMGW_SYSGEN_715	U	Cobalt	0.005	NV	N	D
2098	02/04/93	GW930204-7	U	Cobalt	0.0067	NV	N	D
2104	11/07/91	EMGW_SYSGEN_722	U	Cobalt	0.005	NV	N	R
2104	08/10/92	2104-08/10/92-B-N	U	Cobalt	0.0078	NV	N	R
2104	02/02/93	GW930202-12	U	Cobalt	0.0067	NV	N	R
2728	02/10/93	GW930210-5	U	Cobalt	0.004	NV	N	S
3024	11/30/89	66735	U	Cobalt	0.025	NV	N	S
3024	02/18/90	EMGW_SYSGEN_992	U	Cobalt	0.025	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993	U	Cobalt	0.025	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	U	Cobalt	0.025	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	U	Cobalt	0.025	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	Cobalt	0.025	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	Cobalt	0.025	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	Cobalt	0.005	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	Cobalt	0.005	NV	N	S
3024	01/13/93	GW930113-8	U	Cobalt	0.005	NV	N	S
3043	11/14/89	66685	U	Cobalt	0.025	NV	N	S
3043	02/20/90	EMGW_SYSGEN_1018	U	Cobalt	0.025	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Cobalt	0.025	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	Cobalt	0.025	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	Cobalt	0.025	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	Cobalt	0.025	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	Cobalt	0.005	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	Cobalt	0.005	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	Cobalt	0.005	NV	N	S
3043	01/18/93	GW930118-14	U	Cobalt	0.005	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138	U	Cobalt	0.005	NV	N	R
3096	08/18/92	3096-08/18/92-B-N	U	Cobalt	0.0078	NV	N	R

Table D-19 (Continued)
Rejected/Nonvalidated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
3096	11/04/92	3096-11/04/92-A-N	U	Cobalt	0.05	NV	N	R
3096	02/02/93	GW930202-9	U	Cobalt	0.0067	NV	N	R
3098	11/05/91	EMGW_SYSGEN_1149	U	Cobalt	0.005	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D	U	Cobalt	0.005	NV	D	D
3098	08/13/92	3098-08/13/92-A-D1-5	U	Cobalt	0.004	NV	D	D
3098	02/04/93	GW930204-10	U	Cobalt	0.0067	NV	N	D
3098	02/04/93	GW930204-12	U	Cobalt	0.004	NV	D	D
4011	11/14/90	EMGW_SYSGEN_1244	U	Cobalt	0.025	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Cobalt	0.025	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	Cobalt	0.005	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	Cobalt	0.005	NV	N	S
4011	01/05/93	GW930105-7	U	Cobalt	0.005	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297	U	Cobalt	0.005	NV	N	R
4096	08/18/92	4096-08/18/92-B-N	U	Cobalt	0.0078	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5	U	Cobalt	0.004	NV	D	R
4096	11/04/92	4096-11/04/92-A-N	U	Cobalt	0.05	NV	N	R
4096	11/04/92	4096-11/04/92-A-D1-7	U	Cobalt	0.05	NV	D	R
4096	02/02/93	GW930202-10	U	Cobalt	0.0067	NV	N	R
2043	11/14/89	66683	U	Copper	0.025	NV	N	S
2043	02/20/90	EMGW_SYSGEN_522	U	Copper	0.025	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Copper	0.025	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	U	Copper	0.025	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	U	Copper	0.025	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	Copper	0.025	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	Copper	0.025	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	Copper	0.02	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	Copper	0.02	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	Copper	0.02	NV	N	S
2043	01/18/93	GW930118-12	U	Copper	0.02	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559		Copper	0.024	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560	U	Copper	0.02	NV	N	S
2050	08/10/92	2050-08/10/92-B-N	B	Copper	0.0133	NV	N	S
2050	02/10/93	GW930210-8	U	Copper	0.002	NV	N	S
2066	08/07/88	3443	U	Copper	0.03	R	N	S
2066	11/06/89	66687	U	Copper	0.025	NV	N	S
2066	02/22/90	EMGW_SYSGEN_628	U	Copper	0.025	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Copper	0.025	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	Copper	0.025	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	Copper	0.025	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	Copper	0.025	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	Copper	0.025	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	Copper	0.02	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	Copper	0.02	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	Copper	0.02	NV	N	S
2066	01/06/93	GW930106-7	U	Copper	0.02	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703	U	Copper	0.02	NV	N	R
2096	08/18/92	2096-08/18/92-B-N	U	Copper	0.0056	NV	N	R
2096	11/04/92	2096-11/04/92-A-N	U	Copper	0.02	NV	N	R
2096	02/02/93	GW930202-8		Copper	0.0288	NV	N	R
2098	11/05/91	EMGW_SYSGEN_715	U	Copper	0.02	NV	N	D

Table D-19 (Continued)
Rejected/Nonvalidated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well	Sample		Lab		Validated		QA	
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type	Area
2098	02/04/93	GW930204-7	U	Copper	0.0044	NV	N	D
2104	11/07/91	EMGW_SYSGEN_722	U	Copper	0.02	NV	N	R
2104	08/10/92	2104-08/10/92-B-N	B	Copper	0.0133	NV	N	R
2104	02/02/93	GW930202-12	B	Copper	0.02	NV	N	R
2728	02/10/93	GW930210-5	U	Copper	0.002	NV	N	S
3024	11/30/89	66735	U	Copper	0.025	NV	N	S
3024	02/18/90	EMGW_SYSGEN_992	U	Copper	0.025	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993	U	Copper	0.025	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	U	Copper	0.025	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	U	Copper	0.025	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	Copper	0.025	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	Copper	0.025	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	Copper	0.02	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	Copper	0.02	NV	N	S
3024	01/13/93	GW930113-8	U	Copper	0.02	NV	N	S
3043	11/14/89	66685	U	Copper	0.025	NV	N	S
3043	02/20/90	EMGW_SYSGEN_1018	U	Copper	0.025	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Copper	0.025	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	Copper	0.025	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	Copper	0.025	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	Copper	0.025	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	Copper	0.02	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	Copper	0.02	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	Copper	0.02	NV	N	S
3043	01/18/93	GW930118-14	U	Copper	0.02	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138	U	Copper	0.02	NV	N	R
3096	08/18/92	3096-08/18/92-B-N	B	Copper	0.006	NV	N	R
3096	11/04/92	3096-11/04/92-A-N	U	Copper	0.02	NV	N	R
3096	02/02/93	GW930202-9	B	Copper	0.0238	NV	N	R
3098	11/05/91	EMGW_SYSGEN_1149	U	Copper	0.02	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D	U	Copper	0.02	NV	D	D
3098	08/13/92	3098-08/13/92-A-D1-5	B	Copper	0.003	NV	D	D
3098	02/04/93	GW930204-10	B	Copper	0.0079	NV	N	D
3098	02/04/93	GW930204-12	U	Copper	0.002	NV	D	D
4011	11/14/90	EMGW_SYSGEN_1244	U	Copper	0.025	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Copper	0.025	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	Copper	0.02	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	Copper	0.02	NV	N	S
4011	01/05/93	GW930105-7	U	Copper	0.02	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297	U	Copper	0.02	NV	N	R
4096	08/18/92	4096-08/18/92-B-N	B	Copper	0.009	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5	B	Copper	0.0024	NV	D	R
4096	11/04/92	4096-11/04/92-A-N	U	Copper	0.02	NV	N	R
4096	11/04/92	4096-11/04/92-A-D1-7	U	Copper	0.025	NV	D	R
4096	02/02/93	GW930202-10	B	Copper	0.02	NV	N	R
4011	04/08/93	GW930408-3	U	Cyanide	0.00002	NV	N	S
4011	04/08/93	GW930408-2	U	Cyanide	0.00002	NV	D	S
2043	11/14/89	66683		Iron	0.548	NV	N	S
2043	02/20/90	EMGW_SYSGEN_522		Iron	0.451	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523		Iron	0.055	NV	N	S

Table D-19 (Continued)
Rejected/Nonvalidated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2043	08/06/90	EMGW_SYSGEN_524		Iron	0.301	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525		Iron	0.607	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526		Iron	0.114	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D		Iron	0.099	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528		Iron	0.63	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529		Iron	1	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8		Iron	1.38	NV	N	S
2043	01/18/93	GW930118-12		Iron	1.3	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559		Iron	2.7	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560		Iron	3.01	NV	N	S
2050	08/10/92	2050-08/10/92-B-N		Iron	1.37	NV	N	S
2050	02/10/93	GW930210-8		Iron	4.85	NV	N	S
2066	08/07/88	3443		Iron	1.7	R	N	S
2066	11/06/89	66687		Iron	1.61	NV	N	S
2066	02/22/90	EMGW_SYSGEN_628		Iron	0.38	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629		Iron	0.729	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630		Iron	1.29	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631		Iron	1.35	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633		Iron	1.25	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D		Iron	1.06	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635		Iron	1.79	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636		Iron	1.4	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637		Iron	0.46	NV	N	S
2066	01/06/93	GW930106-7		Iron	1.84	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703		Iron	3.42	NV	N	R
2096	08/18/92	2096-08/18/92-B-N		Iron	4.62	NV	N	R
2096	11/04/92	2096-11/04/92-A-N		Iron	4.4	NV	N	R
2096	02/02/93	GW930202-8		Iron	3.09	NV	N	R
2098	11/05/91	EMGW_SYSGEN_715	U	Iron	0.1	NV	N	D
2098	02/04/93	GW930204-7	B	Iron	0.0303	NV	N	D
2104	11/07/91	EMGW_SYSGEN_722		Iron	2.75	NV	N	R
2104	08/10/92	2104-08/10/92-B-N		Iron	2.76	NV	N	R
2104	02/02/93	GW930202-12		Iron	2.87	NV	N	R
2728	02/10/93	GW930210-5		Iron	1.08	NV	N	S
3024	11/30/89	66735		Iron	3.88	NV	N	S
3024	02/18/90	EMGW_SYSGEN_992		Iron	3.46	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993		Iron	2.89	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D		Iron	2.82	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994		Iron	3.52	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995		Iron	0.06	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	Iron	0.05	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	Iron	0.1	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	Iron	0.1	NV	N	S
3024	01/13/93	GW930113-8		Iron	5.47	NV	N	S
3043	11/14/89	66685		Iron	1.73	NV	N	S
3043	02/20/90	EMGW_SYSGEN_1018		Iron	2.22	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019		Iron	3.04	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020		Iron	3.62	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021		Iron	2.76	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022		Iron	2.56	NV	N	S

Table D-19 (Continued)
Rejected/Nonvalidated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
3043	07/16/91	EMGW_SYSGEN_1024		Iron	3.72	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025		Iron	0.8	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8		Iron	3.92	NV	N	S
3043	01/18/93	GW930118-14		Iron	4.15	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138		Iron	0.4	NV	N	R
3096	08/18/92	3096-08/18/92-B-N		Iron	0.364	NV	N	R
3096	11/04/92	3096-11/04/92-A-N		Iron	0.4	NV	N	R
3096	02/02/93	GW930202-9		Iron	0.375	NV	N	R
3098	11/05/91	EMGW_SYSGEN_1149	U	Iron	0.1	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D	U	Iron	0.1	NV	D	D
3098	02/04/93	GW930204-10	U	Iron	0.0167	NV	N	D
3098	02/04/93	GW930204-12	U	Iron	0.005	NV	D	D
4011	10/05/90	4345		Iron	3.67	R	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Iron	0.05	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245		Iron	1.25	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247		Iron	1.12	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248		Iron	0.52	NV	N	S
4011	01/05/93	GW930105-7		Iron	1.48	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297	U	Iron	0.1	NV	N	R
4096	08/18/92	4096-08/18/92-B-N	U	Iron	0.0178	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5	U	Iron	0.005	NV	D	R
4096	11/04/92	4096-11/04/92-A-N	U	Iron	0.1	NV	N	R
4096	11/04/92	4096-11/04/92-A-D1-7	U	Iron	0.1	NV	D	R
4096	02/02/93	GW930202-10		Iron	0.295	NV	N	R
2043	11/14/89	66683	U	Lead	0.005	NV	N	S
2043	02/20/90	EMGW_SYSGEN_522	U	Lead	0.005	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Lead	0.005	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	U	Lead	0.005	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	U	Lead	0.005	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	Lead	0.005	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	Lead	0.005	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	Lead	0.005	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	Lead	0.003	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	Lead	0.003	NV	N	S
2043	01/18/93	GW930118-12	U	Lead	0.003	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559	U	Lead	0.003	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560	U	Lead	0.003	NV	N	S
2050	08/10/92	2050-08/10/92-B-N	B	Lead	0.0016	NV	N	S
2050	02/10/93	GW930210-8	U	Lead	0.002	NV	N	S
2066	08/07/88	3443	U	Lead	0.005	R	N	S
2066	11/10/88	3710		Lead	0.015	R	N	S
2066	11/06/89	66687	U	Lead	0.005	NV	N	S
2066	02/22/90	EMGW_SYSGEN_628	U	Lead	0.005	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Lead	0.005	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	Lead	0.005	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	Lead	0.005	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	Lead	0.005	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	Lead	0.005	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	Lead	0.005	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	Lead	0.003	NV	N	S

Table D-19 (Continued)
Rejected/Nonvalidated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2066	01/02/92	EMGW_SYSGEN_637	U	Lead	0.003	NV	N	S
2066	01/06/93	GW930106-7	U	Lead	0.003	NV	N	S
2096	09/12/88	3586		Lead	0.135	R	N	R
2096	04/30/89	4081	U	Lead	0.0052	R	N	R
2096	11/12/91	EMGW_SYSGEN_703	U	Lead	0.003	NV	N	R
2096	08/18/92	2096-08/18/92-B-N	UW	Lead	0.0011	NV	N	R
2096	11/04/92	2096-11/04/92-A-N	U	Lead	0.005	NV	N	R
2096	02/02/93	GW930202-8	U	Lead	0.0011	NV	N	R
2098	09/22/88	3591		Lead	0.066	R	N	D
2098	11/05/91	EMGW_SYSGEN_715	U	Lead	0.003	NV	N	D
2098	02/04/93	GW930204-7	U	Lead	0.0011	NV	N	D
2104	11/07/91	EMGW_SYSGEN_722	U	Lead	0.003	NV	N	R
2104	08/10/92	2104-08/10/92-B-N	U	Lead	0.0011	NV	N	R
2104	02/02/93	GW930202-12	U	Lead	0.0011	NV	N	R
2728	02/10/93	GW930210-5	U	Lead	0.002	NV	N	S
3024	11/30/89	66735	U	Lead	0.005	NV	N	S
3024	02/18/90	EMGW_SYSGEN_992	U	Lead	0.005	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993	U	Lead	0.005	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	U	Lead	0.005	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	U	Lead	0.005	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	Lead	0.005	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	Lead	0.005	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	Lead	0.005	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	Lead	0.003	NV	N	S
3024	01/13/93	GW930113-8	U	Lead	0.003	NV	N	S
3043	11/14/89	66685	U	Lead	0.005	NV	N	S
3043	02/20/90	EMGW_SYSGEN_1018	U	Lead	0.005	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Lead	0.005	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	Lead	0.005	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	Lead	0.005	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	Lead	0.005	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	Lead	0.005	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	Lead	0.003	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	Lead	0.003	NV	N	S
3043	01/18/93	GW930118-14	U	Lead	0.003	NV	N	S
3096	09/12/88	3585		Lead	0.098	R	N	R
3096	04/30/89	4082	U	Lead	0.0101	R	N	R
3096	11/12/91	EMGW_SYSGEN_1138	U	Lead	0.003	NV	N	R
3096	08/18/92	3096-08/18/92-B-N	U	Lead	0.0011	NV	N	R
3096	11/04/92	3096-11/04/92-A-N	U	Lead	0.005	NV	N	R
3096	02/02/93	GW930202-9	U	Lead	0.0011	NV	N	R
3098	11/05/91	EMGW_SYSGEN_1149	U	Lead	0.003	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D	U	Lead	0.003	NV	D	D
3098	08/13/92	3098-08/13/92-A-D1-5	U	Lead	0.003	NV	D	D
3098	02/04/93	GW930204-10	U	Lead	0.0011	NV	N	D
3098	02/04/93	GW930204-12	U	Lead	0.001	NV	D	D
4011	11/14/90	EMGW_SYSGEN_1244	U	Lead	0.005	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Lead	0.005	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	Lead	0.005	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	Lead	0.003	NV	N	S

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Table D-19 (Continued)
Rejected/Nonvalidated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well	Sample		Lab		Validated		QA	
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type	Area
4011	01/05/93	GW930105-7	U	Lead	0.003	NV	N	S
4096	09/12/88	3584		Lead	0.152	R	N	R
4096	04/30/89	4083	U	Lead	0.0171	R	N	R
4096	11/12/91	EMGW_SYSGEN_1297	U	Lead	0.003	NV	N	R
4096	08/18/92	4096-08/18/92-B-N	U	Lead	0.0011	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5	U	Lead	0.003	NV	D	R
4096	11/04/92	4096-11/04/92-A-N	U	Lead	0.005	NV	N	R
4096	11/04/92	4096-11/04/92-A-D1-7	U	Lead	0.003	NV	D	R
4096	02/02/93	GW930202-10	U	Lead	0.0011	NV	N	R
2043	11/14/89	66683		Magnesium	34.2	NV	N	S
2043	02/20/90	EMGW_SYSGEN_522		Magnesium	35.6	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523		Magnesium	25	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524		Magnesium	33.2	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525		Magnesium	15	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526		Magnesium	39	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D		Magnesium	39	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528		Magnesium	28	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529		Magnesium	43	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8		Magnesium	39.8	NV	N	S
2043	01/18/93	GW930118-12		Magnesium	33.5	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559		Magnesium	28	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560		Magnesium	27.1	NV	N	S
2050	08/10/92	2050-08/10/92-B-N		Magnesium	28.9	NV	N	S
2050	02/10/93	GW930210-8		Magnesium	35.1	NV	N	S
2066	08/07/88	3443		Magnesium	24	R	N	S
2066	11/06/89	66687		Magnesium	27.2	NV	N	S
2066	02/22/90	EMGW_SYSGEN_628		Magnesium	26.5	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629		Magnesium	1.9	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630		Magnesium	20.4	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631		Magnesium	18	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633		Magnesium	29.1	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D		Magnesium	29.2	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635		Magnesium	29	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636		Magnesium	27	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637		Magnesium	26.7	NV	N	S
2066	01/06/93	GW930106-7		Magnesium	29.9	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703		Magnesium	34.1	NV	N	R
2096	08/18/92	2096-08/18/92-B-N		Magnesium	35.1	NV	N	R
2096	11/04/92	2096-11/04/92-A-N		Magnesium	32	NV	N	R
2096	02/02/93	GW930202-8		Magnesium	26.3	NV	N	R
2098	11/05/91	EMGW_SYSGEN_715		Magnesium	26.5	NV	N	D
2098	02/04/93	GW930204-7		Magnesium	26.8	NV	N	D
2104	11/07/91	EMGW_SYSGEN_722		Magnesium	28.7	NV	N	R
2104	08/10/92	2104-08/10/92-B-N		Magnesium	28.1	NV	N	R
2104	02/02/93	GW930202-12		Magnesium	29.3	NV	N	R
2728	02/10/93	GW930210-5		Magnesium	38.6	NV	N	S
3024	11/30/89	66735		Magnesium	24.4	NV	N	S
3024	02/18/90	EMGW_SYSGEN_992		Magnesium	25.4	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993		Magnesium	24	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D		Magnesium	24.1	NV	D	S

Table D-19 (Continued)
Rejected/Nonvalidated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
3024	08/08/90	EMGW_SYSGEN_994		Magnesium	25.6	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995		Magnesium	11.6	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996		Magnesium	26.2	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998		Magnesium	22	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999		Magnesium	16	NV	N	S
3024	01/13/93	GW930113-8		Magnesium	34.8	NV	N	S
3043	11/14/89	66685		Magnesium	24.4	NV	N	S
3043	02/20/90	EMGW_SYSGEN_1018		Magnesium	24.4	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019		Magnesium	26.8	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020		Magnesium	26	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021		Magnesium	9	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022		Magnesium	29.3	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024		Magnesium	28	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025		Magnesium	24	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8		Magnesium	26.7	NV	N	S
3043	01/18/93	GW930118-14		Magnesium	22.8	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138		Magnesium	22.7	NV	N	R
3096	08/18/92	3096-08/18/92-B-N		Magnesium	22	NV	N	R
3096	11/04/92	3096-11/04/92-A-N		Magnesium	23	NV	N	R
3096	02/02/93	GW930202-9		Magnesium	21.9	NV	N	R
3098	11/05/91	EMGW_SYSGEN_1149		Magnesium	27.3	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D		Magnesium	27.2	NV	D	D
3098	08/13/92	3098-08/13/92-A-D1-5		Magnesium	33.5	NV	D	D
3098	02/04/93	GW930204-10		Magnesium	30.6	NV	N	D
3098	02/04/93	GW930204-12		Magnesium	36.1	NV	D	D
4011	10/05/90	4345		Magnesium	29.3	R	N	S
4011	11/14/90	EMGW_SYSGEN_1244		Magnesium	28.6	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245		Magnesium	27.8	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247		Magnesium	28	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248		Magnesium	28	NV	N	S
4011	01/05/93	GW930105-7		Magnesium	33.9	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297		Magnesium	21.1	NV	N	R
4096	08/18/92	4096-08/18/92-B-N		Magnesium	15.2	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5		Magnesium	16.5	NV	D	R
4096	11/04/92	4096-11/04/92-A-N		Magnesium	21	NV	N	R
4096	11/04/92	4096-11/04/92-A-D1-7		Magnesium	23	NV	D	R
4096	02/02/93	GW930202-10		Magnesium	19.4	NV	N	R
2043	11/14/89	66683		Manganese	0.205	NV	N	S
2043	02/20/90	EMGW_SYSGEN_522		Manganese	0.137	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523		Manganese	0.215	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524		Manganese	0.193	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525		Manganese	0.138	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526		Manganese	0.215	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D		Manganese	0.217	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528		Manganese	0.387	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529		Manganese	0.401	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8		Manganese	0.145	NV	N	S
2043	01/18/93	GW930118-12		Manganese	0.16	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559		Manganese	0.119	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560		Manganese	0.11	NV	N	S

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Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2050	08/10/92	2050-08/10/92-B-N		Manganese	0.11	NV	N	S
2050	02/10/93	GW930210-8		Manganese	0.157	NV	N	S
2066	08/07/88	3443		Manganese	0.06	R	N	S
2066	11/06/89	66687		Manganese	0.027	NV	N	S
2066	02/22/90	EMGW_SYSGEN_628		Manganese	0.03	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629		Manganese	0.035	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630		Manganese	0.033	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631		Manganese	0.024	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633		Manganese	0.025	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	Manganese	0.02	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635		Manganese	0.044	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	Manganese	0.027	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637		Manganese	0.026	NV	N	S
2066	01/06/93	GW930106-7		Manganese	0.021	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703		Manganese	0.561	NV	N	R
2096	08/18/92	2096-08/18/92-B-N		Manganese	0.776	NV	N	R
2096	11/04/92	2096-11/04/92-A-N		Manganese	0.6	NV	N	R
2096	02/02/93	GW930202-8		Manganese	0.306	NV	N	R
2098	11/05/91	EMGW_SYSGEN_715	U	Manganese	0.015	NV	N	D
2098	02/04/93	GW930204-7	B	Manganese	0.0027	NV	N	D
2104	11/07/91	EMGW_SYSGEN_722		Manganese	0.254	NV	N	R
2104	08/10/92	2104-08/10/92-B-N		Manganese	0.261	NV	N	R
2104	02/02/93	GW930202-12		Manganese	0.27	NV	N	R
2728	02/10/93	GW930210-5		Manganese	0.409	NV	N	S
3024	11/30/89	66735		Manganese	0.151	NV	N	S
3024	02/18/90	EMGW_SYSGEN_992		Manganese	0.184	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993		Manganese	0.203	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D		Manganese	0.204	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994		Manganese	0.161	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995		Manganese	0.027	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996		Manganese	0.022	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998		Manganese	0.015	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	Manganese	0.015	NV	N	S
3024	01/13/93	GW930113-8		Manganese	0.202	NV	N	S
3043	11/14/89	66685		Manganese	0.061	NV	N	S
3043	02/20/90	EMGW_SYSGEN_1018		Manganese	0.057	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019		Manganese	0.061	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020		Manganese	0.061	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021		Manganese	0.053	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022		Manganese	0.051	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024		Manganese	0.069	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025		Manganese	0.042	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8		Manganese	0.059	NV	N	S
3043	01/18/93	GW930118-14		Manganese	0.072	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138		Manganese	0.067	NV	N	R
3096	08/18/92	3096-08/18/92-B-N		Manganese	0.0541	NV	N	R
3096	11/04/92	3096-11/04/92-A-N		Manganese	0.05	NV	N	R
3096	02/02/93	GW930202-9		Manganese	0.0612	NV	N	R
3098	11/05/91	EMGW_SYSGEN_1149	U	Manganese	0.015	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D	U	Manganese	0.015	NV	D	D

Table D-19 (Continued)
Rejected/Nonvalidated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
3098	08/13/92	3098-08/13/92-A-D1-5	B	Manganese	0.0035	NV	D	D
3098	02/04/93	GW930204-10	B	Manganese	0.0046	NV	N	D
3098	02/04/93	GW930204-12	B	Manganese	0.0057	NV	D	D
4011	11/14/90	EMGW_SYSGEN_1244		Manganese	0.055	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245		Manganese	0.163	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247		Manganese	0.145	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248		Manganese	0.145	NV	N	S
4011	01/05/93	GW930105-7		Manganese	0.148	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297		Manganese	0.031	NV	N	R
4096	08/18/92	4096-08/18/92-B-N	B	Manganese	0.0166	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5		Manganese	0.0189	NV	D	R
4096	11/04/92	4096-11/04/92-A-N		Manganese	0.9	NV	N	R
4096	11/04/92	4096-11/04/92-A-D1-7		Manganese	1	NV	D	R
4096	02/02/93	GW930202-10		Manganese	0.879	NV	N	R
2043	05/17/90	EMGW_SYSGEN_523	U	Mercury	0.0002	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	U	Mercury	0.0002	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	U	Mercury	0.0002	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	Mercury	0.0002	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	Mercury	0.0002	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	Mercury	0.0002	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	Mercury	0.0002	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	Mercury	0.0002	NV	N	S
2043	01/18/93	GW930118-12	U	Mercury	0.0002	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559	U	Mercury	0.0002	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560	U	Mercury	0.0002	NV	N	S
2050	08/10/92	2050-08/10/92-B-N	U	Mercury	0.00022	NV	N	S
2050	02/10/93	GW930210-8	U	Mercury	0.0002	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Mercury	0.0002	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	Mercury	0.0002	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	Mercury	0.0002	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	Mercury	0.0002	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	Mercury	0.0002	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	Mercury	0.0002	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	Mercury	0.0002	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	Mercury	0.0002	NV	N	S
2066	01/06/93	GW930106-7	U	Mercury	0.0002	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703	U	Mercury	0.0002	NV	N	R
2096	08/18/92	2096-08/18/92-B-N	U	Mercury	0.0002	NV	N	R
2096	11/04/92	2096-11/04/92-A-N	U	Mercury	0.0001	NV	N	R
2096	02/02/93	GW930202-8	U	Mercury	0.0002	NV	N	R
2098	11/05/91	EMGW_SYSGEN_715	U	Mercury	0.0002	NV	N	D
2098	02/04/93	GW930204-7	U	Mercury	0.0002	NV	N	D
2104	11/07/91	EMGW_SYSGEN_722	U	Mercury	0.0002	NV	N	R
2104	08/10/92	2104-08/10/92-B-N	U	Mercury	0.00022	NV	N	R
2104	02/02/93	GW930202-12	U	Mercury	0.0002	NV	N	R
2728	02/10/93	GW930210-5	U	Mercury	0.0002	NV	N	S
3024	08/08/90	EMGW_SYSGEN_994	U	Mercury	0.0002	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	Mercury	0.0002	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	Mercury	0.0002	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	Mercury	0.0002	NV	N	S

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Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
3024	10/01/91	EMGW_SYSGEN_999	U	Mercury	0.0002	NV	N	S
3024	01/13/93	GW930113-8	U	Mercury	0.0002	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Mercury	0.0002	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	Mercury	0.0002	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	Mercury	0.0002	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	Mercury	0.0002	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	Mercury	0.0002	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	Mercury	0.0002	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	Mercury	0.0002	NV	N	S
3043	01/18/93	GW930118-14	U	Mercury	0.0002	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138	U	Mercury	0.0002	NV	N	R
3096	08/18/92	3096-08/18/92-B-N	U	Mercury	0.0002	NV	N	R
3096	11/04/92	3096-11/04/92-A-N	U	Mercury	0.0001	NV	N	R
3096	02/02/93	GW930202-9	U	Mercury	0.0002	NV	N	R
3098	11/05/91	EMGW_SYSGEN_1149	U	Mercury	0.0002	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D	U	Mercury	0.0002	NV	D	D
3098	08/13/92	3098-08/13/92-A-D1-5	U	Mercury	0.0003	NV	D	D
3098	02/04/93	GW930204-10	U	Mercury	0.0002	NV	N	D
3098	02/04/93	GW930204-12	U	Mercury	0.0002	NV	D	D
4011	11/14/90	EMGW_SYSGEN_1244	U	Mercury	0.0002	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Mercury	0.0002	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	Mercury	0.0002	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	Mercury	0.0002	NV	N	S
4011	01/05/93	GW930105-7	U	Mercury	0.0002	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297	U	Mercury	0.0002	NV	N	R
4096	08/18/92	4096-08/18/92-B-N	U	Mercury	0.0002	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5	U	Mercury	0.0002	NV	D	R
4096	11/04/92	4096-11/04/92-A-N		Mercury	0.0002	NV	N	R
4096	11/04/92	4096-11/04/92-A-D1-7	U	Mercury	0.0002	NV	D	R
4096	02/02/93	GW930202-10	U	Mercury	0.0002	NV	N	R
2043	05/17/90	EMGW_SYSGEN_523	U	Molybdenum	0.025	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	U	Molybdenum	0.025	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	U	Molybdenum	0.025	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	Molybdenum	0.025	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	Molybdenum	0.025	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	Molybdenum	0.01	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	Molybdenum	0.01	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	Molybdenum	0.01	NV	N	S
2043	01/18/93	GW930118-12	U	Molybdenum	0.01	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559	U	Molybdenum	0.01	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560	U	Molybdenum	0.01	NV	N	S
2050	02/10/93	GW930210-8	U	Molybdenum	0.007	NV	N	S
2066	08/07/88	3443	U	Molybdenum	0.05	R	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Molybdenum	0.025	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	Molybdenum	0.025	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	Molybdenum	0.025	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	Molybdenum	0.025	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	Molybdenum	0.025	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	Molybdenum	0.01	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	Molybdenum	0.01	NV	N	S

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Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2066	01/02/92	EMGW_SYSGEN_637	U	Molybdenum	0.01	NV	N	S
2066	01/06/93	GW930106-7	U	Molybdenum	0.01	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703	U	Molybdenum	0.01	NV	N	R
2096	11/04/92	2096-11/04/92-A-N	U	Molybdenum	0.05	NV	N	R
2098	11/05/91	EMGW_SYSGEN_715	U	Molybdenum	0.01	NV	N	D
2104	11/07/91	EMGW_SYSGEN_722	U	Molybdenum	0.01	NV	N	R
2728	02/10/93	GW930210-5	B	Molybdenum	0.0081	NV	N	S
3024	08/08/90	EMGW_SYSGEN_994	U	Molybdenum	0.025	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	Molybdenum	0.025	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	Molybdenum	0.025	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	Molybdenum	0.01	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	Molybdenum	0.01	NV	N	S
3024	01/13/93	GW930113-8	U	Molybdenum	0.01	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Molybdenum	0.025	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	Molybdenum	0.025	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	Molybdenum	0.025	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	Molybdenum	0.025	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	Molybdenum	0.01	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	Molybdenum	0.01	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	Molybdenum	0.01	NV	N	S
3043	01/18/93	GW930118-14	U	Molybdenum	0.01	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138	U	Molybdenum	0.01	NV	N	R
3096	11/04/92	3096-11/04/92-A-N	U	Molybdenum	0.05	NV	N	R
3098	11/05/91	EMGW_SYSGEN_1149	U	Molybdenum	0.01	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D	U	Molybdenum	0.01	NV	D	D
3098	08/13/92	3098-08/13/92-A-D1-5	B	Molybdenum	0.0083	NV	D	D
3098	02/04/93	GW930204-12	U	Molybdenum	0.007	NV	D	D
4011	11/14/90	EMGW_SYSGEN_1244	U	Molybdenum	0.025	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Molybdenum	0.025	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	Molybdenum	0.01	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	Molybdenum	0.01	NV	N	S
4011	01/05/93	GW930105-7	U	Molybdenum	0.01	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297	U	Molybdenum	0.01	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5	U	Molybdenum	0.007	NV	D	R
4096	11/04/92	4096-11/04/92-A-N	U	Molybdenum	0.05	NV	N	R
4096	11/04/92	4096-11/04/92-A-D1-7	U	Molybdenum	0.067	NV	D	R
2043	11/14/89	66683	U	Nickel	0.005	NV	N	S
2043	02/20/90	EMGW_SYSGEN_522	U	Nickel	0.005	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523		Nickel	0.019	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	U	Nickel	0.005	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	U	Nickel	0.005	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	Nickel	0.005	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	Nickel	0.005	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	Nickel	0.01	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	Nickel	0.01	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	Nickel	0.01	NV	N	S
2043	01/18/93	GW930118-12	U	Nickel	0.01	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559	U	Nickel	0.01	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560	U	Nickel	0.01	NV	N	S
2050	08/10/92	2050-08/10/92-B-N		Nickel	0.218	NV	N	S

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Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2050	02/10/93	GW930210-8	B	Nickel	0.0111	NV	N	S
2066	08/07/88	3443	U	Nickel	0.04	R	N	S
2066	11/06/89	66687	U	Nickel	0.005	NV	N	S
2066	02/22/90	EMGW_SYSGEN_628	U	Nickel	0.005	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Nickel	0.005	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	Nickel	0.005	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	Nickel	0.005	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	Nickel	0.005	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	Nickel	0.005	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	Nickel	0.01	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	Nickel	0.01	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	Nickel	0.01	NV	N	S
2066	01/06/93	GW930106-7	U	Nickel	0.01	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703	U	Nickel	0.01	NV	N	R
2096	08/18/92	2096-08/18/92-B-N	U	Nickel	0.02	NV	N	R
2096	11/04/92	2096-11/04/92-A-N	U	Nickel	0.05	NV	N	R
2096	02/02/93	GW930202-8	U	Nickel	0.0211	NV	N	R
2098	11/05/91	EMGW_SYSGEN_715	U	Nickel	0.01	NV	N	D
2098	02/04/93	GW930204-7	U	Nickel	0.0211	NV	N	D
2104	11/07/91	EMGW_SYSGEN_722	U	Nickel	0.01	NV	N	R
2104	08/10/92	2104-08/10/92-B-N	U	Nickel	0.02	NV	N	R
2104	02/02/93	GW930202-12	U	Nickel	0.0211	NV	N	R
2728	02/10/93	GW930210-5	U	Nickel	0.011	NV	N	S
3024	11/30/89	66735	U	Nickel	0.005	NV	N	S
3024	02/18/90	EMGW_SYSGEN_992	U	Nickel	0.005	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993	U	Nickel	0.005	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	U	Nickel	0.005	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	U	Nickel	0.005	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	Nickel	0.005	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	Nickel	0.005	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	Nickel	0.01	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	Nickel	0.01	NV	N	S
3024	01/13/93	GW930113-8	U	Nickel	0.01	NV	N	S
3043	11/14/89	66685	U	Nickel	0.005	NV	N	S
3043	02/20/90	EMGW_SYSGEN_1018	U	Nickel	0.005	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Nickel	0.005	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	Nickel	0.005	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	Nickel	0.005	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	Nickel	0.005	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	Nickel	0.01	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	Nickel	0.01	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	Nickel	0.01	NV	N	S
3043	01/18/93	GW930118-14	U	Nickel	0.01	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138	U	Nickel	0.01	NV	N	R
3096	08/18/92	3096-08/18/92-B-N	U	Nickel	0.02	NV	N	R
3096	11/04/92	3096-11/04/92-A-N	U	Nickel	0.05	NV	N	R
3096	02/02/93	GW930202-9	U	Nickel	0.0211	NV	N	R
3098	11/05/91	EMGW_SYSGEN_1149	U	Nickel	0.01	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D	U	Nickel	0.01	NV	D	D
3098	08/13/92	3098-08/13/92-A-D1-5	U	Nickel	0.011	NV	D	D

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Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
3098	02/04/93	GW930204-10	U	Nickel	0.0211	NV	N	D
3098	02/04/93	GW930204-12	U	Nickel	0.011	NV	D	D
4011	11/14/90	EMGW_SYSGEN_1244	U	Nickel	0.005	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245		Nickel	0.014	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	Nickel	0.01	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	Nickel	0.01	NV	N	S
4011	01/05/93	GW930105-7	U	Nickel	0.01	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297	U	Nickel	0.01	NV	N	R
4096	08/18/92	4096-08/18/92-B-N	U	Nickel	0.02	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5	U	Nickel	0.011	NV	D	R
4096	11/04/92	4096-11/04/92-A-N	U	Nickel	0.05	NV	N	R
4096	11/04/92	4096-11/04/92-A-D1-7	U	Nickel	0.04	NV	D	R
4096	02/02/93	GW930202-10	U	Nickel	0.0211	NV	N	R
2043	05/17/90	EMGW_SYSGEN_523		Potassium	1.62	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524		Potassium	1.9	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525		Potassium	1.52	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	Potassium	1	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	Potassium	1	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528		Potassium	1.5	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529		Potassium	1.5	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559		Potassium	1.7	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560		Potassium	1.8	NV	N	S
2050	08/10/92	2050-08/10/92-B-N	B	Potassium	1.66	NV	N	S
2050	02/10/93	GW930210-8	B	Potassium	2.07	NV	N	S
2066	08/07/88	3443	U	Potassium	5	R	N	S
2066	05/16/90	EMGW_SYSGEN_629		Potassium	2.01	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630		Potassium	2.04	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631		Potassium	1.87	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633		Potassium	1.93	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D		Potassium	1.98	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635		Potassium	1.8	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636		Potassium	1.6	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637		Potassium	1.5	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703		Potassium	1.7	NV	N	R
2096	08/18/92	2096-08/18/92-B-N	B	Potassium	1.83	NV	N	R
2096	02/02/93	GW930202-8	B	Potassium	1.29	NV	N	R
2098	11/05/91	EMGW_SYSGEN_715		Potassium	1.7	NV	N	D
2098	02/04/93	GW930204-7	B	Potassium	2.07	NV	N	D
2104	11/07/91	EMGW_SYSGEN_722		Potassium	2	NV	N	R
2104	08/10/92	2104-08/10/92-B-N	B	Potassium	1.99	NV	N	R
2104	02/02/93	GW930202-12	B	Potassium	1.69	NV	N	R
2728	02/10/93	GW930210-5	B	Potassium	1.52	NV	N	S
3024	08/08/90	EMGW_SYSGEN_994		Potassium	1.12	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995		Potassium	9.71	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996		Potassium	9.03	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998		Potassium	10	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999		Potassium	7.1	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019		Potassium	1.14	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020		Potassium	1.28	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021		Potassium	1	NV	N	S

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Table D-19 (Continued)
Rejected/Nonvalidated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well	Sample		Lab		Validated		QA	
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type	Area
3043	02/28/91	EMGW_SYSGEN_1022	U	Potassium	1	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024		Potassium	1	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025		Potassium	1	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138		Potassium	1.2	NV	N	R
3096	08/18/92	3096-08/18/92-B-N	B	Potassium	1.34	NV	N	R
3096	02/02/93	GW930202-9	B	Potassium	0.98	NV	N	R
3098	11/05/91	EMGW_SYSGEN_1149		Potassium	2.3	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D		Potassium	2.3	NV	D	D
3098	08/13/92	3098-08/13/92-A-D1-5	B	Potassium	2.1	NV	D	D
3098	02/04/93	GW930204-10	B	Potassium	2.37	NV	N	D
3098	02/04/93	GW930204-12	B	Potassium	2.2	NV	D	D
4011	11/14/90	EMGW_SYSGEN_1244		Potassium	3.16	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245		Potassium	1.1	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247		Potassium	1	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248		Potassium	1.4	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297		Potassium	1.1	NV	N	R
4096	08/18/92	4096-08/18/92-B-N	B	Potassium	1.06	NV	N	R
4096	02/02/93	GW930202-10	B	Potassium	0.98	NV	N	R
2043	05/17/90	EMGW_SYSGEN_523	U	Selenium	0.0025	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	U	Selenium	0.0025	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	U	Selenium	0.0025	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	Selenium	0.0025	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	Selenium	0.0025	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	Selenium	0.005	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	Selenium	0.005	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	Selenium	0.005	NV	N	S
2043	01/18/93	GW930118-12	U	Selenium	0.005	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559	U	Selenium	0.005	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560	U	Selenium	0.005	NV	N	S
2050	08/10/92	2050-08/10/92-B-N	U	Selenium	0.0011	NV	N	S
2050	02/10/93	GW930210-8	U	Selenium	0.002	NV	N	S
2066	08/07/88	3443	U	Selenium	0.005	R	N	S
2066	11/10/88	3710		Selenium	0.016	R	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Selenium	0.0025	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	Selenium	0.0025	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	Selenium	0.0025	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	Selenium	0.0025	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	Selenium	0.0025	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	Selenium	0.005	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	Selenium	0.005	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	Selenium	0.005	NV	N	S
2066	01/06/93	GW930106-7	U	Selenium	0.005	NV	N	S
2096	04/30/89	4081	U	Selenium	0.002	R	N	R
2096	11/12/91	EMGW_SYSGEN_703	U	Selenium	0.005	NV	N	R
2096	08/18/92	2096-08/18/92-B-N	UW	Selenium	0.0011	NV	N	R
2096	11/04/92	2096-11/04/92-A-N	U	Selenium	0.005	NV	N	R
2096	02/02/93	GW930202-8	U	Selenium	0.0011	NV	N	R
2098	11/05/91	EMGW_SYSGEN_715	U	Selenium	0.005	NV	N	D
2098	02/04/93	GW930204-7	BW	Selenium	0.0014	NV	N	D
2104	11/07/91	EMGW_SYSGEN_722	U	Selenium	0.005	NV	N	R

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Table D-19 (Continued)
Rejected/Nonvalidated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2104	08/10/92	2104-08/10/92-B-N	U	Selenium	0.0011	NV	N	R
2104	02/02/93	GW930202-12	U	Selenium	0.0011	NV	N	R
2728	02/10/93	GW930210-5	U	Selenium	0.002	NV	N	S
3024	08/08/90	EMGW_SYSGEN_994	U	Selenium	0.0025	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	Selenium	0.0025	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	Selenium	0.0025	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	Selenium	0.005	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	Selenium	0.005	NV	N	S
3024	01/13/93	GW930113-8	U	Selenium	0.005	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Selenium	0.0025	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	Selenium	0.0025	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	Selenium	0.0025	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	Selenium	0.0025	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	Selenium	0.005	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	Selenium	0.005	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	Selenium	0.005	NV	N	S
3043	01/18/93	GW930118-14	U	Selenium	0.005	NV	N	S
3096	04/30/89	4082	U	Selenium	0.002	R	N	R
3096	11/12/91	EMGW_SYSGEN_1138	U	Selenium	0.005	NV	N	R
3096	08/18/92	3096-08/18/92-B-N	BW	Selenium	0.0017	NV	N	R
3096	11/04/92	3096-11/04/92-A-N	U	Selenium	0.005	NV	N	R
3096	02/02/93	GW930202-9	U	Selenium	0.0011	NV	N	R
3098	11/05/91	EMGW_SYSGEN_1149	U	Selenium	0.005	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D	U	Selenium	0.005	NV	D	D
3098	08/13/92	3098-08/13/92-A-D1-5	U	Selenium	0.005	NV	D	D
3098	02/04/93	GW930204-10	BW	Selenium	0.002	NV	N	D
3098	02/04/93	GW930204-12	UW	Selenium	0.002	NV	D	D
4011	11/14/90	EMGW_SYSGEN_1244	U	Selenium	0.0025	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Selenium	0.0025	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	Selenium	0.005	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	Selenium	0.005	NV	N	S
4011	01/05/93	GW930105-7	U	Selenium	0.005	NV	N	S
4096	04/30/89	4083	U	Selenium	0.002	R	N	R
4096	11/12/91	EMGW_SYSGEN_1297	U	Selenium	0.005	NV	N	R
4096	08/18/92	4096-08/18/92-B-N	UW	Selenium	0.0011	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5	U	Selenium	0.005	NV	D	R
4096	11/04/92	4096-11/04/92-A-N	U	Selenium	0.005	NV	N	R
4096	11/04/92	4096-11/04/92-A-D1-7	U	Selenium	0.005	NV	D	R
4096	02/02/93	GW930202-10	U	Selenium	0.0011	NV	N	R
2043	11/14/89	66683	U	Silver	0.001	NV	N	S
2043	02/20/90	EMGW_SYSGEN_522	U	Silver	0.001	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Silver	0.001	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	U	Silver	0.001	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	U	Silver	0.001	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	Silver	0.001	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	Silver	0.001	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	Silver	0.001	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	Silver	0.001	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	Silver	0.001	NV	N	S
2043	01/18/93	GW930118-12	U	Silver	0.001	NV	N	S

Table D-19 (Continued)
Rejected/Nonvalidated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well	Sample		Lab		Validated		QA	
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type	Area
2050	09/30/91	EMGW_SYSGEN_559	U	Silver	0.001	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560	U	Silver	0.001	NV	N	S
2050	08/10/92	2050-08/10/92-B-N	U	Silver	0.0033	NV	N	S
2050	02/10/93	GW930210-8	U	Silver	0.005	NV	N	S
2066	08/07/88	3443	U	Silver	0.01	R	N	S
2066	11/06/89	66687	U	Silver	0.001	NV	N	S
2066	02/22/90	EMGW_SYSGEN_628	U	Silver	0.001	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Silver	0.001	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	Silver	0.001	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	Silver	0.001	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	Silver	0.001	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	Silver	0.001	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	Silver	0.001	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	Silver	0.001	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	Silver	0.001	NV	N	S
2066	01/06/93	GW930106-7	U	Silver	0.001	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703	U	Silver	0.001	NV	N	R
2096	08/18/92	2096-08/18/92-B-N	U	Silver	0.0033	NV	N	R
2096	11/04/92	2096-11/04/92-A-N	U	Silver	0.01	NV	N	R
2096	02/02/93	GW930202-8	U	Silver	0.0033	NV	N	R
2098	12/16/88	3796	U	Silver	0.0005	R	N	D
2098	11/05/91	EMGW_SYSGEN_715	U	Silver	0.001	NV	N	D
2098	02/04/93	GW930204-7	U	Silver	0.0033	NV	N	D
2104	11/07/91	EMGW_SYSGEN_722	U	Silver	0.001	NV	N	R
2104	08/10/92	2104-08/10/92-B-N	U	Silver	0.0033	NV	N	R
2104	02/02/93	GW930202-12	U	Silver	0.0033	NV	N	R
2728	02/10/93	GW930210-5	U	Silver	0.005	NV	N	S
3024	11/30/89	66735	U	Silver	0.001	NV	N	S
3024	02/18/90	EMGW_SYSGEN_992	U	Silver	0.001	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993	U	Silver	0.001	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	U	Silver	0.001	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	U	Silver	0.001	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	Silver	0.001	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	Silver	0.001	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	Silver	0.001	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	Silver	0.001	NV	N	S
3024	01/13/93	GW930113-8	U	Silver	0.001	NV	N	S
3043	11/14/89	66685	U	Silver	0.001	NV	N	S
3043	02/20/90	EMGW_SYSGEN_1018	U	Silver	0.001	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Silver	0.001	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	Silver	0.001	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	Silver	0.001	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	Silver	0.001	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	Silver	0.001	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	Silver	0.001	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	Silver	0.001	NV	N	S
3043	01/18/93	GW930118-14	U	Silver	0.001	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138	U	Silver	0.001	NV	N	R
3096	08/18/92	3096-08/18/92-B-N	U	Silver	0.0033	NV	N	R
3096	11/04/92	3096-11/04/92-A-N	U	Silver	0.01	NV	N	R

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Table D-19 (Continued)
Rejected/Nonvalidated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
3096	02/02/93	GW930202-9	U	Silver	0.0033	NV	N	R
3098	12/16/88	3795	U	Silver	0.0005	R	N	D
3098	11/05/91	EMGW_SYSGEN_1149	U	Silver	0.001	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D	U	Silver	0.001	NV	D	D
3098	08/13/92	3098-08/13/92-A-D1-5	U	Silver	0.005	NV	D	D
3098	02/04/93	GW930204-10	U	Silver	0.0033	NV	N	D
3098	02/04/93	GW930204-12	U	Silver	0.005	NV	D	D
4011	11/14/90	EMGW_SYSGEN_1244	U	Silver	0.001	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Silver	0.001	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	Silver	0.001	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	Silver	0.001	NV	N	S
4011	01/05/93	GW930105-7	U	Silver	0.001	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297	U	Silver	0.001	NV	N	R
4096	08/18/92	4096-08/18/92-B-N	U	Silver	0.0033	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5	U	Silver	0.005	NV	D	R
4096	11/04/92	4096-11/04/92-A-N	U	Silver	0.01	NV	N	R
4096	11/04/92	4096-11/04/92-A-D1-7	U	Silver	0.01	NV	D	R
4096	02/02/93	GW930202-10	U	Silver	0.0033	NV	N	R
2043	11/14/89	66683		Sodium	38.9	NV	N	S
2043	02/20/90	EMGW_SYSGEN_522		Sodium	52.1	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523		Sodium	34	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524		Sodium	28	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525		Sodium	34.1	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526		Sodium	28.2	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D		Sodium	30.2	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528		Sodium	23	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529		Sodium	30	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559		Sodium	49	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560		Sodium	53.8	NV	N	S
2050	08/10/92	2050-08/10/92-B-N		Sodium	46	NV	N	S
2050	02/10/93	GW930210-8		Sodium	51.8	NV	N	S
2066	08/07/88	3443		Sodium	48	R	N	S
2066	11/06/89	66687		Sodium	46.8	NV	N	S
2066	02/22/90	EMGW_SYSGEN_628		Sodium	60.8	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629		Sodium	50.9	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630		Sodium	48.4	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631		Sodium	52.6	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633		Sodium	51.6	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D		Sodium	51.8	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635		Sodium	53	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636		Sodium	46	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637		Sodium	45	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703		Sodium	5.9	NV	N	R
2096	08/18/92	2096-08/18/92-B-N		Sodium	6.04	NV	N	R
2096	02/02/93	GW930202-8	B	Sodium	4.37	NV	N	R
2098	11/05/91	EMGW_SYSGEN_715		Sodium	7.1	NV	N	D
2098	02/04/93	GW930204-7		Sodium	20.6	NV	N	D
2104	11/07/91	EMGW_SYSGEN_722		Sodium	10.5	NV	N	R
2104	08/10/92	2104-08/10/92-B-N		Sodium	11.3	NV	N	R
2104	02/02/93	GW930202-12		Sodium	12	NV	N	R

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Table D-19 (Continued)
Rejected/Nonvalidated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2728	02/10/93	GW930210-5		Sodium	42.9	NV	N	S
3024	11/30/89	66735		Sodium	12.3	NV	N	S
3024	02/18/90	EMGW_SYSGEN_992		Sodium	13.8	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993		Sodium	11.6	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D		Sodium	11.9	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994		Sodium	12.5	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995		Sodium	16.7	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996		Sodium	15.6	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998		Sodium	15	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999		Sodium	12	NV	N	S
3043	11/14/89	66685		Sodium	18.5	NV	N	S
3043	02/20/90	EMGW_SYSGEN_1018		Sodium	26.1	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019		Sodium	17.6	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020		Sodium	29.2	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021		Sodium	17.5	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022		Sodium	26.2	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024		Sodium	25	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025		Sodium	18	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138		Sodium	2.9	NV	N	R
3096	08/18/92	3096-08/18/92-B-N	B	Sodium	2.8	NV	N	R
3096	02/02/93	GW930202-9	B	Sodium	2.87	NV	N	R
3098	11/05/91	EMGW_SYSGEN_1149		Sodium	8.7	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D		Sodium	8.7	NV	D	D
3098	02/04/93	GW930204-10		Sodium	9.12	NV	N	D
3098	02/04/93	GW930204-12		Sodium	10.3	NV	D	D
4011	11/14/90	EMGW_SYSGEN_1244		Sodium	86.3	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245		Sodium	34.9	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247		Sodium	51	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248		Sodium	41	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297		Sodium	6.3	NV	N	R
4096	08/18/92	4096-08/18/92-B-N		Sodium	10.2	NV	N	R
4096	02/02/93	GW930202-10	B	Sodium	4.12	NV	N	R
2043	05/17/90	EMGW_SYSGEN_523	U	Thallium	0.01	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	U	Thallium	0.01	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	U	Thallium	0.01	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	Thallium	0.01	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	Thallium	0.01	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	Thallium	0.01	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	Thallium	0.01	NV	N	S
2043	01/18/93	GW930118-12	U	Thallium	0.01	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559	U	Thallium	0.01	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560	U	Thallium	0.01	NV	N	S
2050	08/10/92	2050-08/10/92-B-N	U	Thallium	0.0011	NV	N	S
2050	02/10/93	GW930210-8	UN	Thallium	0.002	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Thallium	0.01	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	Thallium	0.01	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	Thallium	0.01	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	Thallium	0.01	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	Thallium	0.01	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	Thallium	0.01	NV	N	S

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Table D-19 (Continued)
Rejected/Nonvalidated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2066	10/02/91	EMGW_SYSGEN_636	U	Thallium	0.01	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	Thallium	0.01	NV	N	S
2066	01/06/93	GW930106-7	U	Thallium	0.01	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703	U	Thallium	0.01	NV	N	R
2096	08/18/92	2096-08/18/92-B-N	UNW	Thallium	0.0011	NV	N	R
2096	02/02/93	GW930202-8	U	Thallium	0.0011	NV	N	R
2098	11/05/91	EMGW_SYSGEN_715	U	Thallium	0.01	NV	N	D
2098	02/04/93	GW930204-7	UW	Thallium	0.0011	NV	N	D
2104	11/07/91	EMGW_SYSGEN_722	U	Thallium	0.01	NV	N	R
2104	08/10/92	2104-08/10/92-B-N	B	Thallium	0.0014	NV	N	R
2104	02/02/93	GW930202-12	U	Thallium	0.0011	NV	N	R
2728	02/10/93	GW930210-5	UWN	Thallium	0.002	NV	N	S
3024	08/08/90	EMGW_SYSGEN_994	U	Thallium	0.01	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	Thallium	0.01	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	Thallium	0.01	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	Thallium	0.01	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	Thallium	0.01	NV	N	S
3024	01/13/93	GW930113-8	U	Thallium	0.01	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Thallium	0.01	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	Thallium	0.01	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	Thallium	0.01	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	Thallium	0.01	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	Thallium	0.01	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	Thallium	0.01	NV	N	S
3043	01/18/93	GW930118-14	U	Thallium	0.01	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138	U	Thallium	0.01	NV	N	R
3096	08/18/92	3096-08/18/92-B-N	UNW	Thallium	0.0011	NV	N	R
3096	02/02/93	GW930202-9	U	Thallium	0.0011	NV	N	R
3098	11/05/91	EMGW_SYSGEN_1149	U	Thallium	0.01	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D	U	Thallium	0.01	NV	D	D
3098	02/04/93	GW930204-10	U	Thallium	0.0011	NV	N	D
3098	02/04/93	GW930204-12	U	Thallium	0.002	NV	D	D
4011	11/14/90	EMGW_SYSGEN_1244	U	Thallium	0.01	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Thallium	0.01	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	Thallium	0.01	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	Thallium	0.01	NV	N	S
4011	01/05/93	GW930105-7	U	Thallium	0.01	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297	U	Thallium	0.01	NV	N	R
4096	08/18/92	4096-08/18/92-B-N	UNW	Thallium	0.0011	NV	N	R
4096	02/02/93	GW930202-10	U	Thallium	0.0011	NV	N	R
4011	02/21/91	EMGW_SYSGEN_1245	U	Tin	1	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8		TDS	598	NV	N	S
2043	01/18/93	GW930118-12		TDS	545	NV	N	S
2050	08/10/92	2050-08/10/92-B-N		TDS	440	NV	N	S
2050	11/02/92	2050-11/02/92-A-N		TDS	490	NV	N	S
2050	02/10/93	GW930210-8		TDS	500	NV	N	S
2066	01/06/93	GW930106-7		TDS	372	NV	N	S
2096	08/18/92	2096-08/18/92-B-N		TDS	700	NV	N	R
2096	11/04/92	2096-11/04/92-A-N		TDS	590	NV	N	R
2096	02/02/93	GW930202-8		TDS	450	NV	N	R

Table D-19 (Continued)
Rejected/Nonvalidated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2098	11/23/92	GW921123-5		TDS	470	NV	N	D
2098	02/04/93	GW930204-7		TDS	460	NV	N	D
2104	08/10/92	2104-08/10/92-B-N		TDS	460	NV	N	R
2104	11/02/92	2104-11/02/92-A-N		TDS	480	NV	N	R
2104	02/02/93	GW930202-12		TDS	510	NV	N	R
2728	02/10/93	GW930210-5		TDS	650	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8		TDS	358	NV	N	S
3043	01/18/93	GW930118-14		TDS	353	NV	N	S
3096	08/18/92	3096-08/18/92-B-N		TDS	350	NV	N	R
3096	11/04/92	3096-11/04/92-A-N		TDS	310	NV	N	R
3098	08/13/92	3098-08/13/92-A-D1-5		TDS	460	NV	D	D
3098	02/04/93	GW930204-10		TDS	450	NV	N	D
3098	02/04/93	GW930204-12		TDS	460	NV	D	D
4011	01/05/93	GW930105-7		TDS	529	NV	N	S
4096	08/18/92	4096-08/18/92-B-N		TDS	270	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5		TDS	270	NV	D	R
4096	11/04/92	4096-11/04/92-A-N		TDS	290	NV	N	R
4096	11/04/92	4096-11/04/92-A-D1-7		TDS	310	NV	D	R
4096	02/02/93	GW930202-10		TDS	310	NV	N	R
4096	02/02/93	GW930202-11		TDS	320	NV	D	R
2043	11/14/89	66683	U	Vanadium	0.05	NV	N	S
2043	02/20/90	EMGW_SYSGEN_522	U	Vanadium	0.05	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Vanadium	0.05	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	U	Vanadium	0.05	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	U	Vanadium	0.05	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	Vanadium	0.05	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	Vanadium	0.05	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	Vanadium	0.05	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	Vanadium	0.05	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	Vanadium	0.05	NV	N	S
2043	01/18/93	GW930118-12	U	Vanadium	0.05	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559	U	Vanadium	0.05	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560	U	Vanadium	0.05	NV	N	S
2050	08/10/92	2050-08/10/92-B-N	U	Vanadium	0.0033	NV	N	S
2050	02/10/93	GW930210-8	U	Vanadium	0.003	NV	N	S
2066	11/06/89	66687	U	Vanadium	0.05	NV	N	S
2066	02/22/90	EMGW_SYSGEN_628	U	Vanadium	0.05	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Vanadium	0.05	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	Vanadium	0.05	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	Vanadium	0.05	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	Vanadium	0.05	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	Vanadium	0.05	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	Vanadium	0.05	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	Vanadium	0.05	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	Vanadium	0.05	NV	N	S
2066	01/06/93	GW930106-7	U	Vanadium	0.05	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703	U	Vanadium	0.05	NV	N	R
2096	08/18/92	2096-08/18/92-B-N	U	Vanadium	0.0033	NV	N	R
2096	11/04/92	2096-11/04/92-A-N	U	Vanadium	0.05	NV	N	R
2096	02/02/93	GW930202-8	B	Vanadium	0.0052	NV	N	R

Table D-19 (Continued)
Rejected/Nonvalidated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2098	11/05/91	EMGW_SYSGEN_715	U	Vanadium	0.05	NV	N	D
2098	02/04/93	GW930204-7	U	Vanadium	0.0044	NV	N	D
2104	11/07/91	EMGW_SYSGEN_722	U	Vanadium	0.05	NV	N	R
2104	08/10/92	2104-08/10/92-B-N	U	Vanadium	0.0033	NV	N	R
2104	02/02/93	GW930202-12	U	Vanadium	0.0044	NV	N	R
2728	02/10/93	GW930210-5	U	Vanadium	0.003	NV	N	S
3024	11/30/89	66735	U	Vanadium	0.05	NV	N	S
3024	02/18/90	EMGW_SYSGEN_992	U	Vanadium	0.05	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993	U	Vanadium	0.05	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	U	Vanadium	0.05	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	U	Vanadium	0.05	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	Vanadium	0.05	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	Vanadium	0.05	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	Vanadium	0.05	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	Vanadium	0.05	NV	N	S
3024	01/13/93	GW930113-8	U	Vanadium	0.05	NV	N	S
3043	11/14/89	66685	U	Vanadium	0.05	NV	N	S
3043	02/20/90	EMGW_SYSGEN_1018	U	Vanadium	0.05	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Vanadium	0.05	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	Vanadium	0.05	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	Vanadium	0.05	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	Vanadium	0.05	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	Vanadium	0.05	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	Vanadium	0.05	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	Vanadium	0.05	NV	N	S
3043	01/18/93	GW930118-14	U	Vanadium	0.05	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138	U	Vanadium	0.05	NV	N	R
3096	08/18/92	3096-08/18/92-B-N	U	Vanadium	0.0033	NV	N	R
3096	11/04/92	3096-11/04/92-A-N	U	Vanadium	0.05	NV	N	R
3096	02/02/93	GW930202-9	B	Vanadium	0.0057	NV	N	R
3098	11/05/91	EMGW_SYSGEN_1149	U	Vanadium	0.05	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D	U	Vanadium	0.05	NV	D	D
3098	08/13/92	3098-08/13/92-A-D1-5	U	Vanadium	0.003	NV	D	D
3098	02/04/93	GW930204-10	U	Vanadium	0.0044	NV	N	D
3098	02/04/93	GW930204-12	U	Vanadium	0.003	NV	D	D
4011	11/14/90	EMGW_SYSGEN_1244	U	Vanadium	0.05	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Vanadium	0.05	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	Vanadium	0.05	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	Vanadium	0.05	NV	N	S
4011	01/05/93	GW930105-7	U	Vanadium	0.05	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297	U	Vanadium	0.05	NV	N	R
4096	08/18/92	4096-08/18/92-B-N	B	Vanadium	0.0035	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5	U	Vanadium	0.003	NV	D	R
4096	11/04/92	4096-11/04/92-A-N	U	Vanadium	0.05	NV	N	R
4096	11/04/92	4096-11/04/92-A-D1-7	U	Vanadium	0.05	NV	D	R
4096	02/02/93	GW930202-10	U	Vanadium	0.0044	NV	N	R
2043	11/14/89	66683	U	Zinc	0.02	NV	N	S
2043	02/20/90	EMGW_SYSGEN_522	U	Zinc	0.02	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Zinc	0.02	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	U	Zinc	0.02	NV	N	S

Table D-19 (Continued)
Rejected/Nonvalidated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well	Sample		Lab		Validated		QA	
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type	Area
2043	11/06/90	EMGW_SYSGEN_525	U	Zinc	0.02	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	Zinc	0.02	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	Zinc	0.02	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528		Zinc	0.086	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529		Zinc	0.066	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	Zinc	0.02	NV	N	S
2043	01/18/93	GW930118-12	U	Zinc	0.02	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559	U	Zinc	0.02	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560	U	Zinc	0.02	NV	N	S
2050	08/10/92	2050-08/10/92-B-N		Zinc	0.0688	NV	N	S
2050	02/10/93	GW930210-8	B	Zinc	0.0064	NV	N	S
2066	11/06/89	66687	U	Zinc	0.02	NV	N	S
2066	02/22/90	EMGW_SYSGEN_628	U	Zinc	0.02	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Zinc	0.02	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	Zinc	0.02	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	Zinc	0.02	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	Zinc	0.02	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	Zinc	0.02	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	Zinc	0.02	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636		Zinc	0.02	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	Zinc	0.02	NV	N	S
2066	01/06/93	GW930106-7		Zinc	0.032	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703	U	Zinc	0.02	NV	N	R
2096	08/18/92	2096-08/18/92-B-N	U	Zinc	0.0033	NV	N	R
2096	11/04/92	2096-11/04/92-A-N	U	Zinc	0.02	NV	N	R
2096	02/02/93	GW930202-8	U	Zinc	0.0067	NV	N	R
2098	11/05/91	EMGW_SYSGEN_715		Zinc	0.033	NV	N	D
2098	02/04/93	GW930204-7	U	Zinc	0.0067	NV	N	D
2104	11/07/91	EMGW_SYSGEN_722	U	Zinc	0.02	NV	N	R
2104	08/10/92	2104-08/10/92-B-N	B	Zinc	0.0087	NV	N	R
2104	02/02/93	GW930202-12	U	Zinc	0.0067	NV	N	R
2728	02/10/93	GW930210-5	B	Zinc	0.0042	NV	N	S
3024	11/30/89	66735	U	Zinc	0.02	NV	N	S
3024	02/18/90	EMGW_SYSGEN_992	U	Zinc	0.02	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993	U	Zinc	0.02	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	U	Zinc	0.02	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	U	Zinc	0.02	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	Zinc	0.02	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	Zinc	0.02	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	Zinc	0.02	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999		Zinc	0.045	NV	N	S
3024	01/13/93	GW930113-8	U	Zinc	0.02	NV	N	S
3043	11/14/89	66685		Zinc	0.04	NV	N	S
3043	02/20/90	EMGW_SYSGEN_1018	U	Zinc	0.02	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Zinc	0.02	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	Zinc	0.02	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021		Zinc	0.027	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022		Zinc	0.021	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024		Zinc	0.04	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	Zinc	0.02	NV	N	S

Table D-19 (Continued)
Rejected/Nonvalidated Filtered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
3043	07/06/92	3043-07/06/92-A-N1-8	U	Zinc	0.02	NV	N	S
3043	01/18/93	GW930118-14	U	Zinc	0.02	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138	U	Zinc	0.02	NV	N	R
3096	08/18/92	3096-08/18/92-B-N	B	Zinc	0.0088	NV	N	R
3096	11/04/92	3096-11/04/92-A-N	U	Zinc	0.02	NV	N	R
3096	02/02/93	GW930202-9	U	Zinc	0.0067	NV	N	R
3098	11/05/91	EMGW_SYSGEN_1149	U	Zinc	0.02	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D	U	Zinc	0.02	NV	D	D
3098	08/13/92	3098-08/13/92-A-D1-5		Zinc	0.0377	NV	D	D
3098	02/04/93	GW930204-10	U	Zinc	0.0067	NV	N	D
3098	02/04/93	GW930204-12	B	Zinc	0.0106	NV	D	D
4011	11/14/90	EMGW_SYSGEN_1244	U	Zinc	0.02	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245		Zinc	0.061	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247		Zinc	0.023	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248		Zinc	0.021	NV	N	S
4011	01/05/93	GW930105-7	U	Zinc	0.02	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297	U	Zinc	0.02	NV	N	R
4096	08/18/92	4096-08/18/92-B-N	B	Zinc	0.0055	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5	B	Zinc	0.0083	NV	D	R
4096	11/04/92	4096-11/04/92-A-N		Zinc	0.03	NV	N	R
4096	11/04/92	4096-11/04/92-A-D1-7		Zinc	0.094	NV	D	R
4096	02/02/93	GW930202-10	U	Zinc	0.0067	NV	N	R

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Table D-20
Rejected/Nonvalidated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2043	11/06/90	EMGW_SYSGEN_525		Alkalinity as CaCO3	394	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526		Alkalinity as CaCO3	362	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D		Alkalinity as CaCO3	343	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528		Alkalinity as CaCO3	354	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529		Alkalinity as CaCO3	352	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8		Alkalinity as CaCO3	387	NV	N	S
2043	01/18/93	GW930118-12		Alkalinity as CaCO3	422	NV	N	S
2050	10/17/90	EMGW_SYSGEN_558		Alkalinity as CaCO3	311	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559		Alkalinity as CaCO3	339	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560		Alkalinity as CaCO3	332	NV	N	S
2050	08/10/92	2050-08/10/92-B-N		Alkalinity as CaCO3	370	NV	N	S
2050	11/02/92	2050-11/02/92-A-N		Alkalinity as CaCO3	380	NV	N	S
2050	02/10/93	GW930210-8		Alkalinity as CaCO3	380	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631		Alkalinity as CaCO3	297	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633		Alkalinity as CaCO3	317	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D		Alkalinity as CaCO3	329	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635		Alkalinity as CaCO3	319	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636		Alkalinity as CaCO3	326	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637		Alkalinity as CaCO3	304	NV	N	S
2066	01/06/93	GW930106-7		Alkalinity as CaCO3	307	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703		Alkalinity as CaCO3	306	NV	N	R
2096	08/18/92	2096-08/18/92-B-N		Alkalinity as CaCO3	330	NV	N	R
2096	11/04/92	2096-11/04/92-A-N		Alkalinity as CaCO3	310	NV	N	R
2096	02/02/93	GW930202-8		Alkalinity as CaCO3	280	NV	N	R
2096	02/02/93	GW930202-8		Alkalinity as CaCO3	280	NV	N	R
2098	10/15/90	EMGW_SYSGEN_712		Alkalinity as CaCO3	308	NV	N	D
2098	11/05/91	EMGW_SYSGEN_715		Alkalinity as CaCO3	316	NV	N	D
2098	11/23/92	GW921123-5		Alkalinity as CaCO3	330	NV	N	D
2098	02/04/93	GW930204-7		Alkalinity as CaCO3	320	NV	N	D
2104	09/12/90	EMGW_SYSGEN_719		Alkalinity as CaCO3	282	NV	N	R
2104	11/27/90	EMGW_SYSGEN_720		Alkalinity as CaCO3	269	NV	N	R
2104	03/07/91	EMGW_SYSGEN_721		Alkalinity as CaCO3	273	NV	N	R
2104	11/07/91	EMGW_SYSGEN_722		Alkalinity as CaCO3	276	NV	N	R
2104	08/10/92	2104-08/10/92-B-N		Alkalinity as CaCO3	300	NV	N	R
2104	11/02/92	2104-11/02/92-A-N		Alkalinity as CaCO3	290	NV	N	R
2104	02/02/93	GW930202-12		Alkalinity as CaCO3	290	NV	N	R
2728	02/10/93	GW930210-5		Alkalinity as CaCO3	370	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995		Alkalinity as CaCO3	242	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996		Alkalinity as CaCO3	233	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998		Alkalinity as CaCO3	242	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999		Alkalinity as CaCO3	191	NV	N	S
3024	01/13/93	GW930113-8		Alkalinity as CaCO3	315	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021		Alkalinity as CaCO3	321	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022		Alkalinity as CaCO3	355	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024		Alkalinity as CaCO3	352	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025		Alkalinity as CaCO3	330	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8		Alkalinity as CaCO3	343	NV	N	S
3043	01/18/93	GW930118-14		Alkalinity as CaCO3	290	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138		Alkalinity as CaCO3	250	NV	N	R
3096	08/18/92	3096-08/18/92-B-N		Alkalinity as CaCO3	270	NV	N	R

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Table D-20 (Continued)
Rejected/Nonvalidated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
3096	11/04/92	3096-11/04/92-A-N		Alkalinity as CaCO3	260	NV	N	R
3096	02/02/93	GW930202-9		Alkalinity as CaCO3	260	NV	N	R
3096	02/02/93	GW930202-9		Alkalinity as CaCO3	260	NV	N	R
3098	10/15/90	EMGW_SYSGEN_1147		Alkalinity as CaCO3	314	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149		Alkalinity as CaCO3	308	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D		Alkalinity as CaCO3	302	NV	D	D
3098	08/13/92	3098-08/13/92-A-D1-5		Alkalinity as CaCO3	310	NV	D	D
3098	11/23/92	GW921123-6		Alkalinity as CaCO3	330	NV	N	D
3098	02/04/93	GW930204-10		Alkalinity as CaCO3	330	NV	N	D
3098	02/04/93	GW930204-12		Alkalinity as CaCO3	340	NV	D	D
4011	11/14/90	EMGW_SYSGEN_1244		Alkalinity as CaCO3	364	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245		Alkalinity as CaCO3	365	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247		Alkalinity as CaCO3	392	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248		Alkalinity as CaCO3	367	NV	N	S
4011	01/05/93	GW930105-7		Alkalinity as CaCO3	359	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297		Alkalinity as CaCO3	264	NV	N	R
4096	08/18/92	4096-08/18/92-B-N		Alkalinity as CaCO3	230	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5		Alkalinity as CaCO3	250	NV	D	R
4096	11/04/92	4096-11/04/92-A-N		Alkalinity as CaCO3	240	NV	N	R
4096	11/04/92	4096-11/04/92-A-D1-7		Alkalinity as CaCO3	250	NV	D	R
4096	02/02/93	GW930202-10		Alkalinity as CaCO3	280	NV	N	R
4096	02/02/93	GW930202-11		Alkalinity as CaCO3	290	NV	D	R
2043	11/14/89	66683		Aluminum	0.266	NV	N	S
2043	02/20/90	EMGW_SYSGEN_522		Aluminum	0.066	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523		Aluminum	10.9	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524		Aluminum	9.19	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525		Aluminum	1.47	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526		Aluminum	0.9	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D		Aluminum	0.92	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	Aluminum	0.2	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	Aluminum	0.2	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	Aluminum	0.2	NV	N	S
2043	01/18/93	GW930118-12	U	Aluminum	0.2	NV	N	S
2066	11/06/89	66687		Aluminum	0.339	NV	N	S
2066	02/22/90	EMGW_SYSGEN_628	U	Aluminum	0.05	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629		Aluminum	0.053	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	Aluminum	0.5	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	Aluminum	0.5	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633		Aluminum	0.59	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D		Aluminum	0.56	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635		Aluminum	0.2	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636		Aluminum	0.32	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	Aluminum	0.2	NV	N	S
2066	01/06/93	GW930106-7	U	Aluminum	0.2	NV	N	S
2098	11/23/92	GW921123-5		Aluminum	0.1	NV	N	D
2104	03/07/91	EMGW_SYSGEN_721	U	Aluminum	0.5	NV	N	R
2104	11/02/92	2104-11/02/92-A-N	U*	Aluminum	0.2	NV	N	R
3024	11/30/89	66735		Aluminum	0.078	NV	N	S
3024	02/18/90	EMGW_SYSGEN_992		Aluminum	0.139	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993		Aluminum	0.136	NV	N	S

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Table D-20 (Continued)
Rejected/Nonvalidated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
3024	06/11/90	EMGW_SYSGEN_993D		Aluminum	0.117	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	U	Aluminum	0.5	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	Aluminum	0.5	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	Aluminum	0.5	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	Aluminum	0.2	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	Aluminum	0.2	NV	N	S
3024	01/13/93	GW930113-8	U	Aluminum	0.2	NV	N	S
3043	11/14/89	66685	U	Aluminum	0.05	NV	N	S
3043	02/20/90	EMGW_SYSGEN_1018		Aluminum	0.097	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019		Aluminum	0.055	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	Aluminum	0.5	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	Aluminum	0.5	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	Aluminum	0.5	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	Aluminum	0.2	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	Aluminum	0.2	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	Aluminum	0.2	NV	N	S
3043	01/18/93	GW930118-14	U	Aluminum	0.2	NV	N	S
3098	11/23/92	GW921123-6	U*	Aluminum	0.1	NV	N	D
4011	11/14/90	EMGW_SYSGEN_1244	U	Aluminum	0.5	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Aluminum	0.5	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	Aluminum	0.2	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248		Aluminum	0.48	NV	N	S
4011	01/05/93	GW930105-7	U	Aluminum	0.2	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525		Ammonia	2.14	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526		Ammonia	1.5	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D		Ammonia	1.68	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528		Ammonia	1.56	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529		Ammonia	1.71	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8		Ammonia	2.21	NV	N	S
2043	01/18/93	GW930118-12		Ammonia	2.4	NV	N	S
2050	05/05/88	3147	U	Ammonia	0.5	R	N	S
2050	12/05/88	3743		Ammonia	2.98	R	N	S
2050	10/17/90	EMGW_SYSGEN_558		Ammonia	3.32	NV	N	S
2050	11/02/92	2050-11/02/92-A-N		Ammonia	3.1	NV	N	S
2050	02/10/93	GW930210-8		Ammonia	3.6	NV	N	S
2066	08/07/88	3443		Ammonia	3.8	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631		Ammonia	3.92	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633		Ammonia	3.84	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D		Ammonia	3.71	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635		Ammonia	3.75	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636		Ammonia	3.86	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637		Ammonia	4.05	NV	N	S
2066	01/06/93	GW930106-7		Ammonia	3.56	NV	N	S
2096	11/04/92	2096-11/04/92-A-N	U	Ammonia	0.05	NV	N	R
2096	02/02/93	GW930202-8	U*	Ammonia	0.1	NV	N	R
2098	10/15/90	EMGW_SYSGEN_712	U	Ammonia	0.02	NV	N	D
2098	11/23/92	GW921123-5	U*	Ammonia	0.05	NV	N	D
2098	02/04/93	GW930204-7	U	Ammonia	0.05	NV	N	D
2104	05/05/88	3146	U	Ammonia	0.5	R	N	R
2104	11/27/90	EMGW_SYSGEN_720		Ammonia	0.03	NV	N	R

Table D-20 (Continued)
Rejected/Nonvalidated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2104	03/07/91	EMGW_SYSGEN_721		Ammonia	0.04	NV	N	R
2104	11/02/92	2104-11/02/92-A-N	U*	Ammonia	0.05	NV	N	R
2104	02/02/93	GW930202-12	U*	Ammonia	0.1	NV	N	R
2728	02/10/93	GW930210-5		Ammonia	1.5	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995		Ammonia	0.1	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996		Ammonia	0.04	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	Ammonia	0.02	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	Ammonia	0.02	NV	N	S
3024	01/13/93	GW930113-8		Ammonia	0.6	NV	N	S
3024	04/12/93	GW930412-8		Ammonia	0.49	R	N	S
3043	11/05/90	EMGW_SYSGEN_1021		Ammonia	2.71	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022		Ammonia	2.8	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024		Ammonia	2.63	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025		Ammonia	2.41	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8		Ammonia	3.39	NV	N	S
3043	01/18/93	GW930118-14		Ammonia	3.45	NV	N	S
3096	11/04/92	3096-11/04/92-A-N	U	Ammonia	0.05	NV	N	R
3096	02/02/93	GW930202-9	U*	Ammonia	0.1	NV	N	R
3098	10/15/90	EMGW_SYSGEN_1147	U	Ammonia	0.02	NV	N	D
3098	11/23/92	GW921123-6	U*	Ammonia	0.05	NV	N	D
3098	02/04/93	GW930204-10	U	Ammonia	0.05	NV	N	D
3098	02/04/93	GW930204-12	U	Ammonia	0.05	NV	D	D
4011	11/14/90	EMGW_SYSGEN_1244		Ammonia	0.8	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245		Ammonia	0.88	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247		Ammonia	0.84	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248		Ammonia	0.51	NV	N	S
4011	01/05/93	GW930105-7		Ammonia	0.64	NV	N	S
4096	11/04/92	4096-11/04/92-A-N	U	Ammonia	0.05	NV	N	R
4096	11/04/92	4096-11/04/92-A-D1-7	U	Ammonia	0.05	NV	D	R
4096	02/02/93	GW930202-10	U*	Ammonia	0.1	NV	N	R
4096	02/02/93	GW930202-11		Ammonia	0.07	NV	D	R
2043	05/17/90	EMGW_SYSGEN_523	U	Antimony	0.025	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	U	Antimony	0.025	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	U	Antimony	0.025	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	Antimony	0.025	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	Antimony	0.025	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	Antimony	0.02	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	Antimony	0.02	NV	N	S
2043	01/18/93	GW930118-12	U	Antimony	0.02	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Antimony	0.025	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	Antimony	0.025	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	Antimony	0.025	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	Antimony	0.025	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	Antimony	0.025	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	Antimony	0.02	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	Antimony	0.02	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	Antimony	0.02	NV	N	S
2066	01/06/93	GW930106-7	U	Antimony	0.02	NV	N	S
2104	03/07/91	EMGW_SYSGEN_721	U	Antimony	0.025	NV	N	R
3024	08/08/90	EMGW_SYSGEN_994	U	Antimony	0.025	NV	N	S

Table D-20 (Continued)
Rejected/Nonvalidated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
3024	11/13/90	EMGW_SYSGEN_995	U	Antimony	0.025	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	Antimony	0.025	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	Antimony	0.02	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	Antimony	0.02	NV	N	S
3024	01/13/93	GW930113-8	U	Antimony	0.02	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Antimony	0.025	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	Antimony	0.025	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	Antimony	0.025	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	Antimony	0.025	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	Antimony	0.02	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	Antimony	0.02	NV	N	S
3043	01/18/93	GW930118-14	U	Antimony	0.02	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Antimony	0.025	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Antimony	0.025	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	Antimony	0.02	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	Antimony	0.02	NV	N	S
4011	01/05/93	GW930105-7	U	Antimony	0.02	NV	N	S
2043	11/14/89	66683	U	Arsenic	0.0025	NV	N	S
2043	02/20/90	EMGW_SYSGEN_522	U	Arsenic	0.0025	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523		Arsenic	0.01	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524		Arsenic	0.011	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525		Arsenic	0.004	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	Arsenic	0.0025	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	Arsenic	0.0025	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	Arsenic	0.005	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	Arsenic	0.005	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	Arsenic	0.005	NV	N	S
2043	01/18/93	GW930118-12	U	Arsenic	0.005	NV	N	S
2050	11/02/92	2050-11/02/92-A-N	U	Arsenic	0.005	NV	N	S
2066	11/06/89	66687		Arsenic	0.023	NV	N	S
2066	02/22/90	EMGW_SYSGEN_628		Arsenic	0.025	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629		Arsenic	0.027	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630		Arsenic	0.027	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631		Arsenic	0.031	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633		Arsenic	0.027	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D		Arsenic	0.025	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635		Arsenic	0.0181	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636		Arsenic	0.0331	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637		Arsenic	0.0234	NV	N	S
2066	01/06/93	GW930106-7		Arsenic	0.0284	NV	N	S
2098	11/23/92	GW921123-5	U*	Arsenic	0.005	NV	N	D
2104	03/07/91	EMGW_SYSGEN_721	U	Arsenic	0.0025	NV	N	R
2104	11/02/92	2104-11/02/92-A-N	U*	Arsenic	0.005	NV	N	R
3024	11/30/89	66735	U	Arsenic	0.0025	NV	N	S
3024	02/18/90	EMGW_SYSGEN_992	U	Arsenic	0.0025	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993	U	Arsenic	0.0025	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	U	Arsenic	0.0025	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	U	Arsenic	0.0025	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	Arsenic	0.0025	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996		Arsenic	0.003	NV	N	S

Table D-20 (Continued)
Rejected/Nonvalidated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
3024	07/15/91	EMGW_SYSGEN_998	U	Arsenic	0.005	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	Arsenic	0.005	NV	N	S
3024	01/13/93	GW930113-8	U	Arsenic	0.005	NV	N	S
3043	11/14/89	66685		Arsenic	0.014	NV	N	S
3043	02/20/90	EMGW_SYSGEN_1018		Arsenic	0.014	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019		Arsenic	0.012	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020		Arsenic	0.012	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021		Arsenic	0.013	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	Arsenic	0.0025	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024		Arsenic	0.0103	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025		Arsenic	0.013	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8		Arsenic	0.011	NV	N	S
3043	01/18/93	GW930118-14		Arsenic	0.012	NV	N	S
3098	11/23/92	GW921123-6	U*	Arsenic	0.005	NV	N	D
4011	11/14/90	EMGW_SYSGEN_1244		Arsenic	0.003	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Arsenic	0.0025	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	Arsenic	0.005	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	Arsenic	0.005	NV	N	S
4011	01/05/93	GW930105-7	U	Arsenic	0.005	NV	N	S
2043	11/14/89	66683		Barium	0.292	NV	N	S
2043	02/20/90	EMGW_SYSGEN_522		Barium	0.289	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523		Barium	0.367	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524		Barium	0.625	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525		Barium	0.411	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526		Barium	0.472	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D		Barium	0.437	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528		Barium	0.24	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529		Barium	0.24	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8		Barium	0.24	NV	N	S
2043	01/18/93	GW930118-12		Barium	0.31	NV	N	S
2066	11/06/89	66687		Barium	0.895	NV	N	S
2066	02/22/90	EMGW_SYSGEN_628		Barium	0.805	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629		Barium	0.81	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630		Barium	0.797	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631		Barium	0.784	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633		Barium	0.814	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D		Barium	0.8	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635		Barium	0.89	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636		Barium	0.83	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637		Barium	0.84	NV	N	S
2066	01/06/93	GW930106-7		Barium	0.79	NV	N	S
2098	11/23/92	GW921123-5		Barium	0.05	NV	N	D
2104	03/07/91	EMGW_SYSGEN_721	U	Barium	0.2	NV	N	R
2104	11/02/92	2104-11/02/92-A-N		Barium	0.06	NV	N	R
3024	11/30/89	66735		Barium	0.371	NV	N	S
3024	02/18/90	EMGW_SYSGEN_992		Barium	0.326	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993	U	Barium	0.2	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	U	Barium	0.2	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	U	Barium	0.2	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	Barium	0.2	NV	N	S

Table D-20 (Continued)
Rejected/Nonvalidated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
3024	02/27/91	EMGW_SYSGEN_996	U	Barium	0.2	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	Barium	0.2	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	Barium	0.2	NV	N	S
3024	01/13/93	GW930113-8		Barium	0.23	NV	N	S
3043	11/14/89	66685		Barium	0.241	NV	N	S
3043	02/20/90	EMGW_SYSGEN_1018		Barium	0.291	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019		Barium	0.271	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020		Barium	0.326	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021		Barium	0.325	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022		Barium	0.326	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024		Barium	0.35	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025		Barium	0.29	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8		Barium	0.23	NV	N	S
3043	01/18/93	GW930118-14		Barium	0.34	NV	N	S
3098	11/23/92	GW921123-6		Barium	0.05	NV	N	D
4011	11/14/90	EMGW_SYSGEN_1244		Barium	0.298	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245		Barium	0.471	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247		Barium	0.46	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248		Barium	0.26	NV	N	S
4011	01/05/93	GW930105-7		Barium	0.39	NV	N	S
2043	11/14/89	66683	U	Beryllium	0.01	NV	N	S
2043	02/20/90	EMGW_SYSGEN_522	U	Beryllium	0.01	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Beryllium	0.01	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	U	Beryllium	0.01	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	U	Beryllium	0.01	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	Beryllium	0.01	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	Beryllium	0.01	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	Beryllium	0.05	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	Beryllium	0.005	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	Beryllium	0.005	NV	N	S
2043	01/18/93	GW930118-12	U	Beryllium	0.005	NV	N	S
2066	11/06/89	66687	U	Beryllium	0.01	NV	N	S
2066	02/22/90	EMGW_SYSGEN_628	U	Beryllium	0.01	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Beryllium	0.01	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	Beryllium	0.01	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	Beryllium	0.01	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	Beryllium	0.01	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	Beryllium	0.01	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	Beryllium	0.05	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	Beryllium	0.005	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	Beryllium	0.005	NV	N	S
2066	01/06/93	GW930106-7	U	Beryllium	0.005	NV	N	S
2098	11/23/92	GW921123-5	U*	Beryllium	0.01	NV	N	D
2104	03/07/91	EMGW_SYSGEN_721	U	Beryllium	0.01	NV	N	R
2104	11/02/92	2104-11/02/92-A-N	U*	Beryllium	0.005	NV	N	R
3024	11/30/89	66735	U	Beryllium	0.01	NV	N	S
3024	02/18/90	EMGW_SYSGEN_992	U	Beryllium	0.01	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993	U	Beryllium	0.01	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	U	Beryllium	0.01	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	U	Beryllium	0.01	NV	N	S

Table D-20 (Continued)
Rejected/Nonvalidated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
3024	11/13/90	EMGW_SYSGEN_995	U	Beryllium	0.01	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	Beryllium	0.01	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	Beryllium	0.05	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	Beryllium	0.005	NV	N	S
3024	01/13/93	GW930113-8	U	Beryllium	0.005	NV	N	S
3043	11/14/89	66685	U	Beryllium	0.01	NV	N	S
3043	02/20/90	EMGW_SYSGEN_1018	U	Beryllium	0.01	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Beryllium	0.01	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	Beryllium	0.01	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	Beryllium	0.01	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	Beryllium	0.01	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	Beryllium	0.05	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	Beryllium	0.005	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	Beryllium	0.005	NV	N	S
3043	01/18/93	GW930118-14	U	Beryllium	0.005	NV	N	S
3098	11/23/92	GW921123-6	U*	Beryllium	0.01	NV	N	D
4011	11/14/90	EMGW_SYSGEN_1244	U	Beryllium	0.01	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Beryllium	0.01	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	Beryllium	0.05	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	Beryllium	0.005	NV	N	S
4011	01/05/93	GW930105-7	U	Beryllium	0.005	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559		Bicarbonate	337	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560		Bicarbonate	330	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703		Bicarbonate	305	NV	N	R
2096	08/18/92	2096-08/18/92-B-N		Bicarbonate	280	NV	N	R
2098	11/05/91	EMGW_SYSGEN_715		Bicarbonate	315	NV	N	D
2104	11/07/91	EMGW_SYSGEN_722		Bicarbonate	274	NV	N	R
3096	11/12/91	EMGW_SYSGEN_1138		Bicarbonate	248	NV	N	R
3096	02/02/93	GW930202-9		Bicarbonate	330	NV	N	R
3098	11/05/91	EMGW_SYSGEN_1149		Bicarbonate	305	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D		Bicarbonate	299	NV	D	D
4096	11/12/91	EMGW_SYSGEN_1297		Bicarbonate	261	NV	N	R
2043	01/18/93	GW930118-12		Bicarbonate Alkalinity	506	NV	N	S
2050	08/10/92	2050-08/10/92-B-N		Bicarbonate Alkalinity	460	NV	N	S
2050	11/02/92	2050-11/02/92-A-N		Bicarbonate Alkalinity	470	NV	N	S
2050	02/10/93	GW930210-8		Bicarbonate Alkalinity	380	NV	N	S
2066	01/06/93	GW930106-7		Bicarbonate Alkalinity	409	NV	N	S
2096	11/04/92	2096-11/04/92-A-N		Bicarbonate Alkalinity	390	NV	N	R
2096	02/02/93	GW930202-8		Bicarbonate Alkalinity	360	NV	N	R
2098	11/23/92	GW921123-5		Bicarbonate Alkalinity	410	NV	N	D
2098	02/04/93	GW930204-7		Bicarbonate Alkalinity	400	NV	N	D
2104	08/10/92	2104-08/10/92-B-N		Bicarbonate Alkalinity	380	NV	N	R
2104	11/02/92	2104-11/02/92-A-N		Bicarbonate Alkalinity	370	NV	N	R
2104	02/02/93	GW930202-12		Bicarbonate Alkalinity	370	NV	N	R
2728	02/10/93	GW930210-5		Bicarbonate Alkalinity	370	NV	N	S
3024	01/13/93	GW930113-8		Bicarbonate Alkalinity	433	NV	N	S
3043	01/18/93	GW930118-14		Bicarbonate Alkalinity	421	NV	N	S
3096	08/18/92	3096-08/18/92-B-N		Bicarbonate Alkalinity	330	NV	N	R
3096	11/04/92	3096-11/04/92-A-N		Bicarbonate Alkalinity	320	NV	N	R
3098	08/13/92	3098-08/13/92-A-D1-5		Bicarbonate Alkalinity	300	NV	D	D

Table D-20 (Continued)
Rejected/Nonvalidated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
3098	11/23/92	GW921123-6		Bicarbonate Alkalinity	410	NV	N	D
3098	02/04/93	GW930204-10		Bicarbonate Alkalinity	410	NV	N	D
3098	02/04/93	GW930204-12		Bicarbonate Alkalinity	330	NV	D	D
4011	01/05/93	GW930105-7		Bicarbonate Alkalinity	448	NV	N	S
4096	08/18/92	4096-08/18/92-B-N		Bicarbonate Alkalinity	290	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5		Bicarbonate Alkalinity	250	NV	D	R
4096	11/04/92	4096-11/04/92-A-N		Bicarbonate Alkalinity	300	NV	N	R
4096	11/04/92	4096-11/04/92-A-D1-7		Bicarbonate Alkalinity	250	NV	D	R
4096	02/02/93	GW930202-10		Bicarbonate Alkalinity	350	NV	N	R
4096	02/02/93	GW930202-11		Bicarbonate Alkalinity	290	NV	D	R
2043	05/17/90	EMGW_SYSGEN_523	U	Cadmium	0.001	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	U	Cadmium	0.001	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	U	Cadmium	0.001	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	Cadmium	0.001	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	Cadmium	0.001	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	Cadmium	0.001	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	Cadmium	0.001	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	Cadmium	0.01	NV	N	S
2043	01/18/93	GW930118-12	U	Cadmium	0.001	NV	N	S
2050	11/02/92	2050-11/02/92-A-N	U	Cadmium	0.001	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Cadmium	0.001	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	Cadmium	0.001	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	Cadmium	0.001	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	Cadmium	0.001	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	Cadmium	0.001	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	Cadmium	0.001	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	Cadmium	0.001	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	Cadmium	0.001	NV	N	S
2066	01/06/93	GW930106-7	U	Cadmium	0.001	NV	N	S
2098	11/23/92	GW921123-5	U*	Cadmium	0.0001	NV	N	D
2104	03/07/91	EMGW_SYSGEN_721	U	Cadmium	0.001	NV	N	R
2104	11/02/92	2104-11/02/92-A-N	U*	Cadmium	0.001	NV	N	R
3024	08/08/90	EMGW_SYSGEN_994	U	Cadmium	0.001	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	Cadmium	0.001	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	Cadmium	0.001	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	Cadmium	0.001	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	Cadmium	0.001	NV	N	S
3024	01/13/93	GW930113-8	U	Cadmium	0.001	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Cadmium	0.001	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	Cadmium	0.001	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	Cadmium	0.001	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	Cadmium	0.001	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	Cadmium	0.001	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	Cadmium	0.001	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	Cadmium	0.001	NV	N	S
3043	01/18/93	GW930118-14	U	Cadmium	0.001	NV	N	S
3098	11/23/92	GW921123-6		Cadmium	0.0001	NV	N	D
4011	11/14/90	EMGW_SYSGEN_1244	U	Cadmium	0.001	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Cadmium	0.001	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	Cadmium	0.001	NV	N	S

Table D-20 (Continued)
Rejected/Nonvalidated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
4011	10/02/91	EMGW_SYSGEN_1248	U	Cadmium	0.001	NV	N	S
4011	01/05/93	GW930105-7	U	Cadmium	0.001	NV	N	S
2043	11/14/89	66683		Calcium	104	NV	N	S
2043	02/20/90	EMGW_SYSGEN_522		Calcium	110	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523		Calcium	268	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524		Calcium	142	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525		Calcium	137	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526		Calcium	122	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D		Calcium	113	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528		Calcium	110	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529		Calcium	130	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8		Calcium	115	NV	N	S
2043	01/18/93	GW930118-12		Calcium	130	NV	N	S
2066	11/06/89	66687		Calcium	84.5	NV	N	S
2066	02/22/90	EMGW_SYSGEN_628		Calcium	74.9	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629		Calcium	72.9	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630		Calcium	48.8	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631		Calcium	69.8	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633		Calcium	60.6	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D		Calcium	58.7	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635		Calcium	66	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636		Calcium	76	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637		Calcium	74.9	NV	N	S
2066	01/06/93	GW930106-7		Calcium	75	NV	N	S
2098	11/23/92	GW921123-5		Calcium	120	NV	N	D
2104	03/07/91	EMGW_SYSGEN_721		Calcium	78.7	NV	N	R
2104	11/02/92	2104-11/02/92-A-N		Calcium	110	NV	N	R
3024	11/30/89	66735		Calcium	116	NV	N	S
3024	02/18/90	EMGW_SYSGEN_992		Calcium	135	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993		Calcium	119	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D		Calcium	123	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994		Calcium	117	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995		Calcium	44.2	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996		Calcium	48	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998		Calcium	54	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999		Calcium	56	NV	N	S
3024	01/13/93	GW930113-8		Calcium	156	NV	N	S
3043	11/14/89	66685		Calcium	89.3	NV	N	S
3043	02/20/90	EMGW_SYSGEN_1018		Calcium	97.6	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019		Calcium	89.4	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020		Calcium	38.8	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021		Calcium	76.3	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022		Calcium	70.5	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024		Calcium	83	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025		Calcium	86	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8		Calcium	79.8	NV	N	S
3043	01/18/93	GW930118-14		Calcium	86	NV	N	S
3098	11/23/92	GW921123-6		Calcium	120	NV	N	D
4011	11/14/90	EMGW_SYSGEN_1244		Calcium	51	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245		Calcium	96	NV	N	S

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Table D-20 (Continued)
Rejected/Nonvalidated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well	Sample		Lab		Validated		QA	
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type	Area
4011	07/30/91	EMGW_SYSGEN_1247		Calcium	96	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248		Calcium	100	NV	N	S
4011	01/05/93	GW930105-7		Calcium	115	NV	N	S
2043	01/18/93	GW930118-12	U	Carbonate Alkalinity	3	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559		Carbonate Alkalinity	2	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560		Carbonate Alkalinity	2	NV	N	S
2050	08/10/92	2050-08/10/92-B-N	U	Carbonate Alkalinity	3	NV	N	S
2050	11/02/92	2050-11/02/92-A-N	U*	Carbonate Alkalinity	3	NV	N	S
2050	02/10/93	GW930210-8	U	Carbonate Alkalinity	30	NV	N	S
2066	01/06/93	GW930106-7	U	Carbonate Alkalinity	3	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703		Carbonate Alkalinity	1	NV	N	R
2096	08/18/92	2096-08/18/92-B-N	U*	Carbonate Alkalinity	3	NV	N	R
2096	11/04/92	2096-11/04/92-A-N	U	Carbonate Alkalinity	3	NV	N	R
2098	11/05/91	EMGW_SYSGEN_715		Carbonate Alkalinity	1	NV	N	D
2098	11/23/92	GW921123-5	U*	Carbonate Alkalinity	3	NV	N	D
2098	02/04/93	GW930204-7	U	Carbonate Alkalinity	3	NV	N	D
2104	11/07/91	EMGW_SYSGEN_722		Carbonate Alkalinity	2	NV	N	R
2104	08/10/92	2104-08/10/92-B-N	U	Carbonate Alkalinity	3	NV	N	R
2104	11/02/92	2104-11/02/92-A-N	U*	Carbonate Alkalinity	3	NV	N	R
2728	02/10/93	GW930210-5	U	Carbonate Alkalinity	30	NV	N	S
3024	01/13/93	GW930113-8	U	Carbonate Alkalinity	3	NV	N	S
3043	01/18/93	GW930118-14	U	Carbonate Alkalinity	3	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138		Carbonate Alkalinity	2	NV	N	R
3096	08/18/92	3096-08/18/92-B-N	U*	Carbonate Alkalinity	3	NV	N	R
3096	11/04/92	3096-11/04/92-A-N	U	Carbonate Alkalinity	3	NV	N	R
3098	11/05/91	EMGW_SYSGEN_1149		Carbonate Alkalinity	3	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D		Carbonate Alkalinity	3	NV	D	D
3098	08/13/92	3098-08/13/92-A-D1-5	U	Carbonate Alkalinity	30	NV	D	D
3098	11/23/92	GW921123-6	U*	Carbonate Alkalinity	3	NV	N	D
3098	02/04/93	GW930204-10	U	Carbonate Alkalinity	3	NV	N	D
3098	02/04/93	GW930204-12	U	Carbonate Alkalinity	30	NV	D	D
4011	01/05/93	GW930105-7	U	Carbonate Alkalinity	3	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297		Carbonate Alkalinity	3	NV	N	R
4096	08/18/92	4096-08/18/92-B-N	U*	Carbonate Alkalinity	3	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5	U	Carbonate Alkalinity	30	NV	D	R
4096	11/04/92	4096-11/04/92-A-N	U	Carbonate Alkalinity	3	NV	N	R
4096	11/04/92	4096-11/04/92-A-D1-7	U	Carbonate Alkalinity	30	NV	D	R
4096	02/02/93	GW930202-11	U	Carbonate Alkalinity	30	NV	D	R
2043	02/20/90	EMGW_SYSGEN_522		Chloride	44	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523		Chloride	41	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524		Chloride	28	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525		Chloride	33	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526		Chloride	44	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D		Chloride	38	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528		Chloride	29	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529		Chloride	36	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8		Chloride	58	NV	N	S
2043	01/18/93	GW930118-12		Chloride	56	NV	N	S
2050	12/05/88	3743		Chloride	70.7	R	N	S
2050	10/17/90	EMGW_SYSGEN_558		Chloride	76	NV	N	S

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Table D-20 (Continued)
Rejected/Nonvalidated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2050	09/30/91	EMGW_SYSGEN_559		Chloride	76	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560		Chloride	75	NV	N	S
2050	08/10/92	2050-08/10/92-B-N		Chloride	62	NV	N	S
2050	11/02/92	2050-11/02/92-A-N		Chloride	46	NV	N	S
2050	02/10/93	GW930210-8		Chloride	74	NV	N	S
2066	08/07/88	3443		Chloride	68	NV	N	S
2066	11/06/89	66687		Chloride	69	NV	N	S
2066	02/22/90	EMGW_SYSGEN_628		Chloride	67	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629		Chloride	67	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630		Chloride	68	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631		Chloride	67	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633		Chloride	66	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D		Chloride	66	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635		Chloride	68	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636		Chloride	65	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637		Chloride	67	NV	N	S
2066	01/06/93	GW930106-7		Chloride	69	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703		Chloride	7	NV	N	R
2096	08/18/92	2096-08/18/92-B-N		Chloride	4	NV	N	R
2096	11/04/92	2096-11/04/92-A-N		Chloride	3.6	NV	N	R
2096	02/02/93	GW930202-8		Chloride	4.5	NV	N	R
2098	10/15/90	EMGW_SYSGEN_712		Chloride	19	NV	N	D
2098	11/05/91	EMGW_SYSGEN_715		Chloride	15	NV	N	D
2098	11/23/92	GW921123-5		Chloride	31	NV	N	D
2098	02/04/93	GW930204-7		Chloride	31	NV	N	D
2104	06/14/90	EMGW_SYSGEN_718		Chloride	23	NV	N	R
2104	09/12/90	EMGW_SYSGEN_719		Chloride	25	NV	N	R
2104	11/27/90	EMGW_SYSGEN_720		Chloride	20	NV	N	R
2104	03/07/91	EMGW_SYSGEN_721		Chloride	20	NV	N	R
2104	11/07/91	EMGW_SYSGEN_722		Chloride	21	NV	N	R
2104	08/10/92	2104-08/10/92-B-N		Chloride	21	NV	N	R
2104	11/02/92	2104-11/02/92-A-N		Chloride	24	NV	N	R
2104	02/02/93	GW930202-12		Chloride	25	NV	N	R
2728	02/10/93	GW930210-5		Chloride	95	NV	N	S
3024	11/30/89	66735		Chloride	21	NV	N	S
3024	02/18/90	EMGW_SYSGEN_992		Chloride	19	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993		Chloride	20	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D		Chloride	20	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994		Chloride	21	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995		Chloride	4	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996		Chloride	4	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998		Chloride	5	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999		Chloride	4	NV	N	S
3024	01/13/93	GW930113-8		Chloride	20	NV	N	S
3043	11/14/89	66685		Chloride	15	NV	N	S
3043	02/20/90	EMGW_SYSGEN_1018		Chloride	15	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019		Chloride	21	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020		Chloride	29	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021		Chloride	26	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022		Chloride	29	NV	N	S

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Table D-20 (Continued)
Rejected/Nonvalidated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
3043	07/16/91	EMGW_SYSGEN_1024		Chloride	4	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025		Chloride	27	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8		Chloride	22	NV	N	S
3043	01/18/93	GW930118-14		Chloride	19	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138		Chloride	6	NV	N	R
3096	08/18/92	3096-08/18/92-B-N		Chloride	6.8	NV	N	R
3096	11/04/92	3096-11/04/92-A-N		Chloride	7.3	NV	N	R
3096	02/02/93	GW930202-9		Chloride	7.7	NV	N	R
3098	10/15/90	EMGW_SYSGEN_1147		Chloride	23	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149		Chloride	23	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D		Chloride	23	NV	D	D
3098	08/13/92	3098-08/13/92-A-D1-5		Chloride	21	NV	D	D
3098	11/23/92	GW921123-6		Chloride	18	NV	N	D
3098	02/04/93	GW930204-10		Chloride	19	NV	N	D
3098	02/04/93	GW930204-12		Chloride	22	NV	D	D
4011	11/14/90	EMGW_SYSGEN_1244		Chloride	9	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245		Chloride	38	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247		Chloride	41	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248		Chloride	36	NV	N	S
4011	01/05/93	GW930105-7		Chloride	36	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297		Chloride	8	NV	N	R
4096	08/18/92	4096-08/18/92-B-N		Chloride	9	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5		Chloride	8.8	NV	D	R
4096	11/04/92	4096-11/04/92-A-N		Chloride	11	NV	N	R
4096	11/04/92	4096-11/04/92-A-D1-7		Chloride	10	NV	D	R
4096	02/02/93	GW930202-10		Chloride	3.9	NV	N	R
4096	02/02/93	GW930202-11		Chloride	4.1	NV	D	R
2043	11/14/89	66683		Chromium	0.011	NV	N	S
2043	02/20/90	EMGW_SYSGEN_522	U	Chromium	0.005	NV	N	S
2043	02/20/90	EMGW_SYSGEN_522		Chromium	0.008	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523		Chromium	0.09	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Chromium	0.005	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524		Chromium	0.312	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	U	Chromium	0.005	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525		Chromium	0.011	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525		Chromium	0.036	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	Chromium	0.005	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526		Chromium	0.04	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	Chromium	0.005	NV	D	S
2043	02/28/91	EMGW_SYSGEN_526D		Chromium	0.033	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528		Chromium	0.0035	NV	N	S
2043	07/16/91	EMGW_SYSGEN_528	U	Chromium	0.002	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	Chromium	0.002	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529		Chromium	0.0039	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8		Chromium	0.0034	NV	N	S
2043	01/18/93	GW930118-12	U	Chromium	0.002	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559	U	Chromium	0.002	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560		Chromium	0.0037	NV	N	S
2066	11/06/89	66687		Chromium	0.01	NV	N	S
2066	02/22/90	EMGW_SYSGEN_628	U	Chromium	0.005	NV	N	S

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Table D-20 (Continued)
Rejected/Nonvalidated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2066	02/22/90	EMGW_SYSGEN_628	U	Chromium	0.005	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Chromium	0.005	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Chromium	0.005	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	Chromium	0.005	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	Chromium	0.005	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	Chromium	0.005	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	Chromium	0.005	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	Chromium	0.005	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	Chromium	0.005	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	Chromium	0.005	NV	D	S
2066	02/26/91	EMGW_SYSGEN_633D	U	Chromium	0.005	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	Chromium	0.002	NV	N	S
2066	07/17/91	EMGW_SYSGEN_635		Chromium	0.0032	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	Chromium	0.002	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636		Chromium	0.0035	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	Chromium	0.002	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	Chromium	0.002	NV	N	S
2066	01/06/93	GW930106-7	U	Chromium	0.002	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703	U	Chromium	0.002	NV	N	R
2098	11/05/91	EMGW_SYSGEN_715	U	Chromium	0.002	NV	N	D
2098	11/23/92	GW921123-5	U*	Chromium	0.02	NV	N	D
2104	03/07/91	EMGW_SYSGEN_721	U	Chromium	0.005	NV	N	R
2104	11/07/91	EMGW_SYSGEN_722	U	Chromium	0.14	NV	N	R
2104	11/02/92	2104-11/02/92-A-N	U*	Chromium	0.01	NV	N	R
3024	11/30/89	66735	U	Chromium	0.005	NV	N	S
3024	02/18/90	EMGW_SYSGEN_992		Chromium	0.006	NV	N	S
3024	02/18/90	EMGW_SYSGEN_992	U	Chromium	0.005	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993	U	Chromium	0.005	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993	U	Chromium	0.005	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	U	Chromium	0.005	NV	D	S
3024	06/11/90	EMGW_SYSGEN_993D	U	Chromium	0.005	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	U	Chromium	0.005	NV	N	S
3024	08/08/90	EMGW_SYSGEN_994	U	Chromium	0.005	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	Chromium	0.005	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995		Chromium	0.019	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	Chromium	0.005	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996		Chromium	0.006	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998		Chromium	0.0049	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998		Chromium	0.0077	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999		Chromium	0.0108	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999		Chromium	0.0066	NV	N	S
3024	01/13/93	GW930113-8	U	Chromium	0.002	NV	N	S
3043	11/14/89	66685	U	Chromium	0.005	NV	N	S
3043	02/20/90	EMGW_SYSGEN_1018	U	Chromium	0.005	NV	N	S
3043	02/20/90	EMGW_SYSGEN_1018	U	Chromium	0.005	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Chromium	0.005	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Chromium	0.005	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	Chromium	0.005	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	Chromium	0.005	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	Chromium	0.005	NV	N	S

Table D-20 (Continued)
Rejected/Nonvalidated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
3043	11/05/90	EMGW_SYSGEN_1021		Chromium	0.015	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022		Chromium	0.024	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	Chromium	0.005	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024		Chromium	0.0072	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	Chromium	0.002	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	Chromium	0.002	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025		Chromium	0.0033	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8		Chromium	0.0027	NV	N	S
3043	01/18/93	GW930118-14	U	Chromium	0.002	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138	U	Chromium	0.002	NV	N	R
3098	11/05/91	EMGW_SYSGEN_1149	U	Chromium	0.002	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D	U	Chromium	0.002	NV	D	D
3098	11/23/92	GW921123-6	U*	Chromium	0.02	NV	N	D
4011	11/14/90	EMGW_SYSGEN_1244		Chromium	0.023	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244		Chromium	0.008	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245		Chromium	0.046	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Chromium	0.005	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247		Chromium	0.0047	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	Chromium	0.002	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248		Chromium	0.0034	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	Chromium	0.002	NV	N	S
4011	01/05/93	GW930105-7	U	Chromium	0.002	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297	U	Chromium	0.0038	NV	N	R
2043	11/14/89	66683	U	Cobalt	0.025	NV	N	S
2043	02/20/90	EMGW_SYSGEN_522	U	Cobalt	0.025	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Cobalt	0.025	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	U	Cobalt	0.025	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	U	Cobalt	0.025	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	Cobalt	0.025	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	Cobalt	0.025	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	Cobalt	0.005	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	Cobalt	0.005	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	Cobalt	0.005	NV	N	S
2043	01/18/93	GW930118-12	U	Cobalt	0.005	NV	N	S
2066	11/06/89	66687	U	Cobalt	0.025	NV	N	S
2066	02/22/90	EMGW_SYSGEN_628	U	Cobalt	0.025	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Cobalt	0.025	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	Cobalt	0.025	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	Cobalt	0.025	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	Cobalt	0.025	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	Cobalt	0.025	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	Cobalt	0.005	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	Cobalt	0.005	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	Cobalt	0.005	NV	N	S
2066	01/06/93	GW930106-7	U	Cobalt	0.005	NV	N	S
2098	11/23/92	GW921123-5	U*	Cobalt	0.02	NV	N	D
2104	03/07/91	EMGW_SYSGEN_721	U	Cobalt	0.025	NV	N	R
2104	11/02/92	2104-11/02/92-A-N	U*	Cobalt	0.05	NV	N	R
3024	11/30/89	66735	U	Cobalt	0.025	NV	N	S
3024	02/18/90	EMGW_SYSGEN_992	U	Cobalt	0.025	NV	N	S

Table D-20 (Continued)
Rejected/Nonvalidated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
3024	06/11/90	EMGW_SYSGEN_993	U	Cobalt	0.025	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	U	Cobalt	0.025	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	U	Cobalt	0.025	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	Cobalt	0.025	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	Cobalt	0.025	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	Cobalt	0.005	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	Cobalt	0.005	NV	N	S
3024	01/13/93	GW930113-8	U	Cobalt	0.005	NV	N	S
3043	11/14/89	66685	U	Cobalt	0.025	NV	N	S
3043	02/20/90	EMGW_SYSGEN_1018	U	Cobalt	0.025	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Cobalt	0.025	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	Cobalt	0.025	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	Cobalt	0.025	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	Cobalt	0.025	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	Cobalt	0.005	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	Cobalt	0.005	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	Cobalt	0.005	NV	N	S
3043	01/18/93	GW930118-14	U	Cobalt	0.005	NV	N	S
3098	11/23/92	GW921123-6	U*	Cobalt	0.02	NV	N	D
4011	11/14/90	EMGW_SYSGEN_1244	U	Cobalt	0.025	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Cobalt	0.025	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	Cobalt	0.005	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	Cobalt	0.005	NV	N	S
4011	01/05/93	GW930105-7	U	Cobalt	0.005	NV	N	S
2043	11/14/89	66683		Copper	0.033	NV	N	S
2043	02/20/90	EMGW_SYSGEN_522	U	Copper	0.025	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523		Copper	0.06	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524		Copper	0.047	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	U	Copper	0.025	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	Copper	0.025	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	Copper	0.025	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	Copper	0.02	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	Copper	0.02	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	Copper	0.02	NV	N	S
2043	01/18/93	GW930118-12	U	Copper	0.02	NV	N	S
2066	11/06/89	66687	U	Copper	0.025	NV	N	S
2066	02/22/90	EMGW_SYSGEN_628	U	Copper	0.025	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Copper	0.025	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	Copper	0.025	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	Copper	0.025	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	Copper	0.025	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	Copper	0.025	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	Copper	0.02	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	Copper	0.02	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	Copper	0.02	NV	N	S
2066	01/06/93	GW930106-7	U	Copper	0.02	NV	N	S
2098	11/23/92	GW921123-5	U*	Copper	0.02	NV	N	D
2104	03/07/91	EMGW_SYSGEN_721	U	Copper	0.025	NV	N	R
2104	11/02/92	2104-11/02/92-A-N	U*	Copper	0.02	NV	N	R
3024	11/30/89	66735	U	Copper	0.025	NV	N	S

Table D-20 (Continued)
Rejected/Nonvalidated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well	Sample		Lab		Validated		QA	
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type	Area
3024	02/18/90	EMGW_SYSGEN_992	U	Copper	0.025	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993	U	Copper	0.025	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	U	Copper	0.025	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	U	Copper	0.025	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	Copper	0.025	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	Copper	0.025	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	Copper	0.02	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	Copper	0.02	NV	N	S
3024	01/13/93	GW930113-8	U	Copper	0.02	NV	N	S
3043	11/14/89	66685	U	Copper	0.025	NV	N	S
3043	02/20/90	EMGW_SYSGEN_1018	U	Copper	0.025	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Copper	0.025	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	Copper	0.025	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	Copper	0.025	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	Copper	0.025	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	Copper	0.02	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025		Copper	0.02	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	Copper	0.02	NV	N	S
3043	01/18/93	GW930118-14	U	Copper	0.02	NV	N	S
3098	11/23/92	GW921123-6	U*	Copper	0.02	NV	N	D
4011	11/14/90	EMGW_SYSGEN_1244		Copper	0.026	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Copper	0.025	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	Copper	0.02	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	Copper	0.02	NV	N	S
4011	01/05/93	GW930105-7	U	Copper	0.02	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Cyanide	0.005	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	U	Cyanide	0.005	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	Cyanide	0.005	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	Cyanide	0.005	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	Cyanide	0.005	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	Cyanide	0.005	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	Cyanide	0.005	NV	N	S
2043	01/18/93	GW930118-12	U	Cyanide	0.005	NV	N	S
2050	10/17/90	EMGW_SYSGEN_558	U	Cyanide	0.005	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Cyanide	0.005	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	Cyanide	0.005	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	Cyanide	0.005	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	Cyanide	0.005	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	Cyanide	0.005	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	Cyanide	0.005	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	Cyanide	0.005	NV	N	S
2066	01/06/93	GW930106-7	U	Cyanide	0.005	NV	N	S
2098	10/15/90	EMGW_SYSGEN_712	U	Cyanide	0.005	NV	N	D
2104	11/27/90	EMGW_SYSGEN_720	U	Cyanide	0.005	NV	N	R
2104	03/07/91	EMGW_SYSGEN_721	U	Cyanide	0.005	NV	N	R
2728	04/04/93	113514	U	Cyanide	0.002	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	Cyanide	0.005	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	Cyanide	0.005	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	Cyanide	0.005	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	Cyanide	0.005	NV	N	S

Table D-20 (Continued)
Rejected/Nonvalidated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
3024	01/13/93	GW930113-8	U	Cyanide	0.005	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Cyanide	0.005	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	Cyanide	0.005	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	Cyanide	0.005	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	Cyanide	0.005	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	Cyanide	0.005	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	Cyanide	0.005	NV	N	S
3043	01/18/93	GW930118-14	U	Cyanide	0.005	NV	N	S
3098	10/15/90	EMGW_SYSGEN_1147	U	Cyanide	0.005	NV	N	D
4011	11/14/90	EMGW_SYSGEN_1244	U	Cyanide	0.005	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Cyanide	0.01	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	Cyanide	0.005	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	Cyanide	0.005	NV	N	S
4011	01/05/93	GW930105-7	U	Cyanide	0.005	NV	N	S
4011	04/08/93	GW930408-3	U	Cyanide	0.00002	NV	N	S
4011	04/08/93	GW930408-2	U	Cyanide	0.00002	NV	D	S
2043	02/20/90	EMGW_SYSGEN_522		Fluoride	0.72	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523		Fluoride	0.53	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524		Fluoride	0.38	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525		Fluoride	0.41	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526		Fluoride	0.45	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D		Fluoride	0.4	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528		Fluoride	0.51	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529		Fluoride	0.51	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8		Fluoride	0.5	NV	N	S
2043	01/18/93	GW930118-12		Fluoride	0.53	NV	N	S
2050	10/17/90	EMGW_SYSGEN_558		Fluoride	0.51	NV	N	S
2050	08/10/92	2050-08/10/92-B-N		Fluoride	0.6	NV	N	S
2050	11/02/92	2050-11/02/92-A-N		Fluoride	0.7	NV	N	S
2050	02/10/93	GW930210-8		Fluoride	0.64	NV	N	S
2066	08/07/88	3443		Fluoride	0.9	NV	N	S
2066	11/06/89	66687		Fluoride	1.02	NV	N	S
2066	02/22/90	EMGW_SYSGEN_628		Fluoride	0.63	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629		Fluoride	0.78	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630		Fluoride	0.68	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631		Fluoride	0.5	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633		Fluoride	0.92	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D		Fluoride	0.91	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635		Fluoride	0.9	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636		Fluoride	0.84	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637		Fluoride	0.88	NV	N	S
2066	01/06/93	GW930106-7		Fluoride	0.91	NV	N	S
2096	08/18/92	2096-08/18/92-B-N		Fluoride	0.2	NV	N	R
2096	11/04/92	2096-11/04/92-A-N		Fluoride	0.2	NV	N	R
2096	02/02/93	GW930202-8		Fluoride	0.2	NV	N	R
2098	10/15/90	EMGW_SYSGEN_712		Fluoride	0.41	NV	N	D
2098	11/23/92	GW921123-5		Fluoride	0.2	NV	N	D
2098	02/04/93	GW930204-7		Fluoride	0.3	NV	N	D
2104	09/12/90	EMGW_SYSGEN_719		Fluoride	0.2	NV	N	R
2104	11/27/90	EMGW_SYSGEN_720		Fluoride	0.19	NV	N	R

Table D-20 (Continued)
Rejected/Nonvalidated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2104	03/07/91	EMGW_SYSGEN_721		Fluoride	0.16	NV	N	R
2104	08/10/92	2104-08/10/92-B-N		Fluoride	0.1	NV	N	R
2104	11/02/92	2104-11/02/92-A-N		Fluoride	0.2	NV	N	R
2104	02/02/93	GW930202-12		Fluoride	0.2	NV	N	R
2728	02/10/93	GW930210-5		Fluoride	0.61	NV	N	S
3024	11/30/89	66735		Fluoride	0.39	NV	N	S
3024	02/18/90	EMGW_SYSGEN_992		Fluoride	0.38	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993		Fluoride	0.42	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D		Fluoride	0.53	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994		Fluoride	0.41	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995		Fluoride	0.58	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996		Fluoride	0.49	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998		Fluoride	0.61	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999		Fluoride	0.53	NV	N	S
3024	01/13/93	GW930113-8		Fluoride	0.46	NV	N	S
3043	11/14/89	66685		Fluoride	0.29	NV	N	S
3043	02/20/90	EMGW_SYSGEN_1018		Fluoride	0.63	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019		Fluoride	0.38	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020		Fluoride	0.24	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021		Fluoride	0.27	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022		Fluoride	0.32	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024		Fluoride	0.35	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025		Fluoride	0.32	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8		Fluoride	0.44	NV	N	S
3043	01/18/93	GW930118-14		Fluoride	0.29	NV	N	S
3096	08/18/92	3096-08/18/92-B-N		Fluoride	0.1	NV	N	R
3096	11/04/92	3096-11/04/92-A-N		Fluoride	0.1	NV	N	R
3096	02/02/93	GW930202-9		Fluoride	0.1	NV	N	R
3098	10/15/90	EMGW_SYSGEN_1147		Fluoride	0.52	NV	N	D
3098	08/13/92	3098-08/13/92-A-D1-5	U	Fluoride	0.15	NV	D	D
3098	11/23/92	GW921123-6		Fluoride	0.2	NV	N	D
3098	02/04/93	GW930204-10		Fluoride	0.2	NV	N	D
3098	02/04/93	GW930204-12		Fluoride	0.15	NV	D	D
4011	11/14/90	EMGW_SYSGEN_1244		Fluoride	0.51	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245		Fluoride	0.37	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247		Fluoride	0.39	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248		Fluoride	0.34	NV	N	S
4011	01/05/93	GW930105-7		Fluoride	0.41	NV	N	S
4096	08/18/92	4096-08/18/92-B-N		Fluoride	0.1	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5	U	Fluoride	0.15	NV	D	R
4096	11/04/92	4096-11/04/92-A-N		Fluoride	0.1	NV	N	R
4096	11/04/92	4096-11/04/92-A-D1-7		Fluoride	0.15	NV	D	R
4096	02/02/93	GW930202-10		Fluoride	0.2	NV	N	R
4096	02/02/93	GW930202-10		Fluoride	0.2	NV	N	R
4096	02/02/93	GW930202-11		Fluoride	0.15	NV	D	R
2043	11/14/89	66683		Iron	1.72	NV	N	S
2043	02/20/90	EMGW_SYSGEN_522		Iron	0.839	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523		Iron	25.7	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524		Iron	46.8	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525		Iron	14.2	NV	N	S

Table D-20 (Continued)
Rejected/Nonvalidated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2043	02/28/91	EMGW_SYSGEN_526		Iron	33.6	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D		Iron	26.8	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528		Iron	0.95	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529		Iron	7.8	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8		Iron	1.74	NV	N	S
2043	01/18/93	GW930118-12		Iron	1.4	NV	N	S
2066	11/06/89	66687		Iron	2.1	NV	N	S
2066	02/22/90	EMGW_SYSGEN_628		Iron	1.84	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629		Iron	1.61	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630		Iron	2.11	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631		Iron	2.19	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633		Iron	2.64	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D		Iron	2.53	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635		Iron	1.99	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636		Iron	2.7	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637		Iron	1.71	NV	N	S
2066	01/06/93	GW930106-7		Iron	1.87	NV	N	S
2098	11/23/92	GW921123-5		Iron	0.3	NV	N	D
2104	03/07/91	EMGW_SYSGEN_721		Iron	2.4	NV	N	R
2104	11/02/92	2104-11/02/92-A-N		Iron	2.7	NV	N	R
3024	11/30/89	66735		Iron	4.22	NV	N	S
3024	02/18/90	EMGW_SYSGEN_992		Iron	4.66	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993		Iron	4.42	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D		Iron	4.58	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994		Iron	4.92	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995		Iron	1.03	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996		Iron	1.71	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998		Iron	0.67	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999		Iron	2.3	NV	N	S
3024	01/13/93	GW930113-8		Iron	11.9	NV	N	S
3043	11/14/89	66685		Iron	3.41	NV	N	S
3043	02/20/90	EMGW_SYSGEN_1018		Iron	3.75	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019		Iron	3.45	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020		Iron	3.88	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021		Iron	3.7	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022		Iron	3.85	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024		Iron	3.82	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025		Iron	4	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8		Iron	3.89	NV	N	S
3043	01/18/93	GW930118-14		Iron	4.06	NV	N	S
3098	11/23/92	GW921123-6		Iron	0.2	NV	N	D
4011	11/14/90	EMGW_SYSGEN_1244		Iron	3.4	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245		Iron	2.86	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247		Iron	2.43	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248		Iron	1.1	NV	N	S
4011	01/05/93	GW930105-7		Iron	2.28	NV	N	S
2043	11/14/89	66683		Lead	0.007	NV	N	S
2043	02/20/90	EMGW_SYSGEN_522		Lead	0.008	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523		Lead	0.029	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524		Lead	0.019	NV	N	S

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Table D-20 (Continued)
Rejected/Nonvalidated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2043	11/06/90	EMGW_SYSGEN_525		Lead	0.01	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	Lead	0.005	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	Lead	0.005	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	Lead	0.005	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	Lead	0.003	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8		Lead	0.0055	NV	N	S
2043	01/18/93	GW930118-12	U	Lead	0.003	NV	N	S
2050	11/02/92	2050-11/02/92-A-N	U	Lead	0.005	NV	N	S
2066	11/06/89	66687	U	Lead	0.005	NV	N	S
2066	02/22/90	EMGW_SYSGEN_628	U	Lead	0.005	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Lead	0.005	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	Lead	0.005	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	Lead	0.005	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	Lead	0.005	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	Lead	0.005	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	Lead	0.005	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	Lead	0.003	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	Lead	0.003	NV	N	S
2066	01/06/93	GW930106-7	U	Lead	0.003	NV	N	S
2098	11/23/92	GW921123-5	U*	Lead	0.003	NV	N	D
2104	03/07/91	EMGW_SYSGEN_721	U	Lead	0.005	NV	N	R
2104	11/02/92	2104-11/02/92-A-N	U*	Lead	0.005	NV	N	R
3024	11/30/89	66735	U	Lead	0.005	NV	N	S
3024	02/18/90	EMGW_SYSGEN_992	U	Lead	0.005	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993	U	Lead	0.005	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	U	Lead	0.005	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	U	Lead	0.005	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	Lead	0.005	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	Lead	0.005	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	Lead	0.005	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	Lead	0.003	NV	N	S
3024	01/13/93	GW930113-8	U	Lead	0.003	NV	N	S
3043	11/14/89	66685	U	Lead	0.005	NV	N	S
3043	02/20/90	EMGW_SYSGEN_1018	U	Lead	0.005	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Lead	0.005	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	Lead	0.005	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	Lead	0.005	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	Lead	0.005	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	Lead	0.005	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	Lead	0.003	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	Lead	0.003	NV	N	S
3043	01/18/93	GW930118-14	U	Lead	0.003	NV	N	S
3098	11/23/92	GW921123-6	U*	Lead	0.003	NV	N	D
4011	11/14/90	EMGW_SYSGEN_1244		Lead	0.01	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Lead	0.005	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	Lead	0.005	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	Lead	0.003	NV	N	S
4011	01/05/93	GW930105-7	U	Lead	0.003	NV	N	S
3098	08/13/92	3098-08/13/92-A-D1-5		m,p-Xylene	0.01	NV	D	D
4096	08/18/92	4096-08/18/92-B-D1-5	U	m,p-Xylene	0.0018	NV	D	R

Table D-20 (Continued)
Rejected/Nonvalidated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
4096	11/04/92	4096-11/04/92-A-D1-7	U	m,p-Xylene	0.0018	NV	D	R
2043	11/14/89	66683		Magnesium	37.2	NV	N	S
2043	02/20/90	EMGW_SYSGEN_522		Magnesium	33.5	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523		Magnesium	76	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524		Magnesium	68.8	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525		Magnesium	50	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526		Magnesium	40	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D		Magnesium	40	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528		Magnesium	41	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529		Magnesium	48	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8		Magnesium	34.5	NV	N	S
2043	01/18/93	GW930118-12		Magnesium	39.1	NV	N	S
2050	11/02/92	2050-11/02/92-A-N		Magnesium	30	NV	N	S
2066	11/06/89	66687		Magnesium	34	NV	N	S
2066	02/22/90	EMGW_SYSGEN_628		Magnesium	27.3	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629		Magnesium	28.2	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630		Magnesium	26.8	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631		Magnesium	30	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633		Magnesium	29.4	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D		Magnesium	27.8	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635		Magnesium	31	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636		Magnesium	28	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637		Magnesium	27.4	NV	N	S
2066	01/06/93	GW930106-7		Magnesium	30.1	NV	N	S
2098	11/23/92	GW921123-5		Magnesium	32	NV	N	D
2104	03/07/91	EMGW_SYSGEN_721		Magnesium	27.1	NV	N	R
2104	11/02/92	2104-11/02/92-A-N		Magnesium	30	NV	N	R
3024	11/30/89	66735		Magnesium	25.2	NV	N	S
3024	02/18/90	EMGW_SYSGEN_992		Magnesium	24.9	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993		Magnesium	24.5	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D		Magnesium	25.6	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994		Magnesium	26.8	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995		Magnesium	15.7	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996		Magnesium	25.7	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998		Magnesium	23	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999		Magnesium	19	NV	N	S
3024	01/13/93	GW930113-8		Magnesium	35.1	NV	N	S
3043	11/14/89	66685		Magnesium	25.5	NV	N	S
3043	02/20/90	EMGW_SYSGEN_1018		Magnesium	25.1	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019		Magnesium	26.4	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020		Magnesium	24	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021		Magnesium	25	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022		Magnesium	25.6	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024		Magnesium	30	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025		Magnesium	26	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8		Magnesium	25.1	NV	N	S
3043	01/18/93	GW930118-14		Magnesium	26.7	NV	N	S
3098	11/23/92	GW921123-6		Magnesium	33	NV	N	D
4011	11/14/90	EMGW_SYSGEN_1244		Magnesium	29.2	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245		Magnesium	29.8	NV	N	S

Table D-20 (Continued)
Rejected/Nonvalidated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
4011	07/30/91	EMGW_SYSGEN_1247		Magnesium	30	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248		Magnesium	28	NV	N	S
4011	01/05/93	GW930105-7		Magnesium	35.6	NV	N	S
2043	11/14/89	66683		Manganese	0.252	NV	N	S
2043	02/20/90	EMGW_SYSGEN_522		Manganese	0.144	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523		Manganese	0.715	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524		Manganese	0.632	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525		Manganese	0.271	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526		Manganese	0.504	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D		Manganese	0.45	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528		Manganese	0.396	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529		Manganese	0.38	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8		Manganese	0.146	NV	N	S
2043	01/18/93	GW930118-12		Manganese	0.159	NV	N	S
2050	11/02/92	2050-11/02/92-A-N		Manganese	0.12	NV	N	S
2066	11/06/89	66687		Manganese	0.037	NV	N	S
2066	02/22/90	EMGW_SYSGEN_628		Manganese	0.037	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629		Manganese	0.033	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630		Manganese	0.036	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631		Manganese	0.038	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633		Manganese	0.056	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D		Manganese	0.053	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635		Manganese	0.032	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	Manganese	0.015	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637		Manganese	0.032	NV	N	S
2066	01/06/93	GW930106-7		Manganese	0.025	NV	N	S
2098	11/23/92	GW921123-5	U*	Manganese	0.01	NV	N	D
2104	03/07/91	EMGW_SYSGEN_721		Manganese	0.236	NV	N	R
2104	11/02/92	2104-11/02/92-A-N		Manganese	0.27	NV	N	R
3024	11/30/89	66735		Manganese	0.156	NV	N	S
3024	02/18/90	EMGW_SYSGEN_992		Manganese	0.259	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993		Manganese	0.314	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D		Manganese	0.321	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994		Manganese	0.168	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995		Manganese	0.046	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996		Manganese	0.117	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998		Manganese	0.038	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999		Manganese	0.197	NV	N	S
3024	01/13/93	GW930113-8		Manganese	0.216	NV	N	S
3043	11/14/89	66685		Manganese	0.062	NV	N	S
3043	02/20/90	EMGW_SYSGEN_1018		Manganese	0.073	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019		Manganese	0.063	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020		Manganese	0.07	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021		Manganese	0.069	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022		Manganese	0.07	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024		Manganese	0.063	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025		Manganese	0.047	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8		Manganese	0.057	NV	N	S
3043	01/18/93	GW930118-14		Manganese	0.071	NV	N	S
3098	11/23/92	GW921123-6		Manganese	0.01	NV	N	D

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Table D-20 (Continued)
Rejected/Nonvalidated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
4011	11/14/90	EMGW_SYSGEN_1244		Manganese	0.14	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245		Manganese	0.179	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247		Manganese	0.16	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248		Manganese	0.142	NV	N	S
4011	01/05/93	GW930105-7		Manganese	0.161	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Mercury	0.0002	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	U	Mercury	0.0002	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	U	Mercury	0.0002	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	Mercury	0.0002	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	Mercury	0.0002	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	Mercury	0.0002	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	Mercury	0.0002	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	Mercury	0.0002	NV	N	S
2043	01/18/93	GW930118-12	U	Mercury	0.0002	NV	N	S
2050	11/02/92	2050-11/02/92-A-N	U	Mercury	0.0001	NV	N	S
2066	08/07/88	3443	U	Mercury	0.0002	R	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Mercury	0.0002	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	Mercury	0.0002	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	Mercury	0.0002	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	Mercury	0.0002	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	Mercury	0.0002	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	Mercury	0.0002	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	Mercury	0.0002	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	Mercury	0.0002	NV	N	S
2066	01/06/93	GW930106-7	U	Mercury	0.0002	NV	N	S
2098	11/23/92	GW921123-5	U*	Mercury	0.0001	NV	N	D
2104	03/07/91	EMGW_SYSGEN_721	U	Mercury	0.0002	NV	N	R
2104	11/02/92	2104-11/02/92-A-N	U*	Mercury	0.0001	NV	N	R
3024	08/08/90	EMGW_SYSGEN_994	U	Mercury	0.0002	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	Mercury	0.0002	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	Mercury	0.0002	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	Mercury	0.0002	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	Mercury	0.0002	NV	N	S
3024	01/13/93	GW930113-8	U	Mercury	0.0002	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Mercury	0.0002	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	Mercury	0.0002	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	Mercury	0.0002	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	Mercury	0.0002	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	Mercury	0.0002	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	Mercury	0.0002	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	Mercury	0.0002	NV	N	S
3043	01/18/93	GW930118-14	U	Mercury	0.0002	NV	N	S
3098	11/23/92	GW921123-6	U*	Mercury	0.0001	NV	N	D
4011	11/14/90	EMGW_SYSGEN_1244	U	Mercury	0.0002	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Mercury	0.0002	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	Mercury	0.0002	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	Mercury	0.0002	NV	N	S
4011	01/05/93	GW930105-7	U	Mercury	0.0002	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Molybdenum	0.025	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	U	Molybdenum	0.025	NV	N	S

Table D-20 (Continued)
Rejected/Nonvalidated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2043	11/06/90	EMGW_SYSGEN_525	U	Molybdenum	0.025	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	Molybdenum	0.025	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	Molybdenum	0.025	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	Molybdenum	0.01	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	Molybdenum	0.01	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	Molybdenum	0.01	NV	N	S
2043	01/18/93	GW930118-12	U	Molybdenum	0.01	NV	N	S
2050	11/02/92	2050-11/02/92-A-N	U	Molybdenum	0.05	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Molybdenum	0.025	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	Molybdenum	0.025	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	Molybdenum	0.025	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	Molybdenum	0.025	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	Molybdenum	0.025	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	Molybdenum	0.01	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	Molybdenum	0.01	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	Molybdenum	0.01	NV	N	S
2066	01/06/93	GW930106-7	U	Molybdenum	0.01	NV	N	S
2098	11/23/92	GW921123-5	U*	Molybdenum	0.05	NV	N	D
2104	03/07/91	EMGW_SYSGEN_721	U	Molybdenum	0.025	NV	N	R
2104	11/02/92	2104-11/02/92-A-N	U*	Molybdenum	0.05	NV	N	R
3024	08/08/90	EMGW_SYSGEN_994	U	Molybdenum	0.025	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	Molybdenum	0.025	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	Molybdenum	0.025	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	Molybdenum	0.01	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	Molybdenum	0.01	NV	N	S
3024	01/13/93	GW930113-8	U	Molybdenum	0.01	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Molybdenum	0.025	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	Molybdenum	0.025	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	Molybdenum	0.025	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	Molybdenum	0.025	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	Molybdenum	0.01	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	Molybdenum	0.01	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	Molybdenum	0.01	NV	N	S
3043	01/18/93	GW930118-14	U	Molybdenum	0.01	NV	N	S
3098	11/23/92	GW921123-6	U*	Molybdenum	0.05	NV	N	D
4011	11/14/90	EMGW_SYSGEN_1244	U	Molybdenum	0.025	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Molybdenum	0.025	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	Molybdenum	0.01	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	Molybdenum	0.01	NV	N	S
4011	01/05/93	GW930105-7	U	Molybdenum	0.01	NV	N	S
2043	11/14/89	66683	U	Nickel	0.005	NV	N	S
2043	02/20/90	EMGW_SYSGEN_522	U	Nickel	0.005	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523		Nickel	0.1	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524		Nickel	0.055	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525		Nickel	0.009	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	Nickel	0.005	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D		Nickel	0.055	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	Nickel	0.01	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	Nickel	0.01	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	Nickel	0.01	NV	N	S

Table D-20 (Continued)
Rejected/Nonvalidated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2043	01/18/93	GW930118-12	U	Nickel	0.01	NV	N	S
2050	11/02/92	2050-11/02/92-A-N	U	Nickel	0.05	NV	N	S
2066	11/06/89	66687	U	Nickel	0.005	NV	N	S
2066	02/22/90	EMGW_SYSGEN_628	U	Nickel	0.005	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Nickel	0.005	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	Nickel	0.005	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631		Nickel	0.006	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	Nickel	0.005	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	Nickel	0.005	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	Nickel	0.01	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	Nickel	0.01	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	Nickel	0.01	NV	N	S
2066	01/06/93	GW930106-7	U	Nickel	0.01	NV	N	S
2098	11/23/92	GW921123-5	U*	Nickel	0.03	NV	N	D
2104	03/07/91	EMGW_SYSGEN_721	U	Nickel	0.005	NV	N	R
2104	11/02/92	2104-11/02/92-A-N	U*	Nickel	0.05	NV	N	R
3024	11/30/89	66735	U	Nickel	0.005	NV	N	S
3024	02/18/90	EMGW_SYSGEN_992	U	Nickel	0.005	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993	U	Nickel	0.005	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	U	Nickel	0.005	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	U	Nickel	0.005	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	Nickel	0.005	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	Nickel	0.005	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	Nickel	0.01	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	Nickel	0.01	NV	N	S
3024	01/13/93	GW930113-8	U	Nickel	0.01	NV	N	S
3043	11/14/89	66685	U	Nickel	0.005	NV	N	S
3043	02/20/90	EMGW_SYSGEN_1018	U	Nickel	0.005	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Nickel	0.005	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	Nickel	0.005	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	Nickel	0.005	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	Nickel	0.005	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	Nickel	0.01	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	Nickel	0.01	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	Nickel	0.01	NV	N	S
3043	01/18/93	GW930118-14	U	Nickel	0.01	NV	N	S
3098	11/23/92	GW921123-6	U*	Nickel	0.03	NV	N	D
4011	11/14/90	EMGW_SYSGEN_1244		Nickel	0.016	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245		Nickel	0.027	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	Nickel	0.01	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	Nickel	0.01	NV	N	S
4011	01/05/93	GW930105-7	U	Nickel	0.01	NV	N	S
2043	04/13/88	3091	U	Nitrate	0.1	R	N	S
2043	08/05/88	3440	U	Nitrate	0.1	R	N	S
2043	02/02/89	3887	U	Nitrate	0.1	R	N	S
2043	06/26/89	66438	U	Nitrate	0.1	R	N	S
2043	08/30/89	66547	U	Nitrate	0.1	R	D	S
2043	01/18/93	GW930118-12	U	Nitrate	0.02	NV	N	S
2050	05/05/88	3147	U	Nitrate	0.1	R	N	S
2050	08/16/88	3497		Nitrate	0.87	R	N	S

Table D-20 (Continued)
Rejected/Nonvalidated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well	Sample		Lab		Validated		QA	
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type	Area
2050	03/13/89	3969	U	Nitrate	0.02	R	N	S
2056	05/06/88	3159	U	Nitrate	0.1	R	N	S
2056	03/13/89	3967	U	Nitrate	0.02	R	N	S
2057	06/03/88	3265	U	Nitrate	0.1	R	N	R
2057	12/13/88	3779	U	Nitrate	0.1	R	N	R
2066	08/07/88	3443	J	Nitrate	2.5	NV	N	S
2066	11/10/88	3710	U	Nitrate	0.1	R	N	S
2066	03/14/89	3894	U	Nitrate	0.02	R	N	S
2066	08/09/89	66498	U	Nitrate	0.1	R	N	S
2066	11/06/89	66687		Nitrate	0.03	NV	N	S
2066	01/06/93	GW930106-7	U	Nitrate	0.02	NV	N	S
2096	09/12/88	3586	U	Nitrate	0.1	R	N	R
2096	04/30/89	4081	U	Nitrate	0.1	R	N	R
2096	04/25/90	4234	U	Nitrate	0.02	R	N	R
2104	08/16/88	3498	U	Nitrate	0.1	R	N	R
2104	12/06/88	3744	U	Nitrate	0.1	R	N	R
2104	03/15/89	3970		Nitrate	0.05	R	N	R
2104	04/22/90	4269	U	Nitrate	0.02	R	N	R
2105	12/13/88	3782	U	Nitrate	0.1	R	N	S
2105	03/15/89	3968	U	Nitrate	0.02	R	N	S
3024	07/26/88	3377	U	Nitrate	0.1	R	N	S
3024	01/24/89	3842	U	Nitrate	0.05	R	N	S
3024	11/30/89	66735		Nitrate	0.13	NV	N	S
3024	01/13/93	GW930113-8		Nitrate	0.05	NV	N	S
3043	02/02/89	3886	U	Nitrate	0.1	R	N	S
3043	06/13/89	66439	U	Nitrate	0.1	R	N	S
3043	08/30/89	66543	U	Nitrate	0.1	R	N	S
3043	11/14/89	66685		Nitrate	0.02	NV	N	S
3043	01/18/93	GW930118-14	U	Nitrate	0.02	NV	N	S
3063	08/16/88	3495		Nitrate	0.28	R	N	D
3096	02/09/89	3974	U	Nitrate	0.1	R	N	R
3096	04/30/89	4082	U	Nitrate	0.1	R	N	R
3096	04/25/90	4257	U	Nitrate	0.02	R	N	R
3099	08/16/88	3496		Nitrate	4	R	N	D
3100	08/19/88	3517		Nitrate	12.4	R	N	D
4011	10/05/90	4345	U	Nitrate	0.1	R	N	S
4011	01/05/93	GW930105-7	U	Nitrate	0.02	NV	N	S
4096	09/12/88	3584	U	Nitrate	0.1	R	N	R
4096	02/10/89	3975	U	Nitrate	0.1	R	N	R
4096	04/30/89	4083	U	Nitrate	0.1	R	N	R
2043	02/20/90	EMGW_SYSGEN_522	U	Nitrate, as Nitrogen	0.02	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Nitrate, as Nitrogen	0.02	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524		Nitrate, as Nitrogen	0.17	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526		Nitrate, as Nitrogen	0.27	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D		Nitrate, as Nitrogen	0.21	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	Nitrate, as Nitrogen	0.02	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529		Nitrate, as Nitrogen	0.06	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	Nitrate, as Nitrogen	0.02	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559	U	Nitrate, as Nitrogen	0.02	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560	U	Nitrate, as Nitrogen	0.02	NV	N	S

Table D-20 (Continued)
Rejected/Nonvalidated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2050	11/02/92	2050-11/02/92-A-N4	U	Nitrate, as Nitrogen	0.1	NV	N	S
2066	02/22/90	EMGW_SYSGEN_628		Nitrate, as Nitrogen	0.02	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629		Nitrate, as Nitrogen	0.02	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630		Nitrate, as Nitrogen	0.04	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	Nitrate, as Nitrogen	0.02	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	Nitrate, as Nitrogen	0.02	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635		Nitrate, as Nitrogen	0.02	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	Nitrate, as Nitrogen	0.02	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	Nitrate, as Nitrogen	0.02	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703	U	Nitrate, as Nitrogen	0.02	NV	N	R
2096	08/18/92	2096-08/18/92-B-N4	U	Nitrate, as Nitrogen	0.1	NV	N	R
2096	11/04/92	2096-11/04/92-A-N4	U	Nitrate, as Nitrogen	0.1	NV	N	R
2098	11/05/91	EMGW_SYSGEN_715		Nitrate, as Nitrogen	3.27	NV	N	D
2098	08/13/92	2098-08/13/92-A-N4		Nitrate, as Nitrogen	4.2	NV	N	D
2098	11/23/92	GW921123-5		Nitrate, as Nitrogen	1	NV	N	D
2104	06/14/90	EMGW_SYSGEN_718	U	Nitrate, as Nitrogen	0.02	NV	N	R
2104	09/12/90	EMGW_SYSGEN_719	U	Nitrate, as Nitrogen	0.02	NV	N	R
2104	03/07/91	EMGW_SYSGEN_721	U	Nitrate, as Nitrogen	0.02	NV	N	R
2104	11/07/91	EMGW_SYSGEN_722	U	Nitrate, as Nitrogen	0.02	NV	N	R
2104	11/02/92	2104-11/02/92-A-N4	U	Nitrate, as Nitrogen	0.1	NV	N	R
3024	02/18/90	EMGW_SYSGEN_992		Nitrate, as Nitrogen	0.06	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993	U	Nitrate, as Nitrogen	0.02	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	U	Nitrate, as Nitrogen	0.02	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	U	Nitrate, as Nitrogen	0.02	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	Nitrate, as Nitrogen	0.02	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998		Nitrate, as Nitrogen	0.64	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999		Nitrate, as Nitrogen	0.9	NV	N	S
3043	02/20/90	EMGW_SYSGEN_1018	U	Nitrate, as Nitrogen	0.02	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019		Nitrate, as Nitrogen	0.02	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020		Nitrate, as Nitrogen	0.45	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	Nitrate, as Nitrogen	0.02	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	Nitrate, as Nitrogen	0.02	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	Nitrate, as Nitrogen	0.02	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	Nitrate, as Nitrogen	0.02	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138	U	Nitrate, as Nitrogen	0.02	NV	N	R
3096	08/18/92	3096-08/18/92-B-N4	U	Nitrate, as Nitrogen	0.1	NV	N	R
3096	11/04/92	3096-11/04/92-A-N4	U	Nitrate, as Nitrogen	0.1	NV	N	R
3098	11/05/91	EMGW_SYSGEN_1149		Nitrate, as Nitrogen	2.36	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D		Nitrate, as Nitrogen	2.31	NV	D	D
3098	08/13/92	3098-08/13/92-A-N4		Nitrate, as Nitrogen	1	NV	N	D
3098	08/13/92	3098-08/13/92-A-D1-5		Nitrate, as Nitrogen	0.74	NV	D	D
3098	08/13/92	3098-08/13/92-A-D4		Nitrate, as Nitrogen	0.8	NV	D	D
3098	11/23/92	GW921123-6		Nitrate, as Nitrogen	4.3	NV	N	D
4011	02/21/91	EMGW_SYSGEN_1245	U	Nitrate, as Nitrogen	0.02	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247		Nitrate, as Nitrogen	0.04	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248		Nitrate, as Nitrogen	0.17	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297		Nitrate, as Nitrogen	0.03	NV	N	R
4096	08/18/92	4096-08/18/92-B-N4	U	Nitrate, as Nitrogen	0.1	NV	N	R
4096	08/18/92	4096-08/18/92-B-D4	U	Nitrate, as Nitrogen	0.1	NV	D	R
4096	11/04/92	4096-11/04/92-A-N4	U	Nitrate, as Nitrogen	0.1	NV	N	R

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Table D-20 (Continued)
Rejected/Nonvalidated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
4096	11/04/92	4096-11/04/92-A-D1-7		Nitrate, as Nitrogen	0.039	NV	D	R
4096	11/04/92	4096-11/04/92-A-D4	U	Nitrate, as Nitrogen	0.1	NV	D	R
2043	11/06/90	EMGW_SYSGEN_525		Nitrate/Nitrite	0.04	NV	N	S
2050	10/17/90	EMGW_SYSGEN_558		Nitrate/Nitrite	0.02	NV	N	S
2050	08/10/92	2050-08/10/92-B-N	U	Nitrate/Nitrite	0.1	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	Nitrate/Nitrite	0.02	NV	N	S
2098	10/15/90	EMGW_SYSGEN_712		Nitrate/Nitrite	4.18	NV	N	D
2104	11/27/90	EMGW_SYSGEN_720	U	Nitrate/Nitrite	0.02	NV	N	R
2104	08/10/92	2104-08/10/92-B-N	U	Nitrate/Nitrite	0.1	NV	N	R
3024	11/13/90	EMGW_SYSGEN_995		Nitrate/Nitrite	0.4	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	Nitrate/Nitrite	0.02	NV	N	S
3098	10/15/90	EMGW_SYSGEN_1147		Nitrate/Nitrite	2.33	NV	N	D
4011	11/14/90	EMGW_SYSGEN_1244		Nitrate/Nitrite	0.18	NV	N	S
2043	01/18/93	GW930118-12	U	Nitrite, as Nitrogen	0.02	NV	N	S
2066	01/06/93	GW930106-7	U	Nitrite, as Nitrogen	0.02	NV	N	S
3024	01/13/93	GW930113-8	U	Nitrite, as Nitrogen	0.02	NV	N	S
3043	01/18/93	GW930118-14	U	Nitrite, as Nitrogen	0.02	NV	N	S
4011	01/05/93	GW930105-7	U	Nitrite, as Nitrogen	0.02	NV	N	S
3098	08/13/92	3098-08/13/92-A-D1-5		o-Xylene	0.0034	NV	D	D
4096	08/18/92	4096-08/18/92-B-D1-5	U	o-Xylene	0.00096	NV	D	R
4096	11/04/92	4096-11/04/92-A-D1-7	U	o-Xylene	0.00096	NV	D	R
2043	11/06/90	EMGW_SYSGEN_525		pH	7.24	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526		pH	7.26	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D		pH	7.23	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528		pH	7.24	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529		pH	7	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8		pH	7.28	NV	N	S
2043	01/18/93	GW930118-12		pH	7.26	NV	N	S
2050	10/17/90	EMGW_SYSGEN_558		pH	7.24	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559		pH	7.39	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560		pH	7.44	NV	N	S
2050	08/10/92	2050-08/10/92-B-N		pH	7.6	NV	N	S
2050	11/02/92	2050-11/02/92-A-N		pH	7.5	NV	N	S
2050	02/10/93	GW930210-8		pH	8.2	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631		pH	7.29	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633		pH	7.29	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D		pH	7.31	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635		pH	7.42	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636		pH	7.38	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637		pH	7.43	NV	N	S
2066	01/06/93	GW930106-7		pH	7.56	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703		pH	7.03	NV	N	R
2096	08/18/92	2096-08/18/92-B-N		pH	7.1	NV	N	R
2096	11/04/92	2096-11/04/92-A-N		pH	7.1	NV	N	R
2096	02/02/93	GW930202-8		pH	7.3	NV	N	R
2098	10/15/90	EMGW_SYSGEN_712		pH	6.96	NV	N	D
2098	11/05/91	EMGW_SYSGEN_715		pH	7.21	NV	N	D
2098	11/23/92	GW921123-5		pH	7.4	NV	N	D
2098	02/04/93	GW930204-7		pH	7.5	NV	N	D
2104	09/12/90	EMGW_SYSGEN_719		pH	7.21	NV	N	R

Table D-20 (Continued)
Rejected/Nonvalidated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2104	11/27/90	EMGW_SYSGEN_720		pH	7.23	NV	N	R
2104	03/07/91	EMGW_SYSGEN_721		pH	7.41	NV	N	R
2104	11/07/91	EMGW_SYSGEN_722		pH	7.38	NV	N	R
2104	08/10/92	2104-08/10/92-B-N		pH	7.6	NV	N	R
2104	11/02/92	2104-11/02/92-A-N		pH	7.5	NV	N	R
2104	02/02/93	GW930202-12		pH	7.4	NV	N	R
2728	02/10/93	GW930210-5		pH	7.9	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995		pH	7.63	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996		pH	7.72	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998		pH	7.89	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999		pH	7.87	NV	N	S
3024	01/13/93	GW930113-8		pH	7.16	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021		pH	7.24	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022		pH	7.3	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024		pH	7.42	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025		pH	7.29	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8		pH	7.34	NV	N	S
3043	01/18/93	GW930118-14		pH	6.94	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138		pH	7.33	NV	N	R
3096	08/18/92	3096-08/18/92-B-N		pH	7.6	NV	N	R
3096	11/04/92	3096-11/04/92-A-N		pH	7.4	NV	N	R
3096	02/02/93	GW930202-9		pH	7.6	NV	N	R
3098	10/15/90	EMGW_SYSGEN_1147		pH	7.04	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149		pH	7.35	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D		pH	7.34	NV	D	D
3098	08/13/92	3098-08/13/92-A-D1-5		pH	7.3	NV	D	D
3098	11/23/92	GW921123-6		pH	7.3	NV	N	D
3098	02/04/93	GW930204-10		pH	7.6	NV	N	D
3098	02/04/93	GW930204-12		pH	7.4	NV	D	D
4011	11/14/90	EMGW_SYSGEN_1244		pH	8.28	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245		pH	7.33	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247		pH	7.37	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248		pH	7.29	NV	N	S
4011	01/05/93	GW930105-7		pH	7.47	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297		pH	7.48	NV	N	R
4096	08/18/92	4096-08/18/92-B-N		pH	7.8	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5		pH	7.8	NV	D	R
4096	11/04/92	4096-11/04/92-A-N		pH	7.8	NV	N	R
4096	11/04/92	4096-11/04/92-A-D1-7		pH	7.9	NV	D	R
4096	02/02/93	GW930202-10		pH	7.6	NV	N	R
4096	02/02/93	GW930202-11		pH	7.5	NV	D	R
2066	08/07/88	3443		Phosphate	0.1	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525		Phosphorus	0.68	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526		Phosphorus	3.75	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D		Phosphorus	2.09	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528		Phosphorus	0.13	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529		Phosphorus	0.42	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8		Phosphorus	0.16	NV	N	S
2043	01/18/93	GW930118-12		Phosphorus	0.15	NV	N	S
2050	10/17/90	EMGW_SYSGEN_558		Phosphorus	0.21	NV	N	S

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Table D-20 (Continued)
Rejected/Nonvalidated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2050	11/02/92	2050-11/02/92-A-N		Phosphorus	0.13	NV	N	S
2050	02/10/93	GW930210-8		Phosphorus	0.052	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631		Phosphorus	0.21	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633		Phosphorus	0.19	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D		Phosphorus	0.17	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635		Phosphorus	0.31	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636		Phosphorus	0.44	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637		Phosphorus	0.12	NV	N	S
2066	01/06/93	GW930106-7		Phosphorus	0.16	NV	N	S
2096	11/04/92	2096-11/04/92-A-N		Phosphorus	0.07	NV	N	R
2096	02/02/93	GW930202-8		Phosphorus	0.09	NV	N	R
2098	10/15/90	EMGW_SYSGEN_712		Phosphorus	0.28	NV	N	D
2098	11/23/92	GW921123-5		Phosphorus	0.28	NV	N	D
2098	02/04/93	GW930204-7		Phosphorus	0.22	NV	N	D
2104	11/27/90	EMGW_SYSGEN_720		Phosphorus	0.31	NV	N	R
2104	03/07/91	EMGW_SYSGEN_721	U	Phosphorus	0.1	NV	N	R
2104	11/02/92	2104-11/02/92-A-N		Phosphorus	0.1	NV	N	R
2104	02/02/93	GW930202-12		Phosphorus	0.08	NV	N	R
2728	02/10/93	GW930210-5		Phosphorus	0.18	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995		Phosphorus	0.19	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996		Phosphorus	0.85	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998		Phosphorus	0.29	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999		Phosphorus	0.19	NV	N	S
3024	01/13/93	GW930113-8		Phosphorus	0.4	NV	N	S
3024	04/12/93	GW930412-8		Phosphorus	0.26	R	N	S
3043	11/05/90	EMGW_SYSGEN_1021		Phosphorus	0.49	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022		Phosphorus	0.44	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024		Phosphorus	0.4	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025		Phosphorus	0.29	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8		Phosphorus	0.16	NV	N	S
3043	01/18/93	GW930118-14		Phosphorus	0.25	NV	N	S
3096	11/04/92	3096-11/04/92-A-N		Phosphorus	0.06	NV	N	R
3096	02/02/93	GW930202-9		Phosphorus	0.32	NV	N	R
3098	10/15/90	EMGW_SYSGEN_1147	U	Phosphorus	0.02	NV	N	D
3098	11/23/92	GW921123-6		Phosphorus	0.08	NV	N	D
3098	02/04/93	GW930204-10		Phosphorus	0.1	NV	N	D
3098	02/04/93	GW930204-12	U	Phosphorus	0.03	NV	D	D
4011	11/14/90	EMGW_SYSGEN_1244		Phosphorus	2.54	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245		Phosphorus	0.53	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247		Phosphorus	0.62	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248		Phosphorus	0.64	NV	N	S
4011	01/05/93	GW930105-7		Phosphorus	0.51	NV	N	S
4096	11/04/92	4096-11/04/92-A-N		Phosphorus	0.12	NV	N	R
4096	11/04/92	4096-11/04/92-A-D1-7		Phosphorus	0.09	NV	D	R
4096	02/02/93	GW930202-10		Phosphorus	0.1	NV	N	R
4096	02/02/93	GW930202-11	U	Phosphorus	0.03	NV	D	R
2043	05/17/90	EMGW_SYSGEN_523		Potassium	2.92	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524		Potassium	5.5	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525		Potassium	2.24	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526		Potassium	1.16	NV	N	S

Table D-20 (Continued)
Rejected/Nonvalidated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2043	02/28/91	EMGW_SYSGEN_526D		Potassium	1.4	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528		Potassium	1.6	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529		Potassium	1.4	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8		Potassium	1.5	NV	N	S
2043	01/18/93	GW930118-12		Potassium	1.6	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629		Potassium	1.69	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630		Potassium	2.78	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631		Potassium	1.99	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633		Potassium	2.03	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D		Potassium	1.99	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635		Potassium	1.8	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636		Potassium	1.6	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637		Potassium	1.6	NV	N	S
2066	01/06/93	GW930106-7		Potassium	1.7	NV	N	S
2104	03/07/91	EMGW_SYSGEN_721		Potassium	1.64	NV	N	R
3024	08/08/90	EMGW_SYSGEN_994		Potassium	1.28	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995		Potassium	8.12	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996		Potassium	9.09	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998		Potassium	10	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999		Potassium	8.7	NV	N	S
3024	01/13/93	GW930113-8		Potassium	1.3	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019		Potassium	1.07	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020		Potassium	1.46	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021		Potassium	1.43	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	Potassium	1	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024		Potassium	1	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025		Potassium	1	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	Potassium	1	NV	N	S
3043	01/18/93	GW930118-14		Potassium	1	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244		Potassium	2.24	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245		Potassium	1.11	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247		Potassium	1.1	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248		Potassium	1.6	NV	N	S
4011	01/05/93	GW930105-7		Potassium	1.3	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Selenium	0.0025	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	U	Selenium	0.0025	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	U	Selenium	0.0025	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	Selenium	0.0025	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	Selenium	0.0025	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	Selenium	0.005	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	Selenium	0.005	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	Selenium	0.005	NV	N	S
2043	01/18/93	GW930118-12	U	Selenium	0.005	NV	N	S
2050	11/02/92	2050-11/02/92-A-N	U	Selenium	0.005	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Selenium	0.0025	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	Selenium	0.0025	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	Selenium	0.0025	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	Selenium	0.0025	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	Selenium	0.0025	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	Selenium	0.005	NV	N	S

Table D-20 (Continued)
Rejected/Nonvalidated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2066	10/02/91	EMGW_SYSGEN_636	U	Selenium	0.005	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	Selenium	0.005	NV	N	S
2066	01/06/93	GW930106-7	U	Selenium	0.005	NV	N	S
2098	11/23/92	GW921123-5	U*	Selenium	0.005	NV	N	D
2104	03/07/91	EMGW_SYSGEN_721	U	Selenium	0.0025	NV	N	R
2104	11/02/92	2104-11/02/92-A-N	U*	Selenium	0.005	NV	N	R
2728	04/04/93	113514	UW	Selenium	0.002	NV	N	S
3024	08/08/90	EMGW_SYSGEN_994	U	Selenium	0.0025	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	Selenium	0.0025	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	Selenium	0.0025	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	Selenium	0.005	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	Selenium	0.005	NV	N	S
3024	01/13/93	GW930113-8	U	Selenium	0.005	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Selenium	0.0025	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	Selenium	0.0025	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	Selenium	0.0025	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	Selenium	0.0025	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	Selenium	0.005	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	Selenium	0.005	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	Selenium	0.005	NV	N	S
3043	01/18/93	GW930118-14	U	Selenium	0.005	NV	N	S
3098	11/23/92	GW921123-6	U*	Selenium	0.005	NV	N	D
4011	11/14/90	EMGW_SYSGEN_1244	U	Selenium	0.0025	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Selenium	0.0025	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	Selenium	0.005	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	Selenium	0.005	NV	N	S
4011	01/05/93	GW930105-7	U	Selenium	0.005	NV	N	S
2043	11/14/89	66683	U	Silver	0.001	NV	N	S
2043	02/20/90	EMGW_SYSGEN_522	U	Silver	0.001	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Silver	0.001	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	U	Silver	0.001	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	U	Silver	0.001	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	Silver	0.001	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D		Silver	0.004	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	Silver	0.001	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	Silver	0.001	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	Silver	0.001	NV	N	S
2043	01/18/93	GW930118-12	U	Silver	0.001	NV	N	S
2050	11/02/92	2050-11/02/92-A-N	U	Silver	0.01	NV	N	S
2066	11/06/89	66687	U	Silver	0.001	NV	N	S
2066	02/22/90	EMGW_SYSGEN_628	U	Silver	0.001	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Silver	0.001	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	Silver	0.001	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	Silver	0.001	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	Silver	0.001	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	Silver	0.001	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	Silver	0.001	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	Silver	0.001	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	Silver	0.001	NV	N	S
2066	01/06/93	GW930106-7	U	Silver	0.001	NV	N	S

Table D-20 (Continued)
Rejected/Nonvalidated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2098	11/23/92	GW921123-5	U*	Silver	0.02	NV	N	D
2104	03/07/91	EMGW_SYSGEN_721	U	Silver	0.001	NV	N	R
2104	11/02/92	2104-11/02/92-A-N	U*	Silver	0.01	NV	N	R
3024	11/30/89	66735	U	Silver	0.001	NV	N	S
3024	02/18/90	EMGW_SYSGEN_992	U	Silver	0.001	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993	U	Silver	0.001	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	U	Silver	0.001	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	U	Silver	0.001	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	Silver	0.001	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	Silver	0.001	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	Silver	0.001	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	Silver	0.001	NV	N	S
3024	01/13/93	GW930113-8	U	Silver	0.001	NV	N	S
3043	11/14/89	66685	U	Silver	0.001	NV	N	S
3043	02/20/90	EMGW_SYSGEN_1018	U	Silver	0.001	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Silver	0.001	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	Silver	0.001	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	Silver	0.001	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022		Silver	0.003	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	Silver	0.001	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	Silver	0.001	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	Silver	0.001	NV	N	S
3043	01/18/93	GW930118-14	U	Silver	0.001	NV	N	S
3098	11/23/92	GW921123-6	U*	Silver	0.02	NV	N	D
4011	11/14/90	EMGW_SYSGEN_1244	U	Silver	0.001	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245		Silver	0.002	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	Silver	0.001	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	Silver	0.001	NV	N	S
4011	01/05/93	GW930105-7	U	Silver	0.001	NV	N	S
2043	11/14/89	66683		Sodium	38.2	NV	N	S
2043	02/20/90	EMGW_SYSGEN_522		Sodium	52.8	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523		Sodium	35.1	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524		Sodium	30.4	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525		Sodium	28.5	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526		Sodium	27.5	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D		Sodium	27.6	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528		Sodium	26	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529		Sodium	38	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8		Sodium	38.7	NV	N	S
2043	01/18/93	GW930118-12		Sodium	39	NV	N	S
2066	11/06/89	66687		Sodium	40	NV	N	S
2066	02/22/90	EMGW_SYSGEN_628		Sodium	76.7	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629		Sodium	51.9	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630		Sodium	60	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631		Sodium	51.7	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633		Sodium	50.7	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D		Sodium	50.4	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635		Sodium	56	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636		Sodium	180	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637		Sodium	42.6	NV	N	S

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Table D-20 (Continued)
Rejected/Nonvalidated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well	Sample		Lab		Validated		QA	
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type	Area
2066	01/06/93	GW930106-7		Sodium	52	NV	N	S
2104	03/07/91	EMGW_SYSGEN_721		Sodium	11	NV	N	R
3024	11/30/89	66735		Sodium	38.4	NV	N	S
3024	02/18/90	EMGW_SYSGEN_992		Sodium	18.6	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993		Sodium	11.3	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D		Sodium	11.6	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994		Sodium	16.2	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995		Sodium	25.2	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996		Sodium	15.3	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998		Sodium	16	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999		Sodium	18	NV	N	S
3024	01/13/93	GW930113-8		Sodium	10.5	NV	N	S
3043	11/14/89	66685		Sodium	24.6	NV	N	S
3043	02/20/90	EMGW_SYSGEN_1018		Sodium	32.5	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019		Sodium	19.2	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020		Sodium	24	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021		Sodium	22.7	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022		Sodium	25	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024		Sodium	25	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025		Sodium	24	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8		Sodium	15.7	NV	N	S
3043	01/18/93	GW930118-14		Sodium	14	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244		Sodium	78.5	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245		Sodium	33.2	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247		Sodium	53	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248		Sodium	53	NV	N	S
4011	01/05/93	GW930105-7		Sodium	36	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525		Specific Conductivity	947	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526		Specific Conductivity	893	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D		Specific Conductivity	884	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528		Specific Conductivity	1010	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529		Specific Conductivity	1030	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8		Specific Conductivity	1040	NV	N	S
2043	01/18/93	GW930118-12		Specific Conductivity	1040	NV	N	S
2050	10/17/90	EMGW_SYSGEN_558		Specific Conductivity	794	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559		Specific Conductivity	832	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560		Specific Conductivity	816	NV	N	S
2050	08/10/92	2050-08/10/92-B-N		Specific Conductivity	900	NV	N	S
2050	11/02/92	2050-11/02/92-A-N		Specific Conductivity	900	NV	N	S
2050	02/10/93	GW930210-8		Specific Conductivity	900	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631		Specific Conductivity	816	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633		Specific Conductivity	779	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D		Specific Conductivity	750	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635		Specific Conductivity	767	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636		Specific Conductivity	740	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637		Specific Conductivity	777	NV	N	S
2066	01/06/93	GW930106-7		Specific Conductivity	845	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703		Specific Conductivity	907	NV	N	R
2096	08/18/92	2096-08/18/92-B-N		Specific Conductivity	1000	NV	N	R
2096	11/04/92	2096-11/04/92-A-N		Specific Conductivity	890	NV	N	R

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Table D-20 (Continued)
Rejected/Nonvalidated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2096	02/02/93	GW930202-8		Specific Conductivity	730	NV	N	R
2098	10/15/90	EMGW_SYSGEN_712		Specific Conductivity	691	NV	N	D
2098	11/05/91	EMGW_SYSGEN_715		Specific Conductivity	725	NV	N	D
2098	11/23/92	GW921123-5		Specific Conductivity	800	NV	N	D
2098	02/04/93	GW930204-7		Specific Conductivity	790	NV	N	D
2104	09/12/90	EMGW_SYSGEN_719		Specific Conductivity	795	NV	N	R
2104	11/27/90	EMGW_SYSGEN_720		Specific Conductivity	566	NV	N	R
2104	03/07/91	EMGW_SYSGEN_721		Specific Conductivity	691	NV	N	R
2104	11/07/91	EMGW_SYSGEN_722		Specific Conductivity	733	NV	N	R
2104	08/10/92	2104-08/10/92-B-N		Specific Conductivity	840	NV	N	R
2104	11/02/92	2104-11/02/92-A-N		Specific Conductivity	800	NV	N	R
2104	02/02/93	GW930202-12		Specific Conductivity	830	NV	N	R
2728	02/10/93	GW930210-5		Specific Conductivity	1000	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995		Specific Conductivity	503	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996		Specific Conductivity	506	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998		Specific Conductivity	486	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999		Specific Conductivity	411	NV	N	S
3024	01/13/93	GW930113-8		Specific Conductivity	1010	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021		Specific Conductivity	666	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022		Specific Conductivity	686	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024		Specific Conductivity	698	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025		Specific Conductivity	655	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8		Specific Conductivity	693	NV	N	S
3043	01/18/93	GW930118-14		Specific Conductivity	688	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138		Specific Conductivity	549	NV	N	R
3096	08/18/92	3096-08/18/92-B-N		Specific Conductivity	570	NV	N	R
3096	11/04/92	3096-11/04/92-A-N		Specific Conductivity	580	NV	N	R
3096	02/02/93	GW930202-9		Specific Conductivity	580	NV	N	R
3098	10/15/90	EMGW_SYSGEN_1147		Specific Conductivity	735	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149		Specific Conductivity	744	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D		Specific Conductivity	748	NV	D	D
3098	08/13/92	3098-08/13/92-A-D1-5		Specific Conductivity	790	NV	D	D
3098	11/23/92	GW921123-6		Specific Conductivity	770	NV	N	D
3098	02/04/93	GW930204-10		Specific Conductivity	780	NV	N	D
3098	02/04/93	GW930204-12		Specific Conductivity	760	NV	D	D
4011	11/14/90	EMGW_SYSGEN_1244		Specific Conductivity	866	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245		Specific Conductivity	833	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247		Specific Conductivity	880	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248		Specific Conductivity	819	NV	N	S
4011	01/05/93	GW930105-7		Specific Conductivity	993	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297		Specific Conductivity	536	NV	N	R
4096	08/18/92	4096-08/18/92-B-N		Specific Conductivity	470	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5		Specific Conductivity	510	NV	D	R
4096	11/04/92	4096-11/04/92-A-N		Specific Conductivity	510	NV	N	R
4096	11/04/92	4096-11/04/92-A-D1-7		Specific Conductivity	520	NV	D	R
4096	02/02/93	GW930202-10		Specific Conductivity	550	NV	N	R
4096	02/02/93	GW930202-11		Specific Conductivity	520	NV	D	R
2043	02/20/90	EMGW_SYSGEN_522		Sulfate	26	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523		Sulfate	35	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524		Sulfate	88	NV	N	S

Table D-20 (Continued)
Rejected/Nonvalidated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2043	11/06/90	EMGW_SYSGEN_525		Sulfate	66	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526		Sulfate	114	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D		Sulfate	133	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528		Sulfate	217	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529		Sulfate	154	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8		Sulfate	44	NV	N	S
2043	01/18/93	GW930118-12		Sulfate	64	NV	N	S
2050	10/17/90	EMGW_SYSGEN_558		Sulfate	4	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559		Sulfate	11	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560		Sulfate	4	NV	N	S
2050	08/10/92	2050-08/10/92-B-N		Sulfate	10	NV	N	S
2050	11/02/92	2050-11/02/92-A-N	U*	Sulfate	5	NV	N	S
2050	02/10/93	GW930210-8		Sulfate	1.8	NV	N	S
2066	08/07/88	3443	U	Sulfate	1.5	NV	N	S
2066	11/06/89	66687		Sulfate	7	NV	N	S
2066	02/22/90	EMGW_SYSGEN_628		Sulfate	7	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629		Sulfate	7	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630		Sulfate	8	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631		Sulfate	4	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633		Sulfate	11	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D		Sulfate	10	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635		Sulfate	10	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636		Sulfate	13	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637		Sulfate	7	NV	N	S
2066	01/06/93	GW930106-7		Sulfate	14	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703		Sulfate	247	NV	N	R
2096	08/18/92	2096-08/18/92-B-N		Sulfate	170	NV	N	R
2096	11/04/92	2096-11/04/92-A-N		Sulfate	180	NV	N	R
2096	02/02/93	GW930202-8		Sulfate	120	NV	N	R
2098	10/15/90	EMGW_SYSGEN_712		Sulfate	48	NV	N	D
2098	11/05/91	EMGW_SYSGEN_715		Sulfate	61	NV	N	D
2098	11/23/92	GW921123-5		Sulfate	55	NV	N	D
2098	02/04/93	GW930204-7		Sulfate	65	NV	N	D
2104	06/14/90	EMGW_SYSGEN_718		Sulfate	100	NV	N	R
2104	09/12/90	EMGW_SYSGEN_719		Sulfate	135	NV	N	R
2104	11/27/90	EMGW_SYSGEN_720		Sulfate	81	NV	N	R
2104	03/07/91	EMGW_SYSGEN_721		Sulfate	96	NV	N	R
2104	11/07/91	EMGW_SYSGEN_722		Sulfate	120	NV	N	R
2104	08/10/92	2104-08/10/92-B-N		Sulfate	130	NV	N	R
2104	11/02/92	2104-11/02/92-A-N		Sulfate	96	NV	N	R
2104	02/02/93	GW930202-12		Sulfate	120	NV	N	R
2728	02/10/93	GW930210-5		Sulfate	70	NV	N	S
3024	11/30/89	66735		Sulfate	110	NV	N	S
3024	02/18/90	EMGW_SYSGEN_992		Sulfate	116	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993		Sulfate	117	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D		Sulfate	120	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994		Sulfate	104	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995		Sulfate	27	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996		Sulfate	75	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998		Sulfate	68	NV	N	S

Table D-20 (Continued)
Rejected/Nonvalidated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
3024	10/01/91	EMGW_SYSGEN_999		Sulfate	51	NV	N	S
3024	01/13/93	GW930113-8		Sulfate	250	NV	N	S
3043	11/14/89	66685		Sulfate	4	NV	N	S
3043	02/20/90	EMGW_SYSGEN_1018		Sulfate	6	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019		Sulfate	5	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020		Sulfate	4	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021		Sulfate	4	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022		Sulfate	43	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024		Sulfate	11	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025		Sulfate	8	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8		Sulfate	2	NV	N	S
3043	01/18/93	GW930118-14		Sulfate	5	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138		Sulfate	49	NV	N	R
3096	08/18/92	3096-08/18/92-B-N		Sulfate	43	NV	N	R
3096	11/04/92	3096-11/04/92-A-N		Sulfate	40	NV	N	R
3096	02/02/93	GW930202-9		Sulfate	52	NV	N	R
3098	10/15/90	EMGW_SYSGEN_1147		Sulfate	63	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149		Sulfate	76	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D		Sulfate	76	NV	D	D
3098	08/13/92	3098-08/13/92-A-D1-5		Sulfate	67	NV	D	D
3098	11/23/92	GW921123-6		Sulfate	71	NV	N	D
3098	02/04/93	GW930204-10		Sulfate	67	NV	N	D
3098	02/04/93	GW930204-12		Sulfate	62	NV	D	D
4011	11/14/90	EMGW_SYSGEN_1244		Sulfate	73	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245		Sulfate	68	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247		Sulfate	95	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248		Sulfate	86	NV	N	S
4011	01/05/93	GW930105-7		Sulfate	130	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297		Sulfate	18	NV	N	R
4096	08/18/92	4096-08/18/92-B-N		Sulfate	8	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5		Sulfate	13	NV	D	R
4096	11/04/92	4096-11/04/92-A-N		Sulfate	14	NV	N	R
4096	11/04/92	4096-11/04/92-A-D1-7		Sulfate	15	NV	D	R
4096	02/02/93	GW930202-10		Sulfate	20	NV	N	R
4096	02/02/93	GW930202-11		Sulfate	17	NV	D	R
4011	02/21/91	EMGW_SYSGEN_1245	U	Sulfide	0.2	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Thallium	0.01	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	U	Thallium	0.01	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	U	Thallium	0.01	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	Thallium	0.01	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	Thallium	0.01	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	Thallium	0.01	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	Thallium	0.01	NV	N	S
2043	01/18/93	GW930118-12	U	Thallium	0.01	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Thallium	0.01	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	Thallium	0.01	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	Thallium	0.01	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	Thallium	0.01	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	Thallium	0.01	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	Thallium	0.01	NV	N	S

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Table D-20 (Continued)
Rejected/Nonvalidated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well	Sample		Lab		Validated		QA	
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type	Area
2066	10/02/91	EMGW_SYSGEN_636	U	Thallium	0.01	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	Thallium	0.01	NV	N	S
2066	01/06/93	GW930106-7	U	Thallium	0.01	NV	N	S
2104	03/07/91	EMGW_SYSGEN_721	U	Thallium	0.01	NV	N	R
3024	08/08/90	EMGW_SYSGEN_994	U	Thallium	0.01	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	Thallium	0.01	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	Thallium	0.01	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	Thallium	0.01	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	Thallium	0.01	NV	N	S
3024	01/13/93	GW930113-8	U	Thallium	0.01	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Thallium	0.01	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	Thallium	0.01	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	Thallium	0.01	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	Thallium	0.01	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	Thallium	0.01	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	Thallium	0.01	NV	N	S
3043	01/18/93	GW930118-14	U	Thallium	0.01	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Thallium	0.01	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Thallium	0.01	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	Thallium	0.01	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	Thallium	0.01	NV	N	S
4011	01/05/93	GW930105-7	U	Thallium	0.01	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Tin	1	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525		TDS	586	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526		TDS	550	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D		TDS	528	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528		TDS	676	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529		TDS	718	NV	N	S
2050	10/17/90	EMGW_SYSGEN_558		TDS	418	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559		TDS	383	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560		TDS	482	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631		TDS	480	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633		TDS	396	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D		TDS	412	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635		TDS	394	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636		TDS	414	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637		TDS	379	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703		TDS	640	NV	N	R
2098	10/15/90	EMGW_SYSGEN_712		TDS	473	NV	N	D
2098	11/05/91	EMGW_SYSGEN_715		TDS	978	NV	N	D
2104	09/12/90	EMGW_SYSGEN_719		TDS	490	NV	N	R
2104	11/27/90	EMGW_SYSGEN_720		TDS	438	NV	N	R
2104	03/07/91	EMGW_SYSGEN_721		TDS	432	NV	N	R
2104	11/07/91	EMGW_SYSGEN_722		TDS	560	NV	N	R
3024	11/13/90	EMGW_SYSGEN_995		TDS	384	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996		TDS	334	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998		TDS	330	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999		TDS	276	NV	N	S
3024	01/13/93	GW930113-8		TDS	680	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021		TDS	484	NV	N	S

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Table D-20 (Continued)
Rejected/Nonvalidated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
3043	02/28/91	EMGW_SYSGEN_1022		TDS	360	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024		TDS	416	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025		TDS	376	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138		TDS	336	NV	N	R
3096	02/02/93	GW930202-9		TDS	340	NV	N	R
3098	10/15/90	EMGW_SYSGEN_1147		TDS	485	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149		TDS	588	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D		TDS	496	NV	D	D
3098	11/23/92	GW921123-6		TDS	460	NV	N	D
4011	11/14/90	EMGW_SYSGEN_1244		TDS	658	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245		TDS	478	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247		TDS	500	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248		TDS	508	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297		TDS	334	NV	N	R
2050	05/05/88	3147	U	TKN	0.5	R	N	S
2050	12/05/88	3743		TKN	2.46	R	N	S
2104	05/05/88	3146	U	TKN	0.5	R	N	R
2043	01/18/93	GW930118-12		Total Solids	529	NV	N	S
2066	01/06/93	GW930106-7		Total Solids	395	NV	N	S
3024	01/13/93	GW930113-8		Total Solids	684	NV	N	S
3043	01/18/93	GW930118-14		Total Solids	339	NV	N	S
4011	01/05/93	GW930105-7		Total Solids	565	NV	N	S
4096	11/04/92	4096-11/04/92-A-D1-7	U	TSS	12	NV	D	R
2043	11/14/89	66683	U	Vanadium	0.05	NV	N	S
2043	02/20/90	EMGW_SYSGEN_522	U	Vanadium	0.05	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Vanadium	0.05	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	U	Vanadium	0.05	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	U	Vanadium	0.05	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	Vanadium	0.05	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	Vanadium	0.05	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	Vanadium	0.05	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	Vanadium	0.05	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	Vanadium	0.05	NV	N	S
2043	01/18/93	GW930118-12	U	Vanadium	0.05	NV	N	S
2050	11/02/92	2050-11/02/92-A-N	U	Vanadium	0.05	NV	N	S
2066	11/06/89	66687	U	Vanadium	0.05	NV	N	S
2066	02/22/90	EMGW_SYSGEN_628	U	Vanadium	0.05	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Vanadium	0.05	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	Vanadium	0.05	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	Vanadium	0.05	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	Vanadium	0.05	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	Vanadium	0.05	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	Vanadium	0.05	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	Vanadium	0.05	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	Vanadium	0.05	NV	N	S
2066	01/06/93	GW930106-7	U	Vanadium	0.05	NV	N	S
2098	11/23/92	GW921123-5	U*	Vanadium	0.02	NV	N	D
2104	03/07/91	EMGW_SYSGEN_721	U	Vanadium	0.05	NV	N	R
2104	11/02/92	2104-11/02/92-A-N	U*	Vanadium	0.05	NV	N	R
3024	11/30/89	66735	U	Vanadium	0.05	NV	N	S

Table D-20 (Continued)
Rejected/Nonvalidated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
3024	02/18/90	EMGW_SYSGEN_992	U	Vanadium	0.05	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993	U	Vanadium	0.05	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	U	Vanadium	0.05	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	U	Vanadium	0.05	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	Vanadium	0.05	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	Vanadium	0.05	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	Vanadium	0.05	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	Vanadium	0.05	NV	N	S
3024	01/13/93	GW930113-8	U	Vanadium	0.05	NV	N	S
3043	11/14/89	66685	U	Vanadium	0.05	NV	N	S
3043	02/20/90	EMGW_SYSGEN_1018	U	Vanadium	0.05	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Vanadium	0.05	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020		Vanadium	0.07	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	Vanadium	0.05	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	Vanadium	0.05	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	Vanadium	0.05	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	Vanadium	0.05	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	Vanadium	0.05	NV	N	S
3043	01/18/93	GW930118-14	U	Vanadium	0.05	NV	N	S
3098	11/23/92	GW921123-6	U*	Vanadium	0.02	NV	N	D
4011	11/14/90	EMGW_SYSGEN_1244	U	Vanadium	0.05	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Vanadium	0.05	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	Vanadium	0.05	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	Vanadium	0.05	NV	N	S
4011	01/05/93	GW930105-7	U	Vanadium	0.05	NV	N	S
2043	11/14/89	66683		Zinc	0.081	NV	N	S
2043	02/20/90	EMGW_SYSGEN_522		Zinc	0.049	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523		Zinc	0.202	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524		Zinc	0.122	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525		Zinc	0.054	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526		Zinc	0.036	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D		Zinc	0.026	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528		Zinc	0.115	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529		Zinc	0.074	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	Zinc	0.02	NV	N	S
2043	01/18/93	GW930118-12		Zinc	0.022	NV	N	S
2050	11/02/92	2050-11/02/92-A-N	U	Zinc	0.02	NV	N	S
2066	11/06/89	66687	U	Zinc	0.02	NV	N	S
2066	02/22/90	EMGW_SYSGEN_628	U	Zinc	0.02	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Zinc	0.02	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	Zinc	0.02	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	Zinc	0.02	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	Zinc	0.02	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	Zinc	0.02	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	Zinc	0.02	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636		Zinc	0.046	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	Zinc	0.02	NV	N	S
2066	01/06/93	GW930106-7	U	Zinc	0.02	NV	N	S
2098	11/23/92	GW921123-5	U*	Zinc	0.02	NV	N	D
2104	03/07/91	EMGW_SYSGEN_721	U	Zinc	0.02	NV	N	R

Table D-20 (Continued)
Rejected/Nonvalidated Unfiltered Inorganic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2104	11/02/92	2104-11/02/92-A-N	U*	Zinc	0.02	NV	N	R
3024	11/30/89	66735		Zinc	0.02	NV	N	S
3024	02/18/90	EMGW_SYSGEN_992	U	Zinc	0.02	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993	U	Zinc	0.02	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	U	Zinc	0.02	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	U	Zinc	0.02	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995		Zinc	0.03	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996		Zinc	0.023	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998		Zinc	0.049	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999		Zinc	0.05	NV	N	S
3024	01/13/93	GW930113-8	U	Zinc	0.02	NV	N	S
3043	11/14/89	66685		Zinc	0.037	NV	N	S
3043	02/20/90	EMGW_SYSGEN_1018	U	Zinc	0.02	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Zinc	0.02	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020		Zinc	0.02	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021		Zinc	0.025	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022		Zinc	0.022	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024		Zinc	0.034	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025		Zinc	0.043	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8		Zinc	0.029	NV	N	S
3043	01/18/93	GW930118-14	U	Zinc	0.02	NV	N	S
3098	11/23/92	GW921123-6	U*	Zinc	0.02	NV	N	D
4011	11/14/90	EMGW_SYSGEN_1244		Zinc	0.035	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245		Zinc	0.077	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247		Zinc	0.02	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248		Zinc	0.027	NV	N	S
4011	01/05/93	GW930105-7	U	Zinc	0.02	NV	N	S

000680

Table D-21
Rejected/Nonvalidated Filtered Inorganic Data for Background Surface Water in the Great Miami River

Well No.	Sample		Lab qualifier	Constituent	Validated		QA type
	Date	ID			Result	Qualifier	
No Rejected/Nonvalidated Data Identified							

Table D-22
Rejected/Nonvalidated Unfiltered Inorganic Data for Background Surface Water in the Great Miami River

Well No.	Sample		Lab qualifier	Constituent	Validated		QA type
	Date	ID			Result	Qualifier	
No Rejected/Nonvalidated Data Identified							

5644

Table D-23
Rejected/Nonvalidated Filtered Inorganic Data for Background Surface Water in Paddys Run

Well	Sample		Lab		Validated		QA
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type
W-5	06/24/93	120408	U	Beryllium	0.005	R	N
W-5	06/24/93	120409	U	Beryllium	0.005	R	D
W-5	06/24/93	120409		Cadmium	0.0053	R	D
W-5	06/24/93	120408	U	Cobalt	0.017	R	N
W-5	06/24/93	120409	U	Cobalt	0.017	R	D
W-5	06/24/93	120408	U	Copper	0.009	R	N
W-5	06/24/93	120409	B	Copper	0.01	R	D
W-5	06/24/93	120408		Manganese	0.0203	R	N
W-5	06/24/93	120409		Manganese	0.0225	R	D
W-5	06/24/93	120408	U	Nickel	0.018	R	N
W-5	06/24/93	120409	U	Nickel	0.018	R	D
W-5	06/24/93	120408	UW	Thallium	0.001	R	N
W-5	06/24/93	120409	UW	Thallium	0.001	R	D
W-5	06/24/93	120408	U	Vanadium	0.024	R	N
W-5	06/24/93	120409	U	Vanadium	0.024	R	D
W-5	06/24/93	120408	B*	Zinc	0.0086	R	N
W-5	06/24/93	120409	B*	Zinc	0.0073	R	D

000683

Table D-24
Rejected/Nonvalidated Unfiltered Inorganic Data for Background Surface Water in Paddys Run

Well	Sample		Lab		Validated		QA
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type
W-5	06/24/93	120409	U	Beryllium	0.005	R	D
W-5	06/24/93	120408	U	Beryllium	0.005	R	N
W-5	06/24/93	120409	U	Cobalt	0.017	R	D
W-5	06/24/93	120408	U	Cobalt	0.017	R	N
W-5	06/24/93	120408	U	Copper	0.009	R	N
W-5	06/24/93	120409	B	Copper	0.009	R	D
W-5	06/24/93	120408		Manganese	0.0296	R	N
W-5	06/24/93	120409		Manganese	0.0316	R	D
W-5	06/24/93	120409	U	Nickel	0.018	R	D
W-5	06/24/93	120408	U	Nickel	0.018	R	N
W-5	06/24/93	120408	UW	Thallium	0.001	R	N
W-5	06/24/93	120409	U	Thallium	0.001	R	D
W-5	06/24/93	120408	U	Vanadium	0.024	R	N
W-5	06/24/93	120409	U	Vanadium	0.024	R	D
W-5	06/24/93	120408	U*	Zinc	0.006	R	N
W-5	06/24/93	120409	*	Zinc	0.0528	R	D

Table D-25
Major Cation and Anion Concentrations in mg/L for Background Monitoring Wells

Well No.	Sample ID	Ca (mg/L)	Mg (mg/L)	Na (mg/L)	K (mg/L)	NH4 (mg/L)	HCO3 (mg/L)	SO4 (mg/L)	Cl (mg/L)	NO3 (mg/L)
1024	3106	83.80	40.50	19.70	1.64	0.58	465.70	50.00	1.40	0.05
1024	3376	130.00	31.00	12.00	2.50	0.05	501.10	130.00	18.00	0.05
1024	3657	90.40	44.40	12.40	1.18	0.55	459.10	109.00	1.90	0.05
1024	3847	89.00	44.00	16.60	1.37	0.20	467.90	48.00	0.75	0.025
1040	3218	76.40	23.30	29.80	1.31	2.90	373.60	1.00	41.30	0.10
1040	3219	78.60	25.10	30.90	1.18	3.20	375.90	5.00	46.10	0.10
1040	3572	77.00	23.30	29.50	1.70	4.50	369.80	1.00	27.50	0.05
1040	3778	75.70	23.30	29.10	11.20	4.34	373.40	68.20	7.50	0.012
1040	3964	84.00	24.00	31.00	1.70	3.90	370.00	1.00	50.00	0.01
1059	3188	80.90	22.50	37.40	10.20	0.05	383.60	86.00	5.60	0.20
1059	3562	77.70	22.60	53.60	8.20	0.05	408.30	4.00	8.50	0.26
1059	3751	74.40	20.40	56.30	8.81	0.05	420.00	3.24	1.00	0.075
1059	3981	91.00	22.00	18.00	11.00	0.05	334.00	53.00	4.30	0.22
1060	3255	130.00	47.80	26.50	31.50	0.17	567.30	175.00	35.70	0.30
1060	3398	120.00	34.00	12.00	15.00	0.10	411.60	120.00	26.00	0.10
1060	3695	114.00	33.80	14.70	20.00	0.05	429.00	53.00	25.00	0.235
1060	3888	124.00	34.80	10.30	5.04	0.05	421.40	102.00	25.00	0.19
1065	3136	89.00	29.50	5.71	1.05	0.05	355.90	10.00	0.25	0.05
2026	3186	87.70	28.60	26.70	2.16	0.05	328.10	39.00	44.90	6.80
2026	3505	91.80	30.00	21.50	2.40	0.10	328.50	24.00	41.00	16.00
2026	3750	84.20	18.30	11.70	2.57	0.05	260.90	202.00	3.00	7.98
2026	3980	110.00	33.00	55.00	2.70	0.05	343.20	40.00	120.00	8.40
2036	3184	94.00	25.50	3.41	1.34	0.05	330.70	7.00	12.30	11.20
2036	3564	99.40	26.20	3.30	1.70	0.05	337.10	25.00	11.00	14.40
2036	3770	92.80	24.70	3.28	1.27	0.05	333.20	39.90	2.00	2.88
2036	3983	110.00	25.00	3.10	1.30	0.05	336.00	34.00	6.00	6.20
2043	3091	103.00	36.40	35.30	1.82	1.82	514.80	40.00	51.10	0.05
2043	3440	100.00	38.00	40.00	2.50	0.05	490.10	13.00	66.00	0.05
2043	3700	72.40	25.90	7.60	0.39	2.73	480.80	166.00	54.20	0.05
2050	3147	82.90	28.30	46.30	1.58	0.00	402.70	4.00	78.90	0.05
2050	3497	85.90	29.10	47.84	2.00	1.50	409.60	1.00	100.00	0.87
2050	3743	88.00	27.80	47.50	1.52	2.98	416.60	197.00	70.70	0.05
2050	3969	89.00	27.00	54.00	1.40	0.15	399.90	1.00	76.00	0.01
2056	3159	63.60	22.50	28.10	1.33	2.70	371.20	6.00	39.50	0.05
2056	3575	73.30	25.90	36.20	1.90	3.10	369.20	1.00	44.00	0.05
2056	3781	73.50	26.00	36.40	13.40	3.24	374.00	54.40	6.00	0.016
2056	3967	76.00	25.00	40.00	1.30	3.20	379.60	1.00	46.00	0.01
2057	3265	84.10	23.10	3.99	0.91	0.10	344.30	24.00	20.10	0.05
2057	3573	83.40	22.70	3.86	1.60	0.20	341.80	23.00	3.00	0.05
2057	3779	83.50	22.80	3.64	0.80	0.12	342.50	43.70	5.00	0.05
2057	3965	90.00	22.00	3.90	0.86	0.20	339.90	24.00	1.75	0.03
2066	3124	68.80	27.20	46.60	1.67	4.10	381.20	1.00	96.00	0.05
2066	3710	65.70	26.00	42.70	1.23	4.22	389.20	133.00	64.00	0.05
2066	3894	78.00	28.00	47.00	1.60	4.20	383.40	1.00	69.00	0.01
2096	3586	120.00	28.50	6.10	1.65	0.05	409.10	154.00	2.50	0.05
2096	3790	120.00	27.30	6.34	1.62	0.05	357.30	76.30	1.50	0.014
2096	3985	102.00	27.10	4.28	1.31	0.05	339.60	92.80	0.375	0.23
2096	4081	181.00	42.40	7.88	1.69	0.05	369.60	321.00	7.50	0.05

Table D-25 (Continued)
Major Cation and Anion Concentrations in mg/L for Background Monitoring Wells

Well No.	Sample ID	Ca (mg/L)	Mg (mg/L)	Na (mg/L)	K (mg/L)	NH4 (mg/L)	HCO3 (mg/L)	SO4 (mg/L)	Cl (mg/L)	NO3 (mg/L)
2098	3591	113.00	32.40	9.40	1.62	0.05	394.10	27.00	20.50	0.05
2098	3796	114.00	31.70	9.81	1.58	0.05	405.70	132.00	9.00	11.10
2098	3990	120.00	34.70	12.60	1.84	0.331	381.00	81.60	33.00	1.96
2098	4087	46.30	25.80	17.20	1.37	0.05	295.60	80.90	24.00	1.74
2104	3146	115.00	29.70	11.40	2.76	0.00	334.70	112.00	23.00	0.10
2104	3498	112.50	28.88	11.08	2.50	0.05	327.60	96.00	25.00	0.05
2104	3744	129.00	32.80	11.40	2.36	0.05	369.50	81.20	3.00	0.05
2104	3970	120.00	29.00	11.00	2.00	0.10	338.50	100.00	26.00	0.05
2105	3268	30.40	15.80	101.00	3.12	8.00	385.60	7.00	65.00	0.10
2105	3577	75.30	24.20	33.00	1.13	3.60	377.50	1.00	60.00	1.25
2105	3782	0.005	0.0025	179.00	0.17	0.40	389.50	20.30	8.00	0.05
2105	3968	87.00	24.00	34.00	1.20	4.00	378.60	1.00	54.00	0.05
2121	3158	70.20	15.70	11.60	3.01	0.05	236.80	47.00	0.02	0.40
2121	3571	89.60	20.20	16.70	3.00	0.05	293.10	64.00	25.00	2.00
2121	3776	95.20	21.60	16.20	3.00	0.05	316.00	43.00	7.00	6.75
2121	3962	95.00	20.00	16.00	3.00	0.10	281.90	49.00	14.00	1.30
2122	3157	76.70	17.00	9.41	2.54	0.05	259.40	52.00	20.20	0.80
2122	3504	83.50	18.30	10.90	2.80	0.05	259.30	18.00	20.00	5.70
2122	3749	93.00	29.80	22.40	2.07	0.05	335.10	3.08	5.00	9.32
2123	3156	81.70	20.70	1.96	1.28	0.05	285.20	35.00	11.90	10.00
2123	3565	91.40	22.90	2.90	1.70	0.05	291.30	36.00	11.50	0.50
2123	3771	88.70	22.20	2.75	1.27	0.05	292.20	3.24	0.50	11.40
3024	3096	81.70	21.20	24.80	4.03	0.05	306.40	63.00	9.00	0.24
3024	3377	85.00	46.00	38.00	2.50	0.05	369.10	58.00	3.70	0.05
3024	3658	135.00	28.10	12.10	0.55	0.65	373.00	112.00	19.40	0.15
3024	3842	134.00	28.10	9.97	0.92	0.15	375.90	160.00	20.00	0.025
3043	3090	82.80	24.60	13.80	1.09	3.18	401.80	8.00	2.75	0.12
3043	3397	86.00	26.00	16.00	2.50	3.20	405.80	12.00	11.50	0.05
3043	3694	78.40	23.50	14.90	1.05	4.39	410.80	182.00	15.10	0.05
3063	3190	86.30	22.10	12.10	2.57	0.05	306.50	65.00	22.50	0.80
3063	3495	96.50	24.36	14.46	3.28	0.05	312.70	8.00	24.50	0.28
3063	3741	94.70	24.40	14.70	2.56	0.05	303.40	42.20	6.00	5.44
3063	3966	100.00	24.00	13.00	2.50	0.05	323.10	65.00	13.00	1.50
3096	3585	80.00	22.40	2.90	1.36	0.05	315.80	28.00	5.00	0.35
3096	3789	84.30	22.80	2.91	13.50	0.05	310.20	48.70	2.50	0.023
3096	3974	88.30	24.50	6.10	1.35	0.05	310.40	52.90	0.375	0.05
3096	4082	88.40	23.90	4.95	1.37	0.05	313.30	47.20	9.00	0.05
3098	3589	103.00	30.90	8.20	2.42	0.05	374.70	116.00	17.50	1.88
3098	3795	106.00	29.80	7.20	1.70	0.05	367.00	65.20	8.00	4.61
3098	3989	108.00	31.40	6.44	1.76	0.05	371.00	71.80	16.00	1.74
3098	4088	114.00	32.90	8.16	1.87	0.05	375.10	62.70	26.00	2.70
3099	3237	95.50	31.90	15.60	2.66	0.10	361.20	60.00	49.50	4.50
3099	3496	100.90	32.88	17.52	2.86	0.05	356.20	4.00	41.00	4.00
3099	3977	110.00	33.00	13.00	2.30	0.10	347.80	72.00	17.50	0.45
3100	3239	92.80	28.80	17.30	2.30	0.20	331.20	54.00	42.50	1.60
3100	3240	88.50	26.80	16.20	2.56	0.10	338.40	60.00	28.00	1.50
3100	3517	96.80	29.40	13.70	2.40	0.05	327.90	35.00	28.00	12.40
3100	3761	98.90	29.60	16.60	2.42	0.05	331.50	3.08	1.25	10.90
3100	3978	100.00	28.00	21.00	2.40	0.05	327.90	50.00	39.00	2.30

Table D-25 (Continued)
Major Cation and Anion Concentrations in mg/L for Background Monitoring Wells

Well No.	Sample ID	Ca (mg/L)	Mg (mg/L)	Na (mg/L)	K (mg/L)	NH4 (mg/L)	HCO3 (mg/L)	SO4 (mg/L)	Cl (mg/L)	NO3 (mg/L)
4096	3474	79.10	19.80	4.15	1.05	0.05	336.30	22.20	8.00	0.05
4096	3584	77.20	21.20	5.10	1.80	0.05	323.70	85.00	7.50	0.05
4096	3788	79.00	20.00	3.93	1.11	0.11	337.20	22.60	3.00	0.05
4096	3975	87.20	22.60	4.14	1.12	0.05	333.30	16.40	4.00	0.05
4096	4083	83.00	20.70	4.69	1.18	0.05	323.10	25.90	4.80	0.05

Table D-26
Major Cation and Anion Concentrations in meq/L for Background Monitoring Wells

Well No.	Sample ID	Ca (meq/L)	Mg (meq/L)	Na (meq/L)	K (meq/L)	NH4 (meq/L)	HCO3 (meq/L)	SO4 (meq/L)	Cl (meq/L)	NO3 (meq/L)	Cation Sum (meq/L)	Anion Sum (meq/L)	Charge Balance Error
1024	3106	4.18	3.33	0.86	0.04	0.03	7.63	1.04	0.04	0.00	8.45	8.71	-1.56%
1024	3376	6.49	2.55	0.52	0.06	0.00	8.21	2.71	0.51	0.00	9.63	11.43	-8.55%
1024	3657	4.51	3.65	0.54	0.03	0.03	7.52	2.27	0.05	0.00	8.77	9.85	-5.82%
1024	3847	4.44	3.62	0.72	0.04	0.01	7.67	1.00	0.02	0.00	8.83	8.69	0.80%
1040	3218	3.81	1.92	1.30	0.03	0.16	6.12	0.02	1.17	0.00	7.22	7.31	-0.62%
1040	3219	3.92	2.07	1.34	0.03	0.18	6.16	0.10	1.30	0.00	7.54	7.57	-0.18%
1040	3572	3.84	1.92	1.28	0.04	0.25	6.06	0.02	0.78	0.00	7.34	6.86	3.37%
1040	3778	3.78	1.92	1.27	0.29	0.24	6.12	1.42	0.21	0.00	7.49	7.75	-1.73%
1040	3964	4.19	1.98	1.35	0.04	0.22	6.06	0.02	1.41	0.00	7.78	7.50	1.83%
1059	3188	4.04	1.85	1.63	0.26	0.00	6.29	1.79	0.16	0.00	7.78	8.24	-2.87%
1059	3562	3.88	1.86	2.33	0.21	0.00	6.69	0.08	0.24	0.00	8.28	7.02	8.25%
1059	3751	3.71	1.68	2.45	0.23	0.00	6.88	0.07	0.03	0.00	8.07	6.98	7.23%
1059	3981	4.54	1.81	0.78	0.28	0.00	5.47	1.10	0.12	0.00	7.42	6.70	5.07%
1060	3255	6.49	3.93	1.15	0.81	0.01	9.30	3.64	1.01	0.00	12.39	13.95	-5.94%
1060	3398	5.99	2.80	0.52	0.38	0.01	6.75	2.50	0.73	0.00	9.70	9.98	-1.43%
1060	3695	5.69	2.78	0.64	0.51	0.00	7.03	1.10	0.71	0.00	9.62	8.84	4.23%
1060	3888	6.19	2.86	0.45	0.13	0.00	6.91	2.12	0.71	0.00	9.63	9.74	-0.55%
1065	3136	4.44	2.43	0.25	0.03	0.00	5.83	0.21	0.01	0.00	7.15	6.05	8.32%
2026	3186	4.38	2.35	1.16	0.06	0.00	5.38	0.81	1.27	0.11	7.95	7.57	2.47%
2026	3505	4.58	2.47	0.94	0.06	0.01	5.38	0.50	1.16	0.26	8.05	7.30	4.91%
2026	3750	4.20	1.51	0.51	0.07	0.00	4.28	4.21	0.08	0.13	6.29	8.70	-16.09%
2026	3980	5.49	2.72	2.39	0.07	0.00	5.63	0.83	3.39	0.14	10.67	9.98	3.35%
2036	3184	4.69	2.10	0.15	0.03	0.00	5.42	0.15	0.35	0.18	6.97	6.09	6.74%
2036	3564	4.96	2.16	0.14	0.04	0.00	5.53	0.52	0.31	0.23	7.31	6.59	5.17%
2036	3770	4.63	2.03	0.14	0.03	0.00	5.46	0.83	0.06	0.05	6.84	6.39	3.38%
2036	3983	5.49	2.06	0.13	0.03	0.00	5.51	0.71	0.17	0.10	7.72	6.48	8.68%
2043	3091	5.14	3.00	1.54	0.05	0.10	8.44	0.83	1.44	0.00	9.82	10.71	-4.36%
2043	3440	4.99	3.13	1.74	0.06	0.00	8.03	0.27	1.86	0.00	9.92	10.17	-1.20%
2043	3700	3.61	2.13	0.33	0.01	0.15	7.88	3.46	1.53	0.00	6.24	12.87	-34.71%
2050	3147	4.14	2.33	2.01	0.04	0.00	6.60	0.08	2.23	0.00	8.52	8.91	-2.24%
2050	3497	4.29	2.39	2.08	0.05	0.08	6.71	0.02	2.82	0.01	8.90	9.57	-3.64%
2050	3743	4.39	2.29	2.07	0.04	0.17	6.83	4.10	1.99	0.00	8.95	12.92	-18.17%
2050	3969	4.44	2.22	2.35	0.04	0.01	6.55	0.02	2.14	0.00	9.06	8.72	1.90%

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Table D-26 (Continued)
Major Cation and Anion Concentrations in meq/L for Background Monitoring Wells

Well No.	Sample ID	Ca (meq/L)	Mg (meq/L)	Na (meq/L)	K (meq/L)	NH4 (meq/L)	HCO3 (meq/L)	SO4 (meq/L)	Cl (meq/L)	NO3 (meq/L)	Cation Sum (meq/L)	Anion Sum (meq/L)	Charge Balance Error
2056	3159	3.17	1.85	1.22	0.03	0.15	6.08	0.12	1.11	0.00	6.43	7.32	-6.49%
2056	3575	3.66	2.13	1.57	0.05	0.17	6.05	0.02	1.24	0.00	7.58	7.31	1.81%
2056	3781	3.67	2.14	1.58	0.34	0.18	6.13	1.13	0.17	0.00	7.91	7.43	3.14%
2056	3967	3.79	2.06	1.74	0.03	0.18	6.22	0.02	1.30	0.00	7.80	7.54	1.70%
2057	3265	4.20	1.90	0.17	0.02	0.01	5.64	0.50	0.57	0.00	6.30	6.71	-3.15%
2057	3573	4.16	1.87	0.17	0.04	0.01	5.60	0.48	0.08	0.00	6.25	6.17	0.67%
2057	3779	4.17	1.88	0.16	0.02	0.01	5.61	0.91	0.14	0.00	6.23	6.67	-3.39%
2057	3965	4.49	1.81	0.17	0.02	0.01	5.57	0.50	0.05	0.00	6.50	6.12	3.04%
2066	3124	3.43	2.24	2.03	0.04	0.23	6.25	0.02	2.71	0.00	7.97	8.98	-5.95%
2066	3710	3.28	2.14	1.86	0.03	0.23	6.38	2.77	1.81	0.00	7.54	10.95	-18.45%
2066	3894	3.89	2.30	2.04	0.04	0.23	6.28	0.02	1.95	0.00	8.51	8.25	1.57%
2096	3586	5.99	2.35	0.27	0.04	0.00	6.71	3.21	0.07	0.00	8.64	9.98	-7.19%
2096	3790	5.99	2.25	0.28	0.04	0.00	5.86	1.59	0.04	0.00	8.55	7.49	6.65%
2096	3985	5.09	2.23	0.19	0.03	0.00	5.57	1.93	0.01	0.00	7.54	7.51	0.20%
2096	4081	9.03	3.49	0.34	0.04	0.00	6.06	6.68	0.21	0.00	12.91	12.95	-0.17%
2098	3591	5.64	2.67	0.41	0.04	0.00	6.46	0.56	0.58	0.00	8.76	7.60	7.08%
2098	3796	5.69	2.61	0.43	0.04	0.00	6.65	2.75	0.25	0.18	8.77	9.83	-5.72%
2098	3990	5.99	2.86	0.55	0.05	0.02	6.24	1.70	0.93	0.03	9.46	8.91	3.00%
2098	4087	2.31	2.12	0.75	0.04	0.00	4.84	1.68	0.68	0.03	5.22	7.23	-16.18%
2104	3146	5.74	2.44	0.50	0.07	0.00	5.49	2.33	0.65	0.00	8.75	8.47	1.63%
2104	3498	5.61	2.38	0.48	0.06	0.00	5.37	2.00	0.71	0.00	8.54	8.07	2.80%
2104	3744	6.44	2.70	0.50	0.06	0.00	6.06	1.69	0.08	0.00	9.70	7.83	10.63%
2104	3970	5.99	2.39	0.48	0.05	0.01	5.55	2.08	0.73	0.00	8.91	8.36	3.16%
2105	3268	1.52	1.30	4.39	0.08	0.44	6.32	0.15	1.83	0.00	7.73	8.30	-3.54%
2105	3577	3.76	1.99	1.44	0.03	0.20	6.19	0.02	1.69	0.02	7.41	7.92	-3.31%
2105	3782	0.00	0.00	7.79	0.00	0.02	6.38	0.42	0.23	0.00	7.81	7.03	5.26%
2105	3968	4.34	1.98	1.48	0.03	0.22	6.21	0.02	1.52	0.00	8.05	7.75	1.88%
2121	3158	3.50	1.29	0.50	0.08	0.00	3.88	0.98	0.00	0.01	5.38	4.87	5.00%
2121	3571	4.47	1.66	0.73	0.08	0.00	4.80	1.33	0.71	0.03	6.94	6.87	0.47%
2121	3776	4.75	1.78	0.70	0.08	0.00	5.18	0.90	0.20	0.11	7.31	6.38	6.80%
2121	3962	4.74	1.65	0.70	0.08	0.01	4.62	1.02	0.39	0.02	7.16	6.06	8.38%

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Table D-26 (Continued)
Major Cation and Anion Concentrations in meq/L for Background Monitoring Wells

Well No.	Sample ID	Ca (meq/L)	Mg (meq/L)	Na (meq/L)	K (meq/L)	NH4 (meq/L)	HCO3 (meq/L)	SO4 (meq/L)	Cl (meq/L)	NO3 (meq/L)	Cation Sum (meq/L)	Anion Sum (meq/L)	Charge Balance Error
2122	3157	3.83	1.40	0.41	0.06	0.00	4.25	1.08	0.57	0.01	5.70	5.92	-1.84%
2122	3504	4.17	1.51	0.47	0.07	0.00	4.25	0.37	0.56	0.09	6.22	5.28	8.18%
2122	3749	4.64	2.45	0.97	0.05	0.00	5.49	0.06	0.14	0.15	8.12	5.85	16.29%
2123	3156	4.08	1.70	0.09	0.03	0.00	4.67	0.73	0.34	0.16	5.90	5.90	0.01%
2123	3565	4.56	1.88	0.13	0.04	0.00	4.77	0.75	0.32	0.01	6.62	5.86	6.10%
2123	3771	4.43	1.83	0.12	0.03	0.00	4.79	0.07	0.01	0.18	6.41	5.05	11.81%
3024	3096	4.08	1.74	1.08	0.10	0.00	5.02	1.31	0.25	0.00	7.01	6.59	3.05%
3024	3377	4.24	3.79	1.65	0.06	0.00	6.05	1.21	0.10	0.00	9.75	7.36	13.94%
3024	3658	6.74	2.31	0.53	0.01	0.04	6.11	2.33	0.55	0.00	9.63	9.00	3.39%
3024	3842	6.69	2.31	0.43	0.02	0.01	6.16	3.33	0.56	0.00	9.46	10.06	-3.03%
3043	3090	4.13	2.02	0.60	0.03	0.18	6.59	0.17	0.08	0.00	6.96	6.83	0.94%
3043	3397	4.29	2.14	0.70	0.06	0.18	6.65	0.25	0.32	0.00	7.37	7.23	0.98%
3043	3694	3.91	1.93	0.65	0.03	0.24	6.73	3.79	0.43	0.00	6.76	10.95	-23.62%
3063	3190	4.31	1.82	0.53	0.07	0.00	5.02	1.35	0.63	0.01	6.72	7.02	-2.21%
3063	3495	4.82	2.00	0.63	0.08	0.00	5.13	0.17	0.69	0.00	7.54	5.99	11.45%
3063	3741	4.73	2.01	0.64	0.07	0.00	4.97	0.88	0.17	0.09	7.44	6.11	9.84%
3063	3966	4.99	1.98	0.57	0.06	0.00	5.30	1.35	0.37	0.02	7.60	7.04	3.81%
3096	3585	3.99	1.84	0.13	0.03	0.00	5.18	0.58	0.14	0.01	6.00	5.91	0.79%
3096	3789	4.21	1.88	0.13	0.35	0.00	5.08	1.01	0.07	0.00	6.56	6.17	3.05%
3096	3974	4.41	2.02	0.27	0.03	0.00	5.09	1.10	0.01	0.00	6.73	6.20	4.06%
3096	4082	4.41	1.97	0.22	0.04	0.00	5.13	0.98	0.25	0.00	6.63	6.37	1.99%
3098	3589	5.14	2.54	0.36	0.06	0.00	6.14	2.42	0.49	0.03	8.10	9.08	-5.68%
3098	3795	5.29	2.45	0.31	0.04	0.00	6.02	1.36	0.23	0.07	8.10	7.67	2.72%
3098	3989	5.39	2.58	0.28	0.05	0.00	6.08	1.49	0.45	0.03	8.30	8.05	1.51%
3098	4088	5.69	2.71	0.35	0.05	0.00	6.15	1.31	0.73	0.04	8.80	8.23	3.36%
3099	3237	4.77	2.63	0.68	0.07	0.01	5.92	1.25	1.40	0.07	8.14	8.64	-2.95%
3099	3496	5.03	2.71	0.76	0.07	0.00	5.84	0.08	1.16	0.06	8.58	7.14	9.14%
3099	3977	5.49	2.72	0.57	0.06	0.01	5.70	1.50	0.49	0.01	8.83	7.70	6.86%
3100	3239	4.63	2.37	0.75	0.06	0.01	5.43	1.12	1.20	0.03	7.82	7.78	0.30%
3100	3240	4.42	2.21	0.70	0.07	0.01	5.55	1.25	0.79	0.02	7.40	7.61	-1.41%
3100	3517	4.83	2.42	0.60	0.06	0.00	5.37	0.73	0.79	0.20	7.91	7.09	5.45%
3100	3761	4.94	2.44	0.72	0.06	0.00	5.43	0.06	0.04	0.18	8.16	5.71	17.66%
3100	3978	4.99	2.30	0.91	0.06	0.00	5.37	1.04	1.10	0.04	8.27	7.55	4.55%

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Table D-26 (Continued)
Major Cation and Anion Concentrations in meq/L for
Background Monitoring Wells

Well No.	Sample ID	Ca (meq/L)	Mg (meq/L)	Na (meq/L)	K (meq/L)	NH4 (meq/L)	HCO3 (meq/L)	SO4 (meq/L)	Cl (meq/L)	NO3 (meq/L)	Cation Sum (meq/L)	Anion Sum (meq/L)	Charge Balance Error
4096	3474	3.95	1.63	0.18	0.03	0.00	5.51	0.46	0.23	0.00	5.79	6.20	-3.45%
4096	3584	3.85	1.74	0.22	0.05	0.00	5.31	1.77	0.21	0.00	5.87	7.29	-10.79%
4096	3788	3.94	1.65	0.17	0.03	0.01	5.53	0.47	0.08	0.00	5.79	6.08	-2.43%
4096	3975	4.35	1.86	0.18	0.03	0.00	5.46	0.34	0.11	0.00	6.42	5.92	4.09%
4096	4083	4.14	1.70	0.20	0.03	0.00	5.30	0.54	0.14	0.00	6.08	5.97	0.92%

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Table D-27
Major Cation and Anion Percentages for Background Monitoring Wells

Well No.	Sample ID	Cation Sum (meq/L)	Ca % cation	Mg % cation	Na+K % cation	NH4 % cation	Anion Sum (meq/L)	HCO3 % anion	SO4 % anion	Cl % anion	NO3 % anion
1024	3106	8.45	50%	39%	11%	0%	8.71	88%	12%	0%	0%
1024	3376	9.63	67%	27%	6%	0%	11.43	72%	24%	4%	0%
1024	3657	8.77	52%	42%	6%	0%	9.85	76%	23%	1%	0%
1024	3847	8.83	50%	41%	9%	0%	8.69	88%	12%	0%	0%
1040	3218	7.22	53%	27%	18%	2%	7.31	84%	0%	16%	0%
1040	3219	7.54	52%	28%	18%	2%	7.57	82%	1%	17%	0%
1040	3572	7.34	53%	26%	18%	3%	6.86	89%	0%	11%	0%
1040	3778	7.49	50%	26%	21%	3%	7.75	79%	18%	3%	0%
1040	3964	7.78	54%	25%	18%	3%	7.50	81%	0%	19%	0%
1059	3188	7.78	52%	24%	24%	0%	8.24	76%	22%	2%	0%
1059	3562	8.28	47%	22%	31%	0%	7.02	95%	1%	4%	0%
1059	3751	8.07	46%	21%	33%	0%	6.98	99%	1%	0%	0%
1059	3981	7.42	61%	25%	14%	0%	6.70	82%	16%	2%	0%
1060	3255	12.39	52%	32%	16%	0%	13.95	67%	26%	7%	0%
1060	3398	9.70	62%	29%	9%	0%	9.98	68%	25%	7%	0%
1060	3695	9.62	59%	29%	12%	0%	8.84	80%	12%	8%	0%
1060	3888	9.63	64%	30%	6%	0%	9.74	71%	22%	7%	0%
1065	3136	7.15	62%	34%	4%	0%	6.05	96%	4%	0%	0%
2026	3186	7.95	55%	30%	15%	0%	7.57	71%	11%	17%	1%
2026	3505	8.05	57%	31%	12%	0%	7.30	74%	7%	16%	3%
2026	3750	6.29	67%	24%	9%	0%	8.70	49%	48%	2%	1%
2026	3980	10.67	51%	26%	23%	0%	9.98	57%	8%	34%	1%
2036	3184	6.97	67%	30%	3%	0%	6.09	89%	2%	6%	3%
2036	3564	7.31	68%	29%	3%	0%	6.59	84%	8%	5%	3%
2036	3770	6.84	68%	30%	2%	0%	6.39	85%	13%	1%	1%
2036	3983	7.72	71%	27%	2%	0%	6.48	85%	11%	3%	1%
2043	3091	9.82	52%	31%	16%	1%	10.71	79%	8%	13%	0%
2043	3440	9.92	50%	32%	18%	0%	10.17	79%	3%	18%	0%
2043	3700	6.24	58%	34%	6%	2%	12.87	61%	27%	12%	0%
2050	3147	8.52	49%	27%	24%	0%	8.91	74%	1%	25%	0%
2050	3497	8.90	48%	27%	24%	1%	9.57	70%	0%	30%	0%
2050	3743	8.95	49%	26%	23%	2%	12.92	53%	32%	15%	0%
2050	3969	9.06	49%	25%	26%	0%	8.72	75%	0%	25%	0%
2056	3159	6.43	49%	29%	20%	2%	7.32	83%	2%	15%	0%
2056	3575	7.58	48%	28%	22%	2%	7.31	83%	0%	17%	0%
2056	3781	7.91	47%	27%	24%	2%	7.43	83%	15%	2%	0%
2056	3967	7.80	49%	26%	23%	2%	7.54	83%	0%	17%	0%
2057	3265	6.30	67%	30%	3%	0%	6.71	84%	7%	9%	0%
2057	3573	6.25	67%	30%	3%	0%	6.17	91%	8%	1%	0%
2057	3779	6.23	67%	30%	3%	0%	6.67	84%	14%	2%	0%
2057	3965	6.50	69%	28%	3%	0%	6.12	91%	8%	1%	0%
2066	3124	7.97	43%	28%	26%	3%	8.98	70%	0%	30%	0%
2066	3710	7.54	44%	28%	25%	3%	10.95	58%	25%	17%	0%
2066	3894	8.51	46%	27%	24%	3%	8.25	76%	0%	24%	0%
2096	3586	8.64	69%	27%	4%	0%	9.98	67%	32%	1%	0%
2096	3790	8.55	70%	26%	4%	0%	7.49	78%	21%	1%	0%
2096	3985	7.54	67%	30%	3%	0%	7.51	74%	26%	0%	0%
2096	4081	12.91	70%	27%	3%	0%	12.95	47%	51%	2%	0%

Table D-27 (Continued)
Major Cation and Anion Percentages for
Background Monitoring Wells

Well No.	Sample ID	Cation Sum (meq/L)	Ca % cation	Mg % cation	Na+K % cation	NH4 % cation	Anion Sum (meq/L)	HCO3 % anion	SO4 % anion	Cl % anion	NO3 % anion
2098	3591	8.76	64%	31%	5%	0%	7.60	85%	7%	8%	0%
2098	3796	8.77	65%	30%	5%	0%	9.83	68%	27%	3%	2%
2098	3990	9.46	64%	30%	6%	0%	8.91	70%	19%	11%	0%
2098	4087	5.22	44%	41%	15%	0%	7.23	67%	23%	9%	1%
2104	3146	8.75	66%	28%	6%	0%	8.47	65%	27%	8%	0%
2104	3498	8.54	66%	28%	6%	0%	8.07	66%	25%	9%	0%
2104	3744	9.70	66%	28%	6%	0%	7.83	77%	22%	1%	0%
2104	3970	8.91	67%	27%	6%	0%	8.36	66%	25%	9%	0%
2105	3268	7.73	19%	17%	58%	6%	8.30	76%	2%	22%	0%
2105	3577	7.41	50%	27%	20%	3%	7.92	78%	0%	22%	0%
2105	3782	7.81	0%	0%	100%	0%	7.03	91%	6%	3%	0%
2105	3968	8.05	54%	24%	19%	3%	7.75	80%	0%	20%	0%
2121	3158	5.38	65%	24%	11%	0%	4.87	80%	20%	0%	0%
2121	3571	6.94	64%	24%	12%	0%	6.87	70%	19%	10%	1%
2121	3776	7.31	65%	24%	11%	0%	6.38	81%	14%	3%	2%
2121	3962	7.16	66%	23%	11%	0%	6.06	76%	17%	7%	0%
2122	3157	5.70	67%	25%	8%	0%	5.92	72%	18%	10%	0%
2122	3504	6.22	67%	24%	9%	0%	5.28	80%	7%	11%	2%
2122	3749	8.12	57%	30%	13%	0%	5.85	94%	1%	2%	3%
2123	3156	5.90	69%	29%	2%	0%	5.90	79%	12%	6%	3%
2123	3565	6.62	69%	28%	3%	0%	5.86	82%	13%	5%	0%
2123	3771	6.41	69%	29%	2%	0%	5.05	95%	1%	0%	4%
3024	3096	7.01	58%	25%	17%	0%	6.59	76%	20%	4%	0%
3024	3377	9.75	43%	39%	18%	0%	7.36	82%	16%	2%	0%
3024	3658	9.63	70%	24%	6%	0%	9.00	68%	26%	6%	0%
3024	3842	9.46	71%	24%	5%	0%	10.06	61%	33%	6%	0%
3043	3090	6.96	59%	29%	9%	3%	6.83	96%	3%	1%	0%
3043	3397	7.37	58%	29%	10%	3%	7.23	92%	3%	5%	0%
3043	3694	6.76	58%	28%	10%	4%	10.95	61%	35%	4%	0%
3063	3190	6.72	64%	27%	9%	0%	7.02	72%	19%	9%	0%
3063	3495	7.54	64%	27%	9%	0%	5.99	86%	3%	11%	0%
3063	3741	7.44	64%	27%	9%	0%	6.11	81%	14%	3%	2%
3063	3966	7.60	66%	26%	8%	0%	7.04	75%	19%	5%	1%
3096	3585	6.00	66%	31%	3%	0%	5.91	88%	10%	2%	0%
3096	3789	6.56	64%	29%	7%	0%	6.17	82%	17%	1%	0%
3096	3974	6.73	66%	30%	4%	0%	6.20	82%	18%	0%	0%
3096	4082	6.63	66%	30%	4%	0%	6.37	81%	15%	4%	0%
3098	3589	8.10	64%	31%	5%	0%	9.08	68%	27%	5%	0%
3098	3795	8.10	65%	30%	5%	0%	7.67	78%	18%	3%	1%
3098	3989	8.30	65%	31%	4%	0%	8.05	75%	19%	6%	0%
3098	4088	8.80	65%	31%	4%	0%	8.23	75%	16%	9%	0%
3099	3237	8.14	59%	32%	9%	0%	8.64	69%	14%	16%	1%
3099	3496	8.58	59%	31%	10%	0%	7.14	82%	1%	16%	1%
3099	3977	8.83	62%	31%	7%	0%	7.70	74%	20%	6%	0%
3100	3239	7.82	59%	30%	11%	0%	7.78	70%	15%	15%	0%
3100	3240	7.40	60%	30%	10%	0%	7.61	73%	17%	10%	0%
3100	3517	7.91	61%	31%	8%	0%	7.09	76%	10%	11%	3%
3100	3761	8.16	60%	30%	10%	0%	5.71	95%	1%	1%	3%
3100	3978	8.27	60%	28%	12%	0%	7.55	71%	14%	15%	0%

Table D-27 (Continued)
Major Cation and Anion Percentages for
Background Monitoring Wells

Well No.	Sample ID	Cation Sum (meq/L)	Ca % cation	Mg % cation	Na+K % cation	NH4 % cation	Anion Sum (meq/L)	HCO3 % anion	SO4 % anion	Cl % anion	NO3 % anion
4096	3474	5.79	68%	28%	4%	0%	6.20	89%	7%	4%	0%
4096	3584	5.87	66%	30%	4%	0%	7.29	73%	24%	3%	0%
4096	3788	5.79	68%	28%	4%	0%	6.08	91%	8%	1%	0%
4096	3975	6.42	68%	29%	3%	0%	5.92	92%	6%	2%	0%
4096	4083	6.08	68%	28%	4%	0%	5.97	89%	9%	2%	0%

Table D-28
Dissolved Oxygen, pH and Specific Conductivity for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Constituent	Result	Units
1024	04/21/88	35554	Dissolved oxygen	1.8	mg/L
1024	07/26/88	35748	Dissolved oxygen	1.3	mg/L
1024	11/02/88	35975	Dissolved oxygen	1.8	mg/L
1024	01/22/89	36177	Dissolved oxygen	2.8	mg/L
1024	06/26/89	36793	Dissolved oxygen	1.6	mg/L
1024	08/10/89	36837	Dissolved oxygen	5.4	mg/L
1024	04/12/93	90053	Dissolved oxygen	5.69	mg/L
1040	08/25/88	35910	Dissolved oxygen	1.2	mg/L
1040	12/07/88	36118	Dissolved oxygen	2.1	mg/L
1040	09/28/93	87409	Dissolved oxygen	1.28	mg/L
1059	12/06/88	36106	Dissolved oxygen	2.8	mg/L
1059	03/14/89	36370	Dissolved oxygen	3.95	mg/L
1059	09/29/93	87400	Dissolved oxygen	5.14	mg/L
1060	11/30/87	35436	Dissolved oxygen	9.2	mg/L
1060	12/05/87	35472	Dissolved oxygen	9	mg/L
1060	06/02/88	35702	Dissolved oxygen	1	mg/L
1060	08/04/88	35788	Dissolved oxygen	1.5	mg/L
1060	10/25/88	35956	Dissolved oxygen	2.6	mg/L
1060	09/29/93	87408	Dissolved oxygen	5.09	mg/L
1065	01/22/89	36186	Dissolved oxygen	8	mg/L
1065	05/03/93	90090	Dissolved oxygen	3.52	mg/L
1065	05/04/93	90091	Dissolved oxygen	6.96	mg/L
1024	04/21/88	35554	pH	7.1	SU
1024	07/26/88	35748	pH	7.21	SU
1024	11/02/88	35975	pH	7.39	SU
1024	01/22/89	36177	pH	7.1	SU
1024	06/26/89	36793	pH	7.35	SU
1024	08/10/89	36837	pH	7.24	SU
1024	11/21/89	36956	pH	7.2	SU
1024	04/12/93	90053	pH	7.21	SU
1040	05/21/88	35656	pH	7.3	SU
1040	08/25/88	35910	pH	7.36	SU
1040	12/07/88	36118	pH	6.85	SU
1040	03/15/89	36379	pH	7.7	SU
1040	09/28/93	87409	pH	7.19	SU
1059	05/12/88	35630	pH	7	SU
1059	08/18/88	35880	pH	7.4	SU
1059	12/06/88	36106	pH	7.37	SU
1059	03/14/89	36370	pH	7.24	SU
1059	09/29/93	87400	pH	7.32	SU
1060	11/30/87	35436	pH	6.87	SU
1060	12/05/87	35472	pH	7.19	SU
1060	06/02/88	35702	pH	7.15	SU
1060	08/04/88	35788	pH	7.2	SU
1060	10/25/88	35956	pH	7.18	SU
1060	12/18/89	37061	pH	7.5	SU
1060	09/29/93	87408	pH	7.01	SU
1065	04/14/88	35530	pH	7.4	SU
1065	12/13/89	37048	pH	7.2	SU
1065	05/03/93	90090	pH	6.93	SU
1065	05/04/93	90091	pH	7.25	SU

Table D-28 (Continued)
Dissolved Oxygen, pH and Specific Conductivity for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Constituent	Result	Units
1024	04/21/88	35554	Specific conductivity	480	umhos/cm
1024	07/26/88	35748	Specific conductivity	700	umhos/cm
1024	11/02/88	35975	Specific conductivity	575	umhos/cm
1024	01/22/89	36177	Specific conductivity	800	umhos/cm
1024	06/26/89	36793	Specific conductivity	975	umhos/cm
1024	08/10/89	36837	Specific conductivity	625	umhos/cm
1024	11/21/89	36956	Specific conductivity	600	umhos/cm
1024	04/12/93	90053	Specific conductivity	733	umhos/cm
1040	05/21/88	35656	Specific conductivity	750	umhos/cm
1040	08/25/88	35910	Specific conductivity	650	umhos/cm
1040	12/07/88	36118	Specific conductivity	470	umhos/cm
1040	03/15/89	36379	Specific conductivity	500	umhos/cm
1040	09/28/93	87409	Specific conductivity	712	umhos/cm
1059	05/12/88	35630	Specific conductivity	675	umhos/cm
1059	08/18/88	35880	Specific conductivity	825	umhos/cm
1059	12/06/88	36106	Specific conductivity	550	umhos/cm
1059	03/14/89	36370	Specific conductivity	525	umhos/cm
1059	09/29/93	87400	Specific conductivity	718	umhos/cm
1060	11/30/87	35436	Specific conductivity	684	umhos/cm
1060	12/05/87	35472	Specific conductivity	754	umhos/cm
1060	06/02/88	35702	Specific conductivity	470	umhos/cm
1060	08/04/88	35788	Specific conductivity	725	umhos/cm
1060	10/25/88	35956	Specific conductivity	620	umhos/cm
1060	12/18/89	37061	Specific conductivity	505	umhos/cm
1060	09/29/93	87408	Specific conductivity	1170	umhos/cm
1065	04/14/88	35530	Specific conductivity	975	umhos/cm
1065	01/22/89	36186	Specific conductivity	500	umhos/cm
1065	12/13/89	37048	Specific conductivity	550	umhos/cm
1065	05/03/93	90090	Specific conductivity	685	umhos/cm
1065	05/04/93	90091	Specific conductivity	706	umhos/cm

Table D-29
Dissolved Oxygen, pH and Specific Conductivity for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Constituent	Result	Units	Area
2026	12/07/88	36125	Dissolved oxygen	6.05	mg/L	R
2026	03/14/89	36377	Dissolved oxygen	8	mg/L	R
2036	12/07/88	36124	Dissolved oxygen	4.3	mg/L	D
2036	03/14/89	36376	Dissolved oxygen	3.6	mg/L	D
2043	08/05/88	35794	Dissolved oxygen	0.5	mg/L	S
2043	11/04/88	35991	Dissolved oxygen	0.61	mg/L	S
2043	02/02/89	36242	Dissolved oxygen	0.4	mg/L	S
2043	06/26/89	36794	Dissolved oxygen	0.65	mg/L	S
2043	08/30/89	36882	Dissolved oxygen	0.5	mg/L	S
2043	09/13/89	36904	Dissolved oxygen	0.45	mg/L	S
2043	09/14/89	36906	Dissolved oxygen	1	mg/L	S
2043	11/14/89	36925	Dissolved oxygen	0.6	mg/L	S
2043	12/01/89	37010	Dissolved oxygen	0.65	mg/L	S
2043	04/07/93	90192	Dissolved oxygen	1.18	mg/L	S
2050	12/05/88	36103	Dissolved oxygen	3.2	mg/L	S
2050	03/13/89	36367	Dissolved oxygen	0.2	mg/L	S
2050	05/20/93	90204	Dissolved oxygen	4.62	mg/L	S
2050	08/03/93	90205	Dissolved oxygen	4.8	mg/L	S
2056	08/25/88	35914	Dissolved oxygen	0.8	mg/L	S
2056	12/07/88	36122	Dissolved oxygen	1.6	mg/L	S
2056	03/13/89	36358	Dissolved oxygen	0.5	mg/L	S
2057	08/25/88	35911	Dissolved oxygen	0.8	mg/L	D
2057	12/13/88	36131	Dissolved oxygen	2.8	mg/L	D
2066	04/26/88	35572	Dissolved oxygen	0.1	mg/L	S
2066	11/10/88	36018	Dissolved oxygen	2.3	mg/L	S
2066	08/09/89	36834	Dissolved oxygen	6.2	mg/L	S
2066	04/07/93	90217	Dissolved oxygen	1.47	mg/L	S
2096	12/07/88	36123	Dissolved oxygen	0.5	mg/L	D
2096	02/09/89	36284	Dissolved oxygen	0.59	mg/L	D
2096	04/25/90	37181	Dissolved oxygen	0.6	mg/L	D
2096	05/06/93	90230	Dissolved oxygen	1.1	mg/L	D
2096	08/04/93	90231	Dissolved oxygen	0.98	mg/L	D
2096	12/09/93	92613	Dissolved oxygen	2.35	mg/L	D
2098	09/22/88	35930	Dissolved oxygen	6.5	mg/L	R
2098	12/16/88	36139	Dissolved oxygen	6.6	mg/L	R
2098	02/08/89	36280	Dissolved oxygen	8.2	mg/L	R
2098	05/25/89	36734	Dissolved oxygen	10.4	mg/L	R
2098	05/20/93	90234	Dissolved oxygen	9.87	mg/L	R
2098	08/09/93	92715	Dissolved oxygen	6.16	mg/L	R
2104	12/06/88	36108	Dissolved oxygen	2.8	mg/L	D
2104	03/15/89	36386	Dissolved oxygen	0.4	mg/L	D
2104	05/13/93	90236	Dissolved oxygen	1.6	mg/L	D
2104	08/02/93	90237	Dissolved oxygen	1.29	mg/L	D
2105	12/13/88	36129	Dissolved oxygen	2.2	mg/L	S
2105	03/15/89	36383	Dissolved oxygen	0.3	mg/L	S
2121	08/25/88	35909	Dissolved oxygen	6.8	mg/L	R
2121	12/13/88	36130	Dissolved oxygen	5.3	mg/L	R
2121	03/14/89	36374	Dissolved oxygen	5.55	mg/L	R
2122	12/07/88	36120	Dissolved oxygen	4.45	mg/L	R
2123	12/06/88	36109	Dissolved oxygen	2.65	mg/L	D

Table D-29 (Continued)
Dissolved Oxygen, pH and Specific Conductivity for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Constituent	Result	Units	Area
2123	03/14/89	36378	Dissolved oxygen	1.25	mg/L	D
2728	05/24/93	90324	Dissolved oxygen	2.02	mg/L	S
2728	08/19/93	90325	Dissolved oxygen	0.82	mg/L	S
3024	07/26/88	35749	Dissolved oxygen	0.7	mg/L	S
3024	11/02/88	35979	Dissolved oxygen	1	mg/L	S
3024	01/24/89	36198	Dissolved oxygen	3.1	mg/L	S
3024	08/10/89	36836	Dissolved oxygen	0.6	mg/L	S
3024	11/30/89	37005	Dissolved oxygen	1.1	mg/L	S
3024	04/12/93	90355	Dissolved oxygen	1.98	mg/L	S
3043	04/13/88	35522	Dissolved oxygen	0.2	mg/L	S
3043	08/04/88	35787	Dissolved oxygen	1.2	mg/L	S
3043	11/04/88	35990	Dissolved oxygen	0.4	mg/L	S
3043	02/02/89	36232	Dissolved oxygen	0.17	mg/L	S
3043	06/13/89	5027	Dissolved oxygen	0.35	mg/L	S
3043	08/30/89	36880	Dissolved oxygen	0.45	mg/L	S
3043	09/14/89	36907	Dissolved oxygen	0.35	mg/L	S
3043	11/14/89	36927	Dissolved oxygen	0.3	mg/L	S
3043	04/07/93	90361	Dissolved oxygen	0.96	mg/L	S
3063	12/13/88	36128	Dissolved oxygen	5	mg/L	R
3063	03/13/89	36362	Dissolved oxygen	2.8	mg/L	R
3096	12/07/88	36126	Dissolved oxygen	0.6	mg/L	D
3096	02/09/89	36288	Dissolved oxygen	0.6	mg/L	D
3096	04/25/90	37180	Dissolved oxygen	0.8	mg/L	D
3096	05/07/93	90392	Dissolved oxygen	4.09	mg/L	D
3096	08/11/93	90393	Dissolved oxygen	4	mg/L	D
3096	12/09/93	92614	Dissolved oxygen	1.81	mg/L	D
3098	09/21/88	35928	Dissolved oxygen	2.5	mg/L	R
3098	12/16/88	36140	Dissolved oxygen	0.3	mg/L	R
3098	02/08/89	36282	Dissolved oxygen	1.4	mg/L	R
3098	05/25/89	36735	Dissolved oxygen	0.78	mg/L	R
3098	05/20/93	90396	Dissolved oxygen	0.98	mg/L	R
3098	08/09/93	92713	Dissolved oxygen	1.21	mg/L	R
3099	12/06/88	36115	Dissolved oxygen	1.8	mg/L	R
3099	03/14/89	36372	Dissolved oxygen	0.45	mg/L	R
3100	12/06/88	36114	Dissolved oxygen	8.2	mg/L	R
4011	10/05/90	37260	Dissolved oxygen	0.5	mg/L	S
4011	02/07/91	37301	Dissolved oxygen	0.15	mg/L	S
4011	04/08/93	90461	Dissolved oxygen	4.72	mg/L	S
4096	12/14/88	36133	Dissolved oxygen	0.9	mg/L	D
4096	02/10/89	36294	Dissolved oxygen	0.4	mg/L	D
4096	05/06/93	90475	Dissolved oxygen	0.85	mg/L	D
4096	08/04/93	90476	Dissolved oxygen	1.04	mg/L	D
4096	12/08/93	92336	Dissolved oxygen	1.77	mg/L	D
2026	05/12/88	35624	pH	7	SU	R
2026	08/17/88	35870	pH	7.5	SU	R
2026	12/07/88	36125	pH	7.15	SU	R
2026	03/14/89	36377	pH	7.3	SU	R
2036	05/12/88	35626	pH	7.2	SU	D
2036	08/23/88	35901	pH	7.5	SU	D
2036	12/07/88	36124	pH	7.2	SU	D

Table D-29 (Continued)
Dissolved Oxygen, pH and Specific Conductivity for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Constituent	Result	Units	Area
2036	03/14/89	36376	pH	7.34	SU	D
2043	04/13/88	35527	pH	7.25	SU	S
2043	08/05/88	35794	pH	7.12	SU	S
2043	11/04/88	35991	pH	7.28	SU	S
2043	02/02/89	36242	pH	7	SU	S
2043	06/26/89	36794	pH	7.5	SU	S
2043	08/30/89	36882	pH	7.3	SU	S
2043	09/13/89	36904	pH	7.35	SU	S
2043	09/14/89	36906	pH	6.4	SU	S
2043	11/14/89	36925	pH	7.28	SU	S
2043	12/01/89	37010	pH	6.95	SU	S
2043	04/07/93	90192	pH	7.2	SU	S
2050	05/05/88	35592	pH	7.2	SU	S
2050	08/16/88	35859	pH	7.6	SU	S
2050	12/05/88	36103	pH	7.29	SU	S
2050	03/13/89	36367	pH	7.38	SU	S
2050	12/18/89	37062	pH	7.35	SU	S
2050	05/20/93	90204	pH	7.15	SU	S
2050	08/03/93	90205	pH	7.25	SU	S
2056	05/06/88	35602	pH	7	SU	S
2056	08/25/88	35914	pH	7.39	SU	S
2056	12/07/88	36122	pH	7.4	SU	S
2056	03/13/89	36358	pH	7.5	SU	S
2057	06/03/88	35704	pH	7.2	SU	D
2057	08/25/88	35911	pH	7.22	SU	D
2057	12/13/88	36131	pH	7.6	SU	D
2057	03/14/89	36368	pH	7.34	SU	D
2066	04/26/88	35572	pH	7.6	SU	S
2066	08/07/88	35800	pH	6.5	SU	S
2066	11/10/88	36018	pH	6.72	SU	S
2066	03/14/89	36373	pH	7.25	SU	S
2066	08/09/89	36834	pH	7.5	SU	S
2066	11/06/89	36909	pH	7.3	SU	S
2066	04/07/93	90217	pH	7.36	SU	S
2096	09/12/88	35925	pH	7.33	SU	D
2096	12/07/88	36123	pH	7.2	SU	D
2096	02/09/89	36284	pH	7.37	SU	D
2096	04/30/89	36436	pH	7.05	SU	D
2096	04/25/90	37181	pH	7.2	SU	D
2096	05/06/93	90230	pH	6.93	SU	D
2096	08/04/93	90231	pH	6.87	SU	D
2096	12/09/93	92613	pH	6.9	SU	D
2098	09/22/88	35930	pH	7.23	SU	R
2098	12/16/88	36139	pH	6.25	SU	R
2098	02/08/89	36280	pH	7	SU	R
2098	05/25/89	36734	pH	6.9	SU	R
2098	05/20/93	90234	pH	7.15	SU	R
2098	08/09/93	92715	pH	7.05	SU	R
2104	05/05/88	35593	pH	7.3	SU	D
2104	08/16/88	35860	pH	7.13	SU	D

Table D-29 (Continued)
Dissolved Oxygen, pH and Specific Conductivity for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Constituent	Result	Units	Area
2104	12/06/88	36108	pH	7.41	SU	D
2104	03/15/89	36386	pH	7.1	SU	D
2104	04/22/90	37163	pH	7.2	SU	D
2104	05/13/93	90236	pH	7.22	SU	D
2104	08/02/93	90237	pH	7.09	SU	D
2105	06/05/88	35707	pH	7.33	SU	S
2105	08/28/88	35916	pH	7.3	SU	S
2105	12/13/88	36129	pH	7.8	SU	S
2105	03/15/89	36383	pH	7.2	SU	S
2121	05/06/88	35601	pH	7	SU	R
2121	08/25/88	35909	pH	7.28	SU	R
2121	12/13/88	36130	pH	7.7	SU	R
2121	03/14/89	36374	pH	7.8	SU	R
2122	05/06/88	35599	pH	7	SU	R
2122	08/17/88	35869	pH	7.7	SU	R
2122	12/07/88	36120	pH	7.33	SU	R
2122	03/15/89	36381	pH	7.2	SU	R
2123	05/06/88	35597	pH	7	SU	D
2123	08/23/88	35902	pH	7.6	SU	D
2123	12/06/88	36109	pH	7.5	SU	D
2123	03/14/89	36378	pH	7.4	SU	D
2728	04/04/93	58452	pH	7.05	SU	S
2728	05/24/93	90324	pH	6.94	SU	S
2728	08/19/93	90325	pH	6.94	SU	S
3024	04/20/88	35540	pH	7.5	SU	S
3024	07/26/88	35749	pH	7.21	SU	S
3024	11/02/88	35979	pH	7.41	SU	S
3024	01/24/89	36198	pH	7	SU	S
3024	08/10/89	36836	pH	7.2	SU	S
3024	11/30/89	37005	pH	7.34	SU	S
3024	04/12/93	90355	pH	7.02	SU	S
3043	04/13/88	35522	pH	7.4	SU	S
3043	08/04/88	35787	pH	7.62	SU	S
3043	11/04/88	35990	pH	7.37	SU	S
3043	02/02/89	36232	pH	7.3	SU	S
3043	06/13/89	5027	pH	7.37	SU	S
3043	08/30/89	36880	pH	7.1	SU	S
3043	11/14/89	36927	pH	7.35	SU	S
3043	04/07/93	90361	pH	7.27	SU	S
3063	05/12/88	35628	pH	6.64	SU	R
3063	08/16/88	35857	pH	7	SU	R
3063	12/13/88	36128	pH	7.5	SU	R
3063	03/13/89	36362	pH	7.45	SU	R
3096	09/12/88	35924	pH	7.78	SU	D
3096	12/07/88	36126	pH	7.8	SU	D
3096	02/09/89	36288	pH	7.32	SU	D
3096	04/30/89	36437	pH	7.8	SU	D
3096	04/25/90	37180	pH	7.2	SU	D
3096	05/07/93	90392	pH	7.47	SU	D
3096	08/11/93	90393	pH	7.24	SU	D

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Table D-29 (Continued)
Dissolved Oxygen, pH and Specific Conductivity for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Constituent	Result	Units	Area
3096	12/09/93	92614	pH	7.2	SU	D
3098	09/21/88	35928	pH	7.22	SU	R
3098	12/16/88	36140	pH	7.25	SU	R
3098	02/08/89	36282	pH	7.15	SU	R
3098	05/25/89	36735	pH	7.05	SU	R
3098	05/20/93	90396	pH	6.9	SU	R
3098	08/09/93	92713	pH	7.11	SU	R
3099	05/24/88	35675	pH	7.1	SU	R
3099	08/16/88	35858	pH	7.16	SU	R
3099	12/06/88	36115	pH	7.02	SU	R
3099	03/14/89	36372	pH	7.36	SU	R
3100	08/19/88	35891	pH	7	SU	R
3100	12/06/88	36114	pH	7.39	SU	R
3100	03/13/89	36365	pH	7.38	SU	R
4011	10/05/90	37260	pH	7.38	SU	S
4011	02/07/91	37301	pH	7.2	SU	S
4011	04/08/93	90461	pH	7.11	SU	S
4096	09/12/88	35923	pH	7.92	SU	D
4096	12/14/88	36133	pH	7.3	SU	D
4096	02/10/89	36294	pH	7.4	SU	D
4096	04/30/89	36438	pH	7.4	SU	D
4096	05/06/93	90475	pH	7.33	SU	D
4096	08/04/93	90476	pH	7.22	SU	D
4096	12/08/93	92336	pH	7.14	SU	D
2026	05/12/88	35624	Specific conductivity	625	umhos/cm	R
2026	08/17/88	35870	Specific conductivity	720	umhos/cm	R
2026	12/07/88	36125	Specific conductivity	590	umhos/cm	R
2026	03/14/89	36377	Specific conductivity	800	umhos/cm	R
2036	05/12/88	35626	Specific conductivity	655	umhos/cm	D
2036	08/23/88	35901	Specific conductivity	750	umhos/cm	D
2036	12/07/88	36124	Specific conductivity	500	umhos/cm	D
2036	03/14/89	36376	Specific conductivity	600	umhos/cm	D
2043	04/13/88	35527	Specific conductivity	910	umhos/cm	S
2043	08/05/88	35794	Specific conductivity	830	umhos/cm	S
2043	11/04/88	35991	Specific conductivity	780	umhos/cm	S
2043	02/02/89	36242	Specific conductivity	700	umhos/cm	S
2043	06/26/89	36794	Specific conductivity	700	umhos/cm	S
2043	08/30/89	36882	Specific conductivity	690	umhos/cm	S
2043	09/13/89	36904	Specific conductivity	670	umhos/cm	S
2043	09/14/89	36906	Specific conductivity	1890	umhos/cm	S
2043	11/14/89	36925	Specific conductivity	705	umhos/cm	S
2043	12/01/89	37010	Specific conductivity	600	umhos/cm	S
2043	04/07/93	90192	Specific conductivity	862	umhos/cm	S
2050	05/05/88	35592	Specific conductivity	650	umhos/cm	S
2050	08/16/88	35859	Specific conductivity	850	umhos/cm	S
2050	12/05/88	36103	Specific conductivity	650	umhos/cm	S
2050	03/13/89	36367	Specific conductivity	625	umhos/cm	S
2050	12/18/89	37062	Specific conductivity	600	umhos/cm	S
2050	05/20/93	90204	Specific conductivity	803	umhos/cm	S
2050	08/03/93	90205	Specific conductivity	930	umhos/cm	S

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Table D-29 (Continued)
Dissolved Oxygen, pH and Specific Conductivity for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Constituent	Result	Units	Area
2056	05/06/88	35602	Specific conductivity	600	umhos/cm	S
2056	08/25/88	35914	Specific conductivity	690	umhos/cm	S
2056	12/07/88	36122	Specific conductivity	450	umhos/cm	S
2056	03/13/89	36358	Specific conductivity	525	umhos/cm	S
2057	06/03/88	35704	Specific conductivity	500	umhos/cm	D
2057	08/25/88	35911	Specific conductivity	575	umhos/cm	D
2057	12/13/88	36131	Specific conductivity	370	umhos/cm	D
2057	03/14/89	36368	Specific conductivity	400	umhos/cm	D
2066	04/26/88	35572	Specific conductivity	600	umhos/cm	S
2066	08/07/88	35800	Specific conductivity	680	umhos/cm	S
2066	11/10/88	36018	Specific conductivity	590	umhos/cm	S
2066	03/14/89	36373	Specific conductivity	1270	umhos/cm	S
2066	08/09/89	36834	Specific conductivity	650	umhos/cm	S
2066	11/06/89	36909	Specific conductivity	600	umhos/cm	S
2066	04/07/93	90217	Specific conductivity	718	umhos/cm	S
2096	09/12/88	35925	Specific conductivity	730	umhos/cm	D
2096	12/07/88	36123	Specific conductivity	525	umhos/cm	D
2096	02/09/89	36284	Specific conductivity	470	umhos/cm	D
2096	04/30/89	36436	Specific conductivity	875	umhos/cm	D
2096	04/25/90	37181	Specific conductivity	760	umhos/cm	D
2096	05/06/93	90230	Specific conductivity	738	umhos/cm	D
2096	08/04/93	90231	Specific conductivity	688	umhos/cm	D
2096	12/09/93	92613	Specific conductivity	714	umhos/cm	D
2098	09/22/88	35930	Specific conductivity	600	umhos/cm	R
2098	12/16/88	36139	Specific conductivity	590	umhos/cm	R
2098	02/08/89	36280	Specific conductivity	600	umhos/cm	R
2098	05/25/89	36734	Specific conductivity	440	umhos/cm	R
2098	05/20/93	90234	Specific conductivity	562	umhos/cm	R
2098	08/09/93	92715	Specific conductivity	649	umhos/cm	R
2104	05/05/88	35593	Specific conductivity	610	umhos/cm	D
2104	08/16/88	35860	Specific conductivity	890	umhos/cm	D
2104	12/06/88	36108	Specific conductivity	620	umhos/cm	D
2104	03/15/89	36386	Specific conductivity	580	umhos/cm	D
2104	04/22/90	37163	Specific conductivity	610	umhos/cm	D
2104	05/13/93	90236	Specific conductivity	812	umhos/cm	D
2104	08/02/93	90237	Specific conductivity	819	umhos/cm	D
2105	06/05/88	35707	Specific conductivity	700	umhos/cm	S
2105	08/28/88	35916	Specific conductivity	700	umhos/cm	S
2105	12/13/88	36129	Specific conductivity	575	umhos/cm	S
2105	03/15/89	36383	Specific conductivity	500	umhos/cm	S
2121	05/06/88	35601	Specific conductivity	500	umhos/cm	R
2121	08/25/88	35909	Specific conductivity	600	umhos/cm	R
2121	12/13/88	36130	Specific conductivity	500	umhos/cm	R
2121	03/14/89	36374	Specific conductivity	450	umhos/cm	R
2122	05/06/88	35599	Specific conductivity	525	umhos/cm	R
2122	08/17/88	35869	Specific conductivity	610	umhos/cm	R
2122	12/07/88	36120	Specific conductivity	450	umhos/cm	R
2122	03/15/89	36381	Specific conductivity	400	umhos/cm	R
2123	05/06/88	35597	Specific conductivity	520	umhos/cm	D
2123	08/23/88	35902	Specific conductivity	610	umhos/cm	D

Table D-29 (Continued)
Dissolved Oxygen, pH and Specific Conductivity for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Constituent	Result	Units	Area
2123	12/06/88	36109	Specific conductivity	480	umhos/cm	D
2123	03/14/89	36378	Specific conductivity	460	umhos/cm	D
2728	04/04/93	58452	Specific conductivity	625	umhos/cm	S
2728	05/24/93	90324	Specific conductivity	910	umhos/cm	S
2728	08/19/93	90325	Specific conductivity	694	umhos/cm	S
3024	04/20/88	35540	Specific conductivity	440	umhos/cm	S
3024	07/26/88	35749	Specific conductivity	700	umhos/cm	S
3024	11/02/88	35979	Specific conductivity	625	umhos/cm	S
3024	01/24/89	36198	Specific conductivity	750	umhos/cm	S
3024	08/10/89	36836	Specific conductivity	625	umhos/cm	S
3024	11/30/89	37005	Specific conductivity	595	umhos/cm	S
3024	04/12/93	90355	Specific conductivity	980	umhos/cm	S
3043	04/13/88	35522	Specific conductivity	500	umhos/cm	S
3043	08/04/88	35787	Specific conductivity	500	umhos/cm	S
3043	11/04/88	35990	Specific conductivity	550	umhos/cm	S
3043	02/02/89	36232	Specific conductivity	490	umhos/cm	S
3043	06/13/89	36761	Specific conductivity	525	umhos/cm	S
3043	08/30/89	36880	Specific conductivity	498	umhos/cm	S
3043	09/14/89	36907	Specific conductivity	1500	umhos/cm	S
3043	11/14/89	36927	Specific conductivity	490	umhos/cm	S
3043	04/07/93	90361	Specific conductivity	618	umhos/cm	S
3063	05/12/88	35628	Specific conductivity	614	umhos/cm	R
3063	08/16/88	35857	Specific conductivity	680	umhos/cm	R
3063	12/13/88	36128	Specific conductivity	460	umhos/cm	R
3063	03/13/89	36362	Specific conductivity	550	umhos/cm	R
3096	09/12/88	35924	Specific conductivity	550	umhos/cm	D
3096	12/07/88	36126	Specific conductivity	430	umhos/cm	D
3096	02/09/89	36288	Specific conductivity	471	umhos/cm	D
3096	04/30/89	36437	Specific conductivity	475	umhos/cm	D
3096	04/25/90	37180	Specific conductivity	490	umhos/cm	D
3096	05/07/93	90392	Specific conductivity	516	umhos/cm	D
3096	08/11/93	90393	Specific conductivity	519	umhos/cm	D
3096	12/09/93	92614	Specific conductivity	496	umhos/cm	D
3098	09/21/88	35928	Specific conductivity	650	umhos/cm	R
3098	12/16/88	36140	Specific conductivity	570	umhos/cm	R
3098	02/08/89	36282	Specific conductivity	525	umhos/cm	R
3098	05/25/89	36735	Specific conductivity	590	umhos/cm	R
3098	05/20/93	90396	Specific conductivity	699	umhos/cm	R
3098	08/09/93	92713	Specific conductivity	665	umhos/cm	R
3099	05/24/88	35675	Specific conductivity	750	umhos/cm	R
3099	08/16/88	35858	Specific conductivity	750	umhos/cm	R
3099	12/06/88	36115	Specific conductivity	580	umhos/cm	R
3099	03/14/89	36372	Specific conductivity	600	umhos/cm	R
3100	08/19/88	35891	Specific conductivity	700	umhos/cm	R
3100	12/06/88	36114	Specific conductivity	499	umhos/cm	R
3100	03/13/89	36365	Specific conductivity	520	umhos/cm	R
4011	10/05/90	37260	Specific conductivity	700	umhos/cm	S
4011	02/07/91	37301	Specific conductivity	675	umhos/cm	S
4011	04/08/93	90461	Specific conductivity	896	umhos/cm	S
4096	09/12/88	35923	Specific conductivity	600	umhos/cm	D

Table D-29 (Continued)
Dissolved Oxygen, pH and Specific Conductivity for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Constituent	Result	Units	Area
4096	12/14/88	36133	Specific conductivity	390	umhos/cm	D
4096	04/30/89	36438	Specific conductivity	440	umhos/cm	D
4096	05/06/93	90475	Specific conductivity	456	umhos/cm	D
4096	08/04/93	90476	Specific conductivity	493	umhos/cm	D
4096	12/08/93	92336	Specific conductivity	477	umhos/cm	D

Table D-30
Dissolved Oxygen, pH and Specific Conductivity for Background Surface Water in the Great Miami River

Well No.	Sample Date	Sample ID	Constituent	Result	Units
W-1	06/23/93	79971	pH	8.26	SU
W-1	06/23/93	79971	Specific conductivity	666	umhos/cm

Table D-31
Dissolved Oxygen, pH and Specific Conductivity for Background Surface Water in Paddys Run

Well No.	Sample		Constituent	Result	Units
	Date	ID			
No Dissolved Oxygen, pH and Specific Conductivity Data Identified					

APPENDIX E

ORGANIC CHEMICAL DATA

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FOOTNOTES FOR APPENDIX E TABLES

(1) Units:
Phenols, total organic carbon (TOC), total organic halides (TOX), and total organic nitrogen (TON) are reported in mg/L (milligrams per liter). Dioxins are reported in ng/L (nanograms per liter). All the other results within the tables are reported in μg/L (micrograms per liter).

(2) Lab Qualifiers:

- * Duplicate analysis was not within control limits. These data should be considered estimated.
- B Analyte also detected in associated field or lab blank(s).
- J Analyte present; reported value may not be accurate or precise.
- P Result for pesticide/PCB exhibits significant imprecision between two chromatographic columns; lab reports lower value.
- U The analyte was analyzed for but was not detected.
- X Definition limit is higher than normal due to sample matrix interferences.

(3) Validation Qualifiers:

- - These data meet all requirements of the indicated analytical support level (ASL).
- J These data should be considered an estimate on the basis of laboratory quality control results.
- NV These data were not validated.
- R These data are considered unreliable/unusable for any quantitative purpose.
- U These data were not detected at levels up to the corresponding limit of detection. This qualifier was also used to denote a value that was adjusted by the use if the 5X/10X rule for evaluation for blank data.
- Z These data indicate that a more representative result exists within the corresponding sample.

(4) QA Type:
QA Type refers to the number of replicate samples taken from a location during the sampling event.

- N One sample set was obtained.
- D Duplicate sample sets were obtained.
- T Triplicate sample sets were obtained.

(5) Analytical Support Levels (ASLs):
The validation of analytical data is correlated to ASLs A through E defined in the SCQ; these FEMP-specific ASLs are analogous to the EPA's Analytical Levels 1 through 5. The ASLs are assigned depending on the intended use of the data and the quality control methods required. The ASL for organic data was generally EPA Level 3 or 4.

(6) Area:
Area refers to the tributary section of the Great Miami Aquifer.

- D Dry Fork section of the Great Miami Aquifer
- R Ross section of the Great Miami Aquifer
- S Shandon section of the Great Miami Aquifer

FOOTNOTES FOR APPENDIX E TABLES
(continued)

(7) Data Types:

Validated Data:	Data that have been through the validation process and are of known quality based on the ASL specified.
High Nondect Data:	Nondect data that have unusually high detection limits. Refer to Section 4.2.2.
Result Outlier:	A result that has been deemed "suspect". Refer to Section 4.2.3.
Sample Outlier:	A sample that has several result outliers. Refer to Section 4.2.3.
Rejected Data:	Data that have been identified through validation as being either unreliable or unusable.
Nonvalidated Data:	Data that have not been through the validation process.

(8) All nondetect data (data with a U qualifier) listed in these tables are the actual results reported by the laboratories. For statistical computations, nondetect data were set equal to one-half of the detection limit. Nondetect data can also be referred to by using a < symbol.

Table E-1
Validated Phenols, Total Organic Carbon, Total Organic Halides, and Total Organic Nitrogen Data for Background Monitoring Wells in the Glacial Overburden

Well	Sample		Lab		Validated		QA	
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type	ASL
1024	04/21/88	3106	U	Phenols	0.01	U	N	3
1024	11/02/88	3657		Phenols	0.03	-	N	3
1024	01/22/89	3847	U	Phenols	0.01	U	N	3
1024	04/12/93	GW930412-6	U	Phenols	0.01	U	N	3
1040	05/21/88	3218		Phenols	0.02	J	N	3
1040	05/21/88	3219	U	Phenols	0.01	UJ	D	3
1040	08/25/88	3572		Phenols	0.01	-	N	3
1040	12/07/88	3778		Phenols	0.017	-	N	3
1040	03/15/89	3964		Phenols	0.007	-	N	3
1040	09/28/93	30928-1040-02	U	Phenols	0.005	U	N	3
1059	05/12/88	3188		Phenols	0.01	J	N	3
1059	05/12/88	3189		Phenols	0.02	J	D	3
1059	12/06/88	3751		Phenols	0.02	-	N	3
1059	03/14/89	3981	U	Phenols	0.005	UJ	N	3
1059	09/29/93	30929-1059-02	U*	Phenols	0.002	U	N	3
1060	06/02/88	3255		Phenols	0.02	-	N	3
1060	08/04/88	3398		Phenols	0.02	J	N	3
1060	10/25/88	3695	U	Phenols	0.01	U	N	3
1060	02/01/89	3888		Phenols	0.01	J	N	3
1060	09/29/93	30929-1060-02	U*	Phenols	0.002	U	N	3
1065	04/14/88	3136		Phenols	0.02	-	N	3
1065	01/22/89	3860	U	Phenols	0.01	U	N	3
1065	05/04/93	112013	U	Phenols	0.01	U	N	3
1024	06/26/89	66420		Total Organic Carbon	3.266	U	N	3
1024	08/10/89	66497	U	Total Organic Carbon	1	U	N	3
1024	04/12/93	GW930412-6		Total Organic Carbon	9	J	N	3
1040	09/28/93	30928-1040-02		Total Organic Carbon	2.2	-	N	3
1059	09/29/93	30929-1059-02	U	Total Organic Carbon	1	U	N	3
1060	09/29/93	30929-1060-02		Total Organic Carbon	3	-	N	3
1065	05/04/93	112013		Total Organic Carbon	1.15	-	N	C
1024	11/02/88	3657	U	Total Organic Halides	0.05	U	N	3
1024	01/22/89	3847	U	Total Organic Halides	0.01	U	N	3
1024	06/26/89	66420		Total Organic Halides	0.067	J	N	3
1024	08/10/89	66497		Total Organic Halides	0.126	-	N	3
1040	08/25/88	3572	U	Total Organic Halides	0.05	U	N	3
1040	12/07/88	3778	U	Total Organic Halides	0.05	U	N	3
1040	03/15/89	3964	U	Total Organic Halides	0.05	U	N	3
1059	08/18/88	3562	U	Total Organic Halides	0.05	U	N	3
1059	12/06/88	3751	U	Total Organic Halides	0.05	U	N	3
1059	03/14/89	3981	U	Total Organic Halides	0.05	UJ	N	3
1059	09/29/93	30929-1059-02	U	Total Organic Halides	0.01	U	N	3
1060	10/25/88	3695	U	Total Organic Halides	0.05	U	N	3
1060	02/01/89	3888		Total Organic Halides	0.011	-	N	3
1060	09/29/93	30929-1060-02	U	Total Organic Halides	0.01	U	N	3
1065	01/22/89	3860	U	Total Organic Halides	0.01	U	N	3
1065	05/04/93	112013		Total Organic Halides	0.0114	UJ	N	C
1024	04/21/88	3106	U	Total Organic Nitrogen	0.1	U	N	3
1024	07/26/88	3376	U	Total Organic Nitrogen	0.1	U	N	3
1024	11/02/88	3657		Total Organic Nitrogen	0.13	J	N	3
1024	01/22/89	3847	U	Total Organic Nitrogen	0.1	U	N	3

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Table E-1 (Continued)
Validated Phenols, Total Organic Carbon, Total Organic Halides, and Total Organic Nitrogen Data for Background Monitoring Wells in the Glacial Overburden

Well	Sample		Lab		Validated		QA	
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type	ASL
1024	04/12/93	GW930412-6		Total Organic Nitrogen	0.17	-	N	3
1040	05/21/88	3218		Total Organic Nitrogen	1.3	J	N	3
1040	05/21/88	3219		Total Organic Nitrogen	1.4	J	D	3
1040	12/07/88	3778	U	Total Organic Nitrogen	0.1	U	N	3
1040	03/15/89	3964		Total Organic Nitrogen	0.3	-	N	3
1040	09/28/93	30928-1040-02	U	Total Organic Nitrogen	0.1	U	N	3
1059	05/12/88	3188	U	Total Organic Nitrogen	0.1	UJ	N	3
1059	05/12/88	3189	U	Total Organic Nitrogen	0.1	UJ	D	3
1059	08/18/88	3562		Total Organic Nitrogen	0.1	J	N	3
1059	12/06/88	3751		Total Organic Nitrogen	0.23	UJ	N	3
1059	03/14/89	3981		Total Organic Nitrogen	0.3	J	N	3
1060	06/02/88	3255	U	Total Organic Nitrogen	0.1	U	N	3
1060	08/04/88	3398	U	Total Organic Nitrogen	0.1	U	N	3
1060	10/25/88	3695		Total Organic Nitrogen	0.319	-	N	3
1060	02/01/89	3888		Total Organic Nitrogen	0.178	J	N	3
1065	04/14/88	3136		Total Organic Nitrogen	0.1	-	N	3
1065	01/22/89	3860	U	Total Organic Nitrogen	0.1	U	N	3
1065	05/04/93	112013		Total Organic Nitrogen	0.34	-	N	C

Table E-2
Validated Phenols, Total Organic Carbon, Total Organic Halides, and Total Organic Nitrogen Data for Background Monitoring Wells in the Great Miami Aquifer

Well	Sample		Lab		Validated		QA		
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type	ASL	Area
2026	05/12/88	3186		Phenols	0.01	J	N	3	D
2026	05/12/88	3187		Phenols	0.01	J	D	3	D
2026	08/17/88	3505		Phenols	0.03	J	N	3	D
2026	12/07/88	3750	U	Phenols	0.01	U	N	3	D
2026	03/14/89	3980		Phenols	0.009	J	N	3	D
2036	05/12/88	3184		Phenols	0.03	J	N	3	R
2036	05/12/88	3185		Phenols	0.01	J	D	3	R
2036	08/23/88	3564		Phenols	0.01	J	N	3	R
2036	12/07/88	3770	U	Phenols	0.01	U	N	3	R
2036	03/14/89	3983		Phenols	0.011	J	N	3	R
2043	04/13/88	3091		Phenols	0.02	-	N	3	S
2043	08/05/88	3440		Phenols	0.03	J	N	3	S
2043	11/04/88	3700	U	Phenols	0.01	U	N	3	S
2050	05/05/88	3147		Phenols	0.02	-	N	3	S
2050	08/16/88	3497		Phenols	0.04	J	N	3	S
2050	12/05/88	3743	U	Phenols	0.01	U	N	3	S
2050	03/13/89	3969	U	Phenols	0.005	U	N	3	S
2056	05/06/88	3159	U	Phenols	0.01	UJ	N	3	S
2056	08/25/88	3575	U	Phenols	0.01	U	N	3	S
2056	12/07/88	3781		Phenols	0.014	-	N	3	S
2056	03/13/89	3967		Phenols	0.009	-	N	3	S
2056	03/13/89	4045	U	Phenols	0.005	U	D	3	S
2057	06/03/88	3265		Phenols	0.02	-	N	3	R
2057	08/25/88	3573		Phenols	0.012	-	N	3	R
2057	12/13/88	3779	U	Phenols	0.01	U	N	3	R
2057	03/14/89	3965		Phenols	0.007	J	N	3	R
2066	04/26/88	3124		Phenols	0.01	-	N	3	S
2066	11/10/88	3710	U	Phenols	0.01	U	N	3	S
2066	03/14/89	3894		Phenols	0.008	J	N	3	S
2096	09/12/88	3586		Phenols	0.02	-	N	3	R
2096	12/07/88	3790		Phenols	0.026	-	N	3	R
2096	02/09/89	3985	U	Phenols	0.01	UJ	N	3	R
2096	04/30/89	4081		Phenols	0.022	-	N	3	R
2096	04/25/90	4234		Phenols	0.078	-	N	3	R
2096	05/06/93	GW930506-5	U	Phenols	0.01	U	N	3	R
2098	09/22/88	3591	U	Phenols	0.01	UJ	N	3	D
2098	12/16/88	3796	U	Phenols	0.01	U	N	3	D
2098	02/08/89	3990	U	Phenols	0.01	UJ	N	3	D
2098	05/25/89	4087	U	Phenols	0.01	UJ	N	3	D
2104	05/05/88	3146	U	Phenols	0.01	U	N	3	R
2104	08/16/88	3498		Phenols	0.03	J	N	3	R
2104	12/06/88	3744	U	Phenols	0.01	U	N	3	R
2104	03/15/89	3970	U	Phenols	0.005	U	N	3	R
2104	04/22/90	4235		Phenols	0.022	-	N	3	R
2104	04/22/90	4269		Phenols	0.031	-	N	3	R
2105	06/05/88	3268	U	Phenols	0.01	U	N	3	S
2105	08/28/88	3577	U	Phenols	0.01	U	N	3	S
2105	03/15/89	3968	U	Phenols	0.005	U	N	3	S
2121	05/06/88	3158		Phenols	0.02	J	N	3	D
2121	08/25/88	3571	U	Phenols	0.01	U	N	3	D

Table E-2 (Continued)
Validated Phenols, Total Organic Carbon, Total Organic Halides, and Total Organic Nitrogen Data for Background Monitoring Wells in the Great Miami Aquifer

Well	Sample		Lab		Validated		QA		
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type	ASL	Area
2121	12/13/88	3776	U	Phenols	0.01	U	N	3	D
2121	03/14/89	3962		Phenols	0.025	J	N	3	D
2122	05/06/88	3157		Phenols	0.01	J	N	3	D
2122	08/17/88	3504		Phenols	0.02	J	N	3	D
2122	12/07/88	3749		Phenols	0.014	-	N	3	D
2122	03/15/89	3979	U	Phenols	0.005	U	N	3	D
2123	05/06/88	3156	U	Phenols	0.01	UJ	N	3	R
2123	08/23/88	3565		Phenols	0.02	J	N	3	R
2123	12/06/88	3771		Phenols	0.02	-	N	3	R
2123	03/14/89	3984	U	Phenols	0.005	UJ	N	3	R
2728	04/04/93	113514	U	Phenols	0.01	U	N	3	S
2728	05/24/93	GW930524-3	U	Phenols	0.01	U	N	3	S
3024	04/20/88	3096		Phenols	0.02	-	N	3	S
3024	11/02/88	3658	U	Phenols	0.01	U	N	3	S
3024	01/24/89	3842	U	Phenols	0.01	UJ	N	3	S
3024	04/12/93	GW930412-8	U	Phenols	0.01	U	N	3	S
3043	04/13/88	3090		Phenols	0.05	-	N	3	S
3043	08/04/88	3397		Phenols	0.02	J	N	3	S
3043	11/04/88	3694	U	Phenols	0.01	U	N	3	S
3063	05/12/88	3190		Phenols	0.02	J	N	3	D
3063	05/12/88	3191		Phenols	0.02	J	D	3	D
3063	08/16/88	3495		Phenols	0.02	J	N	3	D
3063	12/13/88	3741	U	Phenols	0.01	U	N	3	D
3063	03/13/89	3966	U	Phenols	0.005	U	N	3	D
3096	09/12/88	3585		Phenols	0.02	-	N	3	R
3096	12/07/88	3789		Phenols	0.023	-	N	3	R
3096	02/09/89	3974	U	Phenols	0.01	UJ	N	3	R
3096	04/30/89	4082	U	Phenols	0.01	U	N	3	R
3096	04/25/90	4257		Phenols	0.011	-	N	3	R
3096	05/07/93	GW930507-1	U	Phenols	0.01	U	N	3	R
3098	09/21/88	3589		Phenols	0.02	J	N	3	D
3098	12/16/88	3795	U	Phenols	0.01	U	N	3	D
3098	02/08/89	3989	U	Phenols	0.01	UJ	N	3	D
3098	05/25/89	4088	U	Phenols	0.01	UJ	N	3	D
3099	05/24/88	3237		Phenols	0.02	J	N	3	D
3099	05/24/88	3238		Phenols	0.02	J	D	3	D
3099	08/16/88	3496		Phenols	0.02	J	N	3	D
3099	12/06/88	3742	U	Phenols	0.01	U	N	3	D
3099	03/14/89	3977	U	Phenols	0.005	UJ	N	3	D
3100	05/24/88	3239		Phenols	0.02	J	N	3	D
3100	05/24/88	3240		Phenols	0.02	J	D	3	D
3100	08/19/88	3517		Phenols	0.01	J	N	3	D
3100	12/06/88	3761		Phenols	0.026	-	N	3	D
3100	03/13/89	3978	U	Phenols	0.005	U	N	3	D
4011	10/05/90	4345		Phenols	0.014	U	N	3	S
4011	02/07/91	4382	U	Phenols	0.01	U	N	3	S
4096	09/12/88	3584		Phenols	0.03	-	N	3	R
4096	12/14/88	3788	U	Phenols	0.01	U	N	3	R
4096	12/14/88	3474	U	Phenols	0.01	U	D	3	R
4096	02/10/89	3975		Phenols	0.091	-	N	3	R

Table E-2 (Continued)
Validated Phenols, Total Organic Carbon, Total Organic Halides, and Total Organic Nitrogen Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
4096	04/30/89	4083	U	Phenols	0.01	U	N	3	R
4096	05/06/93	GW930506-7	U	Phenols	0.01	U	N	3	R
2043	08/30/89	66542		Total Organic Carbon	2.13	-	N	3	S
2043	08/30/89	66547		Total Organic Carbon	3.34	-	D	3	S
2043	04/07/93	GW930407-12		Total Organic Carbon	2.7	-	N	3	S
2050	05/20/93	GW930520-8		Total Organic Carbon	3.2	-	N	3	S
2066	08/09/89	66498		Total Organic Carbon	1.65	-	N	3	S
2066	04/07/93	GW930407-14		Total Organic Carbon	4	-	N	3	S
2096	04/25/90	4234	U	Total Organic Carbon	1	U	N	3	R
2096	05/06/93	GW930506-5	U	Total Organic Carbon	1	U	N	3	R
2098	05/25/89	4087	U	Total Organic Carbon	1	UJ	N	3	D
2098	05/20/93	GW930520-9		Total Organic Carbon	1.4	-	N	3	D
2104	04/22/90	4235		Total Organic Carbon	1	-	N	3	R
2104	04/22/90	4269		Total Organic Carbon	1	-	N	3	R
2104	05/13/93	GW930513-14	U	Total Organic Carbon	1	U	N	3	R
2104	05/13/93	GW930513-18	U	Total Organic Carbon	1	U	N	3	R
2728	04/04/93	113514		Total Organic Carbon	2	-	N	3	S
2728	05/24/93	GW930524-3		Total Organic Carbon	2	J	N	3	S
3024	08/10/89	66515		Total Organic Carbon	1.29	-	N	3	S
3043	06/13/89	66439		Total Organic Carbon	3.32	-	N	3	S
3043	08/30/89	66543		Total Organic Carbon	2.15	-	N	3	S
3043	04/07/93	GW930407-13		Total Organic Carbon	2	-	N	3	S
3096	04/25/90	4257		Total Organic Carbon	1	-	N	3	R
3096	05/07/93	GW930507-1	U	Total Organic Carbon	1	U	N	3	R
3098	05/25/89	4088	U	Total Organic Carbon	1	UJ	N	3	D
3098	05/20/93	GW930520-10	U	Total Organic Carbon	1	U	N	3	D
4011	10/05/90	4345		Total Organic Carbon	4.12	-	N	3	S
4011	02/07/91	4382		Total Organic Carbon	2.29	-	N	3	S
4011	04/08/93	GW930408-3		Total Organic Carbon	4.4	-	N	3	S
4011	04/08/93	GW930408-2		Total Organic Carbon	4.1	-	D	3	S
4096	05/06/93	GW930506-7	U	Total Organic Carbon	1	U	N	3	R
2026	08/17/88	3505	U	Total Organic Halides	0.05	U	N	3	D
2026	12/07/88	3750	U	Total Organic Halides	0.05	U	N	3	D
2026	03/14/89	3980	U	Total Organic Halides	0.05	UJ	N	3	D
2036	08/23/88	3564	U	Total Organic Halides	0.05	UJ	N	3	R
2036	12/07/88	3770	U	Total Organic Halides	0.05	U	N	3	R
2036	03/14/89	3983	U	Total Organic Halides	0.05	UJ	N	3	R
2043	11/04/88	3700	U	Total Organic Halides	0.05	U	N	3	S
2043	02/02/89	3887		Total Organic Halides	0.023	-	N	3	S
2043	08/30/89	66542	U	Total Organic Halides	0.01	U	N	3	S
2043	08/30/89	66547	U	Total Organic Halides	0.01	U	D	3	S
2043	04/07/93	GW930407-12		Total Organic Halides	0.073	-	N	3	S
2050	08/16/88	3497	U	Total Organic Halides	0.05	U	N	3	S
2050	12/05/88	3743	U	Total Organic Halides	0.05	U	N	3	S
2050	03/13/89	3969	U	Total Organic Halides	0.05	U	N	3	S
2050	05/20/93	GW930520-8		Total Organic Halides	0.12	-	N	3	S
2056	08/25/88	3575	U	Total Organic Halides	0.05	U	N	3	S
2056	12/07/88	3781	U	Total Organic Halides	0.05	U	N	3	S
2056	03/13/89	3967	U	Total Organic Halides	0.05	U	N	3	S
2056	03/13/89	4045	U	Total Organic Halides	0.05	U	D	3	S

Table E-2 (Continued)
Validated Phenols, Total Organic Carbon, Total Organic Halides, and Total Organic Nitrogen Data for Background Monitoring Wells in the Great Miami Aquifer

Well	Sample		Lab		Validated		QA		
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type	ASL	Area
2057	08/25/88	3573	U	Total Organic Halides	0.05	U	N	3	R
2057	12/13/88	3779	U	Total Organic Halides	0.05	UJ	N	3	R
2057	03/14/89	3965	U	Total Organic Halides	0.05	UJ	N	3	R
2066	11/10/88	3710	U	Total Organic Halides	0.05	U	N	3	S
2066	03/14/89	3894	U	Total Organic Halides	0.05	UJ	N	3	S
2066	06/27/89	66436	U	Total Organic Halides	0.01	U	N	3	S
2066	08/09/89	66498	U	Total Organic Halides	0.01	U	N	3	S
2066	04/07/93	GW930407-14		Total Organic Halides	0.072	-	N	3	S
2096	09/12/88	3586	U	Total Organic Halides	0.05	U	N	3	R
2096	12/07/88	3790	U	Total Organic Halides	0.05	U	N	3	R
2096	02/09/89	3985	U	Total Organic Halides	0.01	U	N	3	R
2096	04/30/89	4081	U	Total Organic Halides	0.01	U	N	3	R
2096	05/06/93	GW930506-5	U	Total Organic Halides	0.01	U	N	3	R
2098	09/22/88	3591	U	Total Organic Halides	0.05	UJ	N	3	D
2098	12/16/88	3796		Total Organic Halides	0.012	J	N	3	D
2098	05/25/89	4087	U	Total Organic Halides	0.01	U	N	3	D
2098	05/20/93	GW930520-9	U	Total Organic Halides	0.045	U	N	3	D
2104	08/16/88	3498	U	Total Organic Halides	0.05	U	N	3	R
2104	12/06/88	3744	U	Total Organic Halides	0.05	U	N	3	R
2104	03/15/89	3970	U	Total Organic Halides	0.05	U	N	3	R
2104	04/22/90	4235	U	Total Organic Halides	0.05	UJ	N	3	R
2104	04/22/90	4269	U	Total Organic Halides	0.05	UJ	N	3	R
2104	05/13/93	GW930513-14	U	Total Organic Halides	0.045	U	N	3	R
2104	05/13/93	GW930513-18	U	Total Organic Halides	0.045	U	N	3	R
2105	08/28/88	3577	U	Total Organic Halides	0.05	U	N	3	S
2105	03/15/89	3968	U	Total Organic Halides	0.05	U	N	3	S
2121	08/25/88	3571	U	Total Organic Halides	0.05	U	N	3	D
2121	12/13/88	3776	U	Total Organic Halides	0.05	UJ	N	3	D
2121	03/14/89	3962	U	Total Organic Halides	0.05	UJ	N	3	D
2122	08/17/88	3504	U	Total Organic Halides	0.05	U	N	3	D
2122	12/07/88	3749	U	Total Organic Halides	0.05	U	N	3	D
2122	03/15/89	3979	U	Total Organic Halides	0.05	U	N	3	D
2123	08/23/88	3565	U	Total Organic Halides	0.05	UJ	N	3	R
2123	12/06/88	3771	U	Total Organic Halides	0.05	U	N	3	R
2123	03/14/89	3984	U	Total Organic Halides	0.05	UJ	N	3	R
2728	04/04/93	113514	U	Total Organic Halides	0.01	U	N	3	S
3024	01/24/89	3842	U	Total Organic Halides	0.01	U	N	3	S
3024	06/26/89	66460	U	Total Organic Halides	0.01	U	N	3	S
3024	08/10/89	66515		Total Organic Halides	0.018	-	N	3	S
3043	11/04/88	3694	U	Total Organic Halides	0.05	U	N	3	S
3043	02/02/89	3886	U	Total Organic Halides	0.01	U	N	3	S
3043	06/13/89	66439		Total Organic Halides	0.0206	J	N	3	S
3043	08/30/89	66543	U	Total Organic Halides	0.01	U	N	3	S
3043	04/07/93	GW930407-13		Total Organic Halides	0.052	-	N	3	S
3063	08/16/88	3495	U	Total Organic Halides	0.05	U	N	3	D
3063	12/13/88	3741	U	Total Organic Halides	0.05	UJ	N	3	D
3063	03/13/89	3966	U	Total Organic Halides	0.05	U	N	3	D
3096	09/12/88	3585	U	Total Organic Halides	0.05	U	N	3	R
3096	12/07/88	3789	U	Total Organic Halides	0.05	U	N	3	R
3096	02/09/89	3974	U	Total Organic Halides	0.01	U	N	3	R

Table E-2 (Continued)
Validated Phenols, Total Organic Carbon, Total Organic Halides, and Total Organic Nitrogen Data for Background Monitoring Wells in the Great Miami Aquifer

Well	Sample		Lab		Validated		QA		
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type	ASL	Area
3096	04/30/89	4082		Total Organic Halides	0.016	-	N	3	R
3096	05/07/93	GW930507-1	U	Total Organic Halides	0.01	UJ	N	3	R
3098	09/21/88	3589	U	Total Organic Halides	0.05	UJ	N	3	D
3098	12/16/88	3795		Total Organic Halides	0.012	J	N	3	D
3098	05/25/89	4088	U	Total Organic Halides	0.01	U	N	3	D
3098	05/20/93	GW930520-10	U	Total Organic Halides	0.045	U	N	3	D
3099	08/16/88	3496	U	Total Organic Halides	0.05	U	N	3	D
3099	12/06/88	3742	U	Total Organic Halides	0.05	U	N	3	D
3099	03/14/89	3977	U	Total Organic Halides	0.05	UJ	N	3	D
3100	08/19/88	3517	U	Total Organic Halides	0.05	U	N	3	D
3100	12/06/88	3761	U	Total Organic Halides	0.05	U	N	3	D
3100	03/13/89	3978	U	Total Organic Halides	0.05	U	N	3	D
4011	10/05/90	4345	U	Total Organic Halides	0.01	U	N	3	S
4011	02/07/91	4382	U	Total Organic Halides	0.01	U	N	3	S
4011	04/08/93	GW930408-3		Total Organic Halides	0.067	-	N	3	S
4011	04/08/93	GW930408-2		Total Organic Halides	0.049	-	D	3	S
4096	09/12/88	3584	U	Total Organic Halides	0.05	U	N	3	R
4096	12/14/88	3788		Total Organic Halides	0.035	J	N	3	R
4096	12/14/88	3474		Total Organic Halides	0.017	J	D	3	R
4096	02/10/89	3975	U	Total Organic Halides	0.01	UJ	N	3	R
4096	04/30/89	4083		Total Organic Halides	0.016	-	N	3	R
4096	05/06/93	GW930506-7	U	Total Organic Halides	0.01	U	N	3	R
2026	05/12/88	3186	U	Total Organic Nitrogen	0.1	UJ	N	3	D
2026	05/12/88	3187	U	Total Organic Nitrogen	0.1	UJ	D	3	D
2026	08/17/88	3505		Total Organic Nitrogen	0.1	-	N	3	D
2026	12/07/88	3750		Total Organic Nitrogen	0.48	J	N	3	D
2026	03/14/89	3980		Total Organic Nitrogen	0.1	J	N	3	D
2036	05/12/88	3184	U	Total Organic Nitrogen	0.1	UJ	N	3	R
2036	05/12/88	3185	U	Total Organic Nitrogen	0.1	UJ	D	3	R
2036	08/23/88	3564		Total Organic Nitrogen	0.1	J	N	3	R
2036	12/07/88	3770		Total Organic Nitrogen	0.21	-	N	3	R
2036	03/14/89	3983		Total Organic Nitrogen	0.1	J	N	3	R
2043	04/13/88	3091	U	Total Organic Nitrogen	0.1	UJ	N	3	S
2043	08/05/88	3440		Total Organic Nitrogen	2	J	N	3	S
2043	11/04/88	3700		Total Organic Nitrogen	0.17	-	N	3	S
2043	02/02/89	3887	U	Total Organic Nitrogen	0.1	U	N	3	S
2050	08/16/88	3497		Total Organic Nitrogen	1	-	N	3	S
2050	03/13/89	3969		Total Organic Nitrogen	0.3	-	N	3	S
2056	05/06/88	3159		Total Organic Nitrogen	0.2	-	N	3	S
2056	08/25/88	3575		Total Organic Nitrogen	2.75	J	N	3	S
2056	12/07/88	3781		Total Organic Nitrogen	0.26	J	N	3	S
2057	06/03/88	3265		Total Organic Nitrogen	0.3	J	N	3	R
2057	08/25/88	3573		Total Organic Nitrogen	0.1	UJ	N	3	R
2057	12/13/88	3779		Total Organic Nitrogen	0.11	-	N	3	R
2066	04/26/88	3124		Total Organic Nitrogen	0.4	-	N	3	S
2066	11/10/88	3710		Total Organic Nitrogen	0.52	J	N	3	S
2096	09/12/88	3586		Total Organic Nitrogen	0.22	-	N	3	R
2096	12/07/88	3790		Total Organic Nitrogen	0.77	J	N	3	R
2096	02/09/89	3985		Total Organic Nitrogen	0.163	J	N	3	R
2096	04/30/89	4081		Total Organic Nitrogen	0.676	J	N	3	R

Table E-2 (Continued)
Validated Phenols, Total Organic Carbon, Total Organic Halides, and Total Organic Nitrogen Data for Background Monitoring Wells in the Great Miami Aquifer

Well	Sample		Lab		Validated		QA		
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type	ASL	Area
2096	04/25/90	4234		Total Organic Nitrogen	0.2	-	N	3	R
2098	09/22/88	3591	U	Total Organic Nitrogen	0.1	UJ	N	3	D
2098	12/16/88	3796		Total Organic Nitrogen	0.17	-	N	3	D
2098	02/08/89	3990	U	Total Organic Nitrogen	0.1	UJ	N	3	D
2098	05/25/89	4087		Total Organic Nitrogen	0.459	J	N	3	D
2104	08/16/88	3498		Total Organic Nitrogen	0.1	-	N	3	R
2104	12/06/88	3744		Total Organic Nitrogen	0.11	UJ	N	3	R
2104	03/15/89	3970		Total Organic Nitrogen	0.1	-	N	3	R
2104	04/22/90	4235	U	Total Organic Nitrogen	0.1	U	N	3	R
2104	04/22/90	4269	U	Total Organic Nitrogen	0.1	U	N	3	R
2105	06/05/88	3268		Total Organic Nitrogen	0.9	-	N	3	S
2105	08/28/88	3577		Total Organic Nitrogen	0.5	-	N	3	S
2105	03/15/89	3968		Total Organic Nitrogen	0.2	-	N	3	S
2121	05/06/88	3158		Total Organic Nitrogen	0.3	-	N	3	D
2121	08/25/88	3571	U	Total Organic Nitrogen	0.1	UJ	N	3	D
2121	12/13/88	3776		Total Organic Nitrogen	0.28	-	N	3	D
2121	03/14/89	3962		Total Organic Nitrogen	0.4	J	N	3	D
2122	05/06/88	3157		Total Organic Nitrogen	0.2	-	N	3	D
2122	08/17/88	3504	U	Total Organic Nitrogen	0.1	U	N	3	D
2122	12/07/88	3749		Total Organic Nitrogen	0.22	-	N	3	D
2122	03/15/89	3979		Total Organic Nitrogen	0.2	-	N	3	D
2123	05/06/88	3156	U	Total Organic Nitrogen	0.1	U	N	3	R
2123	08/23/88	3565		Total Organic Nitrogen	0.1	J	N	3	R
2123	12/06/88	3771		Total Organic Nitrogen	0.11	UJ	N	3	R
2123	03/14/89	3984		Total Organic Nitrogen	0.1	J	N	3	R
2728	04/04/93	113514	U	Total Organic Nitrogen	0.1	U	N	3	S
2728	05/24/93	GW930524-3	U	Total Organic Nitrogen	0.1	U	N	3	S
3024	04/20/88	3096		Total Organic Nitrogen	0.5	-	N	3	S
3024	07/26/88	3377	U	Total Organic Nitrogen	0.1	U	N	3	S
3024	11/02/88	3658		Total Organic Nitrogen	0.18	J	N	3	S
3024	01/24/89	3842		Total Organic Nitrogen	0.6	J	N	3	S
3024	04/12/93	GW930412-8		Total Organic Nitrogen	0.23	-	N	3	S
3043	04/13/88	3090		Total Organic Nitrogen	0.1	J	N	3	S
3043	08/04/88	3397	U	Total Organic Nitrogen	0.1	U	N	3	S
3043	11/04/88	3694		Total Organic Nitrogen	0.39	-	N	3	S
3043	02/02/89	3886	U	Total Organic Nitrogen	0.1	U	N	3	S
3063	05/12/88	3190	U	Total Organic Nitrogen	0.1	UJ	N	3	D
3063	05/12/88	3191	U	Total Organic Nitrogen	0.1	UJ	D	3	D
3063	08/16/88	3495		Total Organic Nitrogen	0.1	-	N	3	D
3063	12/13/88	3741		Total Organic Nitrogen	0.26	-	N	3	D
3063	03/13/89	3966		Total Organic Nitrogen	0.1	-	N	3	D
3096	09/12/88	3585		Total Organic Nitrogen	0.1	-	N	3	R
3096	12/07/88	3789		Total Organic Nitrogen	0.52	J	N	3	R
3096	02/09/89	3974		Total Organic Nitrogen	0.163	J	N	3	R
3096	04/30/89	4082		Total Organic Nitrogen	0.116	J	N	3	R
3096	04/25/90	4257		Total Organic Nitrogen	0.3	-	N	3	R
3098	09/21/88	3589	U	Total Organic Nitrogen	0.1	UJ	N	3	D
3098	12/16/88	3795		Total Organic Nitrogen	1.37	-	N	3	D
3098	02/08/89	3989		Total Organic Nitrogen	0.262	J	N	3	D
3098	05/25/89	4088		Total Organic Nitrogen	0.138	J	N	3	D

Table E-2 (Continued)
Validated Phenols, Total Organic Carbon, Total Organic Halides, and Total Organic Nitrogen Data for Background Monitoring Wells in the Great Miami Aquifer

Well	Sample		Lab		Validated		QA		
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type	ASL	Area
3099	05/24/88	3237		Total Organic Nitrogen	0.1	J	N	3	D
3099	05/24/88	3238	U	Total Organic Nitrogen	0.1	U	D	3	D
3099	08/16/88	3496		Total Organic Nitrogen	0.1	-	N	3	D
3099	12/06/88	3742	U	Total Organic Nitrogen	0.1	UJ	N	3	D
3099	03/14/89	3977		Total Organic Nitrogen	0.1	J	N	3	D
3100	05/24/88	3239	U	Total Organic Nitrogen	0.1	U	N	3	D
3100	05/24/88	3240		Total Organic Nitrogen	0.1	-	D	3	D
3100	08/19/88	3517	U	Total Organic Nitrogen	0.1	UJ	N	3	D
3100	12/06/88	3761	U	Total Organic Nitrogen	0.21	UJ	N	3	D
3100	03/13/89	3978		Total Organic Nitrogen	0.1	-	N	3	D
4096	09/12/88	3584		Total Organic Nitrogen	0.2	-	N	3	R
4096	12/14/88	3788		Total Organic Nitrogen	0.56	J	N	3	R
4096	12/14/88	3474		Total Organic Nitrogen	0.28	J	D	3	R
4096	02/10/89	3975	U	Total Organic Nitrogen	0.101	U	N	3	R
4096	04/30/89	4083	U	Total Organic Nitrogen	0.1	UJ	N	3	R

Table E-3
Validated Phenols, Total Organic Carbon, Total Organic Halides, and Total Organic Nitrogen Data for Background Surface Water in the Great Miami River

Well	Sample		Lab		Validated		QA	
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type	ASL
W-1	06/16/88	1035		Phenols	0.01	-	N	3
W-1	04/03/89	1178	U	Phenols	0.01	U	N	3
W-1	05/20/93	120064-2	U	Phenols	0.01	UJ	N	3
W-1	05/20/93	120068-1	U	Phenols	0.01	UJ	D	3
W-1	05/20/93	120072-2	U	Phenols	0.01	UJ	T	3
W-1	06/23/93	120416	U	Phenols	0.01	U	N	3
W-1	06/23/93	120414		Phenols	0.01	U	D	3
W-1	05/20/93	120068-1		Total Organic Carbon	3.11	J	D	3
W-1	05/20/93	120072-2		Total Organic Carbon	3	J	T	3
W-1	06/23/93	120416		Total Organic Carbon	1.92	-	N	3
W-1	06/23/93	120414		Total Organic Carbon	2.01	-	D	3
W-1	06/16/88	1035	U	Total Organic Halides	0.05	UJ	N	3
W-1	08/29/88	1092		Total Organic Halides	0.25	-	N	3
W-1	04/03/89	1178		Total Organic Halides	0.0189	-	N	3
W-1	05/20/93	120068-1		Total Organic Halides	0.057	J	D	3
W-1	05/20/93	120072-2		Total Organic Halides	0.0645	J	T	3
W-1	06/23/93	120416		Total Organic Halides	0.0254	J	N	3
W-1	06/23/93	120414		Total Organic Halides	0.0252	J	D	3
W-1	06/16/88	1035		Total Organic Nitrogen	0.2	-	N	3
W-1	08/29/88	1092		Total Organic Nitrogen	1.1	J	N	3
W-1	04/03/89	1178		Total Organic Nitrogen	1.73	-	N	3
W-1	05/20/93	120068-1		Total Organic Nitrogen	0.37	J	D	3
W-1	05/20/93	120072-2		Total Organic Nitrogen	0.31	J	T	3
W-1	06/23/93	120416		Total Organic Nitrogen	1.17	-	N	3
W-1	06/23/93	120414		Total Organic Nitrogen	1.04	-	D	3

Table E-4
Validated Phenols, Total Organic Carbon, Total Organic Halides, and Total Organic Nitrogen Data for Background Surface Water in Paddys Run

Well	Sample		Lab		Validated		QA	
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type	ASL
W-5	03/25/93	113493	U	Phenols	0.01	U	N	3
W-5	06/24/93	120408	U	Phenols	0.005	U	N	3
W-5	06/24/93	120409	U	Phenols	0.005	U	D	3
W-5	03/25/93	113493		Total Organic Carbon	1.68	-	N	3
W-5	06/24/93	120408		Total Organic Carbon	5.4	-	N	3
W-5	06/24/93	120409		Total Organic Carbon	5.3	-	D	3
W-5	03/25/93	113493	U	Total Organic Halides	0.01	U	N	3
W-5	06/24/93	120408		Total Organic Halides	0.0122	-	N	3
W-5	06/24/93	120409		Total Organic Halides	0.0096	-	D	3
W-5	03/25/93	113493		Total Organic Nitrogen	0.288	-	N	3
W-5	06/24/93	120408		Total Organic Nitrogen	0.242	U	N	3
W-5	06/24/93	120409		Total Organic Nitrogen	0.183	U	D	3

5344

Table E-5
Outlier/High Nondetect Phenols, Total Organic Carbon, Total Organic Halides, and Total Organic Nitrogen Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL
Result Outliers								
1024	07/26/88	3376	U	Phenols	0.05	U	N	3
1059	08/18/88	3562	U	Phenols	0.1	UJ	N	3
1040	09/28/93	30928-1040-02		Total Organic Halides	28.8	J	N	3
1040	08/25/88	3572		Total Organic Nitrogen	5.5	J	N	3
No Outlier/High Nondetect Data For Total Organic Carbon								

Table E-6
Outlier/High Nondetect Phenols, Total Organic Carbon, Total Organic Halides, and Total Organic Nitrogen Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
				High Nondetects					
2043	04/07/93	GW930407-12	U	Phenols	0.15	U	N	3	S
2050	05/20/93	GW930520-8	U	Phenols	0.15	U	N	3	S
2066	04/07/93	GW930407-14	U	Phenols	0.15	U	N	3	S
2098	05/20/93	GW930520-9	U	Phenols	0.15	U	N	3	R
2104	05/13/93	GW930513-14	U	Phenols	0.15	U	N	3	D
2104	05/13/93	GW930513-18	U	Phenols	0.15	U	N	3	D
3024	07/26/88	3377	U	Phenols	0.05	U	N	3	S
3043	04/07/93	GW930407-13	U	Phenols	0.15	U	N	3	S
3098	05/20/93	GW930520-10	U	Phenols	0.15	U	N	3	R
4011	04/08/93	GW930408-3	U	Phenols	0.15	U	N	3	S
4011	04/08/93	GW930408-2	U	Phenols	0.15	U	D	3	S
2043	06/26/89	66438		Total Organic Carbon	4.928	U	N	3	S
2066	06/27/89	66436		Total Organic Carbon	6.362	UJ	N	3	S
3024	06/26/89	66460		Total Organic Carbon	6.17	U	N	3	S
				Low Nondetects					
2043	04/07/93	GW930407-12		Total Organic Nitrogen	-0.078	U	N	3	S
2050	05/20/93	GW930520-8		Total Organic Nitrogen	-0.11	U	N	3	S
2098	05/20/93	GW930520-9		Total Organic Nitrogen	0	U	N	3	R
2104	05/13/93	GW930513-14		Total Organic Nitrogen	-0.065	U	N	3	D
3043	04/07/93	GW930407-13		Total Organic Nitrogen	-0.13	U	N	3	S
3098	05/20/93	GW930520-10		Total Organic Nitrogen	0	U	N	3	R
4011	04/08/93	GW930408-3		Total Organic Nitrogen	-0.064	U	N	3	S
				Result Outliers					
3024	04/12/93	GW930412-8		Total Organic Carbon	13	J	N	3	D
2043	06/26/89	66438		Total Organic Halides	0.324	J	N	3	D
2066	04/07/93	GW930407-14		Total Organic Nitrogen	0.02	-	N	3	D
2104	05/13/93	GW930513-18		Total Organic Nitrogen	0	-	N	3	D
4011	04/08/93	GW930408-2		Total Organic Nitrogen	0.018	-	D	3	D
				Deleted Samples					
2105	12/13/88	3782	U	Phenols	0.01	U	N	3	S
2105	12/13/88	3782	U	Total Organic Halides	0.05	UJ	N	3	S
2105	12/13/88	3782		Total Organic Nitrogen	0.13	-	N	3	S

Table E-7
Outlier/High Nondetect Phenols, Total Organic Carbon, Total Organic Halides, and Total Organic Nitrogen Data for Background Surface Water in the Great Miami River

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL
Result Outlier								
W-1	06/16/88	1035		Total Organic Carbon	18.5	J	N	3
No Outlier/High Nondetect Data for Phenols, Total Organic Halides, and Total Organic Nitrogen								

Table E-8
Outlier/High Nondetect Phenols, Total Organic Carbon, Total Organic Halides, and Total Organic Nitrogen Data for Background Surface Water in Paddys Run

Well No.	Sample		Lab qualifier	Constituent	Validated		QA type	ASL
	Date	ID			Result	Qualifier		
No Outlier/High Nondetect Data Identified								

5644

Table E-9
Rejected/Nonvalidated Phenols, Total Organic Carbon, Total Organic Halides, and Total Organic Nitrogen Data for Background Monitoring Wells in the Glacial Overburden

Well	Sample		Lab		Validated		QA
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type
1024	11/21/89	66651		Phenols	0.012	NV	N
1024	02/18/90	EMGW_SYSGEN_34	U	Phenols	0.005	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Phenols	0.005	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	Phenols	0.005	NV	N
1024	11/13/90	EMGW_SYSGEN_37	U	Phenols	0.005	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	Phenols	0.005	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	Phenols	0.005	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	Phenols	0.005	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	Phenols	0.005	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	Phenols	0.005	NV	N
1024	01/13/93	GW930113-6	U	Phenols	0.01	NV	N
1040	10/18/90	EMGW_SYSGEN_116	U	Phenols	0.005	NV	N
1060	11/30/87	3001	U	Phenols	0.005	NV	N
1060	12/05/87	3045		Phenols	0.01	NV	N
1060	11/27/90	EMGW_SYSGEN_161		Phenols	0.006	NV	N
1060	11/27/90	EMGW_SYSGEN_161D		Phenols	0.009	NV	D
1060	03/11/91	EMGW_SYSGEN_162	U	Phenols	0.005	NV	N
1065	10/16/90	EMGW_SYSGEN_168	U	Phenols	0.005	NV	N
1065	10/16/90	EMGW_SYSGEN_168D	U	Phenols	0.005	NV	D
1024	11/21/89	66651		Total Organic Carbon	1	NV	N
1024	02/18/90	EMGW_SYSGEN_34	U	Total Organic Carbon	1	NV	N
1024	05/15/90	EMGW_SYSGEN_35		Total Organic Carbon	2	NV	N
1024	08/08/90	EMGW_SYSGEN_36		Total Organic Carbon	50	NV	N
1024	11/13/90	EMGW_SYSGEN_37		Total Organic Carbon	3	NV	N
1024	02/27/91	EMGW_SYSGEN_38		Total Organic Carbon	4	NV	N
1024	02/27/91	EMGW_SYSGEN_38D		Total Organic Carbon	5	NV	D
1024	07/15/91	EMGW_SYSGEN_40		Total Organic Carbon	8	NV	N
1024	10/01/91	EMGW_SYSGEN_41		Total Organic Carbon	7	NV	N
1024	01/02/92	EMGW_SYSGEN_42		Total Organic Carbon	19	NV	N
1024	01/13/93	GW930113-6		Total Organic Carbon	9	NV	N
1040	10/18/90	EMGW_SYSGEN_116		Total Organic Carbon	3	NV	N
1060	11/30/87	3001	U	Total Organic Carbon	1	NV	N
1060	12/05/87	3045		Total Organic Carbon	3.25	NV	N
1060	06/04/90	EMGW_SYSGEN_159		Total Organic Carbon	39	NV	N
1060	06/04/90	EMGW_SYSGEN_159D		Total Organic Carbon	48	NV	D
1060	11/27/90	EMGW_SYSGEN_161		Total Organic Carbon	3	NV	N
1060	11/27/90	EMGW_SYSGEN_161D		Total Organic Carbon	2	NV	D
1060	03/11/91	EMGW_SYSGEN_162		Total Organic Carbon	4	NV	N
1065	04/16/90	EMGW_SYSGEN_167		Total Organic Carbon	3	NV	N
1065	10/16/90	EMGW_SYSGEN_168		Total Organic Carbon	3	NV	N
1065	10/16/90	EMGW_SYSGEN_168D		Total Organic Carbon	2	NV	D
1024	11/21/89	66651	U	Total Organic Halides	0.01	NV	N
1024	01/13/93	GW930113-6	U	Total Organic Halides	0.01	NV	N
1060	11/30/87	3001	U	Total Organic Halides	0.01	NV	N
1060	12/05/87	3045	U	Total Organic Halides	0.01	NV	N

000727

Table E-10
Rejected/Nonvalidated Phenols, Total Organic Carbon, Total Organic Halides, and Total Organic Nitrogen Data for Background Monitoring Wells in the Great Miami Aquifer

Well	Sample		Lab		Validated		QA	
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type	Area
2043	02/02/89	3887		Phenols	0.09	R	N	S
2043	11/14/89	66683	U	Phenols	0.005	NV	N	S
2043	02/20/90	EMGW_SYSGEN_522	U	Phenols	0.005	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Phenols	0.005	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	U	Phenols	0.005	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	U	Phenols	0.005	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	Phenols	0.005	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	Phenols	0.005	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	Phenols	0.005	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	Phenols	0.005	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	Phenols	0.005	NV	N	S
2043	01/18/93	GW930118-12	U	Phenols	0.005	NV	N	S
2050	10/17/90	EMGW_SYSGEN_558		Phenols	0.017	NV	N	S
2066	08/07/88	3443	U	Phenols	0.01	NV	N	S
2066	11/06/89	66687		Phenols	0.018	NV	N	S
2066	02/22/90	EMGW_SYSGEN_628		Phenols	0.011	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Phenols	0.005	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	Phenols	0.005	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	Phenols	0.005	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	Phenols	0.005	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	Phenols	0.005	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	Phenols	0.005	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	Phenols	0.005	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	Phenols	0.005	NV	N	S
2066	01/06/93	GW930106-7	U	Phenols	0.01	NV	N	S
2098	10/15/90	EMGW_SYSGEN_712	U	Phenols	0.005	NV	N	D
2104	09/12/90	EMGW_SYSGEN_719	U	Phenols	0.005	NV	N	R
2104	11/27/90	EMGW_SYSGEN_720		Phenols	0.007	NV	N	R
2104	03/07/91	EMGW_SYSGEN_721	U	Phenols	0.005	NV	N	R
3024	11/30/89	66735	U	Phenols	0.005	NV	N	S
3024	02/18/90	EMGW_SYSGEN_992	U	Phenols	0.005	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993	U	Phenols	0.005	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	U	Phenols	0.005	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	U	Phenols	0.005	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	Phenols	0.005	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	Phenols	0.005	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	Phenols	0.005	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	Phenols	0.005	NV	N	S
3024	01/13/93	GW930113-8	U	Phenols	0.01	NV	N	S
3043	02/02/89	3886		Phenols	0.01	R	N	S
3043	11/14/89	66685	U	Phenols	0.005	NV	N	S
3043	02/20/90	EMGW_SYSGEN_1018	U	Phenols	0.005	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Phenols	0.005	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	Phenols	0.005	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	Phenols	0.005	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	Phenols	0.005	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	Phenols	0.005	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	Phenols	0.005	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	Phenols	0.005	NV	N	S
3043	01/18/93	GW930118-14	U	Phenols	0.005	NV	N	S

Table E-10 (Continued)
Rejected/Nonvalidated Phenols, Total Organic Carbon, Total Organic Halides, and Total Organic Nitrogen Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
3098	10/15/90	EMGW_SYSGEN_1147	U	Phenols	0.005	NV	N	D
4011	11/14/90	EMGW_SYSGEN_1244	U	Phenols	0.005	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Phenols	0.005	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	Phenols	0.005	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	Phenols	0.005	NV	N	S
4011	01/05/93	GW930105-7	U	Phenols	0.01	NV	N	S
2043	11/14/89	66683		Total Organic Carbon	3	NV	N	S
2043	02/20/90	EMGW_SYSGEN_522		Total Organic Carbon	1	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523		Total Organic Carbon	10	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524		Total Organic Carbon	4	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525		Total Organic Carbon	3	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526		Total Organic Carbon	14	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D		Total Organic Carbon	7	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528		Total Organic Carbon	9	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529		Total Organic Carbon	12	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8		Total Organic Carbon	23	NV	N	S
2043	01/18/93	GW930118-12		Total Organic Carbon	6	NV	N	S
2050	10/17/90	EMGW_SYSGEN_558		Total Organic Carbon	4	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559		Total Organic Carbon	16	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560		Total Organic Carbon	17	NV	N	S
2050	08/10/92	2050-08/10/92-B-N		Total Organic Carbon	3	NV	N	S
2050	11/02/92	2050-11/02/92-A-N		Total Organic Carbon	2	NV	N	S
2050	02/10/93	GW930210-8		Total Organic Carbon	3.4	NV	N	S
2066	11/06/89	66687		Total Organic Carbon	4	NV	N	S
2066	02/22/90	EMGW_SYSGEN_628		Total Organic Carbon	4	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629		Total Organic Carbon	9	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630		Total Organic Carbon	4	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631		Total Organic Carbon	9	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633		Total Organic Carbon	14	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D		Total Organic Carbon	13	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635		Total Organic Carbon	6	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636		Total Organic Carbon	8	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637		Total Organic Carbon	13	NV	N	S
2066	01/06/93	GW930106-7		Total Organic Carbon	4	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703		Total Organic Carbon	14	NV	N	R
2096	08/18/92	2096-08/18/92-B-N	U*	Total Organic Carbon	1	NV	N	R
2096	11/04/92	2096-11/04/92-A-N	U	Total Organic Carbon	1	NV	N	R
2096	02/02/93	GW930202-8	U*	Total Organic Carbon	1	NV	N	R
2098	10/15/90	EMGW_SYSGEN_712		Total Organic Carbon	3	NV	N	D
2098	11/05/91	EMGW_SYSGEN_715		Total Organic Carbon	18	NV	N	D
2098	11/23/92	GW921123-5	U*	Total Organic Carbon	1	NV	N	D
2098	02/04/93	GW930204-7	U	Total Organic Carbon	1	NV	N	D
2104	06/14/90	EMGW_SYSGEN_718	U	Total Organic Carbon	1	NV	N	R
2104	09/12/90	EMGW_SYSGEN_719		Total Organic Carbon	3	NV	N	R
2104	11/27/90	EMGW_SYSGEN_720		Total Organic Carbon	1	NV	N	R
2104	03/07/91	EMGW_SYSGEN_721		Total Organic Carbon	5	NV	N	R
2104	11/07/91	EMGW_SYSGEN_722		Total Organic Carbon	9	NV	N	R
2104	08/10/92	2104-08/10/92-B-N	U	Total Organic Carbon	1	NV	N	R
2104	11/02/92	2104-11/02/92-A-N	U*	Total Organic Carbon	1	NV	N	R
2104	02/02/93	GW930202-12	U*	Total Organic Carbon	1	NV	N	R

Table E-10 (Continued)
Rejected/Nonvalidated Phenols, Total Organic Carbon, Total Organic Halides, and Total Organic Nitrogen Data for Background Monitoring Wells in the Great Miami Aquifer

Well	Sample		Lab		Validated		QA	
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type	Area
2728	02/10/93	GW930210-5		Total Organic Carbon	3.1	NV	N	S
3024	11/30/89	66735		Total Organic Carbon	4	NV	N	S
3024	02/18/90	EMGW_SYSGEN_992	U	Total Organic Carbon	1	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993		Total Organic Carbon	20	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D		Total Organic Carbon	20	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994		Total Organic Carbon	3	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995		Total Organic Carbon	5	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996		Total Organic Carbon	6	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998		Total Organic Carbon	11	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999		Total Organic Carbon	7	NV	N	S
3024	01/13/93	GW930113-8		Total Organic Carbon	8	NV	N	S
3043	11/14/89	66685		Total Organic Carbon	3	NV	N	S
3043	02/20/90	EMGW_SYSGEN_1018		Total Organic Carbon	3	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019		Total Organic Carbon	14	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020		Total Organic Carbon	3	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021		Total Organic Carbon	5	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022		Total Organic Carbon	5	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024		Total Organic Carbon	12	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025		Total Organic Carbon	9	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8		Total Organic Carbon	17	NV	N	S
3043	01/18/93	GW930118-14		Total Organic Carbon	5	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138		Total Organic Carbon	11	NV	N	R
3096	08/18/92	3096-08/18/92-B-N	U*	Total Organic Carbon	1	NV	N	R
3096	11/04/92	3096-11/04/92-A-N	U	Total Organic Carbon	1	NV	N	R
3096	02/02/93	GW930202-9	U*	Total Organic Carbon	1	NV	N	R
3098	10/15/90	EMGW_SYSGEN_1147		Total Organic Carbon	2	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149		Total Organic Carbon	16	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D		Total Organic Carbon	14	NV	D	D
3098	08/13/92	3098-08/13/92-A-D1-5	U	Total Organic Carbon	1	NV	D	D
3098	11/23/92	GW921123-6		Total Organic Carbon	6	NV	N	D
3098	02/04/93	GW930204-10	U	Total Organic Carbon	1	NV	N	D
3098	02/04/93	GW930204-12	U	Total Organic Carbon	1	NV	D	D
4011	11/14/90	EMGW_SYSGEN_1244		Total Organic Carbon	6	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245		Total Organic Carbon	14	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247		Total Organic Carbon	19	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248		Total Organic Carbon	8	NV	N	S
4011	01/05/93	GW930105-7		Total Organic Carbon	15	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297		Total Organic Carbon	13	NV	N	R
4096	08/18/92	4096-08/18/92-B-N	U*	Total Organic Carbon	1	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5		Total Organic Carbon	1.2	NV	D	R
4096	11/04/92	4096-11/04/92-A-N	U	Total Organic Carbon	1	NV	N	R
4096	11/04/92	4096-11/04/92-A-D1-7	U	Total Organic Carbon	2	NV	D	R
4096	02/02/93	GW930202-10	U*	Total Organic Carbon	1	NV	N	R
4096	02/02/93	GW930202-11	U	Total Organic Carbon	1	NV	D	R
2043	01/18/93	GW930118-12	U	Total Organic Halides	0.01	NV	N	S
2050	11/02/92	2050-11/02/92-A-N	U*	Total Organic Halides	0.01	NV	N	S
2050	02/10/93	GW930210-8	U	Total Organic Halides	0.01	NV	N	S
2066	11/06/89	66687		Total Organic Halides	0.0139	NV	N	S
2066	01/06/93	GW930106-7	U	Total Organic Halides	0.01	NV	N	S
2096	08/18/92	2096-08/18/92-B-N	U*	Total Organic Halides	0.01	NV	N	R

Table E-10 (Continued)
Rejected/Nonvalidated Phenols, Total Organic Carbon, Total Organic Halides, and Total Organic Nitrogen Data for Background Monitoring Wells in the Great Miami Aquifer

Well	Sample		Lab		Validated		QA	
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type	Area
2096	02/02/93	GW930202-8	U*	Total Organic Halides	0.01	NV	N	R
2098	02/08/89	3990		Total Organic Halides	0.013	R	N	D
2098	11/23/92	GW921123-5	U*	Total Organic Halides	0.01	NV	N	D
2098	02/04/93	GW930204-7		Total Organic Halides	0.02	NV	N	D
2104	11/02/92	2104-11/02/92-A-N	U*	Total Organic Halides	0.01	NV	N	R
2104	02/02/93	GW930202-12	U*	Total Organic Halides	0.01	NV	N	R
2728	02/10/93	GW930210-5	U	Total Organic Halides	0.01	NV	N	S
3024	11/02/88	3658	U	Total Organic Halides	0.05	R	N	S
3024	11/30/89	66735	U	Total Organic Halides	0.01	NV	N	S
3024	01/13/93	GW930113-8	U	Total Organic Halides	0.01	NV	N	S
3043	11/14/89	66685	U	Total Organic Halides	0.01	NV	N	S
3043	01/18/93	GW930118-14	U	Total Organic Halides	0.01	NV	N	S
3096	08/18/92	3096-08/18/92-B-N	U*	Total Organic Halides	0.01	NV	N	R
3096	02/02/93	GW930202-9	U*	Total Organic Halides	0.01	NV	N	R
3098	02/08/89	3989	U	Total Organic Halides	0.01	R	N	D
3098	08/13/92	3098-08/13/92-A-D1-5	U	Total Organic Halides	0.045	NV	D	D
3098	11/23/92	GW921123-6		Total Organic Halides	0.01	NV	N	D
3098	02/04/93	GW930204-10	U	Total Organic Halides	0.01	NV	N	D
4011	01/05/93	GW930105-7	U	Total Organic Halides	0.01	NV	N	S
4096	08/18/92	4096-08/18/92-B-N	U*	Total Organic Halides	0.01	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5	U	Total Organic Halides	0.045	NV	D	R
4096	02/02/93	GW930202-10	U*	Total Organic Halides	0.01	NV	N	R
2050	05/05/88	3147	U	Total Organic Nitrogen	0.5	R	N	S
2050	12/05/88	3743	U	Total Organic Nitrogen	0.1	R	N	S
2066	08/07/88	3443	U	Total Organic Nitrogen	0.1	R	N	S
2104	05/05/88	3146	U	Total Organic Nitrogen	0.5	R	N	R

Table E-11
Rejected/Nonvalidated Phenols, Total Organic Carbon, Total Organic Halides, and Total Organic Nitrogen Data for Background Surface Water in the Great Miami River

Well No.	Sample		Lab qualifier	Constituent	Validated		QA type
	Date	ID			Result	Qualifier	
W-1	08/29/88	1092	U	Phenols	0.01	R	N

Table E-12
Rejected/Nonvalidated Phenols, Total Organic Carbon, Total Organic Halides, and Total Organic Nitrogen Data for Background Surface Water in Paddys Run

Well No.	Sample		Lab qualifier	Constituent	Validated		QA type
	Date	ID			Result	Qualifier	
No Rejected/Nonvalidated Data Identified							

Table E-13
Validated Organic Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL
1065	05/04/93	112013	U	4,4'-DDD	0.1	U	N	C
1065	05/04/93	112013	U	4,4'-DDE	0.1	U	N	C
1065	05/04/93	112013	U	4,4'-DDT	0.1	UJ	N	C
1065	05/04/93	112013	U	Aldrin	0.05	U	N	C
1065	05/04/93	112013	U	alpha-BHC	0.05	UJ	N	C
1065	05/04/93	112013	U	alpha-Chlordane	0.05	U	N	C
1065	05/04/93	112013	U	Aroclor-1016	1	U	N	C
1065	05/04/93	112013	U	Aroclor-1221	2	U	N	C
1065	05/04/93	112013	U	Aroclor-1232	1	U	N	C
1065	05/04/93	112013	U	Aroclor-1242	1	U	N	C
1065	05/04/93	112013	U	Aroclor-1248	1	U	N	C
1065	05/04/93	112013	U	Aroclor-1254	1	U	N	C
1065	05/04/93	112013	U	Aroclor-1260	1	U	N	C
1065	05/04/93	112013	U	beta-BHC	0.05	U	N	C
1065	05/04/93	112013	U	delta-BHC	0.05	UJ	N	C
1065	05/04/93	112013	U	Dieldrin	0.1	U	N	C
1065	05/04/93	112013	U	Endosulfan II	0.1	U	N	C
1065	05/04/93	112013	U	Endosulfan sulfate	0.1	U	N	C
1065	05/04/93	112013	U	Endosulfan-I	0.05	U	N	C
1065	05/04/93	112013	U	Endrin	0.1	U	N	C
1065	05/04/93	112013	U	Endrin aldehyde	0.1	U	N	C
1065	05/04/93	112013	U	Endrin ketone	0.1	U	N	C
1065	05/04/93	112013	U	gamma-BHC (Lindane)	0.05	UJ	N	C
1065	05/04/93	112013	U	gamma-Chlordane	0.05	U	N	C
1065	05/04/93	112013	U	Heptachlor	0.05	U	N	C
1065	05/04/93	112013	U	Heptachlor epoxide	0.05	U	N	C
1065	05/04/93	112013	U	Methoxychlor	0.5	U	N	C
1065	05/04/93	112013	U	Toxaphene	5	U	N	C
1065	05/04/93	112013	U	1,2,4-Trichlorobenzene	10	U	N	C
1065	05/04/93	112013	U	1,2-Dichlorobenzene	10	U	N	C
1065	05/04/93	112013	U	1,3-Dichlorobenzene	10	U	N	C
1065	05/04/93	112013	U	1,4-Dichlorobenzene	10	U	N	C
1065	05/04/93	112013	U	2,4,5-Trichlorophenol	25	U	N	C
1065	05/04/93	112013	U	2,4,6-Trichlorophenol	10	U	N	C
1065	05/04/93	112013	U	2,4-Dichlorophenol	10	U	N	C
1065	05/04/93	112013	U	2,4-Dimethylphenol	10	U	N	C
1065	05/04/93	112013	U	2,4-Dinitrotoluene	10	U	N	C
1065	05/04/93	112013	U	2,6-Dinitrotoluene	10	U	N	C
1065	05/04/93	112013	U	2-Chloronaphthalene	10	U	N	C
1065	05/04/93	112013	U	2-Chlorophenol	10	U	N	C
1065	05/04/93	112013	U	2-Methylnaphthalene	10	U	N	C
1065	05/04/93	112013	U	2-Methylphenol	10	U	N	C
1065	05/04/93	112013	U	2-Nitroaniline	25	U	N	C
1065	05/04/93	112013	U	2-Nitrophenol	10	U	N	C
1065	05/04/93	112013	U	3,3'-Dichlorobenzidine	10	U	N	C
1065	05/04/93	112013	U	3-Nitroaniline	25	U	N	C
1065	05/04/93	112013	U	4,6-Dinitro-2-methylphenol	25	UJ	N	C
1065	05/04/93	112013	U	4-Bromophenyl phenyl ether	10	U	N	C
1065	05/04/93	112013	U	4-Chloro-3-methylphenol	10	U	N	C
1065	05/04/93	112013	U	4-Chlorophenylphenyl ether	10	U	N	C

Table E-13 (Continued)
Validated Organic Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL
1065	05/04/93	112013	U	4-Methylphenol	10	U	N	C
1065	05/04/93	112013	U	4-Nitroaniline	25	U	N	C
1065	05/04/93	112013	U	4-Nitrophenol	25	UJ	N	C
1065	05/04/93	112013	U	Acenaphthene	10	U	N	C
1065	05/04/93	112013	U	Acenaphthylene	10	U	N	C
1065	05/04/93	112013	U	Anthracene	10	U	N	C
1065	05/04/93	112013	U	Benzo(a)anthracene	10	U	N	C
1065	05/04/93	112013	U	Benzo(a)pyrene	10	U	N	C
1065	05/04/93	112013	U	Benzo(b)fluoranthene	10	U	N	C
1065	05/04/93	112013	U	Benzo(g,h,i)perylene	10	U	N	C
1065	05/04/93	112013	U	Benzo(k)fluoranthene	10	U	N	C
1065	05/04/93	112013	U	Benzyl alcohol	10	UJ	N	C
1065	05/04/93	112013	U	bis(2-Chloroethoxy)methane	10	U	N	C
1065	05/04/93	112013	U	bis(2-Chloroethyl)ether	10	U	N	C
1065	05/04/93	112013	U	bis(2-Chloroisopropyl) ether	10	U	N	C
1065	05/04/93	112013	U	bis(2-Ethylhexyl)phthalate	10	UJ	N	C
1065	05/04/93	112013	U	Butyl benzyl phthalate	10	U	N	C
1065	05/04/93	112013	U	Carbazole	10	U	N	C
1065	05/04/93	112013	U	Chrysene	10	U	N	C
1065	05/04/93	112013	U	Di-n-butyl phthalate	10	U	N	C
1065	05/04/93	112013	U	Dibenzo(a,h)anthracene	10	UJ	N	C
1065	05/04/93	112013	U	Dibenzofuran	10	U	N	C
1065	05/04/93	112013	U	Diethyl phthalate	10	U	N	C
1065	05/04/93	112013	U	Dimethyl phthalate	10	U	N	C
1065	05/04/93	112013	U	Fluoranthene	10	U	N	C
1065	05/04/93	112013	U	Fluorene	10	U	N	C
1065	05/04/93	112013	U	Hexachlorobenzene	10	U	N	C
1065	05/04/93	112013	U	Hexachlorobutadiene	10	U	N	C
1065	05/04/93	112013	U	Hexachlorocyclopentadiene	10	U	N	C
1065	05/04/93	112013	U	Hexachloroethane	10	U	N	C
1065	05/04/93	112013	U	Indeno(1,2,3-cd)pyrene	10	U	N	C
1065	05/04/93	112013	U	Isophorone	10	U	N	C
1065	05/04/93	112013	U	N-Nitroso-di-n-propylamine	10	U	N	C
1065	05/04/93	112013	U	N-Nitrosodiphenylamine	10	U	N	C
1065	05/04/93	112013	U	Naphthalene	10	U	N	C
1065	05/04/93	112013	U	Nitrobenzene	10	U	N	C
1065	05/04/93	112013	U	p-Chloroaniline	10	U	N	C
1065	05/04/93	112013	U	Pentachlorophenol	25	U	N	C
1065	05/04/93	112013	U	Phenanthrene	10	U	N	C
1065	05/04/93	112013	U	Phenol	10	U	N	C
1065	05/04/93	112013	U	Pyrene	10	U	N	C
1024	04/12/93	GW930412-6	U	1,1,1-Trichloroethane	10	U	N	3
1040	09/28/93	30928-1040-02	U	1,1,1-Trichloroethane	10	U	N	3
1059	09/29/93	30929-1059-02	U	1,1,1-Trichloroethane	10	U	N	3
1060	09/29/93	30929-1060-02	U	1,1,1-Trichloroethane	10	U	N	3
1065	04/14/88	3136	U	1,1,1-Trichloroethane	5	UJ	N	4
1065	05/04/93	112013	U	1,1,1-Trichloroethane	10	U	N	C
1024	04/12/93	GW930412-6	U	1,1,2,2-Tetrachloroethane	10	U	N	3
1040	09/28/93	30928-1040-02	U	1,1,2,2-Tetrachloroethane	10	U	N	3
1059	09/29/93	30929-1059-02	U	1,1,2,2-Tetrachloroethane	10	U	N	3

Table E-13 (Continued)
Validated Organic Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL
1060	09/29/93	30929-1060-02	U	1,1,2,2-Tetrachloroethane	10	U	N	3
1065	04/14/88	3136	U	1,1,2,2-Tetrachloroethane	5	UJ	N	4
1065	05/04/93	112013	U	1,1,2,2-Tetrachloroethane	10	U	N	C
1024	04/12/93	GW930412-6	U	1,1,2-Trichloroethane	10	U	N	3
1040	09/28/93	30928-1040-02	U	1,1,2-Trichloroethane	10	U	N	3
1059	09/29/93	30929-1059-02	U	1,1,2-Trichloroethane	10	U	N	3
1060	09/29/93	30929-1060-02	U	1,1,2-Trichloroethane	10	U	N	3
1065	04/14/88	3136	U	1,1,2-Trichloroethane	5	UJ	N	4
1065	05/04/93	112013	U	1,1,2-Trichloroethane	10	U	N	C
1024	06/26/89	66420	U	1,1-Dichloroethane	5	U	N	3
1024	08/10/89	66497	U	1,1-Dichloroethane	5	U	N	3
1024	04/12/93	GW930412-6	U	1,1-Dichloroethane	10	U	N	3
1040	09/28/93	30928-1040-02	U	1,1-Dichloroethane	10	U	N	3
1059	09/29/93	30929-1059-02	U	1,1-Dichloroethane	10	U	N	3
1060	09/29/93	30929-1060-02	U	1,1-Dichloroethane	10	U	N	3
1065	04/14/88	3136	U	1,1-Dichloroethane	5	UJ	N	4
1065	05/04/93	112013	U	1,1-Dichloroethane	10	UJ	N	C
1024	04/12/93	GW930412-6	U	1,1-Dichloroethene	10	U	N	3
1040	09/28/93	30928-1040-02	U	1,1-Dichloroethene	10	U	N	3
1059	09/29/93	30929-1059-02	U	1,1-Dichloroethene	10	U	N	3
1060	09/29/93	30929-1060-02	U	1,1-Dichloroethene	10	U	N	3
1065	04/14/88	3136	U	1,1-Dichloroethene	5	UJ	N	4
1065	05/04/93	112013	U	1,1-Dichloroethene	10	U	N	C
1024	04/12/93	GW930412-6	U	1,2-Dichloroethane	10	U	N	3
1040	09/28/93	30928-1040-02	U	1,2-Dichloroethane	10	U	N	3
1059	09/29/93	30929-1059-02	U	1,2-Dichloroethane	10	U	N	3
1060	09/29/93	30929-1060-02	U	1,2-Dichloroethane	10	U	N	3
1065	04/14/88	3136	U	1,2-Dichloroethane	5	UJ	N	4
1065	05/04/93	112013	U	1,2-Dichloroethane	10	U	N	C
1024	04/12/93	GW930412-6	U	1,2-Dichloroethene (Total)	10	U	N	3
1040	09/28/93	30928-1040-02	U	1,2-Dichloroethene (Total)	10	U	N	3
1059	09/29/93	30929-1059-02	U	1,2-Dichloroethene (Total)	10	U	N	3
1060	09/29/93	30929-1060-02	U	1,2-Dichloroethene (Total)	10	U	N	3
1065	04/14/88	3136	U	1,2-Dichloroethene (Total)	5	UJ	N	4
1065	05/04/93	112013	U	1,2-Dichloroethene (Total)	10	U	N	C
1024	04/12/93	GW930412-6	U	1,2-Dichloropropane	10	U	N	3
1040	09/28/93	30928-1040-02	U	1,2-Dichloropropane	10	U	N	3
1059	09/29/93	30929-1059-02	U	1,2-Dichloropropane	10	U	N	3
1060	09/29/93	30929-1060-02	U	1,2-Dichloropropane	10	U	N	3
1065	04/14/88	3136	U	1,2-Dichloropropane	5	UJ	N	4
1065	05/04/93	112013	U	1,2-Dichloropropane	10	U	N	C
1024	04/12/93	GW930412-6	U	2-Butanone	10	UJ	N	3
1059	09/29/93	30929-1059-02	U	2-Butanone	10	U	N	3
1060	09/29/93	30929-1060-02	U	2-Butanone	10	U	N	3
1065	05/04/93	112013	U	2-Butanone	10	UJ	N	C
1024	04/12/93	GW930412-6	U	2-Hexanone	10	UJ	N	3
1040	09/28/93	30928-1040-02	U	2-Hexanone	10	U	N	3
1059	09/29/93	30929-1059-02	U	2-Hexanone	10	UJ	N	3
1060	09/29/93	30929-1060-02	U	2-Hexanone	10	UJ	N	3
1065	04/14/88	3136	U	2-Hexanone	10	UJ	N	4

Table E-13 (Continued)
Validated Organic Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL
1065	05/04/93	112013	U	2-Hexanone	10	U	N	C
1024	04/12/93	GW930412-6	U	4-Methyl-2-pentanone	10	U	N	3
1040	09/28/93	30928-1040-02	U	4-Methyl-2-pentanone	10	U	N	3
1059	09/29/93	30929-1059-02	U	4-Methyl-2-pentanone	10	U	N	3
1060	09/29/93	30929-1060-02	U	4-Methyl-2-pentanone	10	U	N	3
1065	04/14/88	3136	U	4-Methyl-2-pentanone	10	UJ	N	4
1065	05/04/93	112013	U	4-Methyl-2-pentanone	10	U	N	C
1024	06/26/89	66420	BJ	Acetone	10	U	N	3
1024	08/10/89	66497	BJ	Acetone	10	U	N	3
1024	04/12/93	GW930412-6	U	Acetone	10	U	N	3
1040	09/28/93	30928-1040-02	U	Acetone	10	UJ	N	3
1059	09/29/93	30929-1059-02	U	Acetone	10	UJ	N	3
1060	09/29/93	30929-1060-02	U	Acetone	10	UJ	N	3
1024	04/12/93	GW930412-6	U	Benzene	10	U	N	3
1040	09/28/93	30928-1040-02	U	Benzene	10	U	N	3
1059	09/29/93	30929-1059-02	U	Benzene	10	U	N	3
1060	09/29/93	30929-1060-02	U	Benzene	10	U	N	3
1065	04/14/88	3136	U	Benzene	5	UJ	N	4
1065	05/04/93	112013	U	Benzene	10	U	N	C
1024	04/12/93	GW930412-6	U	Bromodichloromethane	10	U	N	3
1040	09/28/93	30928-1040-02	U	Bromodichloromethane	10	U	N	3
1059	09/29/93	30929-1059-02	U	Bromodichloromethane	10	U	N	3
1060	09/29/93	30929-1060-02	U	Bromodichloromethane	10	U	N	3
1065	04/14/88	3136	U	Bromodichloromethane	5	UJ	N	4
1065	05/04/93	112013	U	Bromodichloromethane	10	U	N	C
1024	04/12/93	GW930412-6	U	Bromoform	10	U	N	3
1040	09/28/93	30928-1040-02	U	Bromoform	10	U	N	3
1059	09/29/93	30929-1059-02	U	Bromoform	10	U	N	3
1060	09/29/93	30929-1060-02	U	Bromoform	10	U	N	3
1065	04/14/88	3136	U	Bromoform	5	UJ	N	4
1065	05/04/93	112013	U	Bromoform	10	U	N	C
1024	04/12/93	GW930412-6	U	Bromomethane	10	U	N	3
1040	09/28/93	30928-1040-02	U	Bromomethane	10	U	N	3
1059	09/29/93	30929-1059-02	U	Bromomethane	10	U	N	3
1060	09/29/93	30929-1060-02	U	Bromomethane	10	U	N	3
1065	04/14/88	3136	U	Bromomethane	10	UJ	N	4
1065	05/04/93	112013	U	Bromomethane	10	U	N	C
1024	04/12/93	GW930412-6	U	Carbon disulfide	10	U	N	3
1040	09/28/93	30928-1040-02	U	Carbon disulfide	10	U	N	3
1059	09/29/93	30929-1059-02	U	Carbon disulfide	10	U	N	3
1060	09/29/93	30929-1060-02	U	Carbon disulfide	10	U	N	3
1065	04/14/88	3136	U	Carbon disulfide	5	UJ	N	4
1065	05/04/93	112013	U	Carbon disulfide	10	UJ	N	C
1024	04/12/93	GW930412-6	U	Carbon Tetrachloride	10	U	N	3
1040	09/28/93	30928-1040-02	U	Carbon Tetrachloride	10	UJ	N	3
1059	09/29/93	30929-1059-02	U	Carbon Tetrachloride	10	U	N	3
1060	09/29/93	30929-1060-02	U	Carbon Tetrachloride	10	U	N	3
1065	04/14/88	3136	U	Carbon Tetrachloride	5	UJ	N	4
1065	05/04/93	112013	U	Carbon Tetrachloride	10	U	N	C

Table E-13 (Continued)
Validated Organic Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL
1024	04/12/93	GW930412-6	U	Chlorobenzene	10	U	N	3
1040	09/28/93	30928-1040-02	U	Chlorobenzene	10	U	N	3
1059	09/29/93	30929-1059-02	U	Chlorobenzene	10	U	N	3
1060	09/29/93	30929-1060-02	U	Chlorobenzene	10	U	N	3
1065	04/14/88	3136	U	Chlorobenzene	5	UJ	N	4
1065	05/04/93	112013	U	Chlorobenzene	10	U	N	C
1024	04/12/93	GW930412-6	U	Chloroethane	10	U	N	3
1040	09/28/93	30928-1040-02	U	Chloroethane	10	U	N	3
1059	09/29/93	30929-1059-02	U	Chloroethane	10	U	N	3
1060	09/29/93	30929-1060-02	U	Chloroethane	10	U	N	3
1065	04/14/88	3136	U	Chloroethane	10	UJ	N	4
1065	05/04/93	112013	U	Chloroethane	10	UJ	N	C
1024	04/12/93	GW930412-6	U	Chloroform	10	U	N	3
1040	09/28/93	30928-1040-02	U	Chloroform	10	U	N	3
1059	09/29/93	30929-1059-02	U	Chloroform	10	U	N	3
1060	09/29/93	30929-1060-02	U	Chloroform	10	U	N	3
1065	04/14/88	3136	U	Chloroform	5	UJ	N	4
1065	05/04/93	112013	U	Chloroform	10	U	N	C
1024	04/12/93	GW930412-6	U	Chloromethane	10	U	N	3
1040	09/28/93	30928-1040-02	U	Chloromethane	10	U	N	3
1059	09/29/93	30929-1059-02	U	Chloromethane	10	U	N	3
1060	09/29/93	30929-1060-02	U	Chloromethane	10	U	N	3
1065	04/14/88	3136	U	Chloromethane	10	UJ	N	4
1024	04/12/93	GW930412-6	U	cis-1,3-Dichloropropene	10	U	N	3
1040	09/28/93	30928-1040-02	U	cis-1,3-Dichloropropene	10	U	N	3
1059	09/29/93	30929-1059-02	U	cis-1,3-Dichloropropene	10	U	N	3
1060	09/29/93	30929-1060-02	U	cis-1,3-Dichloropropene	10	U	N	3
1065	04/14/88	3136	U	cis-1,3-Dichloropropene	5	UJ	N	4
1065	05/04/93	112013	U	cis-1,3-Dichloropropene	10	U	N	C
1024	04/12/93	GW930412-6	U	Dibromochloromethane	10	U	N	3
1059	09/29/93	30929-1059-02	U	Dibromochloromethane	10	U	N	3
1060	09/29/93	30929-1060-02	U	Dibromochloromethane	10	U	N	3
1065	04/14/88	3136	U	Dibromochloromethane	5	UJ	N	4
1065	05/04/93	112013	U	Dibromochloromethane	10	U	N	C
1024	04/12/93	GW930412-6	U	Ethylbenzene	10	U	N	3
1040	09/28/93	30928-1040-02	U	Ethylbenzene	10	U	N	3
1059	09/29/93	30929-1059-02	U	Ethylbenzene	10	U	N	3
1060	09/29/93	30929-1060-02	U	Ethylbenzene	10	U	N	3
1065	04/14/88	3136	U	Ethylbenzene	5	UJ	N	4
1065	05/04/93	112013	U	Ethylbenzene	10	U	N	C
1024	06/26/89	66420	B	Methylene chloride	10	U	N	3
1024	08/10/89	66497	B	Methylene chloride	8	U	N	3
1024	04/12/93	GW930412-6	U	Methylene chloride	10	U	N	3
1040	09/28/93	30928-1040-02	U	Methylene chloride	10	U	N	3
1059	09/29/93	30929-1059-02	U	Methylene chloride	10	U	N	3
1060	09/29/93	30929-1060-02	U	Methylene chloride	10	U	N	3
1065	04/14/88	3136	U	Methylene chloride	5	UJ	N	4
1065	05/04/93	112013	BJ	Methylene chloride	10	UJ	N	C
1024	04/12/93	GW930412-6	U	Styrene	10	U	N	3
1040	09/28/93	30928-1040-02	U	Styrene	10	U	N	3

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Table E-13 (Continued)
Validated Organic Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL
1059	09/29/93	30929-1059-02	U	Styrene	10	U	N	3
1060	09/29/93	30929-1060-02	U	Styrene	10	U	N	3
1065	04/14/88	3136	U	Styrene	5	UJ	N	4
1065	05/04/93	112013	U	Styrene	10	U	N	C
1024	06/26/89	66420	U	Tetrachloroethene	5	U	N	3
1024	08/10/89	66497	U	Tetrachloroethene	5	U	N	3
1024	04/12/93	GW930412-6	U	Tetrachloroethene	10	U	N	3
1040	09/28/93	30928-1040-02	U	Tetrachloroethene	10	U	N	3
1059	09/29/93	30929-1059-02	U	Tetrachloroethene	10	U	N	3
1060	09/29/93	30929-1060-02	U	Tetrachloroethene	10	U	N	3
1065	04/14/88	3136	U	Tetrachloroethene	5	UJ	N	4
1065	05/04/93	112013	U	Tetrachloroethene	10	U	N	C
1024	06/26/89	66420	U	Toluene	5	UJ	N	3
1024	08/10/89	66497	BJ	Toluene	5	U	N	3
1024	04/12/93	GW930412-6	U	Toluene	10	U	N	3
1040	09/28/93	30928-1040-02	U	Toluene	10	U	N	3
1059	09/29/93	30929-1059-02	U	Toluene	10	U	N	3
1060	09/29/93	30929-1060-02	U	Toluene	10	U	N	3
1065	04/14/88	3136	U	Toluene	5	UJ	N	4
1065	05/04/93	112013	U	Toluene	10	U	N	C
1024	04/12/93	GW930412-6	U	trans-1,3-Dichloropropene	10	U	N	3
1040	09/28/93	30928-1040-02	U	trans-1,3-Dichloropropene	10	U	N	3
1059	09/29/93	30929-1059-02	U	trans-1,3-Dichloropropene	10	U	N	3
1060	09/29/93	30929-1060-02	U	trans-1,3-Dichloropropene	10	U	N	3
1065	04/14/88	3136	U	trans-1,3-Dichloropropene	5	UJ	N	4
1065	05/04/93	112013	U	trans-1,3-Dichloropropene	10	U	N	C
1024	06/26/89	66420	U	Trichloroethene	5	U	N	3
1024	08/10/89	66497	U	Trichloroethene	5	U	N	3
1024	04/12/93	GW930412-6	U	Trichloroethene	10	U	N	3
1040	09/28/93	30928-1040-02	U	Trichloroethene	10	U	N	3
1059	09/29/93	30929-1059-02	U	Trichloroethene	10	U	N	3
1060	09/29/93	30929-1060-02	U	Trichloroethene	10	U	N	3
1065	04/14/88	3136	U	Trichloroethene	5	UJ	N	4
1065	05/04/93	112013	U	Trichloroethene	10	U	N	C
1040	09/28/93	30928-1040-02	U	Vinyl Acetate	10	U	N	3
1065	04/14/88	3136	U	Vinyl Acetate	10	UJ	N	4
1065	05/04/93	112013	U	Vinyl Acetate	10	UJ	N	C
1024	04/12/93	GW930412-6	U	Vinyl chloride	10	U	N	3
1040	09/28/93	30928-1040-02	U	Vinyl chloride	10	U	N	3
1059	09/29/93	30929-1059-02	U	Vinyl chloride	10	U	N	3
1060	09/29/93	30929-1060-02	U	Vinyl chloride	10	U	N	3
1065	04/14/88	3136	U	Vinyl chloride	10	UJ	N	4
1065	05/04/93	112013	U	Vinyl chloride	10	UJ	N	C
1024	04/12/93	GW930412-6	U	Xylenes, Total	10	U	N	3
1040	09/28/93	30928-1040-02	U	Xylenes, Total	10	U	N	3
1059	09/29/93	30929-1059-02	U	Xylenes, Total	10	U	N	3
1060	09/29/93	30929-1060-02	U	Xylenes, Total	10	U	N	3
1065	04/14/88	3136	U	Xylenes, Total	5	UJ	N	4
1065	05/04/93	112013	U	Xylenes, Total	10	U	N	C

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Table E-14
Validated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
2043	08/30/89	66572	U	2,3,7,8-tetrachlorodibenzo-p-dioxin	0.39	U	N	5	S
2043	08/30/89	66577	U	2,3,7,8-tetrachlorodibenzo-p-dioxin	0.27	U	D	5	S
3043	08/30/89	66573	U	2,3,7,8-tetrachlorodibenzo-p-dioxin	0.29	U	N	5	S
2043	08/30/89	66572	U	Hexachlorodibenzo-p-dioxins	1.1	U	N	5	S
2043	08/30/89	66577	U	Hexachlorodibenzo-p-dioxins	1.8	U	D	5	S
3043	08/30/89	66573	U	Hexachlorodibenzo-p-dioxins	0.21	U	N	5	S
2043	08/30/89	66572	U	Hexachlorodibenzofurans	0.16	U	N	5	S
2043	08/30/89	66577	U	Hexachlorodibenzofurans	0.13	U	D	5	S
3043	08/30/89	66573	U	Hexachlorodibenzofurans	0.11	U	N	5	S
2043	08/30/89	66577	U	Pentachlorodibenzo-p-dioxins	1.3	U	D	5	S
3043	08/30/89	66573	U	Pentachlorodibenzo-p-dioxins	0.11	U	N	5	S
2043	08/30/89	66572	U	Pentachlorodibenzofurans	0.099	U	N	5	S
2043	08/30/89	66577	U	Pentachlorodibenzofurans	0.15	U	D	5	S
3043	08/30/89	66573	U	Pentachlorodibenzofurans	0.11	U	N	5	S
2043	08/30/89	66572	U	Tetrachlorodibenzo-p-dioxins	0.07	U	N	5	S
2043	08/30/89	66577	U	Tetrachlorodibenzo-p-dioxins	0.27	U	D	5	S
3043	08/30/89	66573	U	Tetrachlorodibenzo-p-dioxins	0.14	U	N	5	S
2043	08/30/89	66572	U	Tetrachlorodibenzofurans	0.23	UJ	N	5	S
2043	08/30/89	66577	U	Tetrachlorodibenzofurans	0.19	U	D	5	S
3043	08/30/89	66573	U	Tetrachlorodibenzofurans	0.4	U	N	5	S
2043	09/13/89	66585	U	2,4,5-T	0.1	U	N	4	S
2043	09/13/89	66587	U	2,4,5-T	0.1	U	N	4	S
2043	09/14/89	66588	U	2,4,5-T	5	U	N	4	S
3043	09/13/89	66586	U	2,4,5-T	0.1	U	N	4	S
2043	09/13/89	66585	U	2,4,5-TP (Silvex)	0.1	U	N	4	S
2043	09/13/89	66587	U	2,4,5-TP (Silvex)	0.1	U	N	4	S
2043	09/14/89	66588	U	2,4,5-TP (Silvex)	0.025	U	N	4	S
3043	09/13/89	66586	U	2,4,5-TP (Silvex)	0.1	U	N	4	S
2043	09/13/89	66585	U	2,4-D	0.2	U	N	4	S
2043	09/13/89	66587	U	2,4-D	0.2	U	N	4	S
2043	09/14/89	66588	U	2,4-D	0.05	U	N	4	S
3043	09/13/89	66586	U	2,4-D	0.2	U	N	4	S
2043	09/14/89	66588	U	Dinoseb	20	U	N	4	S
2043	09/13/89	66585	U	Dimethoate	1	U	N	4	S
2043	09/13/89	66587	U	Dimethoate	1	U	N	4	S
2043	09/14/89	66588	U	Dimethoate	1000	U	N	4	S
3043	09/13/89	66586	U	Dimethoate	1	U	N	4	S
3043	09/14/89	66589	U	Dimethoate	1000	U	N	4	S
2043	09/13/89	66585	U	Disulfoton	1	U	N	4	S
2043	09/13/89	66587	U	Disulfoton	1	U	N	4	S
2043	09/14/89	66588	U	Disulfoton	1000	U	N	4	S
3043	09/13/89	66586	U	Disulfoton	1	U	N	4	S
3043	09/14/89	66589	U	Disulfoton	1000	U	N	4	S
2043	09/13/89	66585	U	Famphur	1	U	N	4	S
2043	09/13/89	66587	U	Famphur	1	U	N	4	S
2043	09/14/89	66588	U	Famphur	1000	U	N	4	S
3043	09/13/89	66586	U	Famphur	1	U	N	4	S
3043	09/14/89	66589	U	Famphur	1000	U	N	4	S
2043	09/13/89	66585	U	Methyl parathion	0.05	U	N	4	S
2043	09/13/89	66587	U	Methyl parathion	0.05	U	N	4	S

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Table E-14 (Continued)
Validated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
2043	09/14/89	66588	U	Methyl parathion	50	U	N	4	S
3043	09/13/89	66586	U	Methyl parathion	0.05	U	N	4	S
3043	09/14/89	66589	U	Methyl parathion	50	U	N	4	S
2043	09/13/89	66585	U	Parathion	0.05	U	N	4	S
2043	09/13/89	66587	U	Parathion	0.05	U	N	4	S
2043	09/14/89	66588	U	Parathion	50	U	N	4	S
3043	09/13/89	66586	U	Parathion	0.05	U	N	4	S
3043	09/14/89	66589	U	Parathion	50	U	N	4	S
2043	09/13/89	66585	U	Phorate	1	U	N	4	S
2043	09/13/89	66587	U	Phorate	1	U	N	4	S
2043	09/14/89	66588	U	Phorate	1000	U	N	4	S
3043	09/13/89	66586	U	Phorate	1	U	N	4	S
3043	09/14/89	66589	U	Phorate	1000	U	N	4	S
2043	09/13/89	66585	U	Thionazin	1	U	N	4	S
2043	09/13/89	66587	U	Thionazin	1	U	N	4	S
2043	09/14/89	66588	U	Thionazin	1000	U	N	4	S
3043	09/13/89	66586	U	Thionazin	1	U	N	4	S
3043	09/14/89	66589	U	Thionazin	1000	U	N	4	S
2043	09/13/89	66585	U	4,4'-DDD	2	U	N	4	S
2043	09/13/89	66587	U	4,4'-DDD	0.5	U	N	4	S
2043	09/14/89	66588	U	4,4'-DDD	0.1	U	N	4	S
2728	04/04/93	113514	U	4,4'-DDD	0.1	U	N	3	S
3043	09/13/89	66586	U	4,4'-DDD	0.1	U	N	4	S
2043	09/13/89	66585	U	4,4'-DDE	2	U	N	4	S
2043	09/13/89	66587	U	4,4'-DDE	0.5	U	N	4	S
2043	09/14/89	66588	U	4,4'-DDE	0.1	U	N	4	S
2728	04/04/93	113514	U	4,4'-DDE	0.1	U	N	3	S
3043	09/13/89	66586	U	4,4'-DDE	0.1	U	N	4	S
2043	09/13/89	66585	U	4,4'-DDT	2	U	N	4	S
2043	09/13/89	66587	U	4,4'-DDT	0.5	U	N	4	S
2043	09/14/89	66588	U	4,4'-DDT	0.1	U	N	4	S
2728	04/04/93	113514	U	4,4'-DDT	0.1	U	N	3	S
3043	09/13/89	66586	U	4,4'-DDT	0.1	U	N	4	S
2043	09/13/89	66585	U	Aldrin	1	U	N	4	S
2043	09/13/89	66587	U	Aldrin	0.25	U	N	4	S
2043	09/14/89	66588	U	Aldrin	0.05	U	N	4	S
2728	04/04/93	113514	U	Aldrin	0.05	U	N	3	S
3043	09/13/89	66586	U	Aldrin	0.05	U	N	4	S
2043	09/13/89	66585	U	alpha-BHC	1	U	N	4	S
2043	09/13/89	66587	U	alpha-BHC	0.25	U	N	4	S
2043	09/14/89	66588	U	alpha-BHC	0.05	U	N	4	S
2728	04/04/93	113514	U	alpha-BHC	0.05	U	N	3	S
3043	09/13/89	66586	U	alpha-BHC	0.05	U	N	4	S
2043	09/13/89	66585	U	alpha-Chlordane	10	U	N	4	S
2043	09/13/89	66587	U	alpha-Chlordane	2.5	U	N	4	S
2043	09/14/89	66588	U	alpha-Chlordane	0.5	U	N	4	S
2728	04/04/93	113514	U	alpha-Chlordane	0.05	U	N	3	S
3043	09/13/89	66586	U	alpha-Chlordane	0.5	U	N	4	S
2043	09/13/89	66585	U	Aroclor-1016	10	U	N	4	S
2043	09/13/89	66587	U	Aroclor-1016	2.5	U	N	4	S

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Table E-14 (Continued)
Validated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
2043	09/14/89	66588	U	Aroclor-1016	0.5	U	N	4	S
2728	04/04/93	113514	U	Aroclor-1016	1	U	N	3	S
3043	09/13/89	66586	U	Aroclor-1016	0.5	U	N	4	S
2043	09/13/89	66585	U	Aroclor-1221	10	U	N	4	S
2043	09/13/89	66587	U	Aroclor-1221	2.5	U	N	4	S
2043	09/14/89	66588	U	Aroclor-1221	0.5	U	N	4	S
2728	04/04/93	113514	U	Aroclor-1221	2	U	N	3	S
3043	09/13/89	66586	U	Aroclor-1221	0.5	U	N	4	S
2043	09/13/89	66585	U	Aroclor-1232	10	U	N	4	S
2043	09/13/89	66587	U	Aroclor-1232	2.5	U	N	4	S
2043	09/14/89	66588	U	Aroclor-1232	0.5	U	N	4	S
2728	04/04/93	113514	U	Aroclor-1232	1	U	N	3	S
3043	09/13/89	66586	U	Aroclor-1232	0.5	U	N	4	S
2043	09/13/89	66585	U	Aroclor-1242	10	U	N	4	S
2043	09/13/89	66587	U	Aroclor-1242	2.5	U	N	4	S
2043	09/14/89	66588	U	Aroclor-1242	0.5	U	N	4	S
2728	04/04/93	113514	U	Aroclor-1242	1	U	N	3	S
3043	09/13/89	66586	U	Aroclor-1242	0.5	U	N	4	S
2043	09/13/89	66585	U	Aroclor-1248	10	U	N	4	S
2043	09/13/89	66587	U	Aroclor-1248	2.5	U	N	4	S
2043	09/14/89	66588	U	Aroclor-1248	0.5	U	N	4	S
2728	04/04/93	113514	U	Aroclor-1248	1	U	N	3	S
3043	09/13/89	66586	U	Aroclor-1248	0.5	U	N	4	S
2043	09/13/89	66585	U	Aroclor-1254	20	U	N	4	S
2043	09/13/89	66587	U	Aroclor-1254	5	U	N	4	S
2043	09/14/89	66588	U	Aroclor-1254	1	U	N	4	S
2728	04/04/93	113514	U	Aroclor-1254	1	U	N	3	S
3043	09/13/89	66586	U	Aroclor-1254	1	U	N	4	S
2043	09/13/89	66585	U	Aroclor-1260	20	U	N	4	S
2043	09/13/89	66587	U	Aroclor-1260	5	U	N	4	S
2043	09/14/89	66588	U	Aroclor-1260	1	U	N	4	S
2728	04/04/93	113514	U	Aroclor-1260	1	U	N	3	S
3043	09/13/89	66586	U	Aroclor-1260	1	U	N	4	S
2043	09/13/89	66585	U	beta-BHC	1	U	N	4	S
2043	09/13/89	66587	U	beta-BHC	0.25	U	N	4	S
2043	09/14/89	66588	U	beta-BHC	0.05	U	N	4	S
2728	04/04/93	113514	U	beta-BHC	0.05	U	N	3	S
3043	09/13/89	66586	U	beta-BHC	0.05	U	N	4	S
2043	09/13/89	66585	U	delta-BHC	1	U	N	4	S
2043	09/13/89	66587	U	delta-BHC	0.25	U	N	4	S
2043	09/14/89	66588	U	delta-BHC	0.05	U	N	4	S
2728	04/04/93	113514	U	delta-BHC	0.05	U	N	3	S
3043	09/13/89	66586	U	delta-BHC	0.05	U	N	4	S
2043	09/13/89	66585	U	Dieldrin	2	U	N	4	S
2043	09/13/89	66587	U	Dieldrin	0.5	U	N	4	S
2043	09/14/89	66588	U	Dieldrin	0.1	U	N	4	S
2728	04/04/93	113514	U	Dieldrin	0.1	U	N	3	S
3043	09/13/89	66586	U	Dieldrin	0.1	U	N	4	S
2043	09/13/89	66585	U	Endosulfan II	2	U	N	4	S
2043	09/13/89	66587	U	Endosulfan II	0.5	U	N	4	S

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Table E-14 (Continued)
Validated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well	Sample		Lab		Validated		QA		
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type	ASL	Area
2043	09/14/89	66588	U	Endosulfan II	0.1	U	N	4	S
2728	04/04/93	113514	U	Endosulfan II	0.1	U	N	3	S
3043	09/13/89	66586	U	Endosulfan II	0.1	U	N	4	S
2043	09/13/89	66585	U	Endosulfan sulfate	2	U	N	4	S
2043	09/13/89	66587	U	Endosulfan sulfate	0.5	U	N	4	S
2043	09/14/89	66588	U	Endosulfan sulfate	0.1	U	N	4	S
2728	04/04/93	113514	U	Endosulfan sulfate	0.1	U	N	3	S
3043	09/13/89	66586	U	Endosulfan sulfate	0.1	U	N	4	S
2043	09/13/89	66585	U	Endosulfan-I	1	U	N	4	S
2043	09/13/89	66587	U	Endosulfan-I	0.25	U	N	4	S
2043	09/14/89	66588	U	Endosulfan-I	0.05	U	N	4	S
2728	04/04/93	113514	U	Endosulfan-I	0.05	U	N	3	S
3043	09/13/89	66586	U	Endosulfan-I	0.05	U	N	4	S
2043	09/13/89	66585	U	Endrin	2	U	N	4	S
2043	09/13/89	66587	U	Endrin	0.5	U	N	4	S
2043	09/14/89	66588	U	Endrin	0.1	U	N	4	S
2728	04/04/93	113514	U	Endrin	0.1	U	N	3	S
3043	09/13/89	66586	U	Endrin	0.1	U	N	4	S
2728	04/04/93	113514	U	Endrin aldehyde	0.1	U	N	3	S
2043	09/13/89	66585	U	Endrin ketone	2	U	N	4	S
2043	09/13/89	66587	U	Endrin ketone	0.5	U	N	4	S
2043	09/14/89	66588	U	Endrin ketone	0.1	U	N	4	S
2728	04/04/93	113514	U	Endrin ketone	0.1	U	N	3	S
3043	09/13/89	66586	U	Endrin ketone	0.1	U	N	4	S
2043	09/13/89	66585	U	gamma-BHC (Lindane)	1	U	N	4	S
2043	09/13/89	66587	U	gamma-BHC (Lindane)	0.25	U	N	4	S
2043	09/14/89	66588	U	gamma-BHC (Lindane)	0.05	U	N	4	S
2728	04/04/93	113514	U	gamma-BHC (Lindane)	0.05	U	N	3	S
3043	09/13/89	66586	U	gamma-BHC (Lindane)	0.05	U	N	4	S
2043	09/13/89	66585	U	gamma-Chlordane	10	U	N	4	S
2043	09/13/89	66587	U	gamma-Chlordane	2.5	U	N	4	S
2043	09/14/89	66588	U	gamma-Chlordane	0.5	U	N	4	S
2728	04/04/93	113514	U	gamma-Chlordane	0.05	U	N	3	S
3043	09/13/89	66586	U	gamma-Chlordane	0.5	U	N	4	S
2043	09/13/89	66585	U	Heptachlor	1	U	N	4	S
2043	09/13/89	66587	U	Heptachlor	0.25	U	N	4	S
2043	09/14/89	66588	U	Heptachlor	0.05	U	N	4	S
2728	04/04/93	113514	U	Heptachlor	0.05	U	N	3	S
3043	09/13/89	66586	U	Heptachlor	0.05	U	N	4	S
2043	09/13/89	66585	U	Heptachlor epoxide	1	U	N	4	S
2043	09/13/89	66587	U	Heptachlor epoxide	0.25	U	N	4	S
2043	09/14/89	66588	U	Heptachlor epoxide	0.05	U	N	4	S
2728	04/04/93	113514	U	Heptachlor epoxide	0.05	U	N	3	S
3043	09/13/89	66586	U	Heptachlor epoxide	0.05	U	N	4	S
2043	09/13/89	66585	U	Isodrin	1	U	N	4	S
2043	09/13/89	66587	U	Isodrin	0.25	U	N	4	S
3043	09/13/89	66586	U	Isodrin	0.05	U	N	4	S
2043	09/13/89	66585	U	Kepone	2	U	N	4	S
2043	09/13/89	66587	U	Kepone	0.5	U	N	4	S
3043	09/13/89	66586	U	Kepone	0.1	U	N	4	S

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Table E-14 (Continued)
Validated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
2043	09/13/89	66585	U	Methoxychlor	10	U	N	4	S
2043	09/13/89	66587	U	Methoxychlor	2.5	U	N	4	S
2043	09/14/89	66588	U	Methoxychlor	0.5	U	N	4	S
2728	04/04/93	113514	U	Methoxychlor	0.5	U	N	3	S
3043	09/13/89	66586	U	Methoxychlor	0.5	U	N	4	S
2043	09/13/89	66585	U	Toxaphene	20	U	N	4	S
2043	09/13/89	66587	U	Toxaphene	5	U	N	4	S
2043	09/14/89	66588	U	Toxaphene	1	U	N	4	S
2728	04/04/93	113514	U	Toxaphene	5	U	N	3	S
3043	09/13/89	66586	U	Toxaphene	1	U	N	4	S
2043	09/14/89	66588	U	1,2,4,5-Tetrachlorobenzene	10	U	N	4	S
2043	09/13/89	66585	U	1,2,4-Trichlorobenzene	10	U	N	4	S
2043	09/13/89	66587	U	1,2,4-Trichlorobenzene	10	U	N	4	S
2043	09/14/89	66588	U	1,2,4-Trichlorobenzene	10	U	N	4	S
2728	04/04/93	113514	U	1,2,4-Trichlorobenzene	10	UJ	N	3	S
3043	09/13/89	66586	U	1,2,4-Trichlorobenzene	10	U	N	4	S
2043	09/13/89	66585	U	1,2-Dichlorobenzene	10	U	N	4	S
2043	09/13/89	66587	U	1,2-Dichlorobenzene	10	U	N	4	S
2043	09/14/89	66588	U	1,2-Dichlorobenzene	10	U	N	4	S
2728	04/04/93	113514	U	1,2-Dichlorobenzene	10	UJ	N	3	S
3043	09/13/89	66586	U	1,2-Dichlorobenzene	10	U	N	4	S
2043	09/14/89	66588	U	1,3,5-Trinitrobenzene	10	U	N	4	S
2043	09/13/89	66585	U	1,3-Dichlorobenzene	10	U	N	4	S
2043	09/13/89	66587	U	1,3-Dichlorobenzene	10	U	N	4	S
2043	09/14/89	66588	U	1,3-Dichlorobenzene	10	U	N	4	S
2728	04/04/93	113514	U	1,3-Dichlorobenzene	10	UJ	N	3	S
3043	09/13/89	66586	U	1,3-Dichlorobenzene	10	U	N	4	S
2043	09/14/89	66588	U	1,3-Dinitrobenzene	10	U	N	4	S
2043	09/13/89	66585	U	1,4-Dichlorobenzene	10	U	N	4	S
2043	09/13/89	66587	U	1,4-Dichlorobenzene	10	U	N	4	S
2043	09/14/89	66588	U	1,4-Dichlorobenzene	10	U	N	4	S
2728	04/04/93	113514	U	1,4-Dichlorobenzene	10	UJ	N	3	S
3043	09/13/89	66586	U	1,4-Dichlorobenzene	10	U	N	4	S
2043	09/14/89	66588	U	1,4-Naphthoquinone	10	U	N	4	S
2043	09/14/89	66588	U	1-Naphthylamine	120	UJ	N	4	S
2043	09/14/89	66588	U	2,3,4,6-Tetrachlorophenol	10	U	N	4	S
2043	09/13/89	66585	U	2,4,5-Trichlorophenol	50	U	N	4	S
2043	09/13/89	66587	U	2,4,5-Trichlorophenol	50	U	N	4	S
2043	09/14/89	66588	U	2,4,5-Trichlorophenol	50	U	N	4	S
2728	04/04/93	113514	U	2,4,5-Trichlorophenol	25	UJ	N	3	S
3043	09/13/89	66586	U	2,4,5-Trichlorophenol	50	U	N	4	S
2043	09/13/89	66585	U	2,4,6-Trichlorophenol	10	U	N	4	S
2043	09/13/89	66587	U	2,4,6-Trichlorophenol	10	U	N	4	S
2043	09/14/89	66588	U	2,4,6-Trichlorophenol	10	U	N	4	S
2728	04/04/93	113514	U	2,4,6-Trichlorophenol	10	UJ	N	3	S
3043	09/13/89	66586	U	2,4,6-Trichlorophenol	10	U	N	4	S
2043	09/13/89	66585	U	2,4-Dichlorophenol	10	U	N	4	S
2043	09/13/89	66587	U	2,4-Dichlorophenol	10	U	N	4	S
2043	09/14/89	66588	U	2,4-Dichlorophenol	10	U	N	4	S
2728	04/04/93	113514	U	2,4-Dichlorophenol	10	UJ	N	3	S

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Table E-14 (Continued)
Validated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
3043	09/13/89	66586	U	2,4-Dichlorophenol	10	U	N	4	S
2043	09/13/89	66585	U	2,4-Dimethylphenol	10	U	N	4	S
2043	09/13/89	66587	U	2,4-Dimethylphenol	10	U	N	4	S
2043	09/14/89	66588	U	2,4-Dimethylphenol	10	U	N	4	S
2728	04/04/93	113514	U	2,4-Dimethylphenol	10	UJ	N	3	S
3043	09/13/89	66586	U	2,4-Dimethylphenol	10	U	N	4	S
2043	09/13/89	66585	U	2,4-Dinitrophenol	50	U	N	4	S
2043	09/13/89	66587	U	2,4-Dinitrophenol	50	U	N	4	S
2043	09/14/89	66588	U	2,4-Dinitrophenol	50	U	N	4	S
3043	09/13/89	66586	U	2,4-Dinitrophenol	50	U	N	4	S
2043	09/13/89	66585	U	2,4-Dinitrotoluene	10	U	N	4	S
2043	09/13/89	66587	U	2,4-Dinitrotoluene	10	U	N	4	S
2043	09/14/89	66588	U	2,4-Dinitrotoluene	10	U	N	4	S
2728	04/04/93	113514	U	2,4-Dinitrotoluene	10	UJ	N	3	S
3043	09/13/89	66586	U	2,4-Dinitrotoluene	10	U	N	4	S
2043	09/14/89	66588	U	2,6-Dichlorophenol	10	U	N	4	S
2043	09/13/89	66585	U	2,6-Dinitrotoluene	10	U	N	4	S
2043	09/13/89	66587	U	2,6-Dinitrotoluene	10	U	N	4	S
2043	09/14/89	66588	U	2,6-Dinitrotoluene	10	U	N	4	S
2728	04/04/93	113514	U	2,6-Dinitrotoluene	10	UJ	N	3	S
3043	09/13/89	66586	U	2,6-Dinitrotoluene	10	U	N	4	S
2043	09/14/89	66588	U	2-Acetylaminofluorene	10	U	N	4	S
2728	04/04/93	113514	U	2-Benzyl-4-chlorophenol	10	UJ	N	3	S
2043	09/13/89	66585	U	2-Chloronaphthalene	10	U	N	4	S
2043	09/13/89	66587	U	2-Chloronaphthalene	10	U	N	4	S
2043	09/14/89	66588	U	2-Chloronaphthalene	10	U	N	4	S
2728	04/04/93	113514	U	2-Chloronaphthalene	10	UJ	N	3	S
3043	09/13/89	66586	U	2-Chloronaphthalene	10	U	N	4	S
2043	09/13/89	66585	U	2-Chlorophenol	10	U	N	4	S
2043	09/13/89	66587	U	2-Chlorophenol	10	U	N	4	S
2043	09/14/89	66588	U	2-Chlorophenol	10	U	N	4	S
2728	04/04/93	113514	U	2-Chlorophenol	10	UJ	N	3	S
3043	09/13/89	66586	U	2-Chlorophenol	10	U	N	4	S
2043	09/13/89	66585	U	2-Methylnaphthalene	10	U	N	4	S
2043	09/13/89	66587	U	2-Methylnaphthalene	10	U	N	4	S
2043	09/14/89	66588	U	2-Methylnaphthalene	10	U	N	4	S
2728	04/04/93	113514	U	2-Methylnaphthalene	10	UJ	N	3	S
3043	09/13/89	66586	U	2-Methylnaphthalene	10	U	N	4	S
2043	09/13/89	66585	U	2-Methylphenol	10	U	N	4	S
2043	09/13/89	66587	U	2-Methylphenol	10	U	N	4	S
2043	09/14/89	66588	U	2-Methylphenol	10	U	N	4	S
2728	04/04/93	113514	U	2-Methylphenol	10	UJ	N	3	S
3043	09/13/89	66586	U	2-Methylphenol	10	U	N	4	S
2043	09/14/89	66588	U	2-Naphthylamine	170	UJ	N	4	S
2043	09/13/89	66585	U	2-Nitroaniline	50	U	N	4	S
2043	09/13/89	66587	U	2-Nitroaniline	50	U	N	4	S
2043	09/14/89	66588	U	2-Nitroaniline	50	U	N	4	S
2728	04/04/93	113514	U	2-Nitroaniline	25	UJ	N	3	S
3043	09/13/89	66586	U	2-Nitroaniline	50	U	N	4	S
2043	09/13/89	66585	U	2-Nitrophenol	10	U	N	4	S

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Table E-14 (Continued)
Validated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well	Sample		Lab		Validated		QA		
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type	ASL	Area
2043	09/13/89	66587	U	2-Nitrophenol	10	U	N	4	S
2043	09/14/89	66588	U	2-Nitrophenol	10	U	N	4	S
2728	04/04/93	113514	U	2-Nitrophenol	10	UJ	N	3	S
3043	09/13/89	66586	U	2-Nitrophenol	10	U	N	4	S
2043	09/14/89	66588	U	2-Picoline	70	U	N	4	S
2043	09/13/89	66585	U	3,3'-Dichlorobenzidine	20	U	N	4	S
2043	09/13/89	66587	U	3,3'-Dichlorobenzidine	20	U	N	4	S
2043	09/14/89	66588	U	3,3'-Dichlorobenzidine	20	U	N	4	S
2728	04/04/93	113514	U	3,3'-Dichlorobenzidine	10	U	N	3	S
3043	09/13/89	66586	U	3,3'-Dichlorobenzidine	20	U	N	4	S
2043	09/14/89	66588	U	3,3'-Dimethylbenzidine	80	U	N	4	S
2043	09/14/89	66588	U	3-Methylcholanthrene	30	U	N	4	S
2043	09/14/89	66588	U	3-Methylphenol	10	U	N	4	S
2043	09/13/89	66585	U	3-Nitroaniline	50	UJ	N	4	S
2043	09/13/89	66587	U	3-Nitroaniline	50	UJ	N	4	S
2043	09/14/89	66588	U	3-Nitroaniline	50	UJ	N	4	S
2728	04/04/93	113514	U	3-Nitroaniline	25	UJ	N	3	S
3043	09/13/89	66586	U	3-Nitroaniline	50	UJ	N	4	S
2043	09/13/89	66585	U	4,6-Dinitro-2-methylphenol	50	U	N	4	S
2043	09/13/89	66587	U	4,6-Dinitro-2-methylphenol	50	U	N	4	S
2043	09/14/89	66588	U	4,6-Dinitro-2-methylphenol	50	U	N	4	S
3043	09/13/89	66586	U	4,6-Dinitro-2-methylphenol	50	U	N	4	S
2043	09/14/89	66588	U	4-Aminobiphenyl	50	UJ	N	4	S
2043	09/13/89	66585	U	4-Bromophenyl phenyl ether	10	U	N	4	S
2043	09/13/89	66587	U	4-Bromophenyl phenyl ether	10	U	N	4	S
2043	09/14/89	66588	U	4-Bromophenyl phenyl ether	10	U	N	4	S
2728	04/04/93	113514	U	4-Bromophenyl phenyl ether	10	UJ	N	3	S
3043	09/13/89	66586	U	4-Bromophenyl phenyl ether	10	U	N	4	S
2043	09/13/89	66585	U	4-Chloro-3-methylphenol	10	U	N	4	S
2043	09/13/89	66587	U	4-Chloro-3-methylphenol	10	U	N	4	S
2043	09/14/89	66588	U	4-Chloro-3-methylphenol	10	U	N	4	S
2728	04/04/93	113514	U	4-Chloro-3-methylphenol	10	UJ	N	3	S
3043	09/13/89	66586	U	4-Chloro-3-methylphenol	10	U	N	4	S
2043	09/13/89	66585	U	4-Chlorophenylphenyl ether	10	U	N	4	S
2043	09/13/89	66587	U	4-Chlorophenylphenyl ether	10	U	N	4	S
2043	09/14/89	66588	U	4-Chlorophenylphenyl ether	10	U	N	4	S
2728	04/04/93	113514	U	4-Chlorophenylphenyl ether	10	UJ	N	3	S
3043	09/13/89	66586	U	4-Chlorophenylphenyl ether	10	U	N	4	S
2043	09/13/89	66585	U	4-Methylphenol	10	U	N	4	S
2043	09/13/89	66587	U	4-Methylphenol	10	U	N	4	S
2043	09/14/89	66588	U	4-Methylphenol	10	U	N	4	S
2728	04/04/93	113514	U	4-Methylphenol	10	UJ	N	3	S
3043	09/13/89	66586	U	4-Methylphenol	10	U	N	4	S
2043	09/13/89	66585	U	4-Nitroaniline	50	UJ	N	4	S
2043	09/13/89	66587	U	4-Nitroaniline	50	UJ	N	4	S
2043	09/14/89	66588	U	4-Nitroaniline	50	UJ	N	4	S
2728	04/04/93	113514	U	4-Nitroaniline	25	UJ	N	3	S
3043	09/13/89	66586	U	4-Nitroaniline	50	UJ	N	4	S
2043	09/13/89	66585	U	4-Nitrophenol	50	U	N	4	S
2043	09/13/89	66587	U	4-Nitrophenol	50	U	N	4	S

Table E-14 (Continued)
Validated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
2043	09/14/89	66588	U	4-Nitrophenol	50	U	N	4	S
2728	04/04/93	113514	U	4-Nitrophenol	25	UJ	N	3	S
3043	09/13/89	66586	U	4-Nitrophenol	50	U	N	4	S
2043	09/14/89	66588	U	4-Nitroquinoline-1-oxide	10	UJ	N	4	S
2043	09/14/89	66588	U	5-Nitro-o-toluidine	20	U	N	4	S
2043	09/14/89	66588	U	7,12-Dimethylbenz(a)anthracene	20	U	N	4	S
2043	09/14/89	66588	U	a,a-Dimethylphenethylamine	10	U	N	4	S
2043	09/13/89	66585	U	Acenaphthene	10	U	N	4	S
2043	09/13/89	66587	U	Acenaphthene	10	U	N	4	S
2043	09/14/89	66588	U	Acenaphthene	10	U	N	4	S
2728	04/04/93	113514	U	Acenaphthene	10	UJ	N	3	S
3043	09/13/89	66586	U	Acenaphthene	10	U	N	4	S
2043	09/13/89	66585	U	Acenaphthylene	10	U	N	4	S
2043	09/13/89	66587	U	Acenaphthylene	10	U	N	4	S
2043	09/14/89	66588	U	Acenaphthylene	10	U	N	4	S
2728	04/04/93	113514	U	Acenaphthylene	10	UJ	N	3	S
3043	09/13/89	66586	U	Acenaphthylene	10	U	N	4	S
2043	09/14/89	66588	U	Acetophenone	10	U	N	4	S
2043	09/14/89	66588	U	Aniline	10	U	N	4	S
2043	09/13/89	66585	U	Anthracene	10	U	N	4	S
2043	09/13/89	66587	U	Anthracene	10	U	N	4	S
2043	09/14/89	66588	U	Anthracene	10	U	N	4	S
2728	04/04/93	113514	U	Anthracene	10	UJ	N	3	S
3043	09/13/89	66586	U	Anthracene	10	U	N	4	S
2043	09/14/89	66588	U	Aramite	10	U	N	4	S
2043	09/13/89	66585	U	Benzo(a)anthracene	10	U	N	4	S
2043	09/13/89	66587	U	Benzo(a)anthracene	10	U	N	4	S
2043	09/14/89	66588	U	Benzo(a)anthracene	10	U	N	4	S
2728	04/04/93	113514	U	Benzo(a)anthracene	10	U	N	3	S
3043	09/13/89	66586	U	Benzo(a)anthracene	10	U	N	4	S
2043	09/13/89	66585	U	Benzo(a)pyrene	10	U	N	4	S
2043	09/13/89	66587	U	Benzo(a)pyrene	10	U	N	4	S
2043	09/14/89	66588	U	Benzo(a)pyrene	10	U	N	4	S
2728	04/04/93	113514	U	Benzo(a)pyrene	10	UJ	N	3	S
3043	09/13/89	66586	U	Benzo(a)pyrene	10	U	N	4	S
2043	09/13/89	66585	U	Benzo(b)fluoranthene	10	U	N	4	S
2043	09/13/89	66587	U	Benzo(b)fluoranthene	10	U	N	4	S
2043	09/14/89	66588	U	Benzo(b)fluoranthene	10	U	N	4	S
2728	04/04/93	113514	U	Benzo(b)fluoranthene	10	UJ	N	3	S
3043	09/13/89	66586	U	Benzo(b)fluoranthene	10	U	N	4	S
2043	09/13/89	66585	U	Benzo(g,h,i)perylene	10	U	N	4	S
2043	09/13/89	66587	U	Benzo(g,h,i)perylene	10	U	N	4	S
2043	09/14/89	66588	U	Benzo(g,h,i)perylene	10	U	N	4	S
2728	04/04/93	113514	U	Benzo(g,h,i)perylene	10	UJ	N	3	S
3043	09/13/89	66586	U	Benzo(g,h,i)perylene	10	U	N	4	S
2043	09/13/89	66585	U	Benzo(k)fluoranthene	10	U	N	4	S
2043	09/13/89	66587	U	Benzo(k)fluoranthene	10	U	N	4	S
2043	09/14/89	66588	U	Benzo(k)fluoranthene	10	U	N	4	S
2728	04/04/93	113514	U	Benzo(k)fluoranthene	10	UJ	N	3	S
3043	09/13/89	66586	U	Benzo(k)fluoranthene	10	U	N	4	S

Table E-14 (Continued)
Validated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
2043	09/13/89	66585	U	Benzoic acid	50	U	N	4	S
2043	09/13/89	66587	U	Benzoic acid	50	U	N	4	S
2043	09/14/89	66588	U	Benzoic acid	50	U	N	4	S
2728	04/04/93	113514	U	Benzoic acid	50	UJ	N	3	S
3043	09/13/89	66586	U	Benzoic acid	50	U	N	4	S
2043	09/13/89	66585	U	Benzyl alcohol	10	U	N	4	S
2043	09/13/89	66587	U	Benzyl alcohol	10	U	N	4	S
2043	09/14/89	66588	U	Benzyl alcohol	10	U	N	4	S
2728	04/04/93	113514	U	Benzyl alcohol	10	UJ	N	3	S
3043	09/13/89	66586	U	Benzyl alcohol	10	U	N	4	S
2043	09/13/89	66585	U	bis(2-Chloroethoxy)methane	10	U	N	4	S
2043	09/13/89	66587	U	bis(2-Chloroethoxy)methane	10	U	N	4	S
2043	09/14/89	66588	U	bis(2-Chloroethoxy)methane	10	U	N	4	S
2728	04/04/93	113514	U	bis(2-Chloroethoxy)methane	10	UJ	N	3	S
3043	09/13/89	66586	U	bis(2-Chloroethoxy)methane	10	U	N	4	S
2043	09/13/89	66585	U	bis(2-Chloroethyl)ether	10	U	N	4	S
2043	09/13/89	66587	U	bis(2-Chloroethyl)ether	10	U	N	4	S
2043	09/14/89	66588	U	bis(2-Chloroethyl)ether	10	U	N	4	S
2728	04/04/93	113514	U	bis(2-Chloroethyl)ether	10	UJ	N	3	S
3043	09/13/89	66586	U	bis(2-Chloroethyl)ether	10	U	N	4	S
2043	09/13/89	66585	U	bis(2-Chloroisopropyl) ether	10	U	N	4	S
2043	09/13/89	66587	U	bis(2-Chloroisopropyl) ether	10	U	N	4	S
2043	09/14/89	66588	U	bis(2-Chloroisopropyl) ether	10	U	N	4	S
2728	04/04/93	113514	U	bis(2-Chloroisopropyl) ether	10	UJ	N	3	S
3043	09/13/89	66586	U	bis(2-Chloroisopropyl) ether	10	U	N	4	S
2043	09/13/89	66585	J	bis(2-Ethylhexyl)phthalate	2	J	N	4	S
2043	09/13/89	66587	U	bis(2-Ethylhexyl)phthalate	3	U	N	4	S
2043	09/14/89	66588	U	bis(2-Ethylhexyl)phthalate	10	U	N	4	S
2728	04/04/93	113514	U	bis(2-Ethylhexyl)phthalate	10	U	N	3	S
3043	09/13/89	66586		bis(2-Ethylhexyl)phthalate	15	-	N	4	S
2043	09/13/89	66585	U	Butyl benzyl phthalate	10	U	N	4	S
2043	09/13/89	66587	U	Butyl benzyl phthalate	10	U	N	4	S
2043	09/14/89	66588	U	Butyl benzyl phthalate	10	U	N	4	S
2728	04/04/93	113514	J	Butyl benzyl phthalate	4	J	N	3	S
3043	09/13/89	66586	U	Butyl benzyl phthalate	10	U	N	4	S
2728	04/04/93	113514	U	Carbazole	10	UJ	N	3	S
2043	09/13/89	66585	U	Chrysene	10	U	N	4	S
2043	09/13/89	66587	U	Chrysene	10	U	N	4	S
2043	09/14/89	66588	U	Chrysene	10	U	N	4	S
2728	04/04/93	113514	U	Chrysene	10	U	N	3	S
3043	09/13/89	66586	U	Chrysene	10	U	N	4	S
2043	09/13/89	66585	U	Di-n-butyl phthalate	10	U	N	4	S
2043	09/13/89	66587	U	Di-n-butyl phthalate	10	U	N	4	S
2043	09/14/89	66588	U	Di-n-butyl phthalate	10	U	N	4	S
2728	04/04/93	113514	BJ	Di-n-butyl phthalate	10	U	N	3	S
3043	09/13/89	66586		Di-n-butyl phthalate	10	-	N	4	S
2043	09/13/89	66585	U	Di-n-octyl phthalate	10	U	N	4	S
2043	09/13/89	66587	U	Di-n-octyl phthalate	10	U	N	4	S
2043	09/14/89	66588	U	Di-n-octyl phthalate	10	U	N	4	S
2728	04/04/93	113514	U	Di-n-octyl phthalate	10	UJ	N	3	S

Table E-14 (Continued)
Validated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
3043	09/13/89	66586	U	Di-n-octyl phthalate	10	U	N	4	S
2043	09/14/89	66588	U	Diallate	10	UJ	N	4	S
2043	09/13/89	66585	U	Dibenzo(a,h)anthracene	10	U	N	4	S
2043	09/13/89	66587	U	Dibenzo(a,h)anthracene	10	U	N	4	S
2043	09/14/89	66588	U	Dibenzo(a,h)anthracene	10	U	N	4	S
2728	04/04/93	113514	U	Dibenzo(a,h)anthracene	10	UJ	N	3	S
3043	09/13/89	66586	U	Dibenzo(a,h)anthracene	10	U	N	4	S
2043	09/13/89	66585	U	Dibenzofuran	10	U	N	4	S
2043	09/13/89	66587	U	Dibenzofuran	10	U	N	4	S
2043	09/14/89	66588	U	Dibenzofuran	10	U	N	4	S
2728	04/04/93	113514	U	Dibenzofuran	10	UJ	N	3	S
3043	09/13/89	66586	U	Dibenzofuran	10	U	N	4	S
2043	09/13/89	66585	U	Diethyl phthalate	10	U	N	4	S
2043	09/13/89	66587	U	Diethyl phthalate	10	U	N	4	S
2043	09/14/89	66588	U	Diethyl phthalate	10	U	N	4	S
2728	04/04/93	113514	U	Diethyl phthalate	10	UJ	N	3	S
3043	09/13/89	66586	U	Diethyl phthalate	10	U	N	4	S
2043	09/13/89	66585	U	Dimethyl phthalate	10	U	N	4	S
2043	09/13/89	66587	U	Dimethyl phthalate	10	U	N	4	S
2043	09/14/89	66588	U	Dimethyl phthalate	10	U	N	4	S
2728	04/04/93	113514	U	Dimethyl phthalate	10	UJ	N	3	S
3043	09/13/89	66586	U	Dimethyl phthalate	10	U	N	4	S
2043	09/14/89	66588	U	Diphenylamine	10	U	N	4	S
2043	09/14/89	66588	U	Ethyl methanesulfonate	10	U	N	4	S
2043	09/13/89	66585	U	Fluoranthene	10	U	N	4	S
2043	09/13/89	66587	U	Fluoranthene	10	U	N	4	S
2043	09/14/89	66588	U	Fluoranthene	10	U	N	4	S
2728	04/04/93	113514	U	Fluoranthene	10	UJ	N	3	S
3043	09/13/89	66586	U	Fluoranthene	10	U	N	4	S
2043	09/13/89	66585	U	Fluorene	10	U	N	4	S
2043	09/13/89	66587	U	Fluorene	10	U	N	4	S
2043	09/14/89	66588	U	Fluorene	10	U	N	4	S
2728	04/04/93	113514	U	Fluorene	10	UJ	N	3	S
3043	09/13/89	66586	U	Fluorene	10	U	N	4	S
2043	09/13/89	66585	U	Hexachlorobenzene	10	U	N	4	S
2043	09/13/89	66587	U	Hexachlorobenzene	10	U	N	4	S
2043	09/14/89	66588	U	Hexachlorobenzene	10	U	N	4	S
2728	04/04/93	113514	U	Hexachlorobenzene	10	UJ	N	3	S
3043	09/13/89	66586	U	Hexachlorobenzene	10	U	N	4	S
2043	09/13/89	66585	U	Hexachlorobutadiene	10	U	N	4	S
2043	09/13/89	66587	U	Hexachlorobutadiene	10	U	N	4	S
2043	09/14/89	66588	U	Hexachlorobutadiene	10	U	N	4	S
2728	04/04/93	113514	U	Hexachlorobutadiene	10	UJ	N	3	S
3043	09/13/89	66586	U	Hexachlorobutadiene	10	U	N	4	S
2043	09/13/89	66585	U	Hexachlorocyclopentadiene	10	U	N	4	S
2043	09/13/89	66587	U	Hexachlorocyclopentadiene	10	U	N	4	S
2043	09/14/89	66588	U	Hexachlorocyclopentadiene	10	U	N	4	S
2728	04/04/93	113514	U	Hexachlorocyclopentadiene	10	UJ	N	3	S
3043	09/13/89	66586	U	Hexachlorocyclopentadiene	10	U	N	4	S
2043	09/13/89	66585	U	Hexachloroethane	10	U	N	4	S

Table E-14 (Continued)
Validated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
2043	09/13/89	66587	U	Hexachloroethane	10	U	N	4	S
2043	09/14/89	66588	U	Hexachloroethane	10	U	N	4	S
2728	04/04/93	113514	U	Hexachloroethane	10	UJ	N	3	S
3043	09/13/89	66586	U	Hexachloroethane	10	U	N	4	S
2043	09/14/89	66588	U	Hexachloropropene	20	U	N	4	S
2043	09/13/89	66585	U	Indeno(1,2,3-cd)pyrene	10	U	N	4	S
2043	09/13/89	66587	U	Indeno(1,2,3-cd)pyrene	10	U	N	4	S
2043	09/14/89	66588	U	Indeno(1,2,3-cd)pyrene	10	U	N	4	S
2728	04/04/93	113514	U	Indeno(1,2,3-cd)pyrene	10	UJ	N	3	S
3043	09/13/89	66586	U	Indeno(1,2,3-cd)pyrene	10	U	N	4	S
2043	09/13/89	66585	U	Isophorone	10	U	N	4	S
2043	09/13/89	66587	U	Isophorone	10	U	N	4	S
2043	09/14/89	66588	U	Isophorone	10	U	N	4	S
2728	04/04/93	113514	U	Isophorone	10	UJ	N	3	S
3043	09/13/89	66586	U	Isophorone	10	U	N	4	S
2043	09/14/89	66588	U	Isosafrole	10	U	N	4	S
2043	09/14/89	66588	U	Methapyrilene	40	U	N	4	S
2043	09/14/89	66588	U	Methyl methanesulfonate	10	U	N	4	S
2043	09/13/89	66585	U	N-Nitroso-di-n-propylamine	10	U	N	4	S
2043	09/13/89	66587	U	N-Nitroso-di-n-propylamine	10	U	N	4	S
2043	09/14/89	66588	U	N-Nitroso-di-n-propylamine	10	U	N	4	S
2728	04/04/93	113514	U	N-Nitroso-di-n-propylamine	10	UJ	N	3	S
3043	09/13/89	66586	U	N-Nitroso-di-n-propylamine	10	U	N	4	S
2043	09/14/89	66588	U	N-Nitrosodi-n-butylamine	20	U	N	4	S
2043	09/14/89	66588	U	N-Nitrosodiethylamine	10	U	N	4	S
2043	09/14/89	66588	U	N-Nitrosodimethylamine	10	U	N	4	S
2728	04/04/93	113514	U	N-Nitrosodimethylamine	10	UJ	N	3	S
2043	09/13/89	66585	BJ	N-Nitrosodiphenylamine	10	U	N	4	S
2043	09/13/89	66587	U	N-Nitrosodiphenylamine	10	U	N	4	S
2043	09/14/89	66588	U	N-Nitrosodiphenylamine	10	U	N	4	S
2728	04/04/93	113514	U	N-Nitrosodiphenylamine	10	UJ	N	3	S
3043	09/13/89	66586	U	N-Nitrosodiphenylamine	10	U	N	4	S
2043	09/14/89	66588	U	N-Nitrosomethylethylamine	10	U	N	4	S
2043	09/14/89	66588	U	N-Nitrosomorpholine	10	U	N	4	S
2043	09/14/89	66588	U	N-Nitrosopiperidine	10	U	N	4	S
2043	09/14/89	66588	U	N-Nitrosopyrrolidine	10	U	N	4	S
2043	09/13/89	66585	U	Naphthalene	10	U	N	4	S
2043	09/13/89	66587	U	Naphthalene	10	U	N	4	S
2043	09/14/89	66588	U	Naphthalene	10	U	N	4	S
2728	04/04/93	113514	U	Naphthalene	10	UJ	N	3	S
3043	09/13/89	66586	U	Naphthalene	10	U	N	4	S
2043	09/13/89	66585	U	Nitrobenzene	10	U	N	4	S
2043	09/13/89	66587	U	Nitrobenzene	10	U	N	4	S
2043	09/14/89	66588	U	Nitrobenzene	10	U	N	4	S
2728	04/04/93	113514	U	Nitrobenzene	10	UJ	N	3	S
3043	09/13/89	66586	U	Nitrobenzene	10	U	N	4	S
2043	09/14/89	66588	U	O,O,O-Triethylphosphorothioate	10	U	N	4	S
2043	09/14/89	66588	U	o-Toluidine	10	UJ	N	4	S
2043	09/13/89	66585	U	p-Chloroaniline	10	UJ	N	4	S
2043	09/13/89	66587	U	p-Chloroaniline	10	UJ	N	4	S

Table E-14 (Continued)
Validated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
2043	09/14/89	66588	U	p-Chloroaniline	10	UJ	N	4	S
2728	04/04/93	113514	U	p-Chloroaniline	10	UJ	N	3	S
3043	09/13/89	66586	U	p-Chloroaniline	10	UJ	N	4	S
2043	09/14/89	66588	U	p-Dimethylaminoazobenzene	30	U	N	4	S
2043	09/14/89	66588	U	p-Phenylenediamine	50	UJ	N	4	S
2043	09/14/89	66588	U	Pentachlorobenzene	20	U	N	4	S
2043	09/14/89	66588	U	Pentachloroethane	20	U	N	4	S
2043	09/14/89	66588	U	Pentachloronitrobenzene	20	U	N	4	S
2043	09/13/89	66585	U	Pentachlorophenol	50	U	N	4	S
2043	09/13/89	66587	U	Pentachlorophenol	50	U	N	4	S
2043	09/14/89	66588	U	Pentachlorophenol	50	U	N	4	S
2728	04/04/93	113514	U	Pentachlorophenol	25	UJ	N	3	S
3043	09/13/89	66586	U	Pentachlorophenol	50	U	N	4	S
2043	09/14/89	66588	U	Phenacetin	10	U	N	4	S
2043	09/13/89	66585	U	Phenanthrene	10	U	N	4	S
2043	09/13/89	66587	U	Phenanthrene	10	U	N	4	S
2043	09/14/89	66588	U	Phenanthrene	10	U	N	4	S
2728	04/04/93	113514	U	Phenanthrene	10	UJ	N	3	S
3043	09/13/89	66586	U	Phenanthrene	10	U	N	4	S
2043	09/13/89	66585	J	Phenol	2	J	N	4	S
2043	09/13/89	66587	U	Phenol	10	U	N	4	S
2043	09/14/89	66588	U	Phenol	10	U	N	4	S
2728	04/04/93	113514	U	Phenol	10	UJ	N	3	S
3043	09/13/89	66586	U	Phenol	10	U	N	4	S
2043	09/14/89	66588	U	Pronamide	30	U	N	4	S
2043	09/13/89	66585	U	Pyrene	10	U	N	4	S
2043	09/13/89	66587	U	Pyrene	10	U	N	4	S
2043	09/14/89	66588	U	Pyrene	10	U	N	4	S
2728	04/04/93	113514	U	Pyrene	10	U	N	3	S
3043	09/13/89	66586	U	Pyrene	10	U	N	4	S
2043	09/14/89	66588	U	Safrole	10	U	N	4	S
2043	09/13/89	66585	U	Sulfotep	1	U	N	4	S
2043	09/13/89	66587	U	Sulfotep	1	U	N	4	S
2043	09/14/89	66588	U	Sulfotep	1000	U	N	4	S
3043	09/13/89	66586	U	Sulfotep	1	U	N	4	S
3043	09/14/89	66589	U	Sulfotep	1000	U	N	4	S
2728	04/04/93	113514	U	Tributyl phosphate	10	UJ	N	3	S
2043	08/30/89	66572	U	1,1,1,2-Tetrachloroethane	5	U	N	4	S
2043	08/30/89	66577	U	1,1,1,2-Tetrachloroethane	5	U	D	4	S
3043	08/30/89	66573	U	1,1,1,2-Tetrachloroethane	5	U	N	4	S
2043	08/30/89	66572	U	1,1,1-Trichloroethane	5	UJ	N	4	S
2043	08/30/89	66577	U	1,1,1-Trichloroethane	5	UJ	D	4	S
2043	04/07/93	GW930407-12	U	1,1,1-Trichloroethane	10	U	N	3	S
2050	05/20/93	GW930520-8	U	1,1,1-Trichloroethane	10	U	N	3	S
2066	04/07/93	GW930407-14	U	1,1,1-Trichloroethane	10	U	N	3	S
2096	05/06/93	GW930506-5	U	1,1,1-Trichloroethane	10	U	N	3	R
2098	05/20/93	GW930520-9	U	1,1,1-Trichloroethane	10	U	N	3	D
2104	05/13/93	GW930513-14	U	1,1,1-Trichloroethane	10	U	N	3	R
2104	05/13/93	GW930513-18	U	1,1,1-Trichloroethane	10	U	N	3	R
2728	04/04/93	113514	U	1,1,1-Trichloroethane	10	U	N	3	S

Table E-14 (Continued)
Validated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
2728	05/24/93	GW930524-3	U	1,1,1-Trichloroethane	10	U	N	3	S
3024	04/12/93	GW930412-8	U	1,1,1-Trichloroethane	10	U	N	3	S
3043	06/13/89	66439	U	1,1,1-Trichloroethane	5	U	N	3	S
3043	08/30/89	66573	U	1,1,1-Trichloroethane	5	UJ	N	4	S
3043	04/07/93	GW930407-13	U	1,1,1-Trichloroethane	10	U	N	3	S
3096	05/07/93	GW930507-1	U	1,1,1-Trichloroethane	10	U	N	3	R
3098	05/20/93	GW930520-10	U	1,1,1-Trichloroethane	10	U	N	3	D
4011	10/05/90	4345	U	1,1,1-Trichloroethane	5	UJ	N	3	S
4011	02/07/91	4382	U	1,1,1-Trichloroethane	5	U	N	3	S
4011	04/08/93	GW930408-3	U	1,1,1-Trichloroethane	10	U	N	3	S
4011	04/08/93	GW930408-2	U	1,1,1-Trichloroethane	10	U	D	3	S
4096	05/06/93	GW930506-7	U	1,1,1-Trichloroethane	10	U	N	3	R
2043	08/30/89	66572	U	1,1,2,2-Tetrachloroethane	5	U	N	4	S
2043	08/30/89	66577	U	1,1,2,2-Tetrachloroethane	5	U	D	4	S
2043	04/07/93	GW930407-12	U	1,1,2,2-Tetrachloroethane	10	U	N	3	S
2050	05/20/93	GW930520-8	U	1,1,2,2-Tetrachloroethane	10	U	N	3	S
2066	04/07/93	GW930407-14	U	1,1,2,2-Tetrachloroethane	10	U	N	3	S
2096	05/06/93	GW930506-5	U	1,1,2,2-Tetrachloroethane	10	U	N	3	R
2098	05/20/93	GW930520-9	U	1,1,2,2-Tetrachloroethane	10	U	N	3	D
2104	05/13/93	GW930513-14	U	1,1,2,2-Tetrachloroethane	10	UJ	N	3	R
2104	05/13/93	GW930513-18	U	1,1,2,2-Tetrachloroethane	10	UJ	N	3	R
2728	04/04/93	113514	U	1,1,2,2-Tetrachloroethane	10	U	N	3	S
2728	05/24/93	GW930524-3	U	1,1,2,2-Tetrachloroethane	10	U	N	3	S
3024	04/12/93	GW930412-8	U	1,1,2,2-Tetrachloroethane	10	U	N	3	S
3043	06/13/89	66439	U	1,1,2,2-Tetrachloroethane	5	U	N	3	S
3043	08/30/89	66573	U	1,1,2,2-Tetrachloroethane	5	U	N	4	S
3043	04/07/93	GW930407-13	U	1,1,2,2-Tetrachloroethane	10	U	N	3	S
3096	05/07/93	GW930507-1	U	1,1,2,2-Tetrachloroethane	10	U	N	3	R
3098	05/20/93	GW930520-10	U	1,1,2,2-Tetrachloroethane	10	U	N	3	D
4011	10/05/90	4345	U	1,1,2,2-Tetrachloroethane	5	UJ	N	3	S
4011	02/07/91	4382	U	1,1,2,2-Tetrachloroethane	5	U	N	3	S
4011	04/08/93	GW930408-3	U	1,1,2,2-Tetrachloroethane	10	U	N	3	S
4011	04/08/93	GW930408-2	U	1,1,2,2-Tetrachloroethane	10	U	D	3	S
4096	05/06/93	GW930506-7	U	1,1,2,2-Tetrachloroethane	10	U	N	3	R
2043	08/30/89	66572	U	1,1,2-Trichloroethane	5	U	N	4	S
2043	08/30/89	66577	U	1,1,2-Trichloroethane	5	U	D	4	S
2043	04/07/93	GW930407-12	U	1,1,2-Trichloroethane	10	U	N	3	S
2050	05/20/93	GW930520-8	U	1,1,2-Trichloroethane	10	U	N	3	S
2066	04/07/93	GW930407-14	U	1,1,2-Trichloroethane	10	U	N	3	S
2096	05/06/93	GW930506-5	U	1,1,2-Trichloroethane	10	U	N	3	R
2098	05/20/93	GW930520-9	U	1,1,2-Trichloroethane	10	U	N	3	D
2104	05/13/93	GW930513-14	U	1,1,2-Trichloroethane	10	U	N	3	R
2104	05/13/93	GW930513-18	U	1,1,2-Trichloroethane	10	U	N	3	R
2728	04/04/93	113514	U	1,1,2-Trichloroethane	10	U	N	3	S
2728	05/24/93	GW930524-3	U	1,1,2-Trichloroethane	10	U	N	3	S
3024	04/12/93	GW930412-8	U	1,1,2-Trichloroethane	10	U	N	3	S
3043	06/13/89	66439	U	1,1,2-Trichloroethane	5	U	N	3	S
3043	08/30/89	66573	U	1,1,2-Trichloroethane	5	U	N	4	S
3043	04/07/93	GW930407-13	U	1,1,2-Trichloroethane	10	U	N	3	S
3096	05/07/93	GW930507-1	U	1,1,2-Trichloroethane	10	U	N	3	R

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Table E-14 (Continued)
Validated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
3098	05/20/93	GW930520-10	U	1,1,2-Trichloroethane	10	U	N	3	D
4011	10/05/90	4345	U	1,1,2-Trichloroethane	5	UJ	N	3	S
4011	02/07/91	4382	U	1,1,2-Trichloroethane	5	U	N	3	S
4011	04/08/93	GW930408-3	U	1,1,2-Trichloroethane	10	U	N	3	S
4011	04/08/93	GW930408-2	U	1,1,2-Trichloroethane	10	U	D	3	S
4096	05/06/93	GW930506-7	U	1,1,2-Trichloroethane	10	U	N	3	R
2043	06/26/89	66438	U	1,1-Dichloroethane	5	U	N	3	S
2043	08/30/89	66572	U	1,1-Dichloroethane	5	UJ	N	4	S
2043	08/30/89	66577	U	1,1-Dichloroethane	5	UJ	D	4	S
2043	04/07/93	GW930407-12	U	1,1-Dichloroethane	10	U	N	3	S
2050	05/20/93	GW930520-8	U	1,1-Dichloroethane	10	U	N	3	S
2066	06/27/89	66436	U	1,1-Dichloroethane	5	U	N	3	S
2066	08/09/89	66498	U	1,1-Dichloroethane	5	U	N	3	S
2066	04/07/93	GW930407-14	U	1,1-Dichloroethane	10	U	N	3	S
2096	05/06/93	GW930506-5	U	1,1-Dichloroethane	10	U	N	3	R
2098	05/20/93	GW930520-9	U	1,1-Dichloroethane	10	U	N	3	D
2104	05/13/93	GW930513-14	U	1,1-Dichloroethane	10	U	N	3	R
2104	05/13/93	GW930513-18	U	1,1-Dichloroethane	10	U	N	3	R
2728	04/04/93	113514	U	1,1-Dichloroethane	10	U	N	3	S
2728	05/24/93	GW930524-3	U	1,1-Dichloroethane	10	U	N	3	S
3024	06/26/89	66460	U	1,1-Dichloroethane	5	U	N	3	S
3024	08/10/89	66515	U	1,1-Dichloroethane	5	U	N	3	S
3024	04/12/93	GW930412-8	U	1,1-Dichloroethane	10	U	N	3	S
3043	06/13/89	66439	U	1,1-Dichloroethane	5	U	N	3	S
3043	08/30/89	66573	U	1,1-Dichloroethane	5	UJ	N	4	S
3043	04/07/93	GW930407-13	U	1,1-Dichloroethane	10	U	N	3	S
3096	05/07/93	GW930507-1	U	1,1-Dichloroethane	10	U	N	3	R
3098	05/20/93	GW930520-10	U	1,1-Dichloroethane	10	U	N	3	D
4011	10/05/90	4345	U	1,1-Dichloroethane	5	UJ	N	3	S
4011	02/07/91	4382	U	1,1-Dichloroethane	5	U	N	3	S
4011	04/08/93	GW930408-3	U	1,1-Dichloroethane	10	U	N	3	S
4011	04/08/93	GW930408-2	U	1,1-Dichloroethane	10	U	D	3	S
4096	05/06/93	GW930506-7	U	1,1-Dichloroethane	10	U	N	3	R
2043	08/30/89	66572	U	1,1-Dichloroethene	5	U	N	4	S
2043	08/30/89	66577	U	1,1-Dichloroethene	5	U	D	4	S
2043	04/07/93	GW930407-12	U	1,1-Dichloroethene	10	U	N	3	S
2050	05/20/93	GW930520-8	U	1,1-Dichloroethene	10	U	N	3	S
2066	04/07/93	GW930407-14	U	1,1-Dichloroethene	10	U	N	3	S
2096	05/06/93	GW930506-5	U	1,1-Dichloroethene	10	U	N	3	R
2098	05/20/93	GW930520-9	U	1,1-Dichloroethene	10	U	N	3	D
2104	05/13/93	GW930513-14	U	1,1-Dichloroethene	10	U	N	3	R
2104	05/13/93	GW930513-18	U	1,1-Dichloroethene	10	U	N	3	R
2728	04/04/93	113514	U	1,1-Dichloroethene	10	U	N	3	S
2728	05/24/93	GW930524-3	U	1,1-Dichloroethene	10	U	N	3	S
3024	04/12/93	GW930412-8	U	1,1-Dichloroethene	10	U	N	3	S
3043	06/13/89	66439	J	1,1-Dichloroethene	2	J	N	3	S
3043	08/30/89	66573	U	1,1-Dichloroethene	5	U	N	4	S
3043	04/07/93	GW930407-13	U	1,1-Dichloroethene	10	U	N	3	S
3096	05/07/93	GW930507-1	U	1,1-Dichloroethene	10	U	N	3	R
3098	05/20/93	GW930520-10	U	1,1-Dichloroethene	10	U	N	3	D

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Table E-14 (Continued)
Validated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well	Sample		Lab		Validated		QA		
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type	ASL	Area
4011	10/05/90	4345	U	1,1-Dichloroethene	5	UJ	N	3	S
4011	02/07/91	4382	U	1,1-Dichloroethene	5	U	N	3	S
4011	04/08/93	GW930408-3	U	1,1-Dichloroethene	10	U	N	3	S
4011	04/08/93	GW930408-2	U	1,1-Dichloroethene	10	U	D	3	S
4096	05/06/93	GW930506-7	U	1,1-Dichloroethene	10	U	N	3	R
2043	08/30/89	66572	U	1,2,3-Trichloropropane	5	U	N	4	S
2043	08/30/89	66577	U	1,2,3-Trichloropropane	5	U	D	4	S
3043	08/30/89	66573	U	1,2,3-Trichloropropane	5	U	N	4	S
2043	08/30/89	66572	U	1,2-Dibromo-3-chloropropane	10	UJ	N	4	S
2043	08/30/89	66577	U	1,2-Dibromo-3-chloropropane	10	UJ	D	4	S
3043	08/30/89	66573	U	1,2-Dibromo-3-chloropropane	10	UJ	N	4	S
2043	08/30/89	66572	U	1,2-Dibromoethane	5	U	N	4	S
2043	08/30/89	66577	U	1,2-Dibromoethane	5	U	D	4	S
3043	08/30/89	66573	U	1,2-Dibromoethane	5	U	N	4	S
2043	08/30/89	66572	U	1,2-Dichloroethane	5	U	N	4	S
2043	08/30/89	66577	U	1,2-Dichloroethane	5	U	D	4	S
2043	04/07/93	GW930407-12	U	1,2-Dichloroethane	10	U	N	3	S
2050	05/20/93	GW930520-8	U	1,2-Dichloroethane	10	U	N	3	S
2066	04/07/93	GW930407-14	U	1,2-Dichloroethane	10	U	N	3	S
2096	05/06/93	GW930506-5	U	1,2-Dichloroethane	10	U	N	3	R
2098	05/20/93	GW930520-9	U	1,2-Dichloroethane	10	U	N	3	D
2104	05/13/93	GW930513-14	U	1,2-Dichloroethane	10	U	N	3	R
2104	05/13/93	GW930513-18	U	1,2-Dichloroethane	10	U	N	3	R
2728	04/04/93	113514	U	1,2-Dichloroethane	10	U	N	3	S
2728	05/24/93	GW930524-3	U	1,2-Dichloroethane	10	U	N	3	S
3024	04/12/93	GW930412-8	U	1,2-Dichloroethane	10	U	N	3	S
3043	06/13/89	66439	U	1,2-Dichloroethane	5	U	N	3	S
3043	08/30/89	66573	U	1,2-Dichloroethane	5	U	N	4	S
3043	04/07/93	GW930407-13	U	1,2-Dichloroethane	10	U	N	3	S
3096	05/07/93	GW930507-1	U	1,2-Dichloroethane	10	U	N	3	R
3098	05/20/93	GW930520-10	U	1,2-Dichloroethane	10	U	N	3	D
4011	10/05/90	4345	U	1,2-Dichloroethane	5	UJ	N	3	S
4011	02/07/91	4382	U	1,2-Dichloroethane	5	U	N	3	S
4011	04/08/93	GW930408-3	U	1,2-Dichloroethane	10	U	N	3	S
4011	04/08/93	GW930408-2	U	1,2-Dichloroethane	10	U	D	3	S
4096	05/06/93	GW930506-7	U	1,2-Dichloroethane	10	U	N	3	R
2043	04/07/93	GW930407-12	U	1,2-Dichloroethene (Total)	10	U	N	3	S
2050	05/20/93	GW930520-8	U	1,2-Dichloroethene (Total)	10	U	N	3	S
2066	04/07/93	GW930407-14	U	1,2-Dichloroethene (Total)	10	U	N	3	S
2096	05/06/93	GW930506-5	U	1,2-Dichloroethene (Total)	10	U	N	3	R
2098	05/20/93	GW930520-9	U	1,2-Dichloroethene (Total)	10	U	N	3	D
2104	05/13/93	GW930513-14	U	1,2-Dichloroethene (Total)	10	U	N	3	R
2104	05/13/93	GW930513-18	U	1,2-Dichloroethene (Total)	10	UJ	N	3	R
2728	04/04/93	113514	U	1,2-Dichloroethene (Total)	10	U	N	3	S
2728	05/24/93	GW930524-3	U	1,2-Dichloroethene (Total)	10	U	N	3	S
3024	04/12/93	GW930412-8	U	1,2-Dichloroethene (Total)	10	U	N	3	S
3043	06/13/89	66439	U	1,2-Dichloroethene (Total)	5	U	N	3	S
3043	04/07/93	GW930407-13	U	1,2-Dichloroethene (Total)	10	U	N	3	S
3096	05/07/93	GW930507-1	U	1,2-Dichloroethene (Total)	10	U	N	3	R
3098	05/20/93	GW930520-10	U	1,2-Dichloroethene (Total)	10	U	N	3	D

Table E-14 (Continued)
Validated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
4011	10/05/90	4345	U	1,2-Dichloroethene (Total)	5	UJ	N	3	S
4011	02/07/91	4382	U	1,2-Dichloroethene (Total)	5	U	N	3	S
4011	04/08/93	GW930408-3	U	1,2-Dichloroethene (Total)	10	U	N	3	S
4011	04/08/93	GW930408-2	U	1,2-Dichloroethene (Total)	10	U	D	3	S
4096	05/06/93	GW930506-7	U	1,2-Dichloroethene (Total)	10	U	N	3	R
2043	08/30/89	66572	U	1,2-Dichloropropane	5	U	N	4	S
2043	08/30/89	66577	U	1,2-Dichloropropane	5	U	D	4	S
2043	04/07/93	GW930407-12	U	1,2-Dichloropropane	10	U	N	3	S
2050	05/20/93	GW930520-8	U	1,2-Dichloropropane	10	U	N	3	S
2066	04/07/93	GW930407-14	U	1,2-Dichloropropane	10	U	N	3	S
2096	05/06/93	GW930506-5	U	1,2-Dichloropropane	10	U	N	3	R
2098	05/20/93	GW930520-9	U	1,2-Dichloropropane	10	U	N	3	D
2104	05/13/93	GW930513-14	U	1,2-Dichloropropane	10	U	N	3	R
2104	05/13/93	GW930513-18	U	1,2-Dichloropropane	10	U	N	3	R
2728	04/04/93	113514	U	1,2-Dichloropropane	10	U	N	3	S
2728	05/24/93	GW930524-3	U	1,2-Dichloropropane	10	U	N	3	S
3024	04/12/93	GW930412-8	U	1,2-Dichloropropane	10	U	N	3	S
3043	06/13/89	66439	U	1,2-Dichloropropane	5	U	N	3	S
3043	08/30/89	66573	U	1,2-Dichloropropane	5	U	N	4	S
3043	04/07/93	GW930407-13	U	1,2-Dichloropropane	10	U	N	3	S
3096	05/07/93	GW930507-1	U	1,2-Dichloropropane	10	U	N	3	R
3098	05/20/93	GW930520-10	U	1,2-Dichloropropane	10	U	N	3	D
4011	10/05/90	4345	U	1,2-Dichloropropane	5	UJ	N	3	S
4011	02/07/91	4382	U	1,2-Dichloropropane	5	U	N	3	S
4011	04/08/93	GW930408-3	U	1,2-Dichloropropane	10	U	N	3	S
4011	04/08/93	GW930408-2	U	1,2-Dichloropropane	10	U	D	3	S
4096	05/06/93	GW930506-7	U	1,2-Dichloropropane	10	U	N	3	R
2043	08/30/89	66572	U	1,4-Dioxane	1000	UJ	N	4	S
2043	08/30/89	66577	U	1,4-Dioxane	1000	UJ	D	4	S
3043	08/30/89	66573	U	1,4-Dioxane	1000	UJ	N	4	S
2043	04/07/93	GW930407-12	U	2-Butanone	10	U	N	3	S
2050	05/20/93	GW930520-8	U	2-Butanone	10	U	N	3	S
2066	04/07/93	GW930407-14	U	2-Butanone	10	U	N	3	S
2096	05/06/93	GW930506-5	U	2-Butanone	10	U	N	3	R
2098	05/20/93	GW930520-9	U	2-Butanone	10	U	N	3	D
2104	05/13/93	GW930513-14	U	2-Butanone	10	U	N	3	R
2104	05/13/93	GW930513-18	U	2-Butanone	10	U	N	3	R
2728	04/04/93	113514	U	2-Butanone	10	U	N	3	S
2728	05/24/93	GW930524-3	U	2-Butanone	10	U	N	3	S
3024	04/12/93	GW930412-8		2-Butanone	37	J	N	3	S
3043	06/13/89	66439	BJ	2-Butanone	2	U	N	3	S
3043	04/07/93	GW930407-13	U	2-Butanone	10	U	N	3	S
3096	05/07/93	GW930507-1	U	2-Butanone	10	U	N	3	R
3098	05/20/93	GW930520-10	U	2-Butanone	10	U	N	3	D
4011	02/07/91	4382	U	2-Butanone	10	U	N	3	S
4011	04/08/93	GW930408-3	U	2-Butanone	10	U	N	3	S
4011	04/08/93	GW930408-2	U	2-Butanone	10	U	D	3	S
4096	05/06/93	GW930506-7		2-Butanone	88	-	N	3	R
2043	08/30/89	66572	U	2-Hexanone	10	U	N	4	S
2043	08/30/89	66577	U	2-Hexanone	10	U	D	4	S

Table E-14 (Continued)
Validated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
2043	04/07/93	GW930407-12	U	2-Hexanone	10	U	N	3	S
2050	05/20/93	GW930520-8	U	2-Hexanone	10	U	N	3	S
2066	04/07/93	GW930407-14	U	2-Hexanone	10	U	N	3	S
2096	05/06/93	GW930506-5	U	2-Hexanone	10	U	N	3	R
2098	05/20/93	GW930520-9	U	2-Hexanone	10	U	N	3	D
2104	05/13/93	GW930513-14	U	2-Hexanone	10	UJ	N	3	R
2104	05/13/93	GW930513-18	U	2-Hexanone	10	UJ	N	3	R
2728	04/04/93	113514	U	2-Hexanone	10	U	N	3	S
2728	05/24/93	GW930524-3	U	2-Hexanone	10	U	N	3	S
3024	04/12/93	GW930412-8	U	2-Hexanone	10	UJ	N	3	S
3043	06/13/89	66439	U	2-Hexanone	10	U	N	3	S
3043	08/30/89	66573	U	2-Hexanone	10	U	N	4	S
3043	04/07/93	GW930407-13	U	2-Hexanone	10	U	N	3	S
3096	05/07/93	GW930507-1	U	2-Hexanone	10	U	N	3	R
3098	05/20/93	GW930520-10	U	2-Hexanone	10	U	N	3	D
4011	10/05/90	4345	U	2-Hexanone	10	UJ	N	3	S
4011	02/07/91	4382	U	2-Hexanone	10	U	N	3	S
4011	04/08/93	GW930408-3	U	2-Hexanone	10	U	N	3	S
4011	04/08/93	GW930408-2	U	2-Hexanone	10	U	D	3	S
4096	05/06/93	GW930506-7	U	2-Hexanone	10	U	N	3	R
2043	08/30/89	66572	U	3-Chloropropene	5	UJ	N	4	S
2043	08/30/89	66577	U	3-Chloropropene	5	UJ	D	4	S
3043	08/30/89	66573	U	3-Chloropropene	5	UJ	N	4	S
2043	08/30/89	66572	U	4-Methyl-2-pentanone	10	U	N	4	S
2043	08/30/89	66577	U	4-Methyl-2-pentanone	10	U	D	4	S
2043	04/07/93	GW930407-12	U	4-Methyl-2-pentanone	10	U	N	3	S
2050	05/20/93	GW930520-8	U	4-Methyl-2-pentanone	10	U	N	3	S
2066	04/07/93	GW930407-14	U	4-Methyl-2-pentanone	10	U	N	3	S
2096	05/06/93	GW930506-5	U	4-Methyl-2-pentanone	10	UJ	N	3	R
2098	05/20/93	GW930520-9	U	4-Methyl-2-pentanone	10	U	N	3	D
2104	05/13/93	GW930513-14	U	4-Methyl-2-pentanone	10	UJ	N	3	R
2104	05/13/93	GW930513-18	U	4-Methyl-2-pentanone	10	UJ	N	3	R
2728	04/04/93	113514	U	4-Methyl-2-pentanone	10	U	N	3	S
2728	05/24/93	GW930524-3	U	4-Methyl-2-pentanone	10	U	N	3	S
3024	04/12/93	GW930412-8	U	4-Methyl-2-pentanone	10	U	N	3	S
3043	06/13/89	66439	U	4-Methyl-2-pentanone	10	U	N	3	S
3043	08/30/89	66573	U	4-Methyl-2-pentanone	10	U	N	4	S
3043	04/07/93	GW930407-13	U	4-Methyl-2-pentanone	10	U	N	3	S
3096	05/07/93	GW930507-1	U	4-Methyl-2-pentanone	10	UJ	N	3	R
3098	05/20/93	GW930520-10	U	4-Methyl-2-pentanone	10	U	N	3	D
4011	10/05/90	4345	U	4-Methyl-2-pentanone	10	UJ	N	3	S
4011	02/07/91	4382	U	4-Methyl-2-pentanone	10	U	N	3	S
4011	04/08/93	GW930408-3	U	4-Methyl-2-pentanone	10	U	N	3	S
4011	04/08/93	GW930408-2	U	4-Methyl-2-pentanone	10	U	D	3	S
4096	05/06/93	GW930506-7	U	4-Methyl-2-pentanone	10	UJ	N	3	R
2043	06/26/89	66438	BJ	Acetone	10	U	N	3	S
2043	08/30/89	66572	U	Acetone	10	UJ	N	4	S
2043	08/30/89	66577	U	Acetone	10	UJ	D	4	S
2043	04/07/93	GW930407-12	U	Acetone	10	U	N	3	S
2050	05/20/93	GW930520-8	U	Acetone	10	UJ	N	3	S

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Table E-14 (Continued)
Validated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
2066	06/27/89	66436	BJ	Acetone	10	U	N	3	S
2066	08/09/89	66498	J	Acetone	6	J	N	3	S
2066	04/07/93	GW930407-14	U	Acetone	10	U	N	3	S
2096	05/06/93	GW930506-5	U	Acetone	10	UJ	N	3	R
2098	05/20/93	GW930520-9	U	Acetone	10	UJ	N	3	D
2104	05/13/93	GW930513-14	U	Acetone	10	UJ	N	3	R
2104	05/13/93	GW930513-18	U	Acetone	10	UJ	N	3	R
2728	04/04/93	113514	U	Acetone	10	U	N	3	S
2728	05/24/93	GW930524-3	U	Acetone	10	U	N	3	S
3024	06/26/89	66460	BJ	Acetone	10	U	N	3	S
3024	08/10/89	66515	BJ	Acetone	10	U	N	3	S
3024	04/12/93	GW930412-8	J	Acetone	10	U	N	3	S
3043	06/13/89	66439		Acetone	10	U	N	3	S
3043	08/30/89	66573	U	Acetone	10	UJ	N	4	S
3043	04/07/93	GW930407-13	U	Acetone	10	U	N	3	S
3096	05/07/93	GW930507-1	U	Acetone	10	UJ	N	3	R
3098	05/20/93	GW930520-10	U	Acetone	10	UJ	N	3	D
4011	10/05/90	4345	J	Acetone	7	UJ	N	3	S
4011	02/07/91	4382	U	Acetone	10	U	N	3	S
4011	04/08/93	GW930408-3	U	Acetone	10	U	N	3	S
4011	04/08/93	GW930408-2	U	Acetone	10	U	D	3	S
4096	05/06/93	GW930506-7	U	Acetone	10	UJ	N	3	R
2043	08/30/89	66572	U	Acetonitrile	200	UJ	N	4	S
2043	08/30/89	66577	U	Acetonitrile	200	UJ	D	4	S
3043	08/30/89	66573	U	Acetonitrile	200	UJ	N	4	S
2043	08/30/89	66572	U	Acrolein	10	U	N	4	S
2043	08/30/89	66577	U	Acrolein	10	U	D	4	S
3043	08/30/89	66573	U	Acrolein	10	U	N	4	S
2043	08/30/89	66572	U	Acrylonitrile	10	UJ	N	4	S
2043	08/30/89	66577	U	Acrylonitrile	10	UJ	D	4	S
3043	08/30/89	66573	U	Acrylonitrile	10	UJ	N	4	S
2043	08/30/89	66572	U	Benzene	5	UJ	N	4	S
2043	08/30/89	66577	U	Benzene	5	UJ	D	4	S
2043	04/07/93	GW930407-12	U	Benzene	10	UJ	N	3	S
2050	05/20/93	GW930520-8	U	Benzene	10	U	N	3	S
2066	04/07/93	GW930407-14	U	Benzene	10	UJ	N	3	S
2096	05/06/93	GW930506-5	U	Benzene	10	U	N	3	R
2098	05/20/93	GW930520-9	U	Benzene	10	U	N	3	D
2104	05/13/93	GW930513-14	U	Benzene	10	U	N	3	R
2104	05/13/93	GW930513-18	U	Benzene	10	UJ	N	3	R
2728	04/04/93	113514	U	Benzene	10	U	N	3	S
2728	05/24/93	GW930524-3	U	Benzene	10	U	N	3	S
3024	04/12/93	GW930412-8	U	Benzene	10	U	N	3	S
3043	06/13/89	66439	J	Benzene	2	J	N	3	S
3043	08/30/89	66573	U	Benzene	5	UJ	N	4	S
3043	04/07/93	GW930407-13	U	Benzene	10	UJ	N	3	S
3096	05/07/93	GW930507-1	U	Benzene	10	U	N	3	R
3098	05/20/93	GW930520-10	U	Benzene	10	U	N	3	D
4011	10/05/90	4345	U	Benzene	5	UJ	N	3	S
4011	02/07/91	4382	U	Benzene	5	U	N	3	S

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Table E-14 (Continued)
Validated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
4011	04/08/93	GW930408-3	U	Benzene	10	UJ	N	3	S
4011	04/08/93	GW930408-2	U	Benzene	10	UJ	D	3	S
4096	05/06/93	GW930506-7	U	Benzene	10	U	N	3	R
2043	08/30/89	66572	U	Bromodichloromethane	5	U	N	4	S
2043	08/30/89	66577	U	Bromodichloromethane	5	U	D	4	S
2043	04/07/93	GW930407-12	U	Bromodichloromethane	10	U	N	3	S
2050	05/20/93	GW930520-8	U	Bromodichloromethane	10	U	N	3	S
2066	04/07/93	GW930407-14	U	Bromodichloromethane	10	U	N	3	S
2096	05/06/93	GW930506-5	U	Bromodichloromethane	10	U	N	3	R
2098	05/20/93	GW930520-9	U	Bromodichloromethane	10	U	N	3	D
2104	05/13/93	GW930513-14	U	Bromodichloromethane	10	U	N	3	R
2104	05/13/93	GW930513-18	U	Bromodichloromethane	10	U	N	3	R
2728	04/04/93	113514	U	Bromodichloromethane	10	U	N	3	S
2728	05/24/93	GW930524-3	U	Bromodichloromethane	10	U	N	3	S
3024	04/12/93	GW930412-8	U	Bromodichloromethane	10	U	N	3	S
3043	06/13/89	66439	U	Bromodichloromethane	5	U	N	3	S
3043	08/30/89	66573	U	Bromodichloromethane	5	U	N	4	S
3043	04/07/93	GW930407-13	U	Bromodichloromethane	10	U	N	3	S
3096	05/07/93	GW930507-1	U	Bromodichloromethane	10	U	N	3	R
3098	05/20/93	GW930520-10	U	Bromodichloromethane	10	U	N	3	D
4011	10/05/90	4345	U	Bromodichloromethane	5	UJ	N	3	S
4011	02/07/91	4382	U	Bromodichloromethane	5	U	N	3	S
4011	04/08/93	GW930408-3	U	Bromodichloromethane	10	U	N	3	S
4011	04/08/93	GW930408-2	U	Bromodichloromethane	10	U	D	3	S
4096	05/06/93	GW930506-7	U	Bromodichloromethane	10	U	N	3	R
2043	08/30/89	66572	U	Bromoform	5	U	N	4	S
2043	08/30/89	66577	U	Bromoform	5	U	D	4	S
2043	04/07/93	GW930407-12	U	Bromoform	10	UJ	N	3	S
2050	05/20/93	GW930520-8	U	Bromoform	10	U	N	3	S
2066	04/07/93	GW930407-14	U	Bromoform	10	UJ	N	3	S
2096	05/06/93	GW930506-5	U	Bromoform	10	U	N	3	R
2098	05/20/93	GW930520-9	U	Bromoform	10	U	N	3	D
2104	05/13/93	GW930513-14	U	Bromoform	10	U	N	3	R
2104	05/13/93	GW930513-18	U	Bromoform	10	U	N	3	R
2728	04/04/93	113514	U	Bromoform	10	U	N	3	S
2728	05/24/93	GW930524-3	U	Bromoform	10	U	N	3	S
3024	04/12/93	GW930412-8	U	Bromoform	10	U	N	3	S
3043	06/13/89	66439	U	Bromoform	5	U	N	3	S
3043	08/30/89	66573	U	Bromoform	5	U	N	4	S
3043	04/07/93	GW930407-13	U	Bromoform	10	UJ	N	3	S
3096	05/07/93	GW930507-1	U	Bromoform	10	U	N	3	R
3098	05/20/93	GW930520-10	U	Bromoform	10	U	N	3	D
4011	10/05/90	4345	U	Bromoform	5	UJ	N	3	S
4011	02/07/91	4382	U	Bromoform	5	U	N	3	S
4011	04/08/93	GW930408-3	U	Bromoform	10	UJ	N	3	S
4011	04/08/93	GW930408-2	U	Bromoform	10	UJ	D	3	S
4096	05/06/93	GW930506-7	U	Bromoform	10	U	N	3	R
2043	08/30/89	66572	U	Bromomethane	10	U	N	4	S
2043	08/30/89	66577	U	Bromomethane	10	U	D	4	S
2043	04/07/93	GW930407-12	U	Bromomethane	10	U	N	3	S

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Table E-14 (Continued)
Validated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
2050	05/20/93	GW930520-8	U	Bromomethane	10	U	N	3	S
2066	04/07/93	GW930407-14	U	Bromomethane	10	U	N	3	S
2096	05/06/93	GW930506-5	U	Bromomethane	10	U	N	3	R
2098	05/20/93	GW930520-9	U	Bromomethane	10	U	N	3	D
2104	05/13/93	GW930513-14	U	Bromomethane	10	U	N	3	R
2104	05/13/93	GW930513-18	U	Bromomethane	10	U	N	3	R
2728	04/04/93	113514	U	Bromomethane	10	UJ	N	3	S
2728	05/24/93	GW930524-3	U	Bromomethane	10	U	N	3	S
3024	04/12/93	GW930412-8	U	Bromomethane	10	U	N	3	S
3043	06/13/89	66439	U	Bromomethane	10	U	N	3	S
3043	08/30/89	66573	U	Bromomethane	10	U	N	4	S
3043	04/07/93	GW930407-13	U	Bromomethane	10	U	N	3	S
3096	05/07/93	GW930507-1	U	Bromomethane	10	U	N	3	R
3098	05/20/93	GW930520-10	U	Bromomethane	10	U	N	3	D
4011	10/05/90	4345	U	Bromomethane	10	UJ	N	3	S
4011	02/07/91	4382	U	Bromomethane	10	U	N	3	S
4011	04/08/93	GW930408-3	U	Bromomethane	10	U	N	3	S
4011	04/08/93	GW930408-2	U	Bromomethane	10	U	D	3	S
4096	05/06/93	GW930506-7	U	Bromomethane	10	U	N	3	R
2043	08/30/89	66572	U	Carbon disulfide	5	U	N	4	S
2043	08/30/89	66577	U	Carbon disulfide	5	U	D	4	S
2043	04/07/93	GW930407-12	U	Carbon disulfide	10	U	N	3	S
2050	05/20/93	GW930520-8	U	Carbon disulfide	10	U	N	3	S
2066	04/07/93	GW930407-14	U	Carbon disulfide	10	U	N	3	S
2096	05/06/93	GW930506-5	U	Carbon disulfide	10	U	N	3	R
2098	05/20/93	GW930520-9	U	Carbon disulfide	10	U	N	3	D
2104	05/13/93	GW930513-14	U	Carbon disulfide	10	U	N	3	R
2104	05/13/93	GW930513-18	U	Carbon disulfide	10	U	N	3	R
2728	04/04/93	113514	U	Carbon disulfide	10	U	N	3	S
2728	05/24/93	GW930524-3	U	Carbon disulfide	10	U	N	3	S
3024	04/12/93	GW930412-8	U	Carbon disulfide	10	U	N	3	S
3043	06/13/89	66439	U	Carbon disulfide	5	U	N	3	S
3043	08/30/89	66573	J	Carbon disulfide	3	J	N	4	S
3043	04/07/93	GW930407-13	U	Carbon disulfide	10	U	N	3	S
3096	05/07/93	GW930507-1	U	Carbon disulfide	10	U	N	3	R
3098	05/20/93	GW930520-10	U	Carbon disulfide	10	U	N	3	D
4011	10/05/90	4345	U	Carbon disulfide	5	UJ	N	3	S
4011	02/07/91	4382	U	Carbon disulfide	5	U	N	3	S
4011	04/08/93	GW930408-3	U	Carbon disulfide	10	U	N	3	S
4011	04/08/93	GW930408-2	U	Carbon disulfide	10	U	D	3	S
4096	05/06/93	GW930506-7	U	Carbon disulfide	10	U	N	3	R
2043	08/30/89	66572	U	Carbon Tetrachloride	5	UJ	N	4	S
2043	08/30/89	66577	U	Carbon Tetrachloride	5	UJ	D	4	S
2043	04/07/93	GW930407-12	U	Carbon Tetrachloride	10	U	N	3	S
2050	05/20/93	GW930520-8	U	Carbon Tetrachloride	10	U	N	3	S
2066	04/07/93	GW930407-14	U	Carbon Tetrachloride	10	U	N	3	S
2096	05/06/93	GW930506-5	U	Carbon Tetrachloride	10	U	N	3	R
2098	05/20/93	GW930520-9	U	Carbon Tetrachloride	10	U	N	3	D
2104	05/13/93	GW930513-14	U	Carbon Tetrachloride	10	U	N	3	R
2104	05/13/93	GW930513-18	U	Carbon Tetrachloride	10	U	N	3	R

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Table E-14 (Continued)
Validated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
2728	04/04/93	113514	U	Carbon Tetrachloride	10	U	N	3	S
2728	05/24/93	GW930524-3	U	Carbon Tetrachloride	10	U	N	3	S
3024	04/12/93	GW930412-8	U	Carbon Tetrachloride	10	U	N	3	S
3043	06/13/89	66439	U	Carbon Tetrachloride	5	U	N	3	S
3043	08/30/89	66573	U	Carbon Tetrachloride	5	UJ	N	4	S
3043	04/07/93	GW930407-13	U	Carbon Tetrachloride	10	U	N	3	S
3096	05/07/93	GW930507-1	U	Carbon Tetrachloride	10	U	N	3	R
3098	05/20/93	GW930520-10	U	Carbon Tetrachloride	10	U	N	3	D
4011	10/05/90	4345	U	Carbon Tetrachloride	5	UJ	N	3	S
4011	02/07/91	4382	U	Carbon Tetrachloride	5	U	N	3	S
4011	04/08/93	GW930408-3	U	Carbon Tetrachloride	10	U	N	3	S
4011	04/08/93	GW930408-2	U	Carbon Tetrachloride	10	U	D	3	S
4096	05/06/93	GW930506-7	U	Carbon Tetrachloride	10	U	N	3	R
2043	08/30/89	66572	U	Chlorobenzene	5	UJ	N	4	S
2043	08/30/89	66577	U	Chlorobenzene	5	UJ	D	4	S
2043	04/07/93	GW930407-12	U	Chlorobenzene	10	UJ	N	3	S
2050	05/20/93	GW930520-8	U	Chlorobenzene	10	U	N	3	S
2066	04/07/93	GW930407-14	U	Chlorobenzene	10	UJ	N	3	S
2096	05/06/93	GW930506-5	U	Chlorobenzene	10	U	N	3	R
2098	05/20/93	GW930520-9	U	Chlorobenzene	10	U	N	3	D
2104	05/13/93	GW930513-14	U	Chlorobenzene	10	U	N	3	R
2104	05/13/93	GW930513-18	U	Chlorobenzene	10	UJ	N	3	R
2728	04/04/93	113514	U	Chlorobenzene	10	U	N	3	S
2728	05/24/93	GW930524-3	U	Chlorobenzene	10	U	N	3	S
3024	04/12/93	GW930412-8	U	Chlorobenzene	10	U	N	3	S
3043	06/13/89	66439	J	Chlorobenzene	2	J	N	3	S
3043	08/30/89	66573	U	Chlorobenzene	5	UJ	N	4	S
3043	04/07/93	GW930407-13	U	Chlorobenzene	10	UJ	N	3	S
3096	05/07/93	GW930507-1	U	Chlorobenzene	10	U	N	3	R
3098	05/20/93	GW930520-10	U	Chlorobenzene	10	U	N	3	D
4011	10/05/90	4345	J	Chlorobenzene	1	J	N	3	S
4011	02/07/91	4382	U	Chlorobenzene	5	U	N	3	S
4011	04/08/93	GW930408-3	U	Chlorobenzene	10	UJ	N	3	S
4011	04/08/93	GW930408-2	U	Chlorobenzene	10	UJ	D	3	S
4096	05/06/93	GW930506-7	U	Chlorobenzene	10	U	N	3	R
2043	08/30/89	66572	U	Chloroethane	10	U	N	4	S
2043	08/30/89	66577	U	Chloroethane	10	U	D	4	S
2043	04/07/93	GW930407-12	U	Chloroethane	10	UJ	N	3	S
2050	05/20/93	GW930520-8	U	Chloroethane	10	U	N	3	S
2066	04/07/93	GW930407-14	U	Chloroethane	10	UJ	N	3	S
2096	05/06/93	GW930506-5	U	Chloroethane	10	U	N	3	R
2098	05/20/93	GW930520-9	U	Chloroethane	10	U	N	3	D
2104	05/13/93	GW930513-14	U	Chloroethane	10	U	N	3	R
2104	05/13/93	GW930513-18	U	Chloroethane	10	U	N	3	R
2728	04/04/93	113514	U	Chloroethane	10	U	N	3	S
2728	05/24/93	GW930524-3	U	Chloroethane	10	U	N	3	S
3024	04/12/93	GW930412-8	U	Chloroethane	10	U	N	3	S
3043	06/13/89	66439	U	Chloroethane	10	U	N	3	S
3043	08/30/89	66573	U	Chloroethane	10	U	N	4	S
3043	04/07/93	GW930407-13	U	Chloroethane	10	UJ	N	3	S

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Table E-14 (Continued)
Validated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
3096	05/07/93	GW930507-1	U	Chloroethane	10	U	N	3	R
3098	05/20/93	GW930520-10	U	Chloroethane	10	U	N	3	D
4011	10/05/90	4345	U	Chloroethane	10	UJ	N	3	S
4011	02/07/91	4382	U	Chloroethane	10	U	N	3	S
4011	04/08/93	GW930408-3	U	Chloroethane	10	UJ	N	3	S
4011	04/08/93	GW930408-2	U	Chloroethane	10	UJ	D	3	S
4096	05/06/93	GW930506-7	U	Chloroethane	10	U	N	3	R
2043	08/30/89	66572	U	Chloroform	5	U	N	4	S
2043	08/30/89	66577	U	Chloroform	5	U	D	4	S
2043	04/07/93	GW930407-12	U	Chloroform	10	U	N	3	S
2050	05/20/93	GW930520-8	U	Chloroform	10	U	N	3	S
2066	04/07/93	GW930407-14	U	Chloroform	10	U	N	3	S
2096	05/06/93	GW930506-5	U	Chloroform	10	U	N	3	R
2098	05/20/93	GW930520-9	U	Chloroform	10	U	N	3	D
2104	05/13/93	GW930513-14	U	Chloroform	10	U	N	3	R
2104	05/13/93	GW930513-18	U	Chloroform	10	U	N	3	R
2728	04/04/93	113514	U	Chloroform	10	U	N	3	S
2728	05/24/93	GW930524-3	U	Chloroform	10	U	N	3	S
3024	04/12/93	GW930412-8	U	Chloroform	10	U	N	3	S
3043	06/13/89	66439	U	Chloroform	5	U	N	3	S
3043	08/30/89	66573	U	Chloroform	5	U	N	4	S
3043	04/07/93	GW930407-13	U	Chloroform	10	U	N	3	S
3096	05/07/93	GW930507-1	U	Chloroform	10	U	N	3	R
3098	05/20/93	GW930520-10	U	Chloroform	10	U	N	3	D
4011	10/05/90	4345	U	Chloroform	5	UJ	N	3	S
4011	02/07/91	4382	U	Chloroform	5	U	N	3	S
4011	04/08/93	GW930408-3	U	Chloroform	10	U	N	3	S
4011	04/08/93	GW930408-2	U	Chloroform	10	U	D	3	S
4096	05/06/93	GW930506-7	U	Chloroform	10	U	N	3	R
2043	08/30/89	66572	U	Chloromethane	10	UJ	N	4	S
2043	08/30/89	66577	U	Chloromethane	10	UJ	D	4	S
2043	04/07/93	GW930407-12	U	Chloromethane	10	U	N	3	S
2050	05/20/93	GW930520-8	U	Chloromethane	10	U	N	3	S
2066	04/07/93	GW930407-14	U	Chloromethane	10	U	N	3	S
2096	05/06/93	GW930506-5	U	Chloromethane	10	UJ	N	3	R
2098	05/20/93	GW930520-9	U	Chloromethane	10	U	N	3	D
2104	05/13/93	GW930513-14	U	Chloromethane	10	U	N	3	R
2104	05/13/93	GW930513-18	U	Chloromethane	10	U	N	3	R
2728	04/04/93	113514	U	Chloromethane	10	U	N	3	S
3024	04/12/93	GW930412-8	U	Chloromethane	10	U	N	3	S
3043	06/13/89	66439	U	Chloromethane	10	U	N	3	S
3043	08/30/89	66573	U	Chloromethane	10	UJ	N	4	S
3043	04/07/93	GW930407-13	U	Chloromethane	10	U	N	3	S
3096	05/07/93	GW930507-1	U	Chloromethane	10	UJ	N	3	R
3098	05/20/93	GW930520-10	U	Chloromethane	10	U	N	3	D
4011	10/05/90	4345	U	Chloromethane	10	UJ	N	3	S
4011	02/07/91	4382	U	Chloromethane	10	U	N	3	S
4011	04/08/93	GW930408-3	U	Chloromethane	10	U	N	3	S
4011	04/08/93	GW930408-2	U	Chloromethane	10	U	D	3	S
4096	05/06/93	GW930506-7	U	Chloromethane	10	UJ	N	3	R

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Table E-14 (Continued)
Validated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
2043	08/30/89	66572	U	cis-1,3-Dichloropropene	5	U	N	4	S
2043	08/30/89	66577	U	cis-1,3-Dichloropropene	5	U	D	4	S
2043	04/07/93	GW930407-12	U	cis-1,3-Dichloropropene	10	U	N	3	S
2050	05/20/93	GW930520-8	U	cis-1,3-Dichloropropene	10	U	N	3	S
2066	04/07/93	GW930407-14	U	cis-1,3-Dichloropropene	10	U	N	3	S
2096	05/06/93	GW930506-5	U	cis-1,3-Dichloropropene	10	U	N	3	R
2098	05/20/93	GW930520-9	U	cis-1,3-Dichloropropene	10	U	N	3	D
2104	05/13/93	GW930513-14	U	cis-1,3-Dichloropropene	10	U	N	3	R
2104	05/13/93	GW930513-18	U	cis-1,3-Dichloropropene	10	U	N	3	R
2728	04/04/93	113514	U	cis-1,3-Dichloropropene	10	U	N	3	S
2728	05/24/93	GW930524-3	U	cis-1,3-Dichloropropene	10	U	N	3	S
3024	04/12/93	GW930412-8	U	cis-1,3-Dichloropropene	10	U	N	3	S
3043	06/13/89	66439	U	cis-1,3-Dichloropropene	5	U	N	3	S
3043	08/30/89	66573	U	cis-1,3-Dichloropropene	5	U	N	4	S
3043	04/07/93	GW930407-13	U	cis-1,3-Dichloropropene	10	U	N	3	S
3096	05/07/93	GW930507-1	U	cis-1,3-Dichloropropene	10	U	N	3	R
3098	05/20/93	GW930520-10	U	cis-1,3-Dichloropropene	10	U	N	3	D
4011	10/05/90	4345	U	cis-1,3-Dichloropropene	5	UJ	N	3	S
4011	02/07/91	4382	U	cis-1,3-Dichloropropene	5	U	N	3	S
4011	04/08/93	GW930408-3	U	cis-1,3-Dichloropropene	10	U	N	3	S
4011	04/08/93	GW930408-2	U	cis-1,3-Dichloropropene	10	U	D	3	S
4096	05/06/93	GW930506-7	U	cis-1,3-Dichloropropene	10	U	N	3	R
2043	08/30/89	66572	U	Dibromochloromethane	5	U	N	4	S
2043	08/30/89	66577	U	Dibromochloromethane	5	U	D	4	S
2043	04/07/93	GW930407-12	U	Dibromochloromethane	10	U	N	3	S
2050	05/20/93	GW930520-8	U	Dibromochloromethane	10	U	N	3	S
2066	04/07/93	GW930407-14	U	Dibromochloromethane	10	U	N	3	S
2096	05/06/93	GW930506-5	U	Dibromochloromethane	10	U	N	3	R
2098	05/20/93	GW930520-9	U	Dibromochloromethane	10	U	N	3	D
2104	05/13/93	GW930513-14	U	Dibromochloromethane	10	U	N	3	R
2104	05/13/93	GW930513-18	U	Dibromochloromethane	10	U	N	3	R
2728	04/04/93	113514	U	Dibromochloromethane	10	U	N	3	S
2728	05/24/93	GW930524-3	U	Dibromochloromethane	10	U	N	3	S
3024	04/12/93	GW930412-8	U	Dibromochloromethane	10	U	N	3	S
3043	06/13/89	66439	U	Dibromochloromethane	5	U	N	3	S
3043	08/30/89	66573	U	Dibromochloromethane	5	U	N	4	S
3043	04/07/93	GW930407-13	U	Dibromochloromethane	10	U	N	3	S
3096	05/07/93	GW930507-1	U	Dibromochloromethane	10	U	N	3	R
3098	05/20/93	GW930520-10	U	Dibromochloromethane	10	U	N	3	D
4011	10/05/90	4345	U	Dibromochloromethane	5	UJ	N	3	S
4011	02/07/91	4382	U	Dibromochloromethane	5	U	N	3	S
4011	04/08/93	GW930408-3	U	Dibromochloromethane	10	U	N	3	S
4011	04/08/93	GW930408-2	U	Dibromochloromethane	10	U	D	3	S
4096	05/06/93	GW930506-7	U	Dibromochloromethane	10	U	N	3	R
2043	08/30/89	66572	U	Dibromomethane	10	U	N	4	S
2043	08/30/89	66577	U	Dibromomethane	10	U	D	4	S
3043	08/30/89	66573	U	Dibromomethane	10	U	N	4	S
2043	08/30/89	66572	U	Ethyl methacrylate	10	U	N	4	S
2043	08/30/89	66577	U	Ethyl methacrylate	10	U	D	4	S
2043	09/14/89	66588	U	Ethyl methacrylate	20	U	N	4	S

Table E-14 (Continued)
Validated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
3043	08/30/89	66573	U	Ethyl methacrylate	10	U	N	4	S
2043	08/30/89	66572	U	Ethylbenzene	5	UJ	N	4	S
2043	08/30/89	66577	U	Ethylbenzene	5	UJ	D	4	S
2043	04/07/93	GW930407-12	U	Ethylbenzene	10	UJ	N	3	S
2050	05/20/93	GW930520-8	U	Ethylbenzene	10	U	N	3	S
2066	04/07/93	GW930407-14	U	Ethylbenzene	10	UJ	N	3	S
2096	05/06/93	GW930506-5	U	Ethylbenzene	10	U	N	3	R
2098	05/20/93	GW930520-9	U	Ethylbenzene	10	U	N	3	D
2104	05/13/93	GW930513-14	U	Ethylbenzene	10	U	N	3	R
2104	05/13/93	GW930513-18	U	Ethylbenzene	10	UJ	N	3	R
2728	04/04/93	113514	U	Ethylbenzene	10	U	N	3	S
2728	05/24/93	GW930524-3	U	Ethylbenzene	10	U	N	3	S
3024	04/12/93	GW930412-8	U	Ethylbenzene	10	U	N	3	S
3043	06/13/89	66439	U	Ethylbenzene	5	UJ	N	3	S
3043	08/30/89	66573	U	Ethylbenzene	5	UJ	N	4	S
3043	04/07/93	GW930407-13	U	Ethylbenzene	10	UJ	N	3	S
3096	05/07/93	GW930507-1	U	Ethylbenzene	10	U	N	3	R
3098	05/20/93	GW930520-10	U	Ethylbenzene	10	U	N	3	D
4011	10/05/90	4345	U	Ethylbenzene	5	UJ	N	3	S
4011	02/07/91	4382	U	Ethylbenzene	5	U	N	3	S
4011	04/08/93	GW930408-3	U	Ethylbenzene	10	UJ	N	3	S
4011	04/08/93	GW930408-2	U	Ethylbenzene	10	UJ	D	3	S
4096	05/06/93	GW930506-7	U	Ethylbenzene	10	U	N	3	R
2043	08/30/89	66572	U	Iodomethane	5	U	N	4	S
2043	08/30/89	66577	U	Iodomethane	5	U	D	4	S
3043	08/30/89	66573	U	Iodomethane	5	U	N	4	S
2043	08/30/89	66572	U	Isobutyl alcohol	3000	UJ	N	4	S
2043	08/30/89	66577	U	Isobutyl alcohol	3000	UJ	D	4	S
3043	08/30/89	66573	U	Isobutyl alcohol	3000	UJ	N	4	S
2043	08/30/89	66572	U	Methacrylonitrile	10	UJ	N	4	S
2043	08/30/89	66577	U	Methacrylonitrile	10	UJ	D	4	S
3043	08/30/89	66573	U	Methacrylonitrile	10	UJ	N	4	S
2043	08/30/89	66572	U	Methyl methacrylate	10	U	N	4	S
2043	08/30/89	66577	U	Methyl methacrylate	10	U	D	4	S
3043	08/30/89	66573	U	Methyl methacrylate	10	U	N	4	S
2043	06/26/89	66438	B	Methylene chloride	8	U	N	3	S
2043	08/30/89	66572	U	Methylene chloride	5	U	N	4	S
2043	08/30/89	66577	U	Methylene chloride	5	U	D	4	S
2043	04/07/93	GW930407-12	U	Methylene chloride	10	U	N	3	S
2050	05/20/93	GW930520-8	U	Methylene chloride	10	U	N	3	S
2066	06/27/89	66436	B	Methylene chloride	7	U	N	3	S
2066	08/09/89	66498	B	Methylene chloride	8	U	N	3	S
2066	04/07/93	GW930407-14	U	Methylene chloride	10	U	N	3	S
2096	05/06/93	GW930506-5	BJ	Methylene chloride	10	U	N	3	R
2098	05/20/93	GW930520-9	U	Methylene chloride	10	U	N	3	D
2104	05/13/93	GW930513-14	U	Methylene chloride	10	U	N	3	R
2104	05/13/93	GW930513-18	U	Methylene chloride	10	U	N	3	R
2728	04/04/93	113514	BJ	Methylene chloride	10	U	N	3	S
2728	05/24/93	GW930524-3	U	Methylene chloride	10	U	N	3	S
3024	06/26/89	66460	B	Methylene chloride	7	U	N	3	S

Table E-14 (Continued)
Validated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
3024	08/10/89	66515	BJ	Methylene chloride	5	U	N	3	S
3024	04/12/93	GW930412-8	U	Methylene chloride	10	U	N	3	S
3043	06/13/89	66439		Methylene chloride	8	U	N	3	S
3043	08/30/89	66573	U	Methylene chloride	5	U	N	4	S
3043	04/07/93	GW930407-13	U	Methylene chloride	10	U	N	3	S
3096	05/07/93	GW930507-1	BJ	Methylene chloride	10	U	N	3	R
3098	05/20/93	GW930520-10	U	Methylene chloride	10	U	N	3	D
4011	10/05/90	4345	B	Methylene chloride	13	UJ	N	3	S
4011	02/07/91	4382	BJ	Methylene chloride	5	U	N	3	S
4011	04/08/93	GW930408-3	U	Methylene chloride	10	U	N	3	S
4011	04/08/93	GW930408-2	U	Methylene chloride	10	U	D	3	S
4096	05/06/93	GW930506-7	BJ	Methylene chloride	10	U	N	3	R
2043	08/30/89	66572	U	Pyridine	50000	UJ	N	4	S
2043	08/30/89	66577	U	Pyridine	50000	UJ	D	4	S
3043	08/30/89	66573	U	Pyridine	50000	UJ	N	4	S
2043	08/30/89	66572	U	Styrene	5	UJ	N	4	S
2043	08/30/89	66577	U	Styrene	5	UJ	D	4	S
2043	04/07/93	GW930407-12	U	Styrene	10	UJ	N	3	S
2050	05/20/93	GW930520-8	U	Styrene	10	U	N	3	S
2066	04/07/93	GW930407-14	U	Styrene	10	UJ	N	3	S
2096	05/06/93	GW930506-5	U	Styrene	10	U	N	3	R
2098	05/20/93	GW930520-9	U	Styrene	10	U	N	3	D
2104	05/13/93	GW930513-14	U	Styrene	10	U	N	3	R
2104	05/13/93	GW930513-18	U	Styrene	10	UJ	N	3	R
2728	04/04/93	113514	U	Styrene	10	U	N	3	S
2728	05/24/93	GW930524-3	U	Styrene	10	U	N	3	S
3024	04/12/93	GW930412-8	U	Styrene	10	U	N	3	S
3043	06/13/89	66439	U	Styrene	5	UJ	N	3	S
3043	08/30/89	66573	U	Styrene	5	UJ	N	4	S
3043	04/07/93	GW930407-13	U	Styrene	10	UJ	N	3	S
3096	05/07/93	GW930507-1	U	Styrene	10	U	N	3	R
3098	05/20/93	GW930520-10	U	Styrene	10	U	N	3	D
4011	10/05/90	4345	U	Styrene	5	UJ	N	3	S
4011	02/07/91	4382	U	Styrene	5	U	N	3	S
4011	04/08/93	GW930408-3	U	Styrene	10	UJ	N	3	S
4011	04/08/93	GW930408-2	U	Styrene	10	UJ	D	3	S
4096	05/06/93	GW930506-7	U	Styrene	10	U	N	3	R
2043	06/26/89	66438	U	Tetrachloroethene	5	U	N	3	S
2043	08/30/89	66572	U	Tetrachloroethene	5	U	N	4	S
2043	08/30/89	66577	U	Tetrachloroethene	5	U	D	4	S
2043	04/07/93	GW930407-12	U	Tetrachloroethene	10	U	N	3	S
2050	05/20/93	GW930520-8	U	Tetrachloroethene	10	U	N	3	S
2066	06/27/89	66436	U	Tetrachloroethene	5	U	N	3	S
2066	08/09/89	66498	U	Tetrachloroethene	5	U	N	3	S
2066	04/07/93	GW930407-14	U	Tetrachloroethene	10	U	N	3	S
2096	05/06/93	GW930506-5	U	Tetrachloroethene	10	U	N	3	R
2098	05/20/93	GW930520-9	U	Tetrachloroethene	10	U	N	3	D
2104	05/13/93	GW930513-14	U	Tetrachloroethene	10	U	N	3	R
2104	05/13/93	GW930513-18	U	Tetrachloroethene	10	U	N	3	R
2728	04/04/93	113514	U	Tetrachloroethene	10	U	N	3	S

Table E-14 (Continued)
Validated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
2728	05/24/93	GW930524-3	U	Tetrachloroethene	10	U	N	3	S
3024	06/26/89	66460	U	Tetrachloroethene	5	U	N	3	S
3024	08/10/89	66515	U	Tetrachloroethene	5	U	N	3	S
3024	04/12/93	GW930412-8	U	Tetrachloroethene	10	U	N	3	S
3043	06/13/89	66439	U	Tetrachloroethene	5	U	N	3	S
3043	08/30/89	66573	U	Tetrachloroethene	5	U	N	4	S
3043	04/07/93	GW930407-13	U	Tetrachloroethene	10	U	N	3	S
3096	05/07/93	GW930507-1	U	Tetrachloroethene	10	U	N	3	R
3098	05/20/93	GW930520-10	U	Tetrachloroethene	10	U	N	3	D
4011	10/05/90	4345	U	Tetrachloroethene	5	UJ	N	3	S
4011	02/07/91	4382	U	Tetrachloroethene	5	U	N	3	S
4011	04/08/93	GW930408-3	U	Tetrachloroethene	10	U	N	3	S
4011	04/08/93	GW930408-2	U	Tetrachloroethene	10	U	D	3	S
4096	05/06/93	GW930506-7	U	Tetrachloroethene	10	U	N	3	R
2043	06/26/89	66438	U	Toluene	5	UJ	N	3	S
2043	08/30/89	66572	U	Toluene	5	UJ	N	4	S
2043	08/30/89	66577	U	Toluene	5	UJ	D	4	S
2043	04/07/93	GW930407-12	U	Toluene	10	UJ	N	3	S
2050	05/20/93	GW930520-8	U	Toluene	10	U	N	3	S
2066	06/27/89	66436	U	Toluene	5	UJ	N	3	S
2066	08/09/89	66498	B	Toluene	5	UJ	N	3	S
2066	04/07/93	GW930407-14	U	Toluene	10	UJ	N	3	S
2096	05/06/93	GW930506-5	U	Toluene	10	U	N	3	R
2098	05/20/93	GW930520-9	U	Toluene	10	U	N	3	D
2104	05/13/93	GW930513-14	U	Toluene	10	U	N	3	R
2104	05/13/93	GW930513-18	U	Toluene	10	UJ	N	3	R
2728	04/04/93	113514	U	Toluene	10	U	N	3	S
2728	05/24/93	GW930524-3	U	Toluene	10	U	N	3	S
3024	06/26/89	66460	U	Toluene	5	UJ	N	3	S
3024	08/10/89	66515	BJ	Toluene	5	U	N	3	S
3024	04/12/93	GW930412-8	J	Toluene	10	U	N	3	S
3043	06/13/89	66439	J	Toluene	3	J	N	3	S
3043	08/30/89	66573	U	Toluene	5	UJ	N	4	S
3043	04/07/93	GW930407-13	U	Toluene	10	UJ	N	3	S
3096	05/07/93	GW930507-1	U	Toluene	10	U	N	3	R
3098	05/20/93	GW930520-10	U	Toluene	10	U	N	3	D
4011	10/05/90	4345	BJ	Toluene	5	U	N	3	S
4011	02/07/91	4382	U	Toluene	5	U	N	3	S
4011	04/08/93	GW930408-3	U	Toluene	10	UJ	N	3	S
4011	04/08/93	GW930408-2	U	Toluene	10	UJ	D	3	S
4096	05/06/93	GW930506-7	J	Toluene	8	J	N	3	R
2043	08/30/89	66572	U	trans-1,2-Dichloroethene	5	U	N	4	S
2043	08/30/89	66577	U	trans-1,2-Dichloroethene	5	U	D	4	S
3043	08/30/89	66573	U	trans-1,2-Dichloroethene	5	U	N	4	S
2043	08/30/89	66572	U	trans-1,3-Dichloropropene	5	U	N	4	S
2043	08/30/89	66577	U	trans-1,3-Dichloropropene	5	U	D	4	S
2043	04/07/93	GW930407-12	U	trans-1,3-Dichloropropene	10	U	N	3	S
2050	05/20/93	GW930520-8	U	trans-1,3-Dichloropropene	10	U	N	3	S
2066	04/07/93	GW930407-14	U	trans-1,3-Dichloropropene	10	U	N	3	S
2096	05/06/93	GW930506-5	U	trans-1,3-Dichloropropene	10	U	N	3	R

Table E-14 (Continued)
Validated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
2098	05/20/93	GW930520-9	U	trans-1,3-Dichloropropene	10	U	N	3	D
2104	05/13/93	GW930513-14	U	trans-1,3-Dichloropropene	10	U	N	3	R
2104	05/13/93	GW930513-18	U	trans-1,3-Dichloropropene	10	U	N	3	R
2728	04/04/93	113514	U	trans-1,3-Dichloropropene	10	U	N	3	S
2728	05/24/93	GW930524-3	U	trans-1,3-Dichloropropene	10	U	N	3	S
3024	04/12/93	GW930412-8	U	trans-1,3-Dichloropropene	10	U	N	3	S
3043	06/13/89	66439	U	trans-1,3-Dichloropropene	5	U	N	3	S
3043	08/30/89	66573	U	trans-1,3-Dichloropropene	5	U	N	4	S
3043	04/07/93	GW930407-13	U	trans-1,3-Dichloropropene	10	U	N	3	S
3096	05/07/93	GW930507-1	U	trans-1,3-Dichloropropene	10	U	N	3	R
3098	05/20/93	GW930520-10	U	trans-1,3-Dichloropropene	10	U	N	3	D
4011	10/05/90	4345	U	trans-1,3-Dichloropropene	5	UJ	N	3	S
4011	02/07/91	4382	U	trans-1,3-Dichloropropene	5	U	N	3	S
4011	04/08/93	GW930408-3	U	trans-1,3-Dichloropropene	10	U	N	3	S
4011	04/08/93	GW930408-2	U	trans-1,3-Dichloropropene	10	U	D	3	S
4096	05/06/93	GW930506-7	U	trans-1,3-Dichloropropene	10	U	N	3	R
2043	08/30/89	66572	U	trans-1,4-Dichloro-2-butene	20	U	N	4	S
2043	08/30/89	66577	U	trans-1,4-Dichloro-2-butene	20	U	D	4	S
3043	08/30/89	66573	U	trans-1,4-Dichloro-2-butene	20	U	N	4	S
2043	06/26/89	66438	U	Trichloroethene	5	U	N	3	S
2043	08/30/89	66572	U	Trichloroethene	5	U	N	4	S
2043	08/30/89	66577	U	Trichloroethene	5	U	D	4	S
2043	04/07/93	GW930407-12	U	Trichloroethene	10	U	N	3	S
2050	05/20/93	GW930520-8	U	Trichloroethene	10	U	N	3	S
2066	06/27/89	66436	U	Trichloroethene	5	U	N	3	S
2066	08/09/89	66498	U	Trichloroethene	5	U	N	3	S
2066	04/07/93	GW930407-14	U	Trichloroethene	10	U	N	3	S
2096	05/06/93	GW930506-5	U	Trichloroethene	10	U	N	3	R
2098	05/20/93	GW930520-9	U	Trichloroethene	10	U	N	3	D
2104	05/13/93	GW930513-14	U	Trichloroethene	10	U	N	3	R
2104	05/13/93	GW930513-18	U	Trichloroethene	10	U	N	3	R
2728	04/04/93	113514	U	Trichloroethene	10	U	N	3	S
2728	05/24/93	GW930524-3	U	Trichloroethene	10	U	N	3	S
3024	06/26/89	66460	U	Trichloroethene	5	U	N	3	S
3024	08/10/89	66515	U	Trichloroethene	5	U	N	3	S
3024	04/12/93	GW930412-8	U	Trichloroethene	10	U	N	3	S
3043	06/13/89	66439	J	Trichloroethene	2	J	N	3	S
3043	08/30/89	66573	U	Trichloroethene	5	U	N	4	S
3043	04/07/93	GW930407-13	U	Trichloroethene	10	U	N	3	S
3096	05/07/93	GW930507-1	U	Trichloroethene	10	U	N	3	R
3098	05/20/93	GW930520-10	U	Trichloroethene	10	U	N	3	D
4011	10/05/90	4345	U	Trichloroethene	5	UJ	N	3	S
4011	02/07/91	4382	U	Trichloroethene	5	U	N	3	S
4011	04/08/93	GW930408-3	U	Trichloroethene	10	U	N	3	S
4011	04/08/93	GW930408-2	U	Trichloroethene	10	U	D	3	S
4096	05/06/93	GW930506-7	U	Trichloroethene	10	U	N	3	R
2043	08/30/89	66572	U	Trichlorofluoromethane	5	U	N	4	S
2043	08/30/89	66577	U	Trichlorofluoromethane	5	U	D	4	S
3043	08/30/89	66573	U	Trichlorofluoromethane	5	U	N	4	S
2043	08/30/89	66572	U	Vinyl Acetate	10	U	N	4	S

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Table E-14 (Continued)
Validated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL	Area
2043	08/30/89	66577	U	Vinyl Acetate	10	U	D	4	S
2728	04/04/93	113514	U	Vinyl Acetate	10	U	N	3	S
3043	06/13/89	66439	U	Vinyl Acetate	10	U	N	3	S
3043	08/30/89	66573	U	Vinyl Acetate	10	U	N	4	S
4011	10/05/90	4345	U	Vinyl Acetate	10	UJ	N	3	S
4011	02/07/91	4382	U	Vinyl Acetate	10	U	N	3	S
2043	08/30/89	66572	U	Vinyl chloride	10	U	N	4	S
2043	08/30/89	66577	U	Vinyl chloride	10	U	D	4	S
2043	04/07/93	GW930407-12	U	Vinyl chloride	10	U	N	3	S
2050	05/20/93	GW930520-8	U	Vinyl chloride	10	U	N	3	S
2066	04/07/93	GW930407-14	U	Vinyl chloride	10	U	N	3	S
2096	05/06/93	GW930506-5	U	Vinyl chloride	10	U	N	3	R
2098	05/20/93	GW930520-9	U	Vinyl chloride	10	U	N	3	D
2104	05/13/93	GW930513-14	U	Vinyl chloride	10	U	N	3	R
2104	05/13/93	GW930513-18	U	Vinyl chloride	10	U	N	3	R
2728	04/04/93	113514	U	Vinyl chloride	10	U	N	3	S
2728	05/24/93	GW930524-3	U	Vinyl chloride	10	UJ	N	3	S
3024	04/12/93	GW930412-8	U	Vinyl chloride	10	U	N	3	S
3043	06/13/89	66439	U	Vinyl chloride	10	U	N	3	S
3043	08/30/89	66573	U	Vinyl chloride	10	U	N	4	S
3043	04/07/93	GW930407-13	U	Vinyl chloride	10	U	N	3	S
3096	05/07/93	GW930507-1	U	Vinyl chloride	10	U	N	3	R
3098	05/20/93	GW930520-10	U	Vinyl chloride	10	U	N	3	D
4011	10/05/90	4345	U	Vinyl chloride	10	UJ	N	3	S
4011	02/07/91	4382	U	Vinyl chloride	10	U	N	3	S
4011	04/08/93	GW930408-3	U	Vinyl chloride	10	U	N	3	S
4011	04/08/93	GW930408-2	U	Vinyl chloride	10	U	D	3	S
4096	05/06/93	GW930506-7	U	Vinyl chloride	10	U	N	3	R
2043	08/30/89	66572	U	Xylenes, Total	5	UJ	N	4	S
2043	08/30/89	66577	U	Xylenes, Total	5	UJ	D	4	S
2043	04/07/93	GW930407-12	U	Xylenes, Total	10	UJ	N	3	S
2050	05/20/93	GW930520-8	U	Xylenes, Total	10	U	N	3	S
2066	04/07/93	GW930407-14	U	Xylenes, Total	10	UJ	N	3	S
2096	05/06/93	GW930506-5	U	Xylenes, Total	10	U	N	3	R
2098	05/20/93	GW930520-9	U	Xylenes, Total	10	U	N	3	D
2104	05/13/93	GW930513-14	U	Xylenes, Total	10	U	N	3	R
2104	05/13/93	GW930513-18	U	Xylenes, Total	10	UJ	N	3	R
2728	04/04/93	113514	U	Xylenes, Total	10	U	N	3	S
2728	05/24/93	GW930524-3	U	Xylenes, Total	10	U	N	3	S
3024	04/12/93	GW930412-8	U	Xylenes, Total	10	U	N	3	S
3043	06/13/89	66439	U	Xylenes, Total	5	UJ	N	3	S
3043	08/30/89	66573	U	Xylenes, Total	5	UJ	N	4	S
3043	04/07/93	GW930407-13	U	Xylenes, Total	10	UJ	N	3	S
3096	05/07/93	GW930507-1	U	Xylenes, Total	10	U	N	3	R
3098	05/20/93	GW930520-10	U	Xylenes, Total	10	U	N	3	D
4011	10/05/90	4345	U	Xylenes, Total	5	UJ	N	3	S
4011	02/07/91	4382	U	Xylenes, Total	5	U	N	3	S
4011	04/08/93	GW930408-3	U	Xylenes, Total	10	UJ	N	3	S
4011	04/08/93	GW930408-2	U	Xylenes, Total	10	UJ	D	3	S
4096	05/06/93	GW930506-7	U	Xylenes, Total	10	U	N	3	R

Table E-15
Validated Organic Data for Background Surface Water in the Great Miami River

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL
W-1	05/20/93	120068-1	U	4,4'-DDD	0.1	U	D	3
W-1	05/20/93	120072-2	U	4,4'-DDD	0.1	U	T	3
W-1	06/23/93	120416	U	4,4'-DDD	0.1	U	N	3
W-1	06/23/93	120414	U	4,4'-DDD	0.1	U	D	3
W-1	05/20/93	120068-1	U	4,4'-DDE	0.1	U	D	3
W-1	05/20/93	120072-2	U	4,4'-DDE	0.1	U	T	3
W-1	06/23/93	120416	U	4,4'-DDE	0.1	U	N	3
W-1	06/23/93	120414	U	4,4'-DDE	0.1	U	D	3
W-1	05/20/93	120068-1	U	4,4'-DDT	0.1	U	D	3
W-1	05/20/93	120072-2	U	4,4'-DDT	0.1	U	T	3
W-1	06/23/93	120416	U	4,4'-DDT	0.1	U	N	3
W-1	06/23/93	120414	U	4,4'-DDT	0.1	U	D	3
W-1	05/20/93	120068-1	U	Aldrin	0.05	U	D	3
W-1	05/20/93	120072-2	U	Aldrin	0.05	U	T	3
W-1	06/23/93	120416	U	Aldrin	0.05	U	N	3
W-1	06/23/93	120414	U	Aldrin	0.05	U	D	3
W-1	05/20/93	120068-1	U	alpha-BHC	0.05	U	D	3
W-1	05/20/93	120072-2	U	alpha-BHC	0.05	U	T	3
W-1	06/23/93	120416	U	alpha-BHC	0.05	U	N	3
W-1	06/23/93	120414	U	alpha-BHC	0.05	U	D	3
W-1	05/20/93	120068-1	U	alpha-Chlordane	0.05	U	D	3
W-1	05/20/93	120072-2	U	alpha-Chlordane	0.05	U	T	3
W-1	06/23/93	120416	U	alpha-Chlordane	0.05	U	N	3
W-1	06/23/93	120414	U	alpha-Chlordane	0.05	U	D	3
W-1	05/20/93	120068-1	U	Aroclor-1016	1	U	D	3
W-1	05/20/93	120072-2	U	Aroclor-1016	1	U	T	3
W-1	06/23/93	120416	U	Aroclor-1016	1	U	N	3
W-1	06/23/93	120414	U	Aroclor-1016	1	U	D	3
W-1	05/20/93	120068-1	U	Aroclor-1221	2	U	D	3
W-1	05/20/93	120072-2	U	Aroclor-1221	2	U	T	3
W-1	06/23/93	120416	U	Aroclor-1221	2	U	N	3
W-1	06/23/93	120414	U	Aroclor-1221	2	U	D	3
W-1	05/20/93	120068-1	U	Aroclor-1232	1	U	D	3
W-1	05/20/93	120072-2	U	Aroclor-1232	1	U	T	3
W-1	06/23/93	120416	U	Aroclor-1232	1	U	N	3
W-1	06/23/93	120414	U	Aroclor-1232	1	U	D	3
W-1	05/20/93	120068-1	U	Aroclor-1242	1	U	D	3
W-1	05/20/93	120072-2	U	Aroclor-1242	1	U	T	3
W-1	06/23/93	120416	U	Aroclor-1242	1	U	N	3
W-1	06/23/93	120414	U	Aroclor-1242	1	U	D	3
W-1	05/20/93	120068-1	U	Aroclor-1248	1	U	D	3
W-1	05/20/93	120072-2	U	Aroclor-1248	1	U	T	3
W-1	06/23/93	120416	U	Aroclor-1248	1	U	N	3
W-1	06/23/93	120414	U	Aroclor-1248	1	U	D	3
W-1	05/20/93	120068-1	U	Aroclor-1254	1	U	D	3
W-1	05/20/93	120072-2	U	Aroclor-1254	1	U	T	3
W-1	06/23/93	120416	U	Aroclor-1254	1	U	N	3
W-1	06/23/93	120414	U	Aroclor-1254	1	U	D	3
W-1	05/20/93	120068-1	U	Aroclor-1260	1	U	D	3
W-1	05/20/93	120072-2	U	Aroclor-1260	1	U	T	3

Table E-15 (Continued)
Validated Organic Data for Background Surface Water in the Great Miami River

Well	Sample		Lab		Validated		QA	
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type	ASL
W-1	06/23/93	120416	U	Aroclor-1260	1	U	N	3
W-1	06/23/93	120414	U	Aroclor-1260	1	U	D	3
W-1	05/20/93	120068-1	U	beta-BHC	0.05	U	D	3
W-1	05/20/93	120072-2	U	beta-BHC	0.05	U	T	3
W-1	06/23/93	120416	U	beta-BHC	0.05	U	N	3
W-1	06/23/93	120414	U	beta-BHC	0.05	U	D	3
W-1	05/20/93	120068-1	U	delta-BHC	0.05	U	D	3
W-1	05/20/93	120072-2	U	delta-BHC	0.05	U	T	3
W-1	06/23/93	120416	U	delta-BHC	0.05	U	N	3
W-1	06/23/93	120414	U	delta-BHC	0.05	U	D	3
W-1	05/20/93	120068-1	U	Dieldrin	0.1	U	D	3
W-1	05/20/93	120072-2	U	Dieldrin	0.1	U	T	3
W-1	06/23/93	120416	U	Dieldrin	0.1	U	N	3
W-1	06/23/93	120414	U	Dieldrin	0.1	U	D	3
W-1	05/20/93	120068-1	U	Endosulfan II	0.1	U	D	3
W-1	05/20/93	120072-2	U	Endosulfan II	0.1	U	T	3
W-1	06/23/93	120416	U	Endosulfan II	0.1	U	N	3
W-1	06/23/93	120414	U	Endosulfan II	0.1	U	D	3
W-1	05/20/93	120068-1	U	Endosulfan sulfate	0.1	U	D	3
W-1	05/20/93	120072-2	U	Endosulfan sulfate	0.1	U	T	3
W-1	06/23/93	120416	U	Endosulfan sulfate	0.1	U	N	3
W-1	06/23/93	120414	U	Endosulfan sulfate	0.1	U	D	3
W-1	05/20/93	120068-1	U	Endosulfan-I	0.05	U	D	3
W-1	05/20/93	120072-2	U	Endosulfan-I	0.05	U	T	3
W-1	06/23/93	120416	U	Endosulfan-I	0.05	U	N	3
W-1	06/23/93	120414	U	Endosulfan-I	0.05	U	D	3
W-1	05/20/93	120068-1	U	Endrin	0.1	U	D	3
W-1	05/20/93	120072-2	U	Endrin	0.1	U	T	3
W-1	06/23/93	120416	U	Endrin	0.1	U	N	3
W-1	06/23/93	120414	U	Endrin	0.1	U	D	3
W-1	05/20/93	120068-1	U	Endrin aldehyde	0.1	U	D	3
W-1	05/20/93	120072-2	U	Endrin aldehyde	0.1	U	T	3
W-1	06/23/93	120416	U	Endrin aldehyde	0.1	U	N	3
W-1	06/23/93	120414	U	Endrin aldehyde	0.1	U	D	3
W-1	05/20/93	120068-1	U	Endrin ketone	0.1	U	D	3
W-1	05/20/93	120072-2	U	Endrin ketone	0.1	U	T	3
W-1	06/23/93	120416	U	Endrin ketone	0.1	U	N	3
W-1	06/23/93	120414	U	Endrin ketone	0.1	U	D	3
W-1	05/20/93	120068-1	U	gamma-BHC (Lindane)	0.05	U	D	3
W-1	05/20/93	120072-2	U	gamma-BHC (Lindane)	0.05	U	T	3
W-1	06/23/93	120416	U	gamma-BHC (Lindane)	0.05	U	N	3
W-1	06/23/93	120414	U	gamma-BHC (Lindane)	0.05	U	D	3
W-1	05/20/93	120068-1	U	gamma-Chlordane	0.05	U	D	3
W-1	05/20/93	120072-2	U	gamma-Chlordane	0.05	U	T	3
W-1	06/23/93	120416	U	gamma-Chlordane	0.05	U	N	3
W-1	06/23/93	120414	U	gamma-Chlordane	0.05	U	D	3
W-1	05/20/93	120068-1	U	Heptachlor	0.05	U	D	3
W-1	05/20/93	120072-2	U	Heptachlor	0.05	U	T	3
W-1	06/23/93	120416	U	Heptachlor	0.05	U	N	3
W-1	06/23/93	120414	U	Heptachlor	0.05	U	D	3

Table E-15 (Continued)
Validated Organic Data for Background Surface Water in the Great Miami River

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL
W-1	05/20/93	120068-1	U	Heptachlor epoxide	0.05	U	D	3
W-1	05/20/93	120072-2	U	Heptachlor epoxide	0.05	U	T	3
W-1	06/23/93	120416	U	Heptachlor epoxide	0.05	U	N	3
W-1	06/23/93	120414	U	Heptachlor epoxide	0.05	U	D	3
W-1	05/20/93	120068-1	U	Methoxychlor	0.5	U	D	3
W-1	05/20/93	120072-2	U	Methoxychlor	0.5	U	T	3
W-1	06/23/93	120416	U	Methoxychlor	0.5	U	N	3
W-1	06/23/93	120414	U	Methoxychlor	0.5	U	D	3
W-1	05/20/93	120068-1	U	Toxaphene	5	U	D	3
W-1	05/20/93	120072-2	U	Toxaphene	5	U	T	3
W-1	06/23/93	120416	U	Toxaphene	5	U	N	3
W-1	06/23/93	120414	U	Toxaphene	5	U	D	3
W-1	05/20/93	120064-2	U	1,2,4-Trichlorobenzene	10	U	N	3
W-1	05/20/93	120068-1	U	1,2,4-Trichlorobenzene	10	U	D	3
W-1	05/20/93	120072-2	U	1,2,4-Trichlorobenzene	10	U	T	3
W-1	06/23/93	120416	U	1,2,4-Trichlorobenzene	10	U	N	3
W-1	06/23/93	120414	U	1,2,4-Trichlorobenzene	10	U	D	3
W-1	05/20/93	120064-2	U	1,2-Dichlorobenzene	10	U	N	3
W-1	05/20/93	120068-1	U	1,2-Dichlorobenzene	10	U	D	3
W-1	05/20/93	120072-2	U	1,2-Dichlorobenzene	10	U	T	3
W-1	06/23/93	120416	U	1,2-Dichlorobenzene	10	U	N	3
W-1	06/23/93	120414	U	1,2-Dichlorobenzene	10	U	D	3
W-1	05/20/93	120064-2	U	1,3-Dichlorobenzene	10	U	N	3
W-1	05/20/93	120068-1	U	1,3-Dichlorobenzene	10	U	D	3
W-1	05/20/93	120072-2	U	1,3-Dichlorobenzene	10	U	T	3
W-1	06/23/93	120416	U	1,3-Dichlorobenzene	10	U	N	3
W-1	06/23/93	120414	U	1,3-Dichlorobenzene	10	U	D	3
W-1	05/20/93	120064-2	U	1,4-Dichlorobenzene	10	U	N	3
W-1	05/20/93	120068-1	U	1,4-Dichlorobenzene	10	U	D	3
W-1	05/20/93	120072-2	U	1,4-Dichlorobenzene	10	U	T	3
W-1	06/23/93	120416	U	1,4-Dichlorobenzene	10	U	N	3
W-1	06/23/93	120414	U	1,4-Dichlorobenzene	10	U	D	3
W-1	05/20/93	120064-2	U	2,4,5-Trichlorophenol	25	U	N	3
W-1	05/20/93	120068-1	U	2,4,5-Trichlorophenol	25	U	D	3
W-1	05/20/93	120072-2	U	2,4,5-Trichlorophenol	25	U	T	3
W-1	06/23/93	120416	U	2,4,5-Trichlorophenol	25	U	N	3
W-1	06/23/93	120414	U	2,4,5-Trichlorophenol	25	U	D	3
W-1	05/20/93	120064-2	U	2,4,6-Trichlorophenol	10	U	N	3
W-1	05/20/93	120068-1	U	2,4,6-Trichlorophenol	10	U	D	3
W-1	05/20/93	120072-2	U	2,4,6-Trichlorophenol	10	U	T	3
W-1	06/23/93	120416	U	2,4,6-Trichlorophenol	10	U	N	3
W-1	06/23/93	120414	U	2,4,6-Trichlorophenol	10	U	D	3
W-1	05/20/93	120064-2	U	2,4-Dichlorophenol	10	U	N	3
W-1	05/20/93	120068-1	U	2,4-Dichlorophenol	10	U	D	3
W-1	05/20/93	120072-2	U	2,4-Dichlorophenol	10	U	T	3
W-1	06/23/93	120416	U	2,4-Dichlorophenol	10	U	N	3
W-1	06/23/93	120414	U	2,4-Dichlorophenol	10	U	D	3
W-1	05/20/93	120064-2	U	2,4-Dimethylphenol	10	U	N	3
W-1	05/20/93	120068-1	U	2,4-Dimethylphenol	10	U	D	3
W-1	05/20/93	120072-2	U	2,4-Dimethylphenol	10	U	T	3

Table E-15 (Continued)
Validated Organic Data for Background Surface Water in the Great Miami River

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL
W-1	06/23/93	120416	U	2,4-Dimethylphenol	10	U	N	3
W-1	06/23/93	120414	U	2,4-Dimethylphenol	10	U	D	3
W-1	05/20/93	120064-2	U	2,4-Dinitrophenol	25	U	N	3
W-1	05/20/93	120068-1	U	2,4-Dinitrophenol	25	U	D	3
W-1	05/20/93	120072-2	U	2,4-Dinitrophenol	25	U	T	3
W-1	06/23/93	120416	U	2,4-Dinitrophenol	50	UJ	N	3
W-1	06/23/93	120414	U	2,4-Dinitrophenol	50	UJ	D	3
W-1	05/20/93	120064-2	U	2,4-Dinitrotoluene	10	U	N	3
W-1	05/20/93	120068-1	U	2,4-Dinitrotoluene	10	U	D	3
W-1	05/20/93	120072-2	U	2,4-Dinitrotoluene	10	U	T	3
W-1	06/23/93	120416	U	2,4-Dinitrotoluene	10	U	N	3
W-1	06/23/93	120414	U	2,4-Dinitrotoluene	10	U	D	3
W-1	05/20/93	120064-2	U	2,6-Dinitrotoluene	10	U	N	3
W-1	05/20/93	120068-1	U	2,6-Dinitrotoluene	10	U	D	3
W-1	05/20/93	120072-2	U	2,6-Dinitrotoluene	10	U	T	3
W-1	06/23/93	120416	U	2,6-Dinitrotoluene	10	U	N	3
W-1	06/23/93	120414	U	2,6-Dinitrotoluene	10	U	D	3
W-1	06/23/93	120416	U	2-Benzyl-4-chlorophenol	10	U	N	3
W-1	06/23/93	120414	U	2-Benzyl-4-chlorophenol	10	U	D	3
W-1	05/20/93	120064-2	U	2-Chloronaphthalene	10	U	N	3
W-1	05/20/93	120068-1	U	2-Chloronaphthalene	10	U	D	3
W-1	05/20/93	120072-2	U	2-Chloronaphthalene	10	U	T	3
W-1	06/23/93	120416	U	2-Chloronaphthalene	10	U	N	3
W-1	06/23/93	120414	U	2-Chloronaphthalene	10	U	D	3
W-1	05/20/93	120064-2	U	2-Chlorophenol	10	U	N	3
W-1	05/20/93	120068-1	U	2-Chlorophenol	10	U	D	3
W-1	05/20/93	120072-2	U	2-Chlorophenol	10	U	T	3
W-1	06/23/93	120416	U	2-Chlorophenol	10	U	N	3
W-1	06/23/93	120414	U	2-Chlorophenol	10	U	D	3
W-1	05/20/93	120064-2	U	2-Methylnaphthalene	10	U	N	3
W-1	05/20/93	120068-1	U	2-Methylnaphthalene	10	U	D	3
W-1	05/20/93	120072-2	U	2-Methylnaphthalene	10	U	T	3
W-1	06/23/93	120416	U	2-Methylnaphthalene	10	U	N	3
W-1	06/23/93	120414	U	2-Methylnaphthalene	10	U	D	3
W-1	05/20/93	120064-2	U	2-Methylphenol	10	U	N	3
W-1	05/20/93	120068-1	U	2-Methylphenol	10	U	D	3
W-1	05/20/93	120072-2	U	2-Methylphenol	10	U	T	3
W-1	06/23/93	120416	U	2-Methylphenol	10	U	N	3
W-1	06/23/93	120414	U	2-Methylphenol	10	U	D	3
W-1	05/20/93	120064-2	U	2-Nitroaniline	25	U	N	3
W-1	05/20/93	120068-1	U	2-Nitroaniline	25	U	D	3
W-1	05/20/93	120072-2	U	2-Nitroaniline	25	U	T	3
W-1	06/23/93	120416	U	2-Nitroaniline	25	U	N	3
W-1	06/23/93	120414	U	2-Nitroaniline	25	U	D	3
W-1	05/20/93	120064-2	U	2-Nitrophenol	10	U	N	3
W-1	05/20/93	120068-1	U	2-Nitrophenol	10	U	D	3
W-1	05/20/93	120072-2	U	2-Nitrophenol	10	U	T	3
W-1	06/23/93	120416	U	2-Nitrophenol	10	U	N	3
W-1	06/23/93	120414	U	2-Nitrophenol	10	U	D	3
W-1	05/20/93	120064-2	U	3,3'-Dichlorobenzidine	10	UJ	N	3

Table E-15 (Continued)
Validated Organic Data for Background Surface Water in the Great Miami River

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL
W-1	05/20/93	120068-1	U	3,3'-Dichlorobenzidine	10	UJ	D	3
W-1	05/20/93	120072-2	U	3,3'-Dichlorobenzidine	10	UJ	T	3
W-1	06/23/93	120416	U	3,3'-Dichlorobenzidine	10	U	N	3
W-1	06/23/93	120414	U	3,3'-Dichlorobenzidine	10	U	D	3
W-1	05/20/93	120064-2	U	3-Nitroaniline	25	UJ	N	3
W-1	05/20/93	120068-1	U	3-Nitroaniline	25	UJ	D	3
W-1	05/20/93	120072-2	U	3-Nitroaniline	25	UJ	T	3
W-1	06/23/93	120416	U	3-Nitroaniline	25	U	N	3
W-1	06/23/93	120414	U	3-Nitroaniline	25	U	D	3
W-1	05/20/93	120064-2	U	4,6-Dinitro-2-methylphenol	25	U	N	3
W-1	05/20/93	120068-1	U	4,6-Dinitro-2-methylphenol	25	U	D	3
W-1	05/20/93	120072-2	U	4,6-Dinitro-2-methylphenol	25	U	T	3
W-1	06/23/93	120416	U	4,6-Dinitro-2-methylphenol	25	U	N	3
W-1	06/23/93	120414	U	4,6-Dinitro-2-methylphenol	25	U	D	3
W-1	05/20/93	120064-2	U	4-Bromophenyl phenyl ether	10	U	N	3
W-1	05/20/93	120068-1	U	4-Bromophenyl phenyl ether	10	U	D	3
W-1	05/20/93	120072-2	U	4-Bromophenyl phenyl ether	10	U	T	3
W-1	06/23/93	120416	U	4-Bromophenyl phenyl ether	10	U	N	3
W-1	06/23/93	120414	U	4-Bromophenyl phenyl ether	10	U	D	3
W-1	05/20/93	120064-2	U	4-Chloro-3-methylphenol	10	U	N	3
W-1	05/20/93	120068-1	U	4-Chloro-3-methylphenol	10	U	D	3
W-1	05/20/93	120072-2	U	4-Chloro-3-methylphenol	10	U	T	3
W-1	06/23/93	120416	U	4-Chloro-3-methylphenol	10	U	N	3
W-1	06/23/93	120414	U	4-Chloro-3-methylphenol	10	U	D	3
W-1	05/20/93	120064-2	U	4-Chlorophenylphenyl ether	10	U	N	3
W-1	05/20/93	120068-1	U	4-Chlorophenylphenyl ether	10	U	D	3
W-1	05/20/93	120072-2	U	4-Chlorophenylphenyl ether	10	U	T	3
W-1	06/23/93	120416	U	4-Chlorophenylphenyl ether	10	U	N	3
W-1	06/23/93	120414	U	4-Chlorophenylphenyl ether	10	U	D	3
W-1	05/20/93	120064-2	U	4-Methylphenol	10	U	N	3
W-1	05/20/93	120068-1	U	4-Methylphenol	10	U	D	3
W-1	05/20/93	120072-2	U	4-Methylphenol	10	U	T	3
W-1	06/23/93	120416	U	4-Methylphenol	10	U	N	3
W-1	06/23/93	120414	U	4-Methylphenol	10	U	D	3
W-1	06/23/93	120416	U	4-Nitroaniline	25	U	N	3
W-1	06/23/93	120414	U	4-Nitroaniline	25	U	D	3
W-1	05/20/93	120064-2	U	4-Nitrophenol	25	U	N	3
W-1	05/20/93	120068-1	U	4-Nitrophenol	25	U	D	3
W-1	05/20/93	120072-2	U	4-Nitrophenol	25	U	T	3
W-1	06/23/93	120416	U	4-Nitrophenol	25	U	N	3
W-1	06/23/93	120414	U	4-Nitrophenol	25	U	D	3
W-1	05/20/93	120064-2	U	Acenaphthene	10	U	N	3
W-1	05/20/93	120068-1	U	Acenaphthene	10	U	D	3
W-1	05/20/93	120072-2	U	Acenaphthene	10	U	T	3
W-1	06/23/93	120416	U	Acenaphthene	10	U	N	3
W-1	06/23/93	120414	U	Acenaphthene	10	U	D	3
W-1	05/20/93	120064-2	U	Acenaphthylene	10	U	N	3
W-1	05/20/93	120068-1	U	Acenaphthylene	10	U	D	3
W-1	05/20/93	120072-2	U	Acenaphthylene	10	U	T	3
W-1	06/23/93	120416	U	Acenaphthylene	10	U	N	3

Table E-15 (Continued)
Validated Organic Data for Background Surface Water in the Great Miami River

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL
W-1	06/23/93	120414	U	Acenaphthylene	10	U	D	3
W-1	05/20/93	120064-2	U	Anthracene	10	U	N	3
W-1	05/20/93	120068-1	U	Anthracene	10	U	D	3
W-1	05/20/93	120072-2	U	Anthracene	10	U	T	3
W-1	06/23/93	120416	U	Anthracene	10	U	N	3
W-1	06/23/93	120414	U	Anthracene	10	U	D	3
W-1	05/20/93	120064-2	U	Benzo(a)anthracene	10	U	N	3
W-1	05/20/93	120068-1	U	Benzo(a)anthracene	10	U	D	3
W-1	05/20/93	120072-2	U	Benzo(a)anthracene	10	U	T	3
W-1	06/23/93	120416	U	Benzo(a)anthracene	10	U	N	3
W-1	06/23/93	120414	U	Benzo(a)anthracene	10	U	D	3
W-1	05/20/93	120064-2	U	Benzo(a)pyrene	10	U	N	3
W-1	05/20/93	120068-1	U	Benzo(a)pyrene	10	U	D	3
W-1	05/20/93	120072-2	U	Benzo(a)pyrene	10	U	T	3
W-1	06/23/93	120416	U	Benzo(a)pyrene	10	U	N	3
W-1	06/23/93	120414	U	Benzo(a)pyrene	10	U	D	3
W-1	05/20/93	120064-2	U	Benzo(b)fluoranthene	10	U	N	3
W-1	05/20/93	120068-1	U	Benzo(b)fluoranthene	10	U	D	3
W-1	05/20/93	120072-2	U	Benzo(b)fluoranthene	10	U	T	3
W-1	06/23/93	120416	U	Benzo(b)fluoranthene	10	U	N	3
W-1	06/23/93	120414	U	Benzo(b)fluoranthene	10	U	D	3
W-1	05/20/93	120064-2	U	Benzo(g,h,i)perylene	10	U	N	3
W-1	05/20/93	120068-1	U	Benzo(g,h,i)perylene	10	U	D	3
W-1	05/20/93	120072-2	U	Benzo(g,h,i)perylene	10	U	T	3
W-1	06/23/93	120416	U	Benzo(g,h,i)perylene	10	U	N	3
W-1	06/23/93	120414	U	Benzo(g,h,i)perylene	10	U	D	3
W-1	05/20/93	120064-2	U	Benzo(k)fluoranthene	10	U	N	3
W-1	05/20/93	120068-1	U	Benzo(k)fluoranthene	10	U	D	3
W-1	05/20/93	120072-2	U	Benzo(k)fluoranthene	10	U	T	3
W-1	06/23/93	120416	U	Benzo(k)fluoranthene	10	U	N	3
W-1	06/23/93	120414	U	Benzo(k)fluoranthene	10	U	D	3
W-1	06/23/93	120416	U	Benzoic acid	50	U	N	3
W-1	06/23/93	120414	U	Benzoic acid	50	U	D	3
W-1	06/23/93	120416	U	Benzyl alcohol	10	U	N	3
W-1	06/23/93	120414	U	Benzyl alcohol	10	U	D	3
W-1	05/20/93	120064-2	U	bis(2-Chloroethoxy)methane	10	U	N	3
W-1	05/20/93	120068-1	U	bis(2-Chloroethoxy)methane	10	U	D	3
W-1	05/20/93	120072-2	U	bis(2-Chloroethoxy)methane	10	U	T	3
W-1	06/23/93	120416	U	bis(2-Chloroethoxy)methane	10	U	N	3
W-1	06/23/93	120414	U	bis(2-Chloroethoxy)methane	10	U	D	3
W-1	05/20/93	120064-2	U	bis(2-Chloroethyl)ether	10	U	N	3
W-1	05/20/93	120068-1	U	bis(2-Chloroethyl)ether	10	U	D	3
W-1	05/20/93	120072-2	U	bis(2-Chloroethyl)ether	10	U	T	3
W-1	06/23/93	120416	U	bis(2-Chloroethyl)ether	10	U	N	3
W-1	06/23/93	120414	U	bis(2-Chloroethyl)ether	10	U	D	3
W-1	05/20/93	120064-2	U	bis(2-Chloroisopropyl) ether	10	U	N	3
W-1	05/20/93	120068-1	U	bis(2-Chloroisopropyl) ether	10	U	D	3
W-1	05/20/93	120072-2	U	bis(2-Chloroisopropyl) ether	10	U	T	3
W-1	06/23/93	120416	U	bis(2-Chloroisopropyl) ether	10	U	N	3
W-1	06/23/93	120414	U	bis(2-Chloroisopropyl) ether	10	U	D	3

Table E-15 (Continued)
Validated Organic Data for Background Surface Water in the Great Miami River

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL
W-1	05/20/93	120064-2	U	bis(2-Ethylhexyl)phthalate	10	U	N	3
W-1	05/20/93	120068-1	U	bis(2-Ethylhexyl)phthalate	10	U	D	3
W-1	05/20/93	120072-2	U	bis(2-Ethylhexyl)phthalate	10	U	T	3
W-1	06/23/93	120416	U	bis(2-Ethylhexyl)phthalate	10	U	N	3
W-1	06/23/93	120414	J	bis(2-Ethylhexyl)phthalate	1	J	D	3
W-1	05/20/93	120064-2	U	Butyl benzyl phthalate	10	U	N	3
W-1	05/20/93	120068-1	U	Butyl benzyl phthalate	10	U	D	3
W-1	05/20/93	120072-2	U	Butyl benzyl phthalate	10	U	T	3
W-1	06/23/93	120416	U	Butyl benzyl phthalate	10	U	N	3
W-1	06/23/93	120414	U	Butyl benzyl phthalate	10	U	D	3
W-1	05/20/93	120064-2	U	Carbazole	10	U	N	3
W-1	05/20/93	120068-1	U	Carbazole	10	U	D	3
W-1	05/20/93	120072-2	U	Carbazole	10	U	T	3
W-1	06/23/93	120416	U	Carbazole	10	U	N	3
W-1	06/23/93	120414	U	Carbazole	10	U	D	3
W-1	05/20/93	120064-2	U	Chrysene	10	U	N	3
W-1	05/20/93	120068-1	U	Chrysene	10	U	D	3
W-1	05/20/93	120072-2	U	Chrysene	10	U	T	3
W-1	06/23/93	120416	U	Chrysene	10	U	N	3
W-1	06/23/93	120414	U	Chrysene	10	U	D	3
W-1	05/20/93	120064-2	U	Di-n-butyl phthalate	10	U	N	3
W-1	05/20/93	120068-1	U	Di-n-butyl phthalate	10	U	D	3
W-1	05/20/93	120072-2	U	Di-n-butyl phthalate	10	U	T	3
W-1	06/23/93	120416	U	Di-n-butyl phthalate	10	U	N	3
W-1	06/23/93	120414	U	Di-n-butyl phthalate	10	U	D	3
W-1	05/20/93	120064-2	U	Di-n-octyl phthalate	10	U	N	3
W-1	05/20/93	120068-1	U	Di-n-octyl phthalate	10	U	D	3
W-1	05/20/93	120072-2	U	Di-n-octyl phthalate	10	U	T	3
W-1	06/23/93	120416	U	Di-n-octyl phthalate	10	U	N	3
W-1	06/23/93	120414	U	Di-n-octyl phthalate	10	U	D	3
W-1	05/20/93	120064-2	U	Dibenzo(a,h)anthracene	10	U	N	3
W-1	05/20/93	120068-1	U	Dibenzo(a,h)anthracene	10	U	D	3
W-1	05/20/93	120072-2	U	Dibenzo(a,h)anthracene	10	U	T	3
W-1	06/23/93	120416	U	Dibenzo(a,h)anthracene	10	U	N	3
W-1	06/23/93	120414	U	Dibenzo(a,h)anthracene	10	U	D	3
W-1	05/20/93	120064-2	U	Dibenzofuran	10	U	N	3
W-1	05/20/93	120068-1	U	Dibenzofuran	10	U	D	3
W-1	05/20/93	120072-2	U	Dibenzofuran	10	U	T	3
W-1	06/23/93	120416	U	Dibenzofuran	10	U	N	3
W-1	06/23/93	120414	U	Dibenzofuran	10	U	D	3
W-1	05/20/93	120064-2	U	Diethyl phthalate	10	U	N	3
W-1	05/20/93	120068-1	U	Diethyl phthalate	10	U	D	3
W-1	05/20/93	120072-2	U	Diethyl phthalate	10	U	T	3
W-1	06/23/93	120416	U	Diethyl phthalate	10	U	N	3
W-1	06/23/93	120414	U	Diethyl phthalate	10	U	D	3
W-1	05/20/93	120064-2	U	Dimethyl phthalate	10	U	N	3
W-1	05/20/93	120068-1	U	Dimethyl phthalate	10	U	D	3
W-1	05/20/93	120072-2	U	Dimethyl phthalate	10	U	T	3
W-1	06/23/93	120416	U	Dimethyl phthalate	10	U	N	3
W-1	06/23/93	120414	U	Dimethyl phthalate	10	U	D	3

Table E-15 (Continued)
Validated Organic Data for Background Surface Water in the Great Miami River

Well	Sample		Lab		Validated		QA	
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type	ASL
W-1	05/20/93	120064-2	U	Fluoranthene	10	U	N	3
W-1	05/20/93	120068-1	U	Fluoranthene	10	U	D	3
W-1	05/20/93	120072-2	U	Fluoranthene	10	U	T	3
W-1	06/23/93	120416	U	Fluoranthene	10	U	N	3
W-1	06/23/93	120414	U	Fluoranthene	10	U	D	3
W-1	05/20/93	120064-2	U	Fluorene	10	U	N	3
W-1	05/20/93	120068-1	U	Fluorene	10	U	D	3
W-1	05/20/93	120072-2	U	Fluorene	10	U	T	3
W-1	06/23/93	120416	U	Fluorene	10	U	N	3
W-1	06/23/93	120414	U	Fluorene	10	U	D	3
W-1	05/20/93	120064-2	U	Hexachlorobenzene	10	U	N	3
W-1	05/20/93	120068-1	U	Hexachlorobenzene	10	U	D	3
W-1	05/20/93	120072-2	U	Hexachlorobenzene	10	U	T	3
W-1	06/23/93	120416	U	Hexachlorobenzene	10	U	N	3
W-1	06/23/93	120414	U	Hexachlorobenzene	10	U	D	3
W-1	05/20/93	120064-2	U	Hexachlorobutadiene	10	U	N	3
W-1	05/20/93	120068-1	U	Hexachlorobutadiene	10	U	D	3
W-1	05/20/93	120072-2	U	Hexachlorobutadiene	10	U	T	3
W-1	06/23/93	120416	U	Hexachlorobutadiene	10	U	N	3
W-1	06/23/93	120414	U	Hexachlorobutadiene	10	U	D	3
W-1	05/20/93	120064-2	U	Hexachlorocyclopentadiene	10	U	N	3
W-1	05/20/93	120068-1	U	Hexachlorocyclopentadiene	10	U	D	3
W-1	05/20/93	120072-2	U	Hexachlorocyclopentadiene	10	U	T	3
W-1	06/23/93	120416	U	Hexachlorocyclopentadiene	10	U	N	3
W-1	06/23/93	120414	U	Hexachlorocyclopentadiene	10	U	D	3
W-1	05/20/93	120064-2	U	Hexachloroethane	10	U	N	3
W-1	05/20/93	120068-1	U	Hexachloroethane	10	U	D	3
W-1	05/20/93	120072-2	U	Hexachloroethane	10	U	T	3
W-1	06/23/93	120416	U	Hexachloroethane	10	U	N	3
W-1	06/23/93	120414	U	Hexachloroethane	10	U	D	3
W-1	05/20/93	120064-2	U	Indeno(1,2,3-cd)pyrene	10	U	N	3
W-1	05/20/93	120068-1	U	Indeno(1,2,3-cd)pyrene	10	U	D	3
W-1	05/20/93	120072-2	U	Indeno(1,2,3-cd)pyrene	10	U	T	3
W-1	06/23/93	120416	U	Indeno(1,2,3-cd)pyrene	10	U	N	3
W-1	06/23/93	120414	U	Indeno(1,2,3-cd)pyrene	10	U	D	3
W-1	05/20/93	120064-2	U	Isophorone	10	U	N	3
W-1	05/20/93	120068-1	U	Isophorone	10	U	D	3
W-1	05/20/93	120072-2	U	Isophorone	10	U	T	3
W-1	06/23/93	120416	U	Isophorone	10	U	N	3
W-1	06/23/93	120414	U	Isophorone	10	U	D	3
W-1	05/20/93	120064-2	U	N-Nitroso-di-n-propylamine	10	U	N	3
W-1	05/20/93	120068-1	U	N-Nitroso-di-n-propylamine	10	U	D	3
W-1	05/20/93	120072-2	U	N-Nitroso-di-n-propylamine	10	U	T	3
W-1	06/23/93	120416	U	N-Nitroso-di-n-propylamine	10	U	N	3
W-1	06/23/93	120414	U	N-Nitroso-di-n-propylamine	10	U	D	3
W-1	06/23/93	120416	U	N-Nitrosodimethylamine	10	U	N	3
W-1	06/23/93	120414	U	N-Nitrosodimethylamine	10	U	D	3
W-1	05/20/93	120064-2	U	N-Nitrosodiphenylamine	10	U	N	3
W-1	05/20/93	120068-1	U	N-Nitrosodiphenylamine	10	U	D	3
W-1	05/20/93	120072-2	U	N-Nitrosodiphenylamine	10	U	T	3

Table E-15 (Continued)
Validated Organic Data for Background Surface Water in the Great Miami River

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL
W-1	06/23/93	120416	U	N-Nitrosodiphenylamine	10	U	N	3
W-1	06/23/93	120414	U	N-Nitrosodiphenylamine	10	U	D	3
W-1	05/20/93	120064-2	U	Naphthalene	10	U	N	3
W-1	05/20/93	120068-1	U	Naphthalene	10	U	D	3
W-1	05/20/93	120072-2	U	Naphthalene	10	U	T	3
W-1	06/23/93	120416	U	Naphthalene	10	U	N	3
W-1	06/23/93	120414	U	Naphthalene	10	U	D	3
W-1	05/20/93	120064-2	U	Nitrobenzene	10	U	N	3
W-1	05/20/93	120068-1	U	Nitrobenzene	10	U	D	3
W-1	05/20/93	120072-2	U	Nitrobenzene	10	U	T	3
W-1	06/23/93	120416	U	Nitrobenzene	10	U	N	3
W-1	06/23/93	120414	U	Nitrobenzene	10	U	D	3
W-1	05/20/93	120064-2	U	p-Chloroaniline	10	U	N	3
W-1	05/20/93	120068-1	U	p-Chloroaniline	10	U	D	3
W-1	05/20/93	120072-2	U	p-Chloroaniline	10	U	T	3
W-1	06/23/93	120416	U	p-Chloroaniline	10	U	N	3
W-1	06/23/93	120414	U	p-Chloroaniline	10	U	D	3
W-1	05/20/93	120064-2	U	Pentachlorophenol	25	U	N	3
W-1	05/20/93	120068-1	U	Pentachlorophenol	25	U	D	3
W-1	05/20/93	120072-2	U	Pentachlorophenol	25	U	T	3
W-1	06/23/93	120416	U	Pentachlorophenol	25	U	N	3
W-1	06/23/93	120414	U	Pentachlorophenol	25	U	D	3
W-1	05/20/93	120064-2	U	Phenanthrene	10	U	N	3
W-1	05/20/93	120068-1	U	Phenanthrene	10	U	D	3
W-1	05/20/93	120072-2	U	Phenanthrene	10	U	T	3
W-1	06/23/93	120416	U	Phenanthrene	10	U	N	3
W-1	06/23/93	120414	U	Phenanthrene	10	U	D	3
W-1	05/20/93	120064-2	U	Phenol	10	U	N	3
W-1	05/20/93	120068-1	U	Phenol	10	U	D	3
W-1	05/20/93	120072-2	U	Phenol	10	U	T	3
W-1	06/23/93	120416	U	Phenol	10	U	N	3
W-1	06/23/93	120414	U	Phenol	10	U	D	3
W-1	05/20/93	120064-2	U	Pyrene	10	U	N	3
W-1	05/20/93	120068-1	U	Pyrene	10	U	D	3
W-1	05/20/93	120072-2	U	Pyrene	10	U	T	3
W-1	06/23/93	120416	U	Pyrene	10	U	N	3
W-1	06/23/93	120414	U	Pyrene	10	U	D	3
W-1	05/20/93	120064-2	U	1,1,1-Trichloroethane	10	U	N	3
W-1	05/20/93	120068-1	U	1,1,1-Trichloroethane	10	U	D	3
W-1	05/20/93	120071-2	U	1,1,1-Trichloroethane	10	U	D	3
W-1	05/20/93	120075-2	U	1,1,1-Trichloroethane	10	U	D	3
W-1	05/20/93	120072-2	U	1,1,1-Trichloroethane	10	U	T	3
W-1	06/23/93	120416	U	1,1,1-Trichloroethane	10	U	N	3
W-1	06/23/93	120414	U	1,1,1-Trichloroethane	10	U	D	3
W-1	05/20/93	120064-2	U	1,1,2,2-Tetrachloroethane	10	U	N	3
W-1	05/20/93	120075-2	U	1,1,2,2-Tetrachloroethane	10	U	D	3
W-1	05/20/93	120071-2	U	1,1,2,2-Tetrachloroethane	10	U	D	3
W-1	05/20/93	120068-1	U	1,1,2,2-Tetrachloroethane	10	U	D	3
W-1	05/20/93	120072-2	U	1,1,2,2-Tetrachloroethane	10	U	T	3
W-1	06/23/93	120416	U	1,1,2,2-Tetrachloroethane	10	U	N	3

Table E-15 (Continued)
Validated Organic Data for Background Surface Water in the Great Miami River

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL
W-1	06/23/93	120414	U	1,1,2,2-Tetrachloroethane	10	U	D	3
W-1	05/20/93	120064-2	U	1,1,2-Trichloroethane	10	U	N	3
W-1	05/20/93	120071-2	U	1,1,2-Trichloroethane	10	U	D	3
W-1	05/20/93	120068-1	U	1,1,2-Trichloroethane	10	U	D	3
W-1	05/20/93	120075-2	U	1,1,2-Trichloroethane	10	U	D	3
W-1	05/20/93	120072-2	U	1,1,2-Trichloroethane	10	U	T	3
W-1	06/23/93	120416	U	1,1,2-Trichloroethane	10	U	N	3
W-1	06/23/93	120414	U	1,1,2-Trichloroethane	10	U	D	3
W-1	05/20/93	120064-2	U	1,1-Dichloroethane	10	U	N	3
W-1	05/20/93	120075-2	U	1,1-Dichloroethane	10	U	D	3
W-1	05/20/93	120071-2	U	1,1-Dichloroethane	10	U	D	3
W-1	05/20/93	120068-1	U	1,1-Dichloroethane	10	U	D	3
W-1	05/20/93	120072-2	U	1,1-Dichloroethane	10	U	T	3
W-1	06/23/93	120416	U	1,1-Dichloroethane	10	U	N	3
W-1	06/23/93	120414	U	1,1-Dichloroethane	10	U	D	3
W-1	05/20/93	120064-2	U	1,1-Dichloroethene	10	U	N	3
W-1	05/20/93	120071-2	U	1,1-Dichloroethene	10	U	D	3
W-1	05/20/93	120068-1	U	1,1-Dichloroethene	10	U	D	3
W-1	05/20/93	120075-2	U	1,1-Dichloroethene	10	U	D	3
W-1	05/20/93	120072-2	U	1,1-Dichloroethene	10	U	T	3
W-1	06/23/93	120416	U	1,1-Dichloroethene	10	U	N	3
W-1	06/23/93	120414	U	1,1-Dichloroethene	10	U	D	3
W-1	05/20/93	120064-2	U	1,2-Dichloroethane	10	U	N	3
W-1	05/20/93	120068-1	U	1,2-Dichloroethane	10	U	D	3
W-1	05/20/93	120071-2	U	1,2-Dichloroethane	10	U	D	3
W-1	05/20/93	120075-2	U	1,2-Dichloroethane	10	U	D	3
W-1	05/20/93	120072-2	U	1,2-Dichloroethane	10	U	T	3
W-1	06/23/93	120416	U	1,2-Dichloroethane	10	UJ	N	3
W-1	06/23/93	120414	U	1,2-Dichloroethane	10	UJ	D	3
W-1	05/20/93	120064-2	U	1,2-Dichloroethene (Total)	10	U	N	3
W-1	05/20/93	120075-2	U	1,2-Dichloroethene (Total)	10	U	D	3
W-1	05/20/93	120068-1	U	1,2-Dichloroethene (Total)	10	U	D	3
W-1	05/20/93	120071-2	U	1,2-Dichloroethene (Total)	10	U	D	3
W-1	05/20/93	120072-2	U	1,2-Dichloroethene (Total)	10	U	T	3
W-1	06/23/93	120416	U	1,2-Dichloroethene (Total)	10	U	N	3
W-1	06/23/93	120414	U	1,2-Dichloroethene (Total)	10	U	D	3
W-1	05/20/93	120064-2	U	1,2-Dichloropropane	10	U	N	3
W-1	05/20/93	120068-1	U	1,2-Dichloropropane	10	U	D	3
W-1	05/20/93	120071-2	U	1,2-Dichloropropane	10	U	D	3
W-1	05/20/93	120075-2	U	1,2-Dichloropropane	10	U	D	3
W-1	05/20/93	120072-2	U	1,2-Dichloropropane	10	U	T	3
W-1	06/23/93	120416	U	1,2-Dichloropropane	10	U	N	3
W-1	06/23/93	120414	U	1,2-Dichloropropane	10	U	D	3
W-1	05/20/93	120064-2	U	2-Butanone	10	UJ	N	3
W-1	05/20/93	120071-2	U	2-Butanone	10	UJ	D	3
W-1	05/20/93	120075-2	U	2-Butanone	10	U	D	3
W-1	05/20/93	120068-1	U	2-Butanone	10	UJ	D	3
W-1	05/20/93	120072-2	U	2-Butanone	10	UJ	T	3
W-1	06/23/93	120416	U	2-Butanone	10	UJ	N	3
W-1	06/23/93	120414	U	2-Butanone	10	UJ	D	3

Table E-15 (Continued)
Validated Organic Data for Background Surface Water in the Great Miami River

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL
W-1	05/20/93	120064-2	U	2-Hexanone	10	UJ	N	3
W-1	05/20/93	120068-1	U	2-Hexanone	10	UJ	D	3
W-1	05/20/93	120071-2	U	2-Hexanone	10	UJ	D	3
W-1	05/20/93	120075-2	U	2-Hexanone	10	UJ	D	3
W-1	05/20/93	120072-2	U	2-Hexanone	10	UJ	T	3
W-1	06/23/93	120416	U	2-Hexanone	10	UJ	N	3
W-1	06/23/93	120414	U	2-Hexanone	10	UJ	D	3
W-1	05/20/93	120064-2	U	4-Methyl-2-pentanone	10	UJ	N	3
W-1	05/20/93	120068-1	U	4-Methyl-2-pentanone	10	UJ	D	3
W-1	05/20/93	120071-2	U	4-Methyl-2-pentanone	10	UJ	D	3
W-1	05/20/93	120075-2	U	4-Methyl-2-pentanone	10	UJ	D	3
W-1	05/20/93	120072-2	U	4-Methyl-2-pentanone	10	UJ	T	3
W-1	06/23/93	120416	U	4-Methyl-2-pentanone	10	U	N	3
W-1	06/23/93	120414	U	4-Methyl-2-pentanone	10	U	D	3
W-1	05/20/93	120064-2	J	Acetone	3	J	N	3
W-1	05/20/93	120068-1	J	Acetone	2	J	D	3
W-1	05/20/93	120075-2	BJ	Acetone	3	U	D	3
W-1	05/20/93	120071-2	U	Acetone	10	U	D	3
W-1	05/20/93	120072-2	U	Acetone	10	U	T	3
W-1	06/23/93	120416	U	Acetone	10	UJ	N	3
W-1	06/23/93	120414	J	Acetone	10	UJ	D	3
W-1	05/20/93	120064-2	U	Benzene	10	U	N	3
W-1	05/20/93	120068-1	U	Benzene	10	U	D	3
W-1	05/20/93	120071-2	U	Benzene	10	U	D	3
W-1	05/20/93	120075-2	U	Benzene	10	U	D	3
W-1	05/20/93	120072-2	U	Benzene	10	U	T	3
W-1	06/23/93	120416	U	Benzene	10	U	N	3
W-1	06/23/93	120414	U	Benzene	10	U	D	3
W-1	05/20/93	120064-2	U	Bromodichloromethane	10	U	N	3
W-1	05/20/93	120071-2	U	Bromodichloromethane	10	U	D	3
W-1	05/20/93	120075-2	U	Bromodichloromethane	10	U	D	3
W-1	05/20/93	120068-1	U	Bromodichloromethane	10	U	D	3
W-1	05/20/93	120072-2	U	Bromodichloromethane	10	U	T	3
W-1	06/23/93	120416	U	Bromodichloromethane	10	U	N	3
W-1	06/23/93	120414	U	Bromodichloromethane	10	U	D	3
W-1	05/20/93	120064-2	U	Bromoform	10	U	N	3
W-1	05/20/93	120068-1	U	Bromoform	10	U	D	3
W-1	05/20/93	120071-2	U	Bromoform	10	U	D	3
W-1	05/20/93	120075-2	U	Bromoform	10	U	D	3
W-1	05/20/93	120072-2	U	Bromoform	10	U	T	3
W-1	06/23/93	120416	U	Bromoform	10	U	N	3
W-1	06/23/93	120414	U	Bromoform	10	U	D	3
W-1	05/20/93	120064-2	U	Bromomethane	10	U	N	3
W-1	05/20/93	120071-2	U	Bromomethane	10	U	D	3
W-1	05/20/93	120075-2	U	Bromomethane	10	U	D	3
W-1	05/20/93	120068-1	U	Bromomethane	10	U	D	3
W-1	05/20/93	120072-2	U	Bromomethane	10	U	T	3
W-1	06/23/93	120416	U	Bromomethane	10	U	N	3
W-1	06/23/93	120414	U	Bromomethane	10	U	D	3
W-1	05/20/93	120064-2	U	Carbon disulfide	10	U	N	3

Table E-15 (Continued)
Validated Organic Data for Background Surface Water in the Great Miami River

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL
W-1	05/20/93	120071-2	U	Carbon disulfide	10	U	D	3
W-1	05/20/93	120075-2	U	Carbon disulfide	10	U	D	3
W-1	05/20/93	120068-1	U	Carbon disulfide	10	U	D	3
W-1	05/20/93	120072-2	U	Carbon disulfide	10	U	T	3
W-1	06/23/93	120416	U	Carbon disulfide	10	U	N	3
W-1	06/23/93	120414	U	Carbon disulfide	10	U	D	3
W-1	05/20/93	120064-2	U	Carbon Tetrachloride	10	U	N	3
W-1	05/20/93	120068-1	U	Carbon Tetrachloride	10	U	D	3
W-1	05/20/93	120071-2	U	Carbon Tetrachloride	10	U	D	3
W-1	05/20/93	120075-2	U	Carbon Tetrachloride	10	U	D	3
W-1	05/20/93	120072-2	U	Carbon Tetrachloride	10	U	T	3
W-1	06/23/93	120416	U	Carbon Tetrachloride	10	U	N	3
W-1	06/23/93	120414	U	Carbon Tetrachloride	10	U	D	3
W-1	05/20/93	120064-2	U	Chlorobenzene	10	U	N	3
W-1	05/20/93	120068-1	U	Chlorobenzene	10	U	D	3
W-1	05/20/93	120075-2	U	Chlorobenzene	10	U	D	3
W-1	05/20/93	120071-2	U	Chlorobenzene	10	U	D	3
W-1	05/20/93	120072-2	U	Chlorobenzene	10	U	T	3
W-1	06/23/93	120416	U	Chlorobenzene	10	U	N	3
W-1	06/23/93	120414	U	Chlorobenzene	10	U	D	3
W-1	05/20/93	120064-2	U	Chloroethane	10	U	N	3
W-1	05/20/93	120068-1	U	Chloroethane	10	U	D	3
W-1	05/20/93	120075-2	U	Chloroethane	10	U	D	3
W-1	05/20/93	120071-2	U	Chloroethane	10	U	D	3
W-1	05/20/93	120072-2	U	Chloroethane	10	U	T	3
W-1	06/23/93	120416	U	Chloroethane	10	U	N	3
W-1	06/23/93	120414	U	Chloroethane	10	U	D	3
W-1	05/20/93	120064-2	U	Chloroform	10	U	N	3
W-1	05/20/93	120075-2	U	Chloroform	10	U	D	3
W-1	05/20/93	120071-2	U	Chloroform	10	U	D	3
W-1	05/20/93	120068-1	U	Chloroform	10	U	D	3
W-1	05/20/93	120072-2	U	Chloroform	10	U	T	3
W-1	06/23/93	120416	U	Chloroform	10	U	N	3
W-1	06/23/93	120414	U	Chloroform	10	U	D	3
W-1	05/20/93	120064-2	U	Chloromethane	10	U	N	3
W-1	05/20/93	120068-1	U	Chloromethane	10	U	D	3
W-1	05/20/93	120071-2	U	Chloromethane	10	U	D	3
W-1	05/20/93	120075-2	U	Chloromethane	10	U	D	3
W-1	05/20/93	120072-2	U	Chloromethane	10	U	T	3
W-1	06/23/93	120416	U	Chloromethane	10	U	N	3
W-1	06/23/93	120414	U	Chloromethane	10	U	D	3
W-1	05/20/93	120064-2	U	cis-1,3-Dichloropropene	10	U	N	3
W-1	05/20/93	120068-1	U	cis-1,3-Dichloropropene	10	U	D	3
W-1	05/20/93	120071-2	U	cis-1,3-Dichloropropene	10	U	D	3
W-1	05/20/93	120075-2	U	cis-1,3-Dichloropropene	10	U	D	3
W-1	05/20/93	120072-2	U	cis-1,3-Dichloropropene	10	U	T	3
W-1	06/23/93	120416	U	cis-1,3-Dichloropropene	10	U	N	3
W-1	06/23/93	120414	U	cis-1,3-Dichloropropene	10	U	D	3
W-1	05/20/93	120064-2	U	Dibromochloromethane	10	U	N	3
W-1	05/20/93	120068-1	U	Dibromochloromethane	10	U	D	3

Table E-15 (Continued)
Validated Organic Data for Background Surface Water in the Great Miami River

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL
W-1	05/20/93	120071-2	U	Dibromochloromethane	10	U	D	3
W-1	05/20/93	120075-2	U	Dibromochloromethane	10	U	D	3
W-1	05/20/93	120072-2	U	Dibromochloromethane	10	U	T	3
W-1	06/23/93	120416	U	Dibromochloromethane	10	U	N	3
W-1	06/23/93	120414	U	Dibromochloromethane	10	U	D	3
W-1	05/20/93	120064-2	U	Ethylbenzene	10	U	N	3
W-1	05/20/93	120068-1	U	Ethylbenzene	10	U	D	3
W-1	05/20/93	120071-2	U	Ethylbenzene	10	U	D	3
W-1	05/20/93	120075-2	U	Ethylbenzene	10	U	D	3
W-1	05/20/93	120072-2	U	Ethylbenzene	10	U	T	3
W-1	06/23/93	120416	U	Ethylbenzene	10	U	N	3
W-1	06/23/93	120414	U	Ethylbenzene	10	U	D	3
W-1	05/20/93	120064-2	BJ	Methylene chloride	10	U	N	3
W-1	05/20/93	120071-2	BJ	Methylene chloride	10	U	D	3
W-1	05/20/93	120075-2	B	Methylene chloride	10	J	D	3
W-1	05/20/93	120068-1	BJ	Methylene chloride	10	U	D	3
W-1	05/20/93	120072-2	BJ	Methylene chloride	10	U	T	3
W-1	06/23/93	120416	U	Methylene chloride	10	UJ	N	3
W-1	06/23/93	120414	U	Methylene chloride	10	UJ	D	3
W-1	05/20/93	120064-2	U	Styrene	10	U	N	3
W-1	05/20/93	120075-2	U	Styrene	10	U	D	3
W-1	05/20/93	120071-2	U	Styrene	10	U	D	3
W-1	05/20/93	120068-1	U	Styrene	10	U	D	3
W-1	05/20/93	120072-2	U	Styrene	10	U	T	3
W-1	06/23/93	120416	U	Styrene	10	U	N	3
W-1	06/23/93	120414	U	Styrene	10	U	D	3
W-1	05/20/93	120064-2	U	Tetrachloroethene	10	U	N	3
W-1	05/20/93	120068-1	U	Tetrachloroethene	10	U	D	3
W-1	05/20/93	120071-2	U	Tetrachloroethene	10	U	D	3
W-1	05/20/93	120075-2	U	Tetrachloroethene	10	U	D	3
W-1	05/20/93	120072-2	U	Tetrachloroethene	10	U	T	3
W-1	06/23/93	120416	U	Tetrachloroethene	10	U	N	3
W-1	06/23/93	120414	U	Tetrachloroethene	10	U	D	3
W-1	05/20/93	120064-2	U	Toluene	10	U	N	3
W-1	05/20/93	120075-2	U	Toluene	10	U	D	3
W-1	05/20/93	120071-2	U	Toluene	10	U	D	3
W-1	05/20/93	120068-1	U	Toluene	10	U	D	3
W-1	05/20/93	120072-2	U	Toluene	10	U	T	3
W-1	06/23/93	120416	U	Toluene	10	U	N	3
W-1	06/23/93	120414	U	Toluene	10	U	D	3
W-1	05/20/93	120064-2	U	trans-1,3-Dichloropropene	10	U	N	3
W-1	05/20/93	120075-2	U	trans-1,3-Dichloropropene	10	U	D	3
W-1	05/20/93	120068-1	U	trans-1,3-Dichloropropene	10	U	D	3
W-1	05/20/93	120071-2	U	trans-1,3-Dichloropropene	10	U	D	3
W-1	05/20/93	120072-2	U	trans-1,3-Dichloropropene	10	U	T	3
W-1	06/23/93	120416	U	trans-1,3-Dichloropropene	10	U	N	3
W-1	06/23/93	120414	U	trans-1,3-Dichloropropene	10	U	D	3
W-1	05/20/93	120064-2	U	Trichloroethene	10	U	N	3
W-1	05/20/93	120071-2	U	Trichloroethene	10	U	D	3
W-1	05/20/93	120068-1	U	Trichloroethene	10	U	D	3

Table E-15 (Continued)
Validated Organic Data for Background Surface Water in the Great Miami River

Well	Sample		Lab		Validated		QA	
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type	ASL
W-1	05/20/93	120075-2	U	Trichloroethene	10	U	D	3
W-1	05/20/93	120072-2	U	Trichloroethene	10	U	T	3
W-1	06/23/93	120416	U	Trichloroethene	10	U	N	3
W-1	06/23/93	120414	U	Trichloroethene	10	U	D	3
W-1	05/20/93	120064-2	U	Vinyl Acetate	10	UJ	N	3
W-1	05/20/93	120075-2	U	Vinyl Acetate	10	U	D	3
W-1	05/20/93	120068-1	U	Vinyl Acetate	10	UJ	D	3
W-1	05/20/93	120071-2	U	Vinyl Acetate	10	UJ	D	3
W-1	05/20/93	120072-2	U	Vinyl Acetate	10	UJ	T	3
W-1	05/20/93	120064-2	U	Vinyl chloride	10	U	N	3
W-1	05/20/93	120071-2	U	Vinyl chloride	10	U	D	3
W-1	05/20/93	120068-1	U	Vinyl chloride	10	U	D	3
W-1	05/20/93	120075-2	U	Vinyl chloride	10	U	D	3
W-1	05/20/93	120072-2	U	Vinyl chloride	10	U	T	3
W-1	06/23/93	120416	U	Vinyl chloride	10	U	N	3
W-1	06/23/93	120414	U	Vinyl chloride	10	U	D	3
W-1	05/20/93	120064-2	U	Xylenes, Total	10	U	N	3
W-1	05/20/93	120075-2	U	Xylenes, Total	10	U	D	3
W-1	05/20/93	120071-2	U	Xylenes, Total	10	U	D	3
W-1	05/20/93	120068-1	U	Xylenes, Total	10	U	D	3
W-1	05/20/93	120072-2	U	Xylenes, Total	10	U	T	3
W-1	06/23/93	120416	U	Xylenes, Total	10	U	N	3
W-1	06/23/93	120414	U	Xylenes, Total	10	U	D	3

Table E-16
Validated Organic Data for Background Surface Water in Paddys Run

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL
W-5	03/25/93	113493	U	4,4'-DDD	0.1	U	N	3
W-5	06/24/93	120408	U	4,4'-DDD	0.1	U	N	3
W-5	06/24/93	120409	U	4,4'-DDD	0.1	U	D	3
W-5	03/25/93	113493	U	4,4'-DDE	0.1	U	N	3
W-5	06/24/93	120408	U	4,4'-DDE	0.1	U	N	3
W-5	06/24/93	120409	U	4,4'-DDE	0.1	U	D	3
W-5	03/25/93	113493	U	4,4'-DDT	0.1	U	N	3
W-5	06/24/93	120408	U	4,4'-DDT	0.1	U	N	3
W-5	06/24/93	120409	U	4,4'-DDT	0.1	U	D	3
W-5	03/25/93	113493	U	Aldrin	0.05	U	N	3
W-5	06/24/93	120408	U	Aldrin	0.05	U	N	3
W-5	06/24/93	120409	U	Aldrin	0.05	U	D	3
W-5	03/25/93	113493	U	alpha-BHC	0.05	U	N	3
W-5	06/24/93	120408	U	alpha-BHC	0.05	U	N	3
W-5	06/24/93	120409	U	alpha-BHC	0.05	U	D	3
W-5	03/25/93	113493	U	alpha-Chlordane	0.05	U	N	3
W-5	06/24/93	120408	U	alpha-Chlordane	0.05	U	N	3
W-5	06/24/93	120409	U	alpha-Chlordane	0.05	U	D	3
W-5	03/25/93	113493	U	Aroclor-1016	1	U	N	3
W-5	06/24/93	120408	U	Aroclor-1016	1	U	N	3
W-5	06/24/93	120409	U	Aroclor-1016	1	U	D	3
W-5	03/25/93	113493	U	Aroclor-1221	2	U	N	3
W-5	06/24/93	120408	U	Aroclor-1221	2	U	N	3
W-5	06/24/93	120409	U	Aroclor-1221	2	U	D	3
W-5	03/25/93	113493	U	Aroclor-1232	1	U	N	3
W-5	06/24/93	120408	U	Aroclor-1232	1	U	N	3
W-5	06/24/93	120409	U	Aroclor-1232	1	U	D	3
W-5	03/25/93	113493	U	Aroclor-1242	1	U	N	3
W-5	06/24/93	120408	U	Aroclor-1242	1	U	N	3
W-5	06/24/93	120409	U	Aroclor-1242	1	U	D	3
W-5	03/25/93	113493	U	Aroclor-1248	1	U	N	3
W-5	06/24/93	120408	U	Aroclor-1248	1	U	N	3
W-5	06/24/93	120409	U	Aroclor-1248	1	U	D	3
W-5	03/25/93	113493	U	Aroclor-1254	1	U	N	3
W-5	06/24/93	120408	U	Aroclor-1254	1	U	N	3
W-5	06/24/93	120409	U	Aroclor-1254	1	U	D	3
W-5	03/25/93	113493	U	Aroclor-1260	1	U	N	3
W-5	06/24/93	120408	U	Aroclor-1260	1	U	N	3
W-5	06/24/93	120409	U	Aroclor-1260	1	U	D	3
W-5	03/25/93	113493	U	beta-BHC	0.05	U	N	3
W-5	06/24/93	120408	U	beta-BHC	0.05	U	N	3
W-5	06/24/93	120409	U	beta-BHC	0.05	U	D	3
W-5	03/25/93	113493	U	delta-BHC	0.05	U	N	3
W-5	06/24/93	120408	U	delta-BHC	0.05	U	N	3
W-5	06/24/93	120409	U	delta-BHC	0.05	U	D	3
W-5	03/25/93	113493	U	Dieldrin	0.1	U	N	3
W-5	06/24/93	120408	U	Dieldrin	0.1	U	N	3
W-5	06/24/93	120409	U	Dieldrin	0.1	U	D	3
W-5	03/25/93	113493	U	Endosulfan II	0.1	U	N	3
W-5	06/24/93	120408	U	Endosulfan II	0.1	U	N	3

Table E-16 (Continued)
Validated Organic Data for Background Surface Water in Paddys Run

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL
W-5	06/24/93	120409	U	Endosulfan II	0.1	U	D	3
W-5	03/25/93	113493	U	Endosulfan sulfate	0.1	U	N	3
W-5	06/24/93	120408	U	Endosulfan sulfate	0.1	U	N	3
W-5	06/24/93	120409	U	Endosulfan sulfate	0.1	U	D	3
W-5	03/25/93	113493	U	Endosulfan-I	0.05	U	N	3
W-5	06/24/93	120408	U	Endosulfan-I	0.05	U	N	3
W-5	06/24/93	120409	U	Endosulfan-I	0.05	U	D	3
W-5	03/25/93	113493	U	Endrin	0.1	U	N	3
W-5	06/24/93	120408	U	Endrin	0.1	U	N	3
W-5	06/24/93	120409	U	Endrin	0.1	U	D	3
W-5	03/25/93	113493	U	Endrin aldehyde	0.1	U	N	3
W-5	06/24/93	120408	U	Endrin aldehyde	0.1	U	N	3
W-5	06/24/93	120409	U	Endrin aldehyde	0.1	U	D	3
W-5	03/25/93	113493	U	Endrin ketone	0.1	U	N	3
W-5	06/24/93	120408	U	Endrin ketone	0.1	U	N	3
W-5	06/24/93	120409	U	Endrin ketone	0.1	U	D	3
W-5	03/25/93	113493	U	gamma-BHC (Lindane)	0.05	U	N	3
W-5	06/24/93	120408	U	gamma-BHC (Lindane)	0.05	U	N	3
W-5	06/24/93	120409	U	gamma-BHC (Lindane)	0.05	U	D	3
W-5	03/25/93	113493	U	gamma-Chlordane	0.05	U	N	3
W-5	06/24/93	120408	U	gamma-Chlordane	0.05	U	N	3
W-5	06/24/93	120409	U	gamma-Chlordane	0.05	U	D	3
W-5	03/25/93	113493	U	Heptachlor	0.05	U	N	3
W-5	06/24/93	120408	U	Heptachlor	0.05	U	N	3
W-5	06/24/93	120409	U	Heptachlor	0.05	U	D	3
W-5	03/25/93	113493	U	Heptachlor epoxide	0.05	U	N	3
W-5	06/24/93	120408	U	Heptachlor epoxide	0.05	U	N	3
W-5	06/24/93	120409	U	Heptachlor epoxide	0.05	U	D	3
W-5	03/25/93	113493	U	Methoxychlor	0.5	U	N	3
W-5	06/24/93	120408	U	Methoxychlor	0.5	U	N	3
W-5	06/24/93	120409	U	Methoxychlor	0.5	U	D	3
W-5	03/25/93	113493	U	Toxaphene	5	U	N	3
W-5	06/24/93	120408	U	Toxaphene	5	U	N	3
W-5	06/24/93	120409	U	Toxaphene	5	U	D	3
W-5	03/25/93	113493	U	1,2,4-Trichlorobenzene	10	U	N	3
W-5	06/24/93	120408	U	1,2,4-Trichlorobenzene	10	U	N	3
W-5	06/24/93	120409	U	1,2,4-Trichlorobenzene	10	U	D	3
W-5	03/25/93	113493	U	1,2-Dichlorobenzene	10	U	N	3
W-5	06/24/93	120408	U	1,2-Dichlorobenzene	10	U	N	3
W-5	06/24/93	120409	U	1,2-Dichlorobenzene	10	U	D	3
W-5	03/25/93	113493	U	1,2-Diphenylhydrazine	10	U	N	3
W-5	03/25/93	113493	U	1,3-Dichlorobenzene	10	U	N	3
W-5	06/24/93	120408	U	1,3-Dichlorobenzene	10	U	N	3
W-5	06/24/93	120409	U	1,3-Dichlorobenzene	10	U	D	3
W-5	03/25/93	113493	U	1,4-Dichlorobenzene	10	U	N	3
W-5	06/24/93	120408	U	1,4-Dichlorobenzene	10	U	N	3
W-5	06/24/93	120409	U	1,4-Dichlorobenzene	10	U	D	3
W-5	03/25/93	113493	U	2,4,5-Trichlorophenol	25	U	N	3
W-5	06/24/93	120408	U	2,4,5-Trichlorophenol	25	U	N	3
W-5	06/24/93	120409	U	2,4,5-Trichlorophenol	25	U	D	3

Table E-16 (Continued)
Validated Organic Data for Background Surface Water in Paddys Run

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL
W-5	03/25/93	113493	U	2,4,6-Trichlorophenol	10	U	N	3
W-5	06/24/93	120408	U	2,4,6-Trichlorophenol	10	U	N	3
W-5	06/24/93	120409	U	2,4,6-Trichlorophenol	10	U	D	3
W-5	03/25/93	113493	U	2,4-Dichlorophenol	10	U	N	3
W-5	06/24/93	120408	U	2,4-Dichlorophenol	10	U	N	3
W-5	06/24/93	120409	U	2,4-Dichlorophenol	10	U	D	3
W-5	03/25/93	113493	U	2,4-Dimethylphenol	10	U	N	3
W-5	06/24/93	120408	U	2,4-Dimethylphenol	10	U	N	3
W-5	06/24/93	120409	U	2,4-Dimethylphenol	10	U	D	3
W-5	06/24/93	120408	U	2,4-Dinitrophenol	25	UJ	N	3
W-5	06/24/93	120409	U	2,4-Dinitrophenol	25	UJ	D	3
W-5	03/25/93	113493	U	2,4-Dinitrotoluene	10	U	N	3
W-5	06/24/93	120408	U	2,4-Dinitrotoluene	10	U	N	3
W-5	06/24/93	120409	U	2,4-Dinitrotoluene	10	U	D	3
W-5	03/25/93	113493	U	2,6-Dinitrotoluene	10	U	N	3
W-5	06/24/93	120408	U	2,6-Dinitrotoluene	10	U	N	3
W-5	06/24/93	120409	U	2,6-Dinitrotoluene	10	U	D	3
W-5	03/25/93	113493	U	2-Chloronaphthalene	10	U	N	3
W-5	06/24/93	120408	U	2-Chloronaphthalene	10	U	N	3
W-5	06/24/93	120409	U	2-Chloronaphthalene	10	U	D	3
W-5	03/25/93	113493	U	2-Chlorophenol	10	U	N	3
W-5	06/24/93	120408	U	2-Chlorophenol	10	U	N	3
W-5	06/24/93	120409	U	2-Chlorophenol	10	U	D	3
W-5	03/25/93	113493	U	2-Methylnaphthalene	10	U	N	3
W-5	06/24/93	120408	U	2-Methylnaphthalene	10	UJ	N	3
W-5	06/24/93	120409	U	2-Methylnaphthalene	10	UJ	D	3
W-5	03/25/93	113493	U	2-Methylphenol	10	U	N	3
W-5	06/24/93	120408	U	2-Methylphenol	10	U	N	3
W-5	06/24/93	120409	U	2-Methylphenol	10	U	D	3
W-5	03/25/93	113493	U	2-Nitroaniline	25	UJ	N	3
W-5	06/24/93	120408	U	2-Nitroaniline	25	U	N	3
W-5	06/24/93	120409	U	2-Nitroaniline	25	U	D	3
W-5	03/25/93	113493	U	2-Nitrophenol	10	UJ	N	3
W-5	06/24/93	120408	U	2-Nitrophenol	10	U	N	3
W-5	06/24/93	120409	U	2-Nitrophenol	10	U	D	3
W-5	03/25/93	113493	U	3,3'-Dichlorobenzidine	10	U	N	3
W-5	06/24/93	120408	U	3,3'-Dichlorobenzidine	10	UJ	N	3
W-5	06/24/93	120409	U	3,3'-Dichlorobenzidine	10	UJ	D	3
W-5	03/25/93	113493	U	3-Nitroaniline	25	U	N	3
W-5	06/24/93	120408	U	3-Nitroaniline	25	U	N	3
W-5	06/24/93	120409	U	3-Nitroaniline	25	U	D	3
W-5	06/24/93	120408	U	4,6-Dinitro-2-methylphenol	25	U	N	3
W-5	06/24/93	120409	U	4,6-Dinitro-2-methylphenol	25	U	D	3
W-5	03/25/93	113493	U	4-Bromophenyl phenyl ether	10	U	N	3
W-5	06/24/93	120408	U	4-Bromophenyl phenyl ether	10	U	N	3
W-5	06/24/93	120409	U	4-Bromophenyl phenyl ether	10	U	D	3
W-5	03/25/93	113493	U	4-Chloro-3-methylphenol	10	U	N	3
W-5	06/24/93	120408	U	4-Chloro-3-methylphenol	10	U	N	3
W-5	06/24/93	120409	U	4-Chloro-3-methylphenol	10	U	D	3

Table E-16 (Continued)
Validated Organic Data for Background Surface Water in Paddys Run

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL
W-5	03/25/93	113493	U	4-Chlorophenylphenyl ether	10	U	N	3
W-5	06/24/93	120408	U	4-Chlorophenylphenyl ether	10	U	N	3
W-5	06/24/93	120409	U	4-Chlorophenylphenyl ether	10	U	D	3
W-5	03/25/93	113493	U	4-Methylphenol	10	U	N	3
W-5	06/24/93	120408	U	4-Methylphenol	10	U	N	3
W-5	06/24/93	120409	U	4-Methylphenol	10	U	D	3
W-5	03/25/93	113493	U	4-Nitroaniline	25	U	N	3
W-5	06/24/93	120408	U	4-Nitroaniline	25	U	N	3
W-5	06/24/93	120409	U	4-Nitroaniline	25	U	D	3
W-5	03/25/93	113493	U	4-Nitrophenol	25	U	N	3
W-5	06/24/93	120408	U	4-Nitrophenol	25	U	N	3
W-5	06/24/93	120409	U	4-Nitrophenol	25	U	D	3
W-5	03/25/93	113493	U	Acenaphthene	10	U	N	3
W-5	06/24/93	120408	U	Acenaphthene	10	U	N	3
W-5	06/24/93	120409	U	Acenaphthene	10	U	D	3
W-5	03/25/93	113493	U	Acenaphthylene	10	U	N	3
W-5	06/24/93	120408	U	Acenaphthylene	10	U	N	3
W-5	06/24/93	120409	U	Acenaphthylene	10	U	D	3
W-5	03/25/93	113493	U	Anthracene	10	U	N	3
W-5	06/24/93	120408	U	Anthracene	10	U	N	3
W-5	06/24/93	120409	U	Anthracene	10	U	D	3
W-5	03/25/93	113493	U	Benzo(a)anthracene	10	U	N	3
W-5	06/24/93	120408	U	Benzo(a)anthracene	10	U	N	3
W-5	06/24/93	120409	U	Benzo(a)anthracene	10	U	D	3
W-5	03/25/93	113493	U	Benzo(a)pyrene	10	U	N	3
W-5	06/24/93	120408	U	Benzo(a)pyrene	10	U	N	3
W-5	06/24/93	120409	U	Benzo(a)pyrene	10	U	D	3
W-5	03/25/93	113493	U	Benzo(b)fluoranthene	10	U	N	3
W-5	06/24/93	120408	U	Benzo(b)fluoranthene	10	U	N	3
W-5	06/24/93	120409	U	Benzo(b)fluoranthene	10	U	D	3
W-5	03/25/93	113493	U	Benzo(g,h,i)perylene	10	U	N	3
W-5	06/24/93	120408	U	Benzo(g,h,i)perylene	10	U	N	3
W-5	06/24/93	120409	U	Benzo(g,h,i)perylene	10	U	D	3
W-5	03/25/93	113493	U	Benzo(k)fluoranthene	10	U	N	3
W-5	06/24/93	120408	U	Benzo(k)fluoranthene	10	U	N	3
W-5	06/24/93	120409	U	Benzo(k)fluoranthene	10	U	D	3
W-5	03/25/93	113493	U	Benzoic acid	50	UJ	N	3
W-5	06/24/93	120408	U	Benzoic acid	25	U	N	3
W-5	06/24/93	120409	U	Benzoic acid	25	U	D	3
W-5	03/25/93	113493	U	Benzyl alcohol	10	UJ	N	3
W-5	06/24/93	120408	U	Benzyl alcohol	10	U	N	3
W-5	06/24/93	120409	U	Benzyl alcohol	10	U	D	3
W-5	03/25/93	113493	U	bis(2-Chloroethoxy)methane	10	U	N	3
W-5	06/24/93	120408	U	bis(2-Chloroethoxy)methane	10	U	N	3
W-5	06/24/93	120409	U	bis(2-Chloroethoxy)methane	10	U	D	3
W-5	03/25/93	113493	U	bis(2-Chloroethyl)ether	10	U	N	3
W-5	06/24/93	120408	U	bis(2-Chloroethyl)ether	10	U	N	3
W-5	06/24/93	120409	U	bis(2-Chloroethyl)ether	10	U	D	3
W-5	03/25/93	113493	U	bis(2-Chloroisopropyl) ether	10	U	N	3
W-5	06/24/93	120408	U	bis(2-Chloroisopropyl) ether	10	U	N	3

Table E-16 (Continued)
Validated Organic Data for Background Surface Water in Paddys Run

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL
W-5	06/24/93	120409	U	bis(2-Chloroisopropyl) ether	10	U	D	3
W-5	03/25/93	113493	U	bis(2-Ethylhexyl)phthalate	10	U	N	3
W-5	06/24/93	120408	BJ	bis(2-Ethylhexyl)phthalate	10	U	N	3
W-5	06/24/93	120409	BJ	bis(2-Ethylhexyl)phthalate	10	U	D	3
W-5	03/25/93	113493	U	Butyl benzyl phthalate	10	U	N	3
W-5	06/24/93	120408	U	Butyl benzyl phthalate	10	U	N	3
W-5	06/24/93	120409	U	Butyl benzyl phthalate	10	U	D	3
W-5	03/25/93	113493	U	Carbazole	10	U	N	3
W-5	03/25/93	113493	U	Chrysene	10	U	N	3
W-5	06/24/93	120408	U	Chrysene	10	U	N	3
W-5	06/24/93	120409	U	Chrysene	10	U	D	3
W-5	03/25/93	113493	U	Di-n-butyl phthalate	10	U	N	3
W-5	06/24/93	120408	U	Di-n-butyl phthalate	10	U	N	3
W-5	06/24/93	120409	U	Di-n-butyl phthalate	10	U	D	3
W-5	03/25/93	113493	U	Di-n-octyl phthalate	10	U	N	3
W-5	06/24/93	120408	U	Di-n-octyl phthalate	10	UJ	N	3
W-5	06/24/93	120409	U	Di-n-octyl phthalate	10	UJ	D	3
W-5	03/25/93	113493	U	Dibenzo(a,h)anthracene	10	U	N	3
W-5	06/24/93	120408	U	Dibenzo(a,h)anthracene	10	U	N	3
W-5	06/24/93	120409	U	Dibenzo(a,h)anthracene	10	U	D	3
W-5	03/25/93	113493	U	Dibenzofuran	10	U	N	3
W-5	06/24/93	120408	U	Dibenzofuran	10	U	N	3
W-5	06/24/93	120409	U	Dibenzofuran	10	U	D	3
W-5	03/25/93	113493	U	Diethyl phthalate	10	U	N	3
W-5	06/24/93	120408	U	Diethyl phthalate	10	U	N	3
W-5	06/24/93	120409	U	Diethyl phthalate	10	U	D	3
W-5	03/25/93	113493	U	Dimethyl phthalate	10	U	N	3
W-5	06/24/93	120408	U	Dimethyl phthalate	10	U	N	3
W-5	06/24/93	120409	U	Dimethyl phthalate	10	U	D	3
W-5	03/25/93	113493	U	Fluoranthene	10	U	N	3
W-5	06/24/93	120408	U	Fluoranthene	10	U	N	3
W-5	06/24/93	120409	U	Fluoranthene	10	U	D	3
W-5	03/25/93	113493	U	Fluorene	10	U	N	3
W-5	06/24/93	120408	U	Fluorene	10	U	N	3
W-5	06/24/93	120409	U	Fluorene	10	U	D	3
W-5	03/25/93	113493	U	Hexachlorobenzene	10	U	N	3
W-5	06/24/93	120408	U	Hexachlorobenzene	10	U	N	3
W-5	06/24/93	120409	U	Hexachlorobenzene	10	U	D	3
W-5	03/25/93	113493	U	Hexachlorobutadiene	10	U	N	3
W-5	06/24/93	120408	U	Hexachlorobutadiene	10	U	N	3
W-5	06/24/93	120409	U	Hexachlorobutadiene	10	U	D	3
W-5	03/25/93	113493	U	Hexachlorocyclopentadiene	10	U	N	3
W-5	06/24/93	120408	U	Hexachlorocyclopentadiene	10	U	N	3
W-5	06/24/93	120409	U	Hexachlorocyclopentadiene	10	U	D	3
W-5	03/25/93	113493	U	Hexachloroethane	10	U	N	3
W-5	06/24/93	120408	U	Hexachloroethane	10	U	N	3
W-5	06/24/93	120409	U	Hexachloroethane	10	U	D	3
W-5	03/25/93	113493	U	Indeno(1,2,3-cd)pyrene	10	U	N	3
W-5	06/24/93	120408	U	Indeno(1,2,3-cd)pyrene	10	U	N	3
W-5	06/24/93	120409	U	Indeno(1,2,3-cd)pyrene	10	U	D	3

Table E-16 (Continued)
Validated Organic Data for Background Surface Water in Paddys Run

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL
W-5	03/25/93	113493	U	Isophorone	10	U	N	3
W-5	06/24/93	120408	U	Isophorone	10	U	N	3
W-5	06/24/93	120409	U	Isophorone	10	U	D	3
W-5	03/25/93	113493	U	N-Nitroso-di-n-propylamine	10	U	N	3
W-5	06/24/93	120408	U	N-Nitroso-di-n-propylamine	10	U	N	3
W-5	06/24/93	120409	U	N-Nitroso-di-n-propylamine	10	U	D	3
W-5	03/25/93	113493	U	N-Nitrosodimethylamine	10	U	N	3
W-5	03/25/93	113493	U	N-Nitrosodiphenylamine	10	U	N	3
W-5	06/24/93	120408	U	N-Nitrosodiphenylamine	10	U	N	3
W-5	06/24/93	120409	U	N-Nitrosodiphenylamine	10	U	D	3
W-5	03/25/93	113493	U	Naphthalene	10	U	N	3
W-5	06/24/93	120408	U	Naphthalene	10	U	N	3
W-5	06/24/93	120409	U	Naphthalene	10	U	D	3
W-5	03/25/93	113493	U	Nitrobenzene	10	U	N	3
W-5	06/24/93	120408	U	Nitrobenzene	10	U	N	3
W-5	06/24/93	120409	U	Nitrobenzene	10	U	D	3
W-5	03/25/93	113493	U	p-Chloroaniline	10	U	N	3
W-5	06/24/93	120408	U	p-Chloroaniline	10	U	N	3
W-5	06/24/93	120409	U	p-Chloroaniline	10	U	D	3
W-5	03/25/93	113493	U	Pentachlorophenol	25	U	N	3
W-5	06/24/93	120408	U	Pentachlorophenol	25	U	N	3
W-5	06/24/93	120409	U	Pentachlorophenol	25	U	D	3
W-5	03/25/93	113493	U	Phenanthrene	10	U	N	3
W-5	06/24/93	120408	U	Phenanthrene	10	U	N	3
W-5	06/24/93	120409	U	Phenanthrene	10	U	D	3
W-5	03/25/93	113493	U	Phenol	10	U	N	3
W-5	06/24/93	120408	U	Phenol	10	U	N	3
W-5	06/24/93	120409	U	Phenol	10	U	D	3
W-5	03/25/93	113493	U	Pyrene	10	U	N	3
W-5	06/24/93	120408	U	Pyrene	10	U	N	3
W-5	06/24/93	120409	U	Pyrene	10	U	D	3
W-5	03/25/93	113493	U	Tributyl phosphate	10	U	N	3
W-5	03/25/93	113493	U	1,1,1-Trichloroethane	10	U	N	3
W-5	06/24/93	120408	U	1,1,1-Trichloroethane	10	U	N	3
W-5	06/24/93	120409	U	1,1,1-Trichloroethane	10	U	D	3
W-5	03/25/93	113493	U	1,1,2,2-Tetrachloroethane	10	U	N	3
W-5	06/24/93	120408	U	1,1,2,2-Tetrachloroethane	10	U	N	3
W-5	06/24/93	120409	U	1,1,2,2-Tetrachloroethane	10	U	D	3
W-5	03/25/93	113493	U	1,1,2-Trichloroethane	10	U	N	3
W-5	06/24/93	120408	U	1,1,2-Trichloroethane	10	U	N	3
W-5	06/24/93	120409	U	1,1,2-Trichloroethane	10	U	D	3
W-5	03/25/93	113493	U	1,1-Dichloroethane	10	U	N	3
W-5	06/24/93	120408	U	1,1-Dichloroethane	10	U	N	3
W-5	06/24/93	120409	U	1,1-Dichloroethane	10	U	D	3
W-5	03/25/93	113493	U	1,1-Dichloroethene	10	U	N	3
W-5	06/24/93	120408	U	1,1-Dichloroethene	10	U	N	3
W-5	06/24/93	120409	U	1,1-Dichloroethene	10	U	D	3
W-5	03/25/93	113493	U	1,2-Dichloroethane	10	U	N	3
W-5	06/24/93	120408	U	1,2-Dichloroethane	10	U	N	3
W-5	06/24/93	120409	U	1,2-Dichloroethane	10	U	D	3

Table E-16 (Continued)
Validated Organic Data for Background Surface Water in Paddys Run

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL
W-5	03/25/93	113493	U	1,2-Dichloroethene (Total)	10	U	N	3
W-5	06/24/93	120408	U	1,2-Dichloroethene (Total)	10	U	N	3
W-5	06/24/93	120409	U	1,2-Dichloroethene (Total)	10	U	D	3
W-5	03/25/93	113493	U	1,2-Dichloropropane	10	U	N	3
W-5	06/24/93	120408	U	1,2-Dichloropropane	10	U	N	3
W-5	06/24/93	120409	U	1,2-Dichloropropane	10	U	D	3
W-5	03/25/93	113493	U	2-Butanone	10	U	N	3
W-5	06/24/93	120408	U	2-Butanone	10	UJ	N	3
W-5	06/24/93	120409	U	2-Butanone	10	UJ	D	3
W-5	03/25/93	113493	U	2-Hexanone	10	U	N	3
W-5	06/24/93	120408	U	2-Hexanone	10	UJ	N	3
W-5	06/24/93	120409	U	2-Hexanone	10	UJ	D	3
W-5	03/25/93	113493	U	4-Methyl-2-pentanone	10	U	N	3
W-5	06/24/93	120408	U	4-Methyl-2-pentanone	10	UJ	N	3
W-5	06/24/93	120409	U	4-Methyl-2-pentanone	10	UJ	D	3
W-5	03/25/93	113493	BJ	Acetone	10	U	N	3
W-5	06/24/93	120408	B	Acetone	10	UJ	N	3
W-5	06/24/93	120409	U	Acetone	10	UJ	D	3
W-5	03/25/93	113493	U	Benzene	10	U	N	3
W-5	06/24/93	120408	U	Benzene	10	U	N	3
W-5	06/24/93	120409	U	Benzene	10	U	D	3
W-5	03/25/93	113493	U	Bromodichloromethane	10	U	N	3
W-5	06/24/93	120408	U	Bromodichloromethane	10	U	N	3
W-5	06/24/93	120409	U	Bromodichloromethane	10	U	D	3
W-5	03/25/93	113493	U	Bromoform	10	U	N	3
W-5	06/24/93	120408	U	Bromoform	10	U	N	3
W-5	06/24/93	120409	U	Bromoform	10	U	D	3
W-5	03/25/93	113493	U	Bromomethane	10	U	N	3
W-5	06/24/93	120408	U	Bromomethane	10	U	N	3
W-5	06/24/93	120409	U	Bromomethane	10	U	D	3
W-5	03/25/93	113493	U	Carbon disulfide	10	U	N	3
W-5	06/24/93	120408	U	Carbon disulfide	10	U	N	3
W-5	06/24/93	120409	U	Carbon disulfide	10	U	D	3
W-5	03/25/93	113493	U	Carbon Tetrachloride	10	U	N	3
W-5	06/24/93	120408	U	Carbon Tetrachloride	10	U	N	3
W-5	06/24/93	120409	U	Carbon Tetrachloride	10	U	D	3
W-5	03/25/93	113493	U	Chlorobenzene	10	U	N	3
W-5	06/24/93	120408	U	Chlorobenzene	10	U	N	3
W-5	06/24/93	120409	U	Chlorobenzene	10	U	D	3
W-5	03/25/93	113493	U	Chloroethane	10	U	N	3
W-5	06/24/93	120408	U	Chloroethane	10	U	N	3
W-5	06/24/93	120409	U	Chloroethane	10	U	D	3
W-5	03/25/93	113493	U	Chloroform	10	U	N	3
W-5	06/24/93	120408	U	Chloroform	10	U	N	3
W-5	06/24/93	120409	U	Chloroform	10	U	D	3
W-5	03/25/93	113493	U	Chloromethane	10	U	N	3
W-5	06/24/93	120408	U	Chloromethane	10	UJ	N	3
W-5	06/24/93	120409	U	Chloromethane	10	U	D	3
W-5	03/25/93	113493	U	cis-1,3-Dichloropropene	10	U	N	3
W-5	06/24/93	120408	U	cis-1,3-Dichloropropene	10	U	N	3

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Table E-16 (Continued)
Validated Organic Data for Background Surface Water in Paddys Run

Well	Sample		Lab		Validated		QA	
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type	ASL
W-5	06/24/93	120409	U	cis-1,3-Dichloropropene	10	U	D	3
W-5	03/25/93	113493	U	Dibromochloromethane	10	U	N	3
W-5	06/24/93	120408	U	Dibromochloromethane	10	U	N	3
W-5	06/24/93	120409	U	Dibromochloromethane	10	U	D	3
W-5	03/25/93	113493	U	Ethylbenzene	10	U	N	3
W-5	06/24/93	120408	U	Ethylbenzene	10	U	N	3
W-5	06/24/93	120409	U	Ethylbenzene	10	U	D	3
W-5	03/25/93	113493	U	Methylene chloride	10	U	N	3
W-5	06/24/93	120408	U	Methylene chloride	10	U	N	3
W-5	06/24/93	120409	U	Methylene chloride	10	U	D	3
W-5	03/25/93	113493	U	Styrene	10	U	N	3
W-5	06/24/93	120408	U	Styrene	10	U	N	3
W-5	06/24/93	120409	U	Styrene	10	U	D	3
W-5	03/25/93	113493	U	Tetrachloroethene	10	U	N	3
W-5	06/24/93	120408	U	Tetrachloroethene	10	U	N	3
W-5	06/24/93	120409	U	Tetrachloroethene	10	U	D	3
W-5	03/25/93	113493	U	Toluene	10	U	N	3
W-5	06/24/93	120408	U	Toluene	10	U	N	3
W-5	06/24/93	120409	U	Toluene	10	U	D	3
W-5	03/25/93	113493	U	trans-1,3-Dichloropropene	10	U	N	3
W-5	06/24/93	120408	U	trans-1,3-Dichloropropene	10	U	N	3
W-5	06/24/93	120409	U	trans-1,3-Dichloropropene	10	U	D	3
W-5	03/25/93	113493	U	Trichloroethene	10	U	N	3
W-5	06/24/93	120408	J	Trichloroethene	10	U	N	3
W-5	06/24/93	120409	U	Trichloroethene	10	U	D	3
W-5	03/25/93	113493	U	Vinyl Acetate	10	U	N	3
W-5	06/24/93	120408	U	Vinyl Acetate	10	U	N	3
W-5	06/24/93	120409	U	Vinyl Acetate	10	U	D	3
W-5	03/25/93	113493	U	Vinyl chloride	10	U	N	3
W-5	06/24/93	120408	U	Vinyl chloride	10	U	N	3
W-5	06/24/93	120409	U	Vinyl chloride	10	U	D	3
W-5	03/25/93	113493	U	Xylenes, Total	10	U	N	3
W-5	06/24/93	120408	U	Xylenes, Total	10	U	N	3
W-5	06/24/93	120409	U	Xylenes, Total	10	U	D	3

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Table E-17
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type
1060	11/30/87	3001	U	Carbofuran	1000000	NV	N
1060	11/30/87	3001	U	Carbofuran	1000000	NV	N
1060	12/05/87	3045	U	Carbofuran	1000000	NV	N
1060	11/30/87	3001	U	2,4,5-TP (Silvex)	500	NV	N
1060	12/05/87	3045	U	2,4,5-TP (Silvex)	500	NV	N
1060	11/30/87	3001	U	2,4-D	1000	NV	N
1060	12/05/87	3045	U	2,4-D	1000	NV	N
1060	11/30/87	3001	U	Atrazine	1000	NV	N
1060	11/30/87	3001	U	Atrazine	1000	NV	N
1060	12/05/87	3045	U	Atrazine	1000	NV	N
1060	11/30/87	3001	U	Cyanazine	1000	NV	N
1060	12/05/87	3045	U	Cyanazine	1000	NV	N
1060	11/30/87	3001	U	Linuron	1000	NV	N
1060	12/05/87	3045	U	Linuron	1000	NV	N
1060	11/30/87	3001	U	Metribuzin	1000	NV	N
1060	12/05/87	3045	U	Metribuzin	1000	NV	N
1060	11/30/87	3001	U	Simizine	1000	NV	N
1060	12/05/87	3045	U	Simizine	1000	NV	N
1060	11/30/87	3001	U	Fonofos	1000	NV	N
1060	11/30/87	3001	U	Fonofos	1000	NV	N
1060	12/05/87	3045	U	Fonofos	1000	NV	N
1060	11/30/87	3001	U	Phosphorodithioic acid	1000	NV	N
1060	11/30/87	3001	U	Terbufos	1000	NV	N
1060	12/05/87	3045	U	Terbufos	1000	NV	N
1024	05/15/90	EMGW SYSGEN 35	U	4,4'-DDD	0.2	NV	N
1024	05/15/90	EMGW SYSGEN 35	U	4,4'-DDE	0.2	NV	N
1024	05/15/90	EMGW SYSGEN 35	U	4,4'-DDT	0.2	NV	N
1060	11/30/87	3001	U	Alachlor	2000	NV	N
1060	11/30/87	3001	U	Alachlor	2000	NV	N
1060	12/05/87	3045	U	Alachlor	2000	NV	N
1024	05/15/90	EMGW SYSGEN 35	U	Aldrin	0.2	NV	N
1024	05/15/90	EMGW SYSGEN 35	U	alpha-BHC	0.2	NV	N
1024	05/15/90	EMGW SYSGEN 35	U	Aroclor-1016	0.2	NV	N
1024	05/15/90	EMGW SYSGEN 35	U	Aroclor-1221	0.2	NV	N
1024	05/15/90	EMGW SYSGEN 35	U	Aroclor-1232	0.2	NV	N
1024	05/15/90	EMGW SYSGEN 35	U	Aroclor-1242	0.2	NV	N
1024	05/15/90	EMGW SYSGEN 35	U	Aroclor-1248	0.2	NV	N
1024	05/15/90	EMGW SYSGEN 35	U	Aroclor-1254	0.2	NV	N
1024	05/15/90	EMGW SYSGEN 35	U	Aroclor-1260	0.2	NV	N
1024	05/15/90	EMGW SYSGEN 35	U	beta-BHC	0.2	NV	N
1024	05/15/90	EMGW SYSGEN 35	U	Chlordane	0.2	NV	N
1024	05/15/90	EMGW SYSGEN 35	U	delta-BHC	0.2	NV	N
1024	05/15/90	EMGW SYSGEN 35	U	Dieldrin	0.2	NV	N
1024	05/15/90	EMGW SYSGEN 35	U	Endosulfan II	0.2	NV	N
1024	05/15/90	EMGW SYSGEN 35	U	Endosulfan sulfate	0.2	NV	N
1024	05/15/90	EMGW SYSGEN 35	U	Endosulfan-I	0.2	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Endrin	0.08	NV	N
1060	11/30/87	3001	U	Endrin	200	NV	N
1060	12/05/87	3045	U	Endrin	200	NV	N
1024	05/15/90	EMGW SYSGEN 35	U	Endrin aldehyde	0.2	NV	N

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Table E-17 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type
1024	05/15/90	EMGW_SYSGEN_35	U	gamma-BHC (Lindane)	0.2	NV	N
1060	11/30/87	3001	U	gamma-BHC (Lindane)	200	NV	N
1060	11/30/87	3001	U	gamma-BHC (Lindane)	200	NV	N
1060	12/05/87	3045	U	gamma-BHC (Lindane)	200	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Heptachlor	0.2	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Heptachlor epoxide	0.2	NV	N
1060	11/30/87	3001	U	Methoxychlor	200	NV	N
1060	12/05/87	3045	U	Methoxychlor	200	NV	N
1060	11/30/87	3001	U	Metolachlor	1000	NV	N
1060	12/05/87	3045	U	Metolachlor	1000	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Toxaphene	0.5	NV	N
1060	11/30/87	3001	U	Toxaphene	500	NV	N
1060	12/05/87	3045	U	Toxaphene	500	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	1,2,4-Trichlorobenzene	4	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	1,3-Dichlorobenzene	4	NV	N
1065	04/16/90	EMGW_SYSGEN_167	U	1,3-Dichlorobenzene	1	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	1,4-Dichlorobenzene	4	NV	N
1065	04/16/90	EMGW_SYSGEN_167	U	1,4-Dichlorobenzene	1	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	2,4,5-Trichlorophenol	4	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	2,4,6-Trichlorophenol	4	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	2,4-Dichlorophenol	4	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	2,4-Dimethylphenol	4	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	2,4-Dinitrophenol	4	NV	N
1065	05/04/93	112013	U	2,4-Dinitrophenol	25	R	N
1024	05/15/90	EMGW_SYSGEN_35	U	2,4-Dinitrotoluene	15	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	2,6-Dinitrotoluene	15	NV	N
1024	11/13/90	EMGW_SYSGEN_37	U	2-Chloroethylvinyl ether	10	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	2-Chloroethylvinyl ether	10	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	2-Chloroethylvinyl ether	10	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	2-Chloroethylvinyl ether	10	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	2-Chloroethylvinyl ether	10	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	2-Chloroethylvinyl ether	10	NV	N
1024	01/13/93	GW930113-6	U	2-Chloroethylvinyl ether	10	NV	N
1040	10/18/90	EMGW_SYSGEN_116	U	2-Chloroethylvinyl ether	10	NV	N
1060	11/27/90	EMGW_SYSGEN_161	U	2-Chloroethylvinyl ether	10	NV	N
1060	11/27/90	EMGW_SYSGEN_161D	U	2-Chloroethylvinyl ether	10	NV	D
1060	03/11/91	EMGW_SYSGEN_162	U	2-Chloroethylvinyl ether	10	NV	N
1065	04/16/90	EMGW_SYSGEN_167	U	2-Chloroethylvinyl ether	60	NV	N
1065	10/16/90	EMGW_SYSGEN_168	U	2-Chloroethylvinyl ether	10	NV	N
1065	10/16/90	EMGW_SYSGEN_168D	U	2-Chloroethylvinyl ether	10	NV	D
1024	05/15/90	EMGW_SYSGEN_35	U	2-Chloronaphthalene	4	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	2-Chlorophenol	4	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	2-Methylphenol	4	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	2-Nitroaniline	15	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	2-Nitrophenol	4	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	3,3'-Dichlorobenzidine	15	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	3-Methylphenol	4	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	3-Nitroaniline	15	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	4,6-Dinitro-2-methylphenol	4	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	4-Bromophenyl phenyl ether	15	NV	N

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Table E-17 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type
1024	05/15/90	EMGW_SYSGEN_35	U	4-Chloro-3-methylphenol	4	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	4-Chlorophenylphenyl ether	15	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	4-Nitroaniline	15	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	4-Nitrophenol	4	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Acenaphthylene	4	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Anthracene	4	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Benzo(a)anthracene	4	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Benzo(a)pyrene	4	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Benzo(b)fluoranthene	4	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Benzo(g,h,i)perylene	4	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Benzo(k)fluoranthene	4	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Benzoic acid	4	NV	N
1065	05/04/93	112013	U	Benzoic acid	50	R	N
1024	05/15/90	EMGW_SYSGEN_35	U	Benzyl alcohol	40	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	bis(2-Chloroethoxy)methane	15	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	bis(2-Chloroethyl)ether	15	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	bis(2-Chloroisopropyl) ether	15	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	bis(2-Ethylhexyl)phthalate	4	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Butyl benzyl phthalate	4	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Chrysene	4	NV	N
1024	01/13/93	GW930113-6	U	Cumene	1	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Di-n-butyl phthalate	4	NV	N
1065	05/04/93	112013	U	Di-n-octyl phthalate	10	R	N
1024	05/15/90	EMGW_SYSGEN_35	U	Dibenzo(a,h)anthracene	4	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Dibenzofuran	4	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Diethyl phthalate	4	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Dimethyl phthalate	4	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Diphenylamine	15	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Fluoranthene	4	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Fluorene	4	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Hexachlorobenzene	4	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Hexachlorobutadiene	4	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Hexachlorocyclopentadiene	4	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Hexachloroethane	4	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Indeno(1,2,3-cd)pyrene	4	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Isophorone	4	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	N-Nitroso-di-n-propylamine	4	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	N-Nitrosodiphenylamine	4	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Naphthalene	4	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Nitrobenzene	4	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	o-Dichlorobenzene	4	NV	N
1065	04/16/90	EMGW_SYSGEN_167	U	o-Dichlorobenzene	1	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	p-Chloroaniline	4	NV	N
1024	01/13/93	GW930113-6	U	Pentachloroethane	5	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Pentachlorophenol	4	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Phenanthrene	4	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Phenol	4	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Pyrene	4	NV	N
1024	01/13/93	GW930113-6	U	1,1,1,2-Tetrachloroethane	1	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	1,1,1-Trichloroethane	1	NV	N

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Table E-17 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type
1024	08/08/90	EMGW_SYSGEN_36	U	1,1,1-Trichloroethane	1	NV	N
1024	11/13/90	EMGW_SYSGEN_37	U	1,1,1-Trichloroethane	1	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	1,1,1-Trichloroethane	1	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	1,1,1-Trichloroethane	1	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	1,1,1-Trichloroethane	1	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	1,1,1-Trichloroethane	1	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	1,1,1-Trichloroethane	1	NV	N
1024	01/13/93	GW930113-6	U	1,1,1-Trichloroethane	1	NV	N
1040	10/18/90	EMGW_SYSGEN_116	U	1,1,1-Trichloroethane	1	NV	N
1060	06/04/90	EMGW_SYSGEN_159	U	1,1,1-Trichloroethane	1	NV	N
1060	06/04/90	EMGW_SYSGEN_159D	U	1,1,1-Trichloroethane	1	NV	D
1060	11/27/90	EMGW_SYSGEN_161	U	1,1,1-Trichloroethane	1	NV	N
1060	11/27/90	EMGW_SYSGEN_161D	U	1,1,1-Trichloroethane	1	NV	D
1060	03/11/91	EMGW_SYSGEN_162	U	1,1,1-Trichloroethane	1	NV	N
1065	04/16/90	EMGW_SYSGEN_167	U	1,1,1-Trichloroethane	1	NV	N
1065	10/16/90	EMGW_SYSGEN_168	U	1,1,1-Trichloroethane	1	NV	N
1065	10/16/90	EMGW_SYSGEN_168D	U	1,1,1-Trichloroethane	1	NV	D
1024	05/15/90	EMGW_SYSGEN_35	U	1,1,2,2-Tetrachloroethane	1	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	1,1,2,2-Tetrachloroethane	1	NV	N
1024	11/13/90	EMGW_SYSGEN_37	U	1,1,2,2-Tetrachloroethane	1	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	1,1,2,2-Tetrachloroethane	1	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	1,1,2,2-Tetrachloroethane	1	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	1,1,2,2-Tetrachloroethane	1	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	1,1,2,2-Tetrachloroethane	1	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	1,1,2,2-Tetrachloroethane	1	NV	N
1024	01/13/93	GW930113-6	U	1,1,2,2-Tetrachloroethane	1	NV	N
1040	10/18/90	EMGW_SYSGEN_116	U	1,1,2,2-Tetrachloroethane	1	NV	N
1060	06/04/90	EMGW_SYSGEN_159	U	1,1,2,2-Tetrachloroethane	1	NV	N
1060	06/04/90	EMGW_SYSGEN_159D	U	1,1,2,2-Tetrachloroethane	1	NV	D
1060	11/27/90	EMGW_SYSGEN_161	U	1,1,2,2-Tetrachloroethane	1	NV	N
1060	11/27/90	EMGW_SYSGEN_161D	U	1,1,2,2-Tetrachloroethane	1	NV	D
1060	03/11/91	EMGW_SYSGEN_162	U	1,1,2,2-Tetrachloroethane	1	NV	N
1065	04/16/90	EMGW_SYSGEN_167	U	1,1,2,2-Tetrachloroethane	1	NV	N
1065	10/16/90	EMGW_SYSGEN_168	U	1,1,2,2-Tetrachloroethane	1	NV	N
1065	10/16/90	EMGW_SYSGEN_168D	U	1,1,2,2-Tetrachloroethane	1	NV	D
1024	05/15/90	EMGW_SYSGEN_35	U	1,1,2-Trichloroethane	1	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	1,1,2-Trichloroethane	1	NV	N
1024	11/13/90	EMGW_SYSGEN_37	U	1,1,2-Trichloroethane	1	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	1,1,2-Trichloroethane	1	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	1,1,2-Trichloroethane	1	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	1,1,2-Trichloroethane	1	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	1,1,2-Trichloroethane	1	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	1,1,2-Trichloroethane	1	NV	N
1024	01/13/93	GW930113-6	U	1,1,2-Trichloroethane	1	NV	N
1040	10/18/90	EMGW_SYSGEN_116	U	1,1,2-Trichloroethane	1	NV	N
1060	06/04/90	EMGW_SYSGEN_159	U	1,1,2-Trichloroethane	1	NV	N
1060	06/04/90	EMGW_SYSGEN_159D	U	1,1,2-Trichloroethane	1	NV	D
1060	11/27/90	EMGW_SYSGEN_161	U	1,1,2-Trichloroethane	1	NV	N
1060	11/27/90	EMGW_SYSGEN_161D	U	1,1,2-Trichloroethane	1	NV	D
1060	03/11/91	EMGW_SYSGEN_162	U	1,1,2-Trichloroethane	1	NV	N

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Table E-17 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type
1065	04/16/90	EMGW_SYSGEN_167	U	1,1,2-Trichloroethane	1	NV	N
1065	10/16/90	EMGW_SYSGEN_168	U	1,1,2-Trichloroethane	1	NV	N
1065	10/16/90	EMGW_SYSGEN_168D	U	1,1,2-Trichloroethane	1	NV	D
1024	11/21/89	66651	U	1,1-Dichloroethane	2.5	NV	N
1024	02/18/90	EMGW_SYSGEN_34	U	1,1-Dichloroethane	1	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	1,1-Dichloroethane	1	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	1,1-Dichloroethane	1	NV	N
1024	11/13/90	EMGW_SYSGEN_37	U	1,1-Dichloroethane	1	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	1,1-Dichloroethane	1	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	1,1-Dichloroethane	1	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	1,1-Dichloroethane	1	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	1,1-Dichloroethane	1	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	1,1-Dichloroethane	1	NV	N
1024	01/13/93	GW930113-6	U	1,1-Dichloroethane	1	NV	N
1040	10/18/90	EMGW_SYSGEN_116	U	1,1-Dichloroethane	1	NV	N
1060	06/04/90	EMGW_SYSGEN_159	U	1,1-Dichloroethane	1	NV	N
1060	06/04/90	EMGW_SYSGEN_159D	U	1,1-Dichloroethane	1	NV	D
1060	11/27/90	EMGW_SYSGEN_161	U	1,1-Dichloroethane	1	NV	N
1060	11/27/90	EMGW_SYSGEN_161D	U	1,1-Dichloroethane	1	NV	D
1060	03/11/91	EMGW_SYSGEN_162	U	1,1-Dichloroethane	1	NV	N
1065	04/16/90	EMGW_SYSGEN_167	U	1,1-Dichloroethane	1	NV	N
1065	10/16/90	EMGW_SYSGEN_168	U	1,1-Dichloroethane	1	NV	N
1065	10/16/90	EMGW_SYSGEN_168D	U	1,1-Dichloroethane	1	NV	D
1024	05/15/90	EMGW_SYSGEN_35	U	1,1-Dichloroethene	1	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	1,1-Dichloroethene	1	NV	N
1024	11/13/90	EMGW_SYSGEN_37	U	1,1-Dichloroethene	1	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	1,1-Dichloroethene	1	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	1,1-Dichloroethene	1	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	1,1-Dichloroethene	1	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	1,1-Dichloroethene	1	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	1,1-Dichloroethene	1	NV	N
1024	01/13/93	GW930113-6	U	1,1-Dichloroethene	1	NV	N
1040	10/18/90	EMGW_SYSGEN_116	U	1,1-Dichloroethene	1	NV	N
1060	06/04/90	EMGW_SYSGEN_159	U	1,1-Dichloroethene	1	NV	N
1060	06/04/90	EMGW_SYSGEN_159D	U	1,1-Dichloroethene	1	NV	D
1060	11/27/90	EMGW_SYSGEN_161	U	1,1-Dichloroethene	1	NV	N
1060	11/27/90	EMGW_SYSGEN_161D	U	1,1-Dichloroethene	1	NV	D
1060	03/11/91	EMGW_SYSGEN_162	U	1,1-Dichloroethene	1	NV	N
1065	04/16/90	EMGW_SYSGEN_167	U	1,1-Dichloroethene	1	NV	N
1065	10/16/90	EMGW_SYSGEN_168	U	1,1-Dichloroethene	1	NV	N
1065	10/16/90	EMGW_SYSGEN_168D	U	1,1-Dichloroethene	1	NV	D
1024	01/13/93	GW930113-6	U	1,2,3-Trichloropropane	5	NV	N
1024	01/13/93	GW930113-6	U	1,2-Dibromo-3-chloropropane	2	NV	N
1024	01/13/93	GW930113-6	U	1,2-Dibromoethane	2	NV	N
1024	11/21/89	66651	U	1,2-Dichloroethane	2.5	NV	N
1024	02/18/90	EMGW_SYSGEN_34	U	1,2-Dichloroethane	1	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	1,2-Dichloroethane	1	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	1,2-Dichloroethane	1	NV	N
1024	11/13/90	EMGW_SYSGEN_37	U	1,2-Dichloroethane	1	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	1,2-Dichloroethane	1	NV	N

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Table E-17 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type
1024	02/27/91	EMGW_SYSGEN_38D	U	1,2-Dichloroethane	1	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	1,2-Dichloroethane	1	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	1,2-Dichloroethane	1	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	1,2-Dichloroethane	1	NV	N
1024	01/13/93	GW930113-6	U	1,2-Dichloroethane	1	NV	N
1040	10/18/90	EMGW_SYSGEN_116	U	1,2-Dichloroethane	1	NV	N
1060	06/04/90	EMGW_SYSGEN_159	U	1,2-Dichloroethane	1	NV	N
1060	06/04/90	EMGW_SYSGEN_159D	U	1,2-Dichloroethane	1	NV	D
1060	11/27/90	EMGW_SYSGEN_161	U	1,2-Dichloroethane	1	NV	N
1060	11/27/90	EMGW_SYSGEN_161D	U	1,2-Dichloroethane	1	NV	D
1060	03/11/91	EMGW_SYSGEN_162	U	1,2-Dichloroethane	1	NV	N
1065	04/16/90	EMGW_SYSGEN_167	U	1,2-Dichloroethane	1	NV	N
1065	10/16/90	EMGW_SYSGEN_168	U	1,2-Dichloroethane	1	NV	N
1065	10/16/90	EMGW_SYSGEN_168D	U	1,2-Dichloroethane	1	NV	D
1024	05/15/90	EMGW_SYSGEN_35	U	1,2-Dichloroethene (Total)	1	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	1,2-Dichloroethene (Total)	1	NV	N
1024	11/13/90	EMGW_SYSGEN_37	U	1,2-Dichloroethene (Total)	1	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	1,2-Dichloroethene (Total)	1	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	1,2-Dichloroethene (Total)	1	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	1,2-Dichloroethene (Total)	1	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	1,2-Dichloroethene (Total)	1	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	1,2-Dichloroethene (Total)	1	NV	N
1040	10/18/90	EMGW_SYSGEN_116	U	1,2-Dichloroethene (Total)	1	NV	N
1060	06/04/90	EMGW_SYSGEN_159	U	1,2-Dichloroethene (Total)	1	NV	N
1060	06/04/90	EMGW_SYSGEN_159D	U	1,2-Dichloroethene (Total)	1	NV	D
1060	11/27/90	EMGW_SYSGEN_161	U	1,2-Dichloroethene (Total)	1	NV	N
1060	11/27/90	EMGW_SYSGEN_161D	U	1,2-Dichloroethene (Total)	1	NV	D
1060	03/11/91	EMGW_SYSGEN_162	U	1,2-Dichloroethene (Total)	1	NV	N
1065	10/16/90	EMGW_SYSGEN_168	U	1,2-Dichloroethene (Total)	1	NV	N
1065	10/16/90	EMGW_SYSGEN_168D	U	1,2-Dichloroethene (Total)	1	NV	D
1024	05/15/90	EMGW_SYSGEN_35	U	1,2-Dichloropropane	1	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	1,2-Dichloropropane	1	NV	N
1024	11/13/90	EMGW_SYSGEN_37	U	1,2-Dichloropropane	1	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	1,2-Dichloropropane	1	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	1,2-Dichloropropane	1	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	1,2-Dichloropropane	1	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	1,2-Dichloropropane	1	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	1,2-Dichloropropane	1	NV	N
1024	01/13/93	GW930113-6	U	1,2-Dichloropropane	1	NV	N
1040	10/18/90	EMGW_SYSGEN_116	U	1,2-Dichloropropane	1	NV	N
1060	06/04/90	EMGW_SYSGEN_159	U	1,2-Dichloropropane	1	NV	N
1060	06/04/90	EMGW_SYSGEN_159D	U	1,2-Dichloropropane	1	NV	D
1060	11/27/90	EMGW_SYSGEN_161	U	1,2-Dichloropropane	1	NV	N
1060	11/27/90	EMGW_SYSGEN_161D	U	1,2-Dichloropropane	1	NV	D
1060	03/11/91	EMGW_SYSGEN_162	U	1,2-Dichloropropane	1	NV	N
1065	04/16/90	EMGW_SYSGEN_167	U	1,2-Dichloropropane	1	NV	N
1065	10/16/90	EMGW_SYSGEN_168	U	1,2-Dichloropropane	1	NV	N
1065	10/16/90	EMGW_SYSGEN_168D	U	1,2-Dichloropropane	1	NV	D
1024	05/15/90	EMGW_SYSGEN_35	U	2-Butanone	2	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	2-Butanone	2	NV	N

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Table E-17 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type
1024	11/13/90	EMGW_SYSGEN_37	U	2-Butanone	2	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	2-Butanone	2	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	2-Butanone	2	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	2-Butanone	2	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	2-Butanone	2	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	2-Butanone	2	NV	N
1024	01/13/93	GW930113-6	U	2-Butanone	10	NV	N
1040	10/18/90	EMGW_SYSGEN_116	U	2-Butanone	2	NV	N
1040	09/28/93	30928-1040-02	U	2-Butanone	10	R	N
1060	06/04/90	EMGW_SYSGEN_159	U	2-Butanone	2	NV	N
1060	06/04/90	EMGW_SYSGEN_159D	U	2-Butanone	2	NV	D
1060	11/27/90	EMGW_SYSGEN_161	U	2-Butanone	2	NV	N
1060	11/27/90	EMGW_SYSGEN_161D	U	2-Butanone	2	NV	D
1060	03/11/91	EMGW_SYSGEN_162	U	2-Butanone	2	NV	N
1065	04/14/88	3136	U	2-Butanone	10	R	N
1065	10/16/90	EMGW_SYSGEN_168	U	2-Butanone	2	NV	N
1065	10/16/90	EMGW_SYSGEN_168D	U	2-Butanone	2	NV	D
1024	01/13/93	GW930113-6	U	2-Chloro-1,3-butadiene	5	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	2-Hexanone	2	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	2-Hexanone	2	NV	N
1024	11/13/90	EMGW_SYSGEN_37	U	2-Hexanone	2	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	2-Hexanone	2	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	2-Hexanone	2	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	2-Hexanone	2	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	2-Hexanone	2	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	2-Hexanone	2	NV	N
1024	01/13/93	GW930113-6	U	2-Hexanone	10	NV	N
1040	10/18/90	EMGW_SYSGEN_116	U	2-Hexanone	2	NV	N
1060	06/04/90	EMGW_SYSGEN_159	U	2-Hexanone	2	NV	N
1060	06/04/90	EMGW_SYSGEN_159D	U	2-Hexanone	2	NV	D
1060	11/27/90	EMGW_SYSGEN_161	U	2-Hexanone	2	NV	N
1060	11/27/90	EMGW_SYSGEN_161D	U	2-Hexanone	2	NV	D
1060	03/11/91	EMGW_SYSGEN_162	U	2-Hexanone	2	NV	N
1065	10/16/90	EMGW_SYSGEN_168	U	2-Hexanone	2	NV	N
1065	10/16/90	EMGW_SYSGEN_168D	U	2-Hexanone	2	NV	D
1024	05/15/90	EMGW_SYSGEN_35	U	4-Methyl-2-pentanone	2	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	4-Methyl-2-pentanone	2	NV	N
1024	11/13/90	EMGW_SYSGEN_37	U	4-Methyl-2-pentanone	2	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	4-Methyl-2-pentanone	2	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	4-Methyl-2-pentanone	2	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	4-Methyl-2-pentanone	2	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	4-Methyl-2-pentanone	2	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	4-Methyl-2-pentanone	2	NV	N
1024	01/13/93	GW930113-6	U	4-Methyl-2-pentanone	10	NV	N
1040	10/18/90	EMGW_SYSGEN_116	U	4-Methyl-2-pentanone	2	NV	N
1060	06/04/90	EMGW_SYSGEN_159	U	4-Methyl-2-pentanone	2	NV	N
1060	06/04/90	EMGW_SYSGEN_159D	U	4-Methyl-2-pentanone	2	NV	D
1060	11/27/90	EMGW_SYSGEN_161	U	4-Methyl-2-pentanone	2	NV	N
1060	11/27/90	EMGW_SYSGEN_161D	U	4-Methyl-2-pentanone	2	NV	D
1060	03/11/91	EMGW_SYSGEN_162	U	4-Methyl-2-pentanone	2	NV	N

Table E-17 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type
1065	10/16/90	EMGW_SYSGEN_168	U	4-Methyl-2-pentanone	2	NV	N
1065	10/16/90	EMGW_SYSGEN_168D	U	4-Methyl-2-pentanone	2	NV	D
1024	11/21/89	66651	U	Acetone	2.5	NV	N
1024	02/18/90	EMGW_SYSGEN_34	U	Acetone	2	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Acetone	2	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	Acetone	2	NV	N
1024	11/13/90	EMGW_SYSGEN_37	U	Acetone	2	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	Acetone	2	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	Acetone	2	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	Acetone	2	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	Acetone	2	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	Acetone	2	NV	N
1024	01/13/93	GW930113-6	U	Acetone	10	NV	N
1040	10/18/90	EMGW_SYSGEN_116	U	Acetone	2	NV	N
1060	06/04/90	EMGW_SYSGEN_159	U	Acetone	2	NV	N
1060	06/04/90	EMGW_SYSGEN_159D	U	Acetone	2	NV	D
1060	11/27/90	EMGW_SYSGEN_161	U	Acetone	2	NV	N
1060	11/27/90	EMGW_SYSGEN_161D	U	Acetone	2	NV	D
1060	03/11/91	EMGW_SYSGEN_162		Acetone	13.9	NV	N
1065	04/14/88	3136	U	Acetone	10	R	N
1065	10/16/90	EMGW_SYSGEN_168	U	Acetone	2	NV	N
1065	10/16/90	EMGW_SYSGEN_168D	U	Acetone	2	NV	D
1065	05/04/93	112013	B	Acetone	16	R	N
1024	01/13/93	GW930113-6	U	Acrolein	50	NV	N
1024	01/13/93	GW930113-6	U	Acrylonitrile	50	NV	N
1024	01/13/93	GW930113-6	U	Allyl chloride	5	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Benzene	1	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	Benzene	1	NV	N
1024	11/13/90	EMGW_SYSGEN_37	U	Benzene	1	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	Benzene	1	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	Benzene	1	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	Benzene	1	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	Benzene	1	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	Benzene	1	NV	N
1024	01/13/93	GW930113-6	U	Benzene	1	NV	N
1040	10/18/90	EMGW_SYSGEN_116	U	Benzene	1	NV	N
1060	06/04/90	EMGW_SYSGEN_159	U	Benzene	1	NV	N
1060	06/04/90	EMGW_SYSGEN_159D	U	Benzene	1	NV	D
1060	11/27/90	EMGW_SYSGEN_161	U	Benzene	1	NV	N
1060	11/27/90	EMGW_SYSGEN_161D	U	Benzene	1	NV	D
1060	03/11/91	EMGW_SYSGEN_162	U	Benzene	1	NV	N
1065	04/16/90	EMGW_SYSGEN_167	U	Benzene	1	NV	N
1065	10/16/90	EMGW_SYSGEN_168	U	Benzene	1	NV	N
1065	10/16/90	EMGW_SYSGEN_168D	U	Benzene	1	NV	D
1024	05/15/90	EMGW_SYSGEN_35	U	Bromodichloromethane	1	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	Bromodichloromethane	1	NV	N
1024	11/13/90	EMGW_SYSGEN_37	U	Bromodichloromethane	1	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	Bromodichloromethane	1	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	Bromodichloromethane	1	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	Bromodichloromethane	1	NV	N

Table E-17 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type
1024	10/01/91	EMGW_SYSGEN_41	U	Bromodichloromethane	1	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	Bromodichloromethane	1	NV	N
1024	01/13/93	GW930113-6	U	Bromodichloromethane	1	NV	N
1040	10/18/90	EMGW_SYSGEN_116	U	Bromodichloromethane	1	NV	N
1060	06/04/90	EMGW_SYSGEN_159	U	Bromodichloromethane	1	NV	N
1060	06/04/90	EMGW_SYSGEN_159D	U	Bromodichloromethane	1	NV	D
1060	11/27/90	EMGW_SYSGEN_161	U	Bromodichloromethane	1	NV	N
1060	11/27/90	EMGW_SYSGEN_161D	U	Bromodichloromethane	1	NV	D
1060	03/11/91	EMGW_SYSGEN_162	U	Bromodichloromethane	1	NV	N
1065	04/16/90	EMGW_SYSGEN_167	U	Bromodichloromethane	1	NV	N
1065	10/16/90	EMGW_SYSGEN_168	U	Bromodichloromethane	1	NV	N
1065	10/16/90	EMGW_SYSGEN_168D	U	Bromodichloromethane	1	NV	D
1024	05/15/90	EMGW_SYSGEN_35	U	Bromoform	1	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	Bromoform	1	NV	N
1024	11/13/90	EMGW_SYSGEN_37	U	Bromoform	1	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	Bromoform	1	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	Bromoform	1	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	Bromoform	1	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	Bromoform	1	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	Bromoform	1	NV	N
1024	01/13/93	GW930113-6	U	Bromoform	1	NV	N
1040	10/18/90	EMGW_SYSGEN_116	U	Bromoform	1	NV	N
1060	06/04/90	EMGW_SYSGEN_159	U	Bromoform	1	NV	N
1060	06/04/90	EMGW_SYSGEN_159D	U	Bromoform	1	NV	D
1060	11/27/90	EMGW_SYSGEN_161	U	Bromoform	1	NV	N
1060	11/27/90	EMGW_SYSGEN_161D	U	Bromoform	1	NV	D
1060	03/11/91	EMGW_SYSGEN_162	U	Bromoform	1	NV	N
1065	04/16/90	EMGW_SYSGEN_167	U	Bromoform	1	NV	N
1065	10/16/90	EMGW_SYSGEN_168	U	Bromoform	1	NV	N
1065	10/16/90	EMGW_SYSGEN_168D	U	Bromoform	1	NV	D
1024	05/15/90	EMGW_SYSGEN_35	U	Bromomethane	1	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	Bromomethane	1	NV	N
1024	11/13/90	EMGW_SYSGEN_37	U	Bromomethane	1	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	Bromomethane	1	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	Bromomethane	1	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	Bromomethane	1	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	Bromomethane	1	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	Bromomethane	1	NV	N
1024	01/13/93	GW930113-6	U	Bromomethane	5	NV	N
1040	10/18/90	EMGW_SYSGEN_116	U	Bromomethane	1	NV	N
1060	06/04/90	EMGW_SYSGEN_159	U	Bromomethane	1	NV	N
1060	06/04/90	EMGW_SYSGEN_159D	U	Bromomethane	1	NV	D
1060	11/27/90	EMGW_SYSGEN_161	U	Bromomethane	1	NV	N
1060	11/27/90	EMGW_SYSGEN_161D	U	Bromomethane	1	NV	D
1060	03/11/91	EMGW_SYSGEN_162	U	Bromomethane	1	NV	N
1065	04/16/90	EMGW_SYSGEN_167	U	Bromomethane	1	NV	N
1065	10/16/90	EMGW_SYSGEN_168	U	Bromomethane	1	NV	N
1065	10/16/90	EMGW_SYSGEN_168D	U	Bromomethane	1	NV	D
1024	05/15/90	EMGW_SYSGEN_35	U	Carbon disulfide	1	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	Carbon disulfide	1	NV	N

Table E-17 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type
1024	11/13/90	EMGW_SYSGEN_37	U	Carbon disulfide	1	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	Carbon disulfide	1	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	Carbon disulfide	1	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	Carbon disulfide	1	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	Carbon disulfide	1	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	Carbon disulfide	1	NV	N
1024	01/13/93	GW930113-6	U	Carbon disulfide	1	NV	N
1040	10/18/90	EMGW_SYSGEN_116	U	Carbon disulfide	1	NV	N
1060	06/04/90	EMGW_SYSGEN_159	U	Carbon disulfide	1	NV	N
1060	06/04/90	EMGW_SYSGEN_159D	U	Carbon disulfide	1	NV	D
1060	11/27/90	EMGW_SYSGEN_161	U	Carbon disulfide	1	NV	N
1060	11/27/90	EMGW_SYSGEN_161D	U	Carbon disulfide	1	NV	D
1060	03/11/91	EMGW_SYSGEN_162	U	Carbon disulfide	1	NV	N
1065	10/16/90	EMGW_SYSGEN_168	U	Carbon disulfide	1	NV	N
1065	10/16/90	EMGW_SYSGEN_168D	U	Carbon disulfide	1	NV	D
1024	05/15/90	EMGW_SYSGEN_35	U	Carbon Tetrachloride	1	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	Carbon Tetrachloride	1	NV	N
1024	11/13/90	EMGW_SYSGEN_37	U	Carbon Tetrachloride	1	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	Carbon Tetrachloride	1	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	Carbon Tetrachloride	1	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	Carbon Tetrachloride	1	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	Carbon Tetrachloride	1	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	Carbon Tetrachloride	1	NV	N
1024	01/13/93	GW930113-6	U	Carbon Tetrachloride	1	NV	N
1040	10/18/90	EMGW_SYSGEN_116	U	Carbon Tetrachloride	1	NV	N
1060	06/04/90	EMGW_SYSGEN_159	U	Carbon Tetrachloride	1	NV	N
1060	06/04/90	EMGW_SYSGEN_159D	U	Carbon Tetrachloride	1	NV	D
1060	11/27/90	EMGW_SYSGEN_161	U	Carbon Tetrachloride	1	NV	N
1060	11/27/90	EMGW_SYSGEN_161D	U	Carbon Tetrachloride	1	NV	D
1060	03/11/91	EMGW_SYSGEN_162	U	Carbon Tetrachloride	1	NV	N
1065	04/16/90	EMGW_SYSGEN_167	U	Carbon Tetrachloride	1	NV	N
1065	10/16/90	EMGW_SYSGEN_168	U	Carbon Tetrachloride	1	NV	N
1065	10/16/90	EMGW_SYSGEN_168D	U	Carbon Tetrachloride	1	NV	D
1024	05/15/90	EMGW_SYSGEN_35	U	Chlorobenzene	1	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	Chlorobenzene	1	NV	N
1024	11/13/90	EMGW_SYSGEN_37	U	Chlorobenzene	1	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	Chlorobenzene	1	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	Chlorobenzene	1	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	Chlorobenzene	1	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	Chlorobenzene	1	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	Chlorobenzene	1	NV	N
1024	01/13/93	GW930113-6	U	Chlorobenzene	1	NV	N
1040	10/18/90	EMGW_SYSGEN_116	U	Chlorobenzene	1	NV	N
1060	06/04/90	EMGW_SYSGEN_159	U	Chlorobenzene	1	NV	N
1060	06/04/90	EMGW_SYSGEN_159D	U	Chlorobenzene	1	NV	D
1060	11/27/90	EMGW_SYSGEN_161	U	Chlorobenzene	1	NV	N
1060	11/27/90	EMGW_SYSGEN_161D	U	Chlorobenzene	1	NV	D
1060	03/11/91	EMGW_SYSGEN_162	U	Chlorobenzene	1	NV	N
1065	04/16/90	EMGW_SYSGEN_167	U	Chlorobenzene	1	NV	N
1065	10/16/90	EMGW_SYSGEN_168	U	Chlorobenzene	1	NV	N

Table E-17 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type
1065	10/16/90	EMGW_SYSGEN_168D	U	Chlorobenzene	1	NV	D
1024	11/13/90	EMGW_SYSGEN_37	U	Chloroethane	1	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	Chloroethane	1	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	Chloroethane	1	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	Chloroethane	1	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	Chloroethane	1	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	Chloroethane	1	NV	N
1024	01/13/93	GW930113-6	U	Chloroethane	10	NV	N
1040	10/18/90	EMGW_SYSGEN_116	U	Chloroethane	1	NV	N
1060	11/27/90	EMGW_SYSGEN_161	U	Chloroethane	1	NV	N
1060	11/27/90	EMGW_SYSGEN_161D	U	Chloroethane	1	NV	D
1060	03/11/91	EMGW_SYSGEN_162	U	Chloroethane	1	NV	N
1065	10/16/90	EMGW_SYSGEN_168	U	Chloroethane	1	NV	N
1065	10/16/90	EMGW_SYSGEN_168D	U	Chloroethane	1	NV	D
1024	05/15/90	EMGW_SYSGEN_35	U	Chloroform	1	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	Chloroform	1	NV	N
1024	11/13/90	EMGW_SYSGEN_37	U	Chloroform	1	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	Chloroform	1	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	Chloroform	1	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	Chloroform	1	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	Chloroform	1	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	Chloroform	1	NV	N
1024	01/13/93	GW930113-6	U	Chloroform	1	NV	N
1040	10/18/90	EMGW_SYSGEN_116	U	Chloroform	1	NV	N
1060	06/04/90	EMGW_SYSGEN_159	U	Chloroform	1	NV	N
1060	06/04/90	EMGW_SYSGEN_159D	U	Chloroform	1	NV	D
1060	11/27/90	EMGW_SYSGEN_161	U	Chloroform	1	NV	N
1060	11/27/90	EMGW_SYSGEN_161D	U	Chloroform	1	NV	D
1060	03/11/91	EMGW_SYSGEN_162	U	Chloroform	1	NV	N
1065	04/16/90	EMGW_SYSGEN_167	U	Chloroform	1	NV	N
1065	10/16/90	EMGW_SYSGEN_168	U	Chloroform	1	NV	N
1065	10/16/90	EMGW_SYSGEN_168D	U	Chloroform	1	NV	D
1024	05/15/90	EMGW_SYSGEN_35	U	Chloromethane	1	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	Chloromethane	1	NV	N
1024	11/13/90	EMGW_SYSGEN_37	U	Chloromethane	1	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	Chloromethane	1	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	Chloromethane	1	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	Chloromethane	1	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	Chloromethane	1	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	Chloromethane	1	NV	N
1024	01/13/93	GW930113-6	U	Chloromethane	10	NV	N
1040	10/18/90	EMGW_SYSGEN_116	U	Chloromethane	1	NV	N
1060	06/04/90	EMGW_SYSGEN_159	U	Chloromethane	1	NV	N
1060	06/04/90	EMGW_SYSGEN_159D	U	Chloromethane	1	NV	D
1060	11/27/90	EMGW_SYSGEN_161	U	Chloromethane	1	NV	N
1060	11/27/90	EMGW_SYSGEN_161D	U	Chloromethane	1	NV	D
1060	03/11/91	EMGW_SYSGEN_162	U	Chloromethane	1	NV	N
1065	04/16/90	EMGW_SYSGEN_167	U	Chloromethane	1	NV	N
1065	10/16/90	EMGW_SYSGEN_168	U	Chloromethane	1	NV	N
1065	10/16/90	EMGW_SYSGEN_168D	U	Chloromethane	1	NV	D

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Table E-17 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type
1065	05/04/93	112013	U	Chloromethane	10	R	N
1024	05/15/90	EMGW_SYSGEN_35	U	cis-1,3-Dichloropropene	1	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	cis-1,3-Dichloropropene	1	NV	N
1024	11/13/90	EMGW_SYSGEN_37	U	cis-1,3-Dichloropropene	1	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	cis-1,3-Dichloropropene	1	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	cis-1,3-Dichloropropene	1	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	cis-1,3-Dichloropropene	1	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	cis-1,3-Dichloropropene	1	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	cis-1,3-Dichloropropene	1	NV	N
1024	01/13/93	GW930113-6	U	cis-1,3-Dichloropropene	1	NV	N
1040	10/18/90	EMGW_SYSGEN_116	U	cis-1,3-Dichloropropene	1	NV	N
1060	06/04/90	EMGW_SYSGEN_159	U	cis-1,3-Dichloropropene	1	NV	N
1060	06/04/90	EMGW_SYSGEN_159D	U	cis-1,3-Dichloropropene	1	NV	D
1060	11/27/90	EMGW_SYSGEN_161	U	cis-1,3-Dichloropropene	1	NV	N
1060	11/27/90	EMGW_SYSGEN_161D	U	cis-1,3-Dichloropropene	1	NV	D
1060	03/11/91	EMGW_SYSGEN_162	U	cis-1,3-Dichloropropene	1	NV	N
1065	04/16/90	EMGW_SYSGEN_167	U	cis-1,3-Dichloropropene	1	NV	N
1065	10/16/90	EMGW_SYSGEN_168	U	cis-1,3-Dichloropropene	1	NV	N
1065	10/16/90	EMGW_SYSGEN_168D	U	cis-1,3-Dichloropropene	1	NV	D
1024	05/15/90	EMGW_SYSGEN_35	U	Dibromochloromethane	1	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	Dibromochloromethane	1	NV	N
1024	11/13/90	EMGW_SYSGEN_37	U	Dibromochloromethane	1	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	Dibromochloromethane	1	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	Dibromochloromethane	1	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	Dibromochloromethane	1	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	Dibromochloromethane	1	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	Dibromochloromethane	1	NV	N
1024	01/13/93	GW930113-6	U	Dibromochloromethane	1	NV	N
1040	10/18/90	EMGW_SYSGEN_116	U	Dibromochloromethane	1	NV	N
1040	09/28/93	30928-1040-02	U	Dibromochloromethane			N
1060	06/04/90	EMGW_SYSGEN_159	U	Dibromochloromethane	1	NV	N
1060	06/04/90	EMGW_SYSGEN_159D	U	Dibromochloromethane	1	NV	D
1060	11/27/90	EMGW_SYSGEN_161	U	Dibromochloromethane	1	NV	N
1060	11/27/90	EMGW_SYSGEN_161D	U	Dibromochloromethane	1	NV	D
1060	03/11/91	EMGW_SYSGEN_162	U	Dibromochloromethane	1	NV	N
1065	04/16/90	EMGW_SYSGEN_167	U	Dibromochloromethane	1	NV	N
1065	10/16/90	EMGW_SYSGEN_168	U	Dibromochloromethane	1	NV	N
1065	10/16/90	EMGW_SYSGEN_168D	U	Dibromochloromethane	1	NV	D
1024	01/13/93	GW930113-6	U	Dichlorodifluoromethane	10	NV	N
1024	01/13/93	GW930113-6	U	Ethyl cyanide	20	NV	N
1024	01/13/93	GW930113-6	U	Ethyl methacrylate	5	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Ethylbenzene	1	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	Ethylbenzene	1	NV	N
1024	11/13/90	EMGW_SYSGEN_37	U	Ethylbenzene	1	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	Ethylbenzene	1	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	Ethylbenzene	1	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	Ethylbenzene	1	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	Ethylbenzene	1	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	Ethylbenzene	1	NV	N
1024	01/13/93	GW930113-6	U	Ethylbenzene	1	NV	N

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Table E-17 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type
1040	10/18/90	EMGW_SYSGEN_116	U	Ethylbenzene	1	NV	N
1060	06/04/90	EMGW_SYSGEN_159	U	Ethylbenzene	1	NV	N
1060	06/04/90	EMGW_SYSGEN_159D	U	Ethylbenzene	1	NV	D
1060	11/27/90	EMGW_SYSGEN_161	U	Ethylbenzene	1	NV	N
1060	11/27/90	EMGW_SYSGEN_161D	U	Ethylbenzene	1	NV	D
1060	03/11/91	EMGW_SYSGEN_162	U	Ethylbenzene	1	NV	N
1065	04/16/90	EMGW_SYSGEN_167	U	Ethylbenzene	1	NV	N
1065	10/16/90	EMGW_SYSGEN_168	U	Ethylbenzene	1	NV	N
1065	10/16/90	EMGW_SYSGEN_168D	U	Ethylbenzene	1	NV	D
1024	01/13/93	GW930113-6	U	Iodomethane	5	NV	N
1024	01/13/93	GW930113-6	U	Methacrylonitrile	5	NV	N
1024	01/13/93	GW930113-6	U	Methyl methacrylate	5	NV	N
1024	11/21/89	66651	U	Methylene chloride	2.5	NV	N
1024	02/18/90	EMGW_SYSGEN_34	U	Methylene chloride	1	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Methylene chloride	1	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	Methylene chloride	1	NV	N
1024	11/13/90	EMGW_SYSGEN_37	U	Methylene chloride	1	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	Methylene chloride	1	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	Methylene chloride	1	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	Methylene chloride	1	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	Methylene chloride	1	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	Methylene chloride	1	NV	N
1024	01/13/93	GW930113-6	U	Methylene chloride	10	NV	N
1040	10/18/90	EMGW_SYSGEN_116	U	Methylene chloride	1	NV	N
1060	06/04/90	EMGW_SYSGEN_159	U	Methylene chloride	1	NV	N
1060	06/04/90	EMGW_SYSGEN_159D	U	Methylene chloride	1	NV	D
1060	11/27/90	EMGW_SYSGEN_161	U	Methylene chloride	1	NV	N
1060	11/27/90	EMGW_SYSGEN_161D	U	Methylene chloride	1	NV	D
1060	03/11/91	EMGW_SYSGEN_162	U	Methylene chloride	1	NV	N
1065	04/16/90	EMGW_SYSGEN_167	U	Methylene chloride	1	NV	N
1065	10/16/90	EMGW_SYSGEN_168	U	Methylene chloride	1	NV	N
1065	10/16/90	EMGW_SYSGEN_168D	U	Methylene chloride	1	NV	D
1024	05/15/90	EMGW_SYSGEN_35	U	Pyridine	4	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Styrene	1	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	Styrene	1	NV	N
1024	11/13/90	EMGW_SYSGEN_37	U	Styrene	1	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	Styrene	1	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	Styrene	1	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	Styrene	1	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	Styrene	1	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	Styrene	1	NV	N
1024	01/13/93	GW930113-6	U	Styrene	1	NV	N
1040	10/18/90	EMGW_SYSGEN_116	U	Styrene	1	NV	N
1060	06/04/90	EMGW_SYSGEN_159	U	Styrene	1	NV	N
1060	06/04/90	EMGW_SYSGEN_159D	U	Styrene	1	NV	D
1060	11/27/90	EMGW_SYSGEN_161	U	Styrene	1	NV	N
1060	11/27/90	EMGW_SYSGEN_161D	U	Styrene	1	NV	D
1060	03/11/91	EMGW_SYSGEN_162	U	Styrene	1	NV	N
1065	10/16/90	EMGW_SYSGEN_168	U	Styrene	1	NV	N
1065	10/16/90	EMGW_SYSGEN_168D	U	Styrene	1	NV	D

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Table E-17 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type
1024	11/21/89	66651	U	Tetrachloroethene	2.5	NV	N
1024	02/18/90	EMGW_SYSGEN_34	U	Tetrachloroethene	1	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Tetrachloroethene	1	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	Tetrachloroethene	1	NV	N
1024	11/13/90	EMGW_SYSGEN_37	U	Tetrachloroethene	1	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	Tetrachloroethene	1	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	Tetrachloroethene	1	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	Tetrachloroethene	1	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	Tetrachloroethene	1	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	Tetrachloroethene	1	NV	N
1024	01/13/93	GW930113-6	U	Tetrachloroethene	1	NV	N
1040	10/18/90	EMGW_SYSGEN_116	U	Tetrachloroethene	1	NV	N
1060	06/04/90	EMGW_SYSGEN_159	U	Tetrachloroethene	1	NV	N
1060	06/04/90	EMGW_SYSGEN_159D	U	Tetrachloroethene	1	NV	D
1060	11/27/90	EMGW_SYSGEN_161	U	Tetrachloroethene	1	NV	N
1060	11/27/90	EMGW_SYSGEN_161D	U	Tetrachloroethene	1	NV	D
1060	03/11/91	EMGW_SYSGEN_162	U	Tetrachloroethene	1	NV	N
1065	04/16/90	EMGW_SYSGEN_167	U	Tetrachloroethene	1	NV	N
1065	10/16/90	EMGW_SYSGEN_168	U	Tetrachloroethene	1	NV	N
1065	10/16/90	EMGW_SYSGEN_168D	U	Tetrachloroethene	1	NV	D
1024	11/21/89	66651	U	Toluene	2.5	NV	N
1024	02/18/90	EMGW_SYSGEN_34	U	Toluene	1	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Toluene	1	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	Toluene	1	NV	N
1024	11/13/90	EMGW_SYSGEN_37	U	Toluene	1	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	Toluene	1	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	Toluene	1	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	Toluene	1	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	Toluene	1	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	Toluene	1	NV	N
1024	01/13/93	GW930113-6	U	Toluene	1	NV	N
1040	10/18/90	EMGW_SYSGEN_116	U	Toluene	1	NV	N
1060	06/04/90	EMGW_SYSGEN_159	U	Toluene	1	NV	N
1060	06/04/90	EMGW_SYSGEN_159D	U	Toluene	1	NV	D
1060	11/27/90	EMGW_SYSGEN_161	U	Toluene	1	NV	N
1060	11/27/90	EMGW_SYSGEN_161D	U	Toluene	1	NV	D
1060	03/11/91	EMGW_SYSGEN_162	U	Toluene	1	NV	N
1065	04/16/90	EMGW_SYSGEN_167	U	Toluene	1	NV	N
1065	10/16/90	EMGW_SYSGEN_168	U	Toluene	1	NV	N
1065	10/16/90	EMGW_SYSGEN_168D	U	Toluene	1	NV	D
1024	11/13/90	EMGW_SYSGEN_37	U	trans-1,2-Dichloroethene	1	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	trans-1,2-Dichloroethene	1	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	trans-1,2-Dichloroethene	1	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	trans-1,2-Dichloroethene	1	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	trans-1,2-Dichloroethene	1	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	trans-1,2-Dichloroethene	1	NV	N
1024	01/13/93	GW930113-6	U	trans-1,2-Dichloroethene	1	NV	N
1040	10/18/90	EMGW_SYSGEN_116	U	trans-1,2-Dichloroethene	1	NV	N
1060	11/27/90	EMGW_SYSGEN_161	U	trans-1,2-Dichloroethene	1	NV	N
1060	11/27/90	EMGW_SYSGEN_161D	U	trans-1,2-Dichloroethene	1	NV	D

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Table E-17 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type
1060	03/11/91	EMGW_SYSGEN_162	U	trans-1,2-Dichloroethene	1	NV	N
1065	04/16/90	EMGW_SYSGEN_167	U	trans-1,2-Dichloroethene	1	NV	N
1065	10/16/90	EMGW_SYSGEN_168	U	trans-1,2-Dichloroethene	1	NV	N
1065	10/16/90	EMGW_SYSGEN_168D	U	trans-1,2-Dichloroethene	1	NV	D
1024	05/15/90	EMGW_SYSGEN_35	U	trans-1,3-Dichloropropene	1	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	trans-1,3-Dichloropropene	1	NV	N
1024	11/13/90	EMGW_SYSGEN_37	U	trans-1,3-Dichloropropene	1	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	trans-1,3-Dichloropropene	1	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	trans-1,3-Dichloropropene	1	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	trans-1,3-Dichloropropene	1	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	trans-1,3-Dichloropropene	1	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	trans-1,3-Dichloropropene	1	NV	N
1024	01/13/93	GW930113-6	U	trans-1,3-Dichloropropene	1	NV	N
1040	10/18/90	EMGW_SYSGEN_116	U	trans-1,3-Dichloropropene	1	NV	N
1060	06/04/90	EMGW_SYSGEN_159	U	trans-1,3-Dichloropropene	1	NV	N
1060	06/04/90	EMGW_SYSGEN_159D	U	trans-1,3-Dichloropropene	1	NV	D
1060	11/27/90	EMGW_SYSGEN_161	U	trans-1,3-Dichloropropene	1	NV	N
1060	11/27/90	EMGW_SYSGEN_161D	U	trans-1,3-Dichloropropene	1	NV	D
1060	03/11/91	EMGW_SYSGEN_162	U	trans-1,3-Dichloropropene	1	NV	N
1065	04/16/90	EMGW_SYSGEN_167	U	trans-1,3-Dichloropropene	1	NV	N
1065	10/16/90	EMGW_SYSGEN_168	U	trans-1,3-Dichloropropene	1	NV	N
1065	10/16/90	EMGW_SYSGEN_168D	U	trans-1,3-Dichloropropene	1	NV	D
1024	01/13/93	GW930113-6	U	trans-1,4-Dichloro-2-butene	20	NV	N
1024	11/21/89	66651	U	Trichloroethene	2.5	NV	N
1024	02/18/90	EMGW_SYSGEN_34		Trichloroethene	2.7	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Trichloroethene	1	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	Trichloroethene	1	NV	N
1024	11/13/90	EMGW_SYSGEN_37	U	Trichloroethene	1	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	Trichloroethene	1	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	Trichloroethene	1	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	Trichloroethene	1	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	Trichloroethene	1	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	Trichloroethene	1	NV	N
1024	01/13/93	GW930113-6	U	Trichloroethene	1	NV	N
1040	10/18/90	EMGW_SYSGEN_116	U	Trichloroethene	1	NV	N
1060	06/04/90	EMGW_SYSGEN_159	U	Trichloroethene	1	NV	N
1060	06/04/90	EMGW_SYSGEN_159D	U	Trichloroethene	1	NV	D
1060	11/27/90	EMGW_SYSGEN_161	U	Trichloroethene	1	NV	N
1060	11/27/90	EMGW_SYSGEN_161D	U	Trichloroethene	1	NV	D
1060	03/11/91	EMGW_SYSGEN_162	U	Trichloroethene	1	NV	N
1065	04/16/90	EMGW_SYSGEN_167	U	Trichloroethene	1	NV	N
1065	10/16/90	EMGW_SYSGEN_168	U	Trichloroethene	1	NV	N
1065	10/16/90	EMGW_SYSGEN_168D	U	Trichloroethene	1	NV	D
1024	01/13/93	GW930113-6	U	Trichlorofluoromethane	1	NV	N
1065	04/16/90	EMGW_SYSGEN_167	U	Trichlorofluoromethane	1	NV	N
1024	05/15/90	EMGW_SYSGEN_35	U	Vinyl Acetate	2	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	Vinyl Acetate	2	NV	N
1024	11/13/90	EMGW_SYSGEN_37	U	Vinyl Acetate	2	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	Vinyl Acetate	2	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	Vinyl Acetate	2	NV	D

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Table E-17 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Glacial Overburden

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type
1024	07/15/91	EMGW_SYSGEN_40	U	Vinyl Acetate	2	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	Vinyl Acetate	2	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	Vinyl Acetate	2	NV	N
1024	01/13/93	GW930113-6	U	Vinyl Acetate	10	NV	N
1040	10/18/90	EMGW_SYSGEN_116	U	Vinyl Acetate	2	NV	N
1060	06/04/90	EMGW_SYSGEN_159	U	Vinyl Acetate	2	NV	N
1060	06/04/90	EMGW_SYSGEN_159D	U	Vinyl Acetate	2	NV	D
1060	11/27/90	EMGW_SYSGEN_161	U	Vinyl Acetate	2	NV	N
1060	11/27/90	EMGW_SYSGEN_161D	U	Vinyl Acetate	2	NV	D
1060	03/11/91	EMGW_SYSGEN_162	U	Vinyl Acetate	2	NV	N
1065	10/16/90	EMGW_SYSGEN_168	U	Vinyl Acetate	2	NV	N
1065	10/16/90	EMGW_SYSGEN_168D	U	Vinyl Acetate	2	NV	D
1024	05/15/90	EMGW_SYSGEN_35	U	Vinyl chloride	1	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	Vinyl chloride	1	NV	N
1024	11/13/90	EMGW_SYSGEN_37	U	Vinyl chloride	1	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	Vinyl chloride	1	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	Vinyl chloride	1	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	Vinyl chloride	1	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	Vinyl chloride	1	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	Vinyl chloride	1	NV	N
1024	01/13/93	GW930113-6	U	Vinyl chloride	5	NV	N
1040	10/18/90	EMGW_SYSGEN_116	U	Vinyl chloride	1	NV	N
1060	06/04/90	EMGW_SYSGEN_159	U	Vinyl chloride	1	NV	N
1060	06/04/90	EMGW_SYSGEN_159D	U	Vinyl chloride	1	NV	D
1060	11/27/90	EMGW_SYSGEN_161	U	Vinyl chloride	1	NV	N
1060	11/27/90	EMGW_SYSGEN_161D	U	Vinyl chloride	1	NV	D
1060	03/11/91	EMGW_SYSGEN_162	U	Vinyl chloride	1	NV	N
1065	04/16/90	EMGW_SYSGEN_167	U	Vinyl chloride	1	NV	N
1065	10/16/90	EMGW_SYSGEN_168	U	Vinyl chloride	1	NV	N
1065	10/16/90	EMGW_SYSGEN_168D	U	Vinyl chloride	1	NV	D
1024	05/15/90	EMGW_SYSGEN_35	U	Xylenes, Total	1	NV	N
1024	08/08/90	EMGW_SYSGEN_36	U	Xylenes, Total	1	NV	N
1024	11/13/90	EMGW_SYSGEN_37	U	Xylenes, Total	1	NV	N
1024	02/27/91	EMGW_SYSGEN_38	U	Xylenes, Total	1	NV	N
1024	02/27/91	EMGW_SYSGEN_38D	U	Xylenes, Total	1	NV	D
1024	07/15/91	EMGW_SYSGEN_40	U	Xylenes, Total	1	NV	N
1024	10/01/91	EMGW_SYSGEN_41	U	Xylenes, Total	1	NV	N
1024	01/02/92	EMGW_SYSGEN_42	U	Xylenes, Total	1	NV	N
1024	01/13/93	GW930113-6	U	Xylenes, Total	1	NV	N
1040	10/18/90	EMGW_SYSGEN_116	U	Xylenes, Total	1	NV	N
1060	06/04/90	EMGW_SYSGEN_159	U	Xylenes, Total	1	NV	N
1060	06/04/90	EMGW_SYSGEN_159D	U	Xylenes, Total	1	NV	D
1060	11/27/90	EMGW_SYSGEN_161	U	Xylenes, Total	1	NV	N
1060	11/27/90	EMGW_SYSGEN_161D	U	Xylenes, Total	1	NV	D
1060	03/11/91	EMGW_SYSGEN_162	U	Xylenes, Total	1	NV	N
1065	10/16/90	EMGW_SYSGEN_168	U	Xylenes, Total	1	NV	N
1065	10/16/90	EMGW_SYSGEN_168D	U	Xylenes, Total	1	NV	D

Table E-18
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
4011	02/21/91	EMGW_SYSGEN_1245	U	2,4,5-T	0.5	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	2,4,5-TP (Silvex)	0.5	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	2,4-D	1	NV	N	S
2043	09/13/89	66585	U	Dinoseb	20	R	N	S
2043	09/13/89	66587	U	Dinoseb	20	R	N	S
3043	09/13/89	66586	U	Dinoseb	20	R	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Dinoseb	0.5	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Dimethoate	15	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Disulfoton	15	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Famphur	15	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Methyl parathion	15	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Parathion	15	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Phorate	15	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Thionazin	15	NV	N	S
2043	09/13/89	66585	U	4,4'-DDD	0.1	Z	N	S
2043	09/13/89	66587	U	4,4'-DDD	0.1	Z	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	4,4'-DDD	0.2	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	4,4'-DDD	0.2	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	4,4'-DDD	0.2	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	4,4'-DDD	0.2	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	4,4'-DDD	4	NV	N	S
2043	09/13/89	66585	U	4,4'-DDE	0.1	Z	N	S
2043	09/13/89	66587	U	4,4'-DDE	0.1	Z	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	4,4'-DDE	0.2	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	4,4'-DDE	0.2	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	4,4'-DDE	0.2	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	4,4'-DDE	0.2	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	4,4'-DDE	4	NV	N	S
2043	09/13/89	66585	U	4,4'-DDT	0.1	Z	N	S
2043	09/13/89	66587	XU	4,4'-DDT	1.4	Z	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	4,4'-DDT	0.2	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	4,4'-DDT	0.2	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	4,4'-DDT	0.2	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	4,4'-DDT	0.2	NV	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
4011	02/21/91	EMGW_SYSGEN_1245	U	4,4'-DDT	4	NV	N	S
2043	09/13/89	66585	U	Aldrin	0.05	Z	N	S
2043	09/13/89	66587	U	Aldrin	0.05	Z	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Aldrin	0.2	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Aldrin	0.2	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Aldrin	0.2	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Aldrin	0.2	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Aldrin	0.2	NV	N	S
2043	09/13/89	66585	U	alpha-BHC	0.05	Z	N	S
2043	09/13/89	66587	U	alpha-BHC	0.05	Z	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	alpha-BHC	0.2	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	alpha-BHC	0.2	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	alpha-BHC	0.2	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	alpha-BHC	0.2	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	alpha-BHC	0.2	NV	N	S
2043	09/13/89	66585	U	alpha-Chlordane	0.5	Z	N	S
2043	09/13/89	66587	U	alpha-Chlordane	0.5	Z	N	S
2043	09/13/89	66585	U	Aroclor-1016	0.5	Z	N	S
2043	09/13/89	66587	U	Aroclor-1016	0.5	Z	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Aroclor-1016	0.2	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Aroclor-1016	0.2	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Aroclor-1016	0.2	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Aroclor-1016	0.2	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Aroclor-1016	0.2	NV	N	S
2043	09/13/89	66585	U	Aroclor-1221	0.5	Z	N	S
2043	09/13/89	66587	U	Aroclor-1221	0.5	Z	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Aroclor-1221	0.2	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Aroclor-1221	0.2	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Aroclor-1221	0.2	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Aroclor-1221	0.2	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Aroclor-1221	0.2	NV	N	S
2043	09/13/89	66585	U	Aroclor-1232	0.5	Z	N	S
2043	09/13/89	66587	U	Aroclor-1232	0.5	Z	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Aroclor-1232	0.2	NV	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2066	05/16/90	EMGW_SYSGEN_629	U	Aroclor-1232	0.2	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Aroclor-1232	0.2	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Aroclor-1232	0.2	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Aroclor-1232	0.2	NV	N	S
2043	09/13/89	66585	U	Aroclor-1242	0.5	Z	N	S
2043	09/13/89	66587	U	Aroclor-1242	0.5	Z	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Aroclor-1242	0.2	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Aroclor-1242	0.2	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Aroclor-1242	0.2	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Aroclor-1242	0.2	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Aroclor-1242	0.2	NV	N	S
2043	09/13/89	66585	U	Aroclor-1248	0.5	Z	N	S
2043	09/13/89	66587	U	Aroclor-1248	0.5	Z	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Aroclor-1248	0.2	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Aroclor-1248	0.2	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Aroclor-1248	0.2	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Aroclor-1248	0.2	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Aroclor-1248	0.2	NV	N	S
2043	09/13/89	66585	U	Aroclor-1254	1	Z	N	S
2043	09/13/89	66587	U	Aroclor-1254	1	Z	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Aroclor-1254	0.2	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Aroclor-1254	0.2	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Aroclor-1254	0.2	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Aroclor-1254	0.2	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Aroclor-1254	0.2	NV	N	S
2043	09/13/89	66585	U	Aroclor-1260	1	Z	N	S
2043	09/13/89	66587	U	Aroclor-1260	1	Z	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Aroclor-1260	0.2	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Aroclor-1260	0.2	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Aroclor-1260	0.2	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Aroclor-1260	0.2	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Aroclor-1260	0.2	NV	N	S
2043	09/13/89	66585	U	beta-BHC	0.05	Z	N	S
2043	09/13/89	66587	U	beta-BHC	0.05	Z	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2043	05/17/90	EMGW_SYSGEN_523	U	beta-BHC	0.2	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	beta-BHC	0.2	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	beta-BHC	0.2	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	beta-BHC	0.2	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	beta-BHC	0.2	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Chlordane	0.2	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Chlordane	0.2	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Chlordane	0.2	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Chlordane	0.2	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Chlordane	0.2	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Chlorobenzilate	15	NV	N	S
2043	09/13/89	66585	U	delta-BHC	0.05	Z	N	S
2043	09/13/89	66587	U	delta-BHC	0.05	Z	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	delta-BHC	0.2	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	delta-BHC	0.2	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	delta-BHC	0.2	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	delta-BHC	0.2	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	delta-BHC	0.2	NV	N	S
2043	09/13/89	66585	U	Dieldrin	0.1	Z	N	S
2043	09/13/89	66587	U	Dieldrin	0.1	Z	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Dieldrin	0.2	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Dieldrin	0.2	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Dieldrin	0.2	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Dieldrin	0.2	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Dieldrin	0.2	NV	N	S
2043	09/13/89	66585	U	Endosulfan II	0.1	Z	N	S
2043	09/13/89	66587	U	Endosulfan II	0.1	Z	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Endosulfan II	0.2	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Endosulfan II	0.2	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Endosulfan II	0.2	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Endosulfan II	0.2	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Endosulfan II	0.2	NV	N	S
2043	09/13/89	66585	U	Endosulfan sulfate	0.1	Z	N	S
2043	09/13/89	66587	U	Endosulfan sulfate	0.1	Z	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2043	05/17/90	EMGW_SYSGEN_523	U	Endosulfan sulfate	0.2	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Endosulfan sulfate	0.2	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Endosulfan sulfate	0.2	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Endosulfan sulfate	0.2	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Endosulfan sulfate	0.2	NV	N	S
2043	09/13/89	66585	U	Endosulfan-I	0.05	Z	N	S
2043	09/13/89	66587	U	Endosulfan-I	0.05	Z	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Endosulfan-I	0.2	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Endosulfan-I	0.2	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Endosulfan-I	0.2	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Endosulfan-I	0.2	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Endosulfan-I	0.2	NV	N	S
2043	09/13/89	66585	U	Endrin	0.1	Z	N	S
2043	09/13/89	66587	U	Endrin	0.1	Z	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Endrin	0.08	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Endrin	0.08	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Endrin	0.08	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Endrin	0.2	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Endrin	0.2	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Endrin aldehyde	0.2	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Endrin aldehyde	0.2	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Endrin aldehyde	0.2	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Endrin aldehyde	0.2	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Endrin aldehyde	0.2	NV	N	S
2043	09/13/89	66585	U	Endrin ketone	0.1	Z	N	S
2043	09/13/89	66587	U	Endrin ketone	0.1	Z	N	S
2043	09/13/89	66585	U	gamma-BHC (Lindane)	0.05	Z	N	S
2043	09/13/89	66587	U	gamma-BHC (Lindane)	0.05	Z	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	gamma-BHC (Lindane)	0.2	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	gamma-BHC (Lindane)	0.2	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	gamma-BHC (Lindane)	0.2	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	gamma-BHC (Lindane)	0.2	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	gamma-BHC (Lindane)	0.2	NV	N	S
2043	09/13/89	66585	U	gamma-Chlordane	0.5	Z	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2043	09/13/89	66587	U	gamma-Chlordane	0.5	Z	N	S
2043	09/13/89	66585	U	Heptachlor	0.05	Z	N	S
2043	09/13/89	66587	U	Heptachlor	0.05	Z	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Heptachlor	0.2	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Heptachlor	0.2	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Heptachlor	0.2	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Heptachlor	0.2	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Heptachlor	0.2	NV	N	S
2043	09/13/89	66585	U	Heptachlor epoxide	0.05	Z	N	S
2043	09/13/89	66587	U	Heptachlor epoxide	0.05	Z	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Heptachlor epoxide	0.2	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Heptachlor epoxide	0.2	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Heptachlor epoxide	0.2	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Heptachlor epoxide	0.2	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Heptachlor epoxide	0.2	NV	N	S
2043	09/13/89	66585	U	Isodrin	0.05	Z	N	S
2043	09/13/89	66587	U	Isodrin	0.05	Z	N	S
2043	09/14/89	66588	U	Isodrin	0.05	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Isodrin	4	NV	N	S
2043	09/13/89	66585	U	Kepone	0.1	Z	N	S
2043	09/13/89	66587	U	Kepone	0.1	Z	N	S
2043	09/14/89	66588	U	Kepone	0.1	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Kepone	4	NV	N	S
2043	09/13/89	66585	U	Methoxychlor	0.5	Z	N	S
2043	09/13/89	66587	U	Methoxychlor	0.5	Z	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Methoxychlor	0.2	NV	N	S
2043	09/13/89	66585	U	Toxaphene	1	Z	N	S
2043	09/13/89	66587	U	Toxaphene	1	Z	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Toxaphene	0.5	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Toxaphene	0.5	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Toxaphene	0.5	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Toxaphene	0.5	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Toxaphene	0.5	NV	N	S
2043	09/13/89	66585	U	1,2,4,5-Tetrachlorobenzene	10	R	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2043	09/13/89	66587	U	1,2,4,5-Tetrachlorobenzene	10	R	N	S
3043	09/13/89	66586	U	1,2,4,5-Tetrachlorobenzene	10	R	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	1,2,4,5-Tetrachlorobenzene	4	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	1,2,4-Trichlorobenzene	4	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	1,2,4-Trichlorobenzene	4	NV	N	S
2728	04/04/93	113514	U	1,2,4-Trichlorobenzene	10	Z	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	1,2,4-Trichlorobenzene	4	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	1,2,4-Trichlorobenzene	4	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	1,2,4-Trichlorobenzene	4	NV	N	S
2728	04/04/93	113514	U	1,2-Dichlorobenzene	10	Z	N	S
3098	08/13/92	3098-08/13/92-A-D1-5	U	1,2-Dichlorobenzene	0.78	NV	D	D
4096	08/18/92	4096-08/18/92-B-D1-5	U	1,2-Dichlorobenzene	0.78	NV	D	R
4096	11/04/92	4096-11/04/92-A-D1-7	U	1,2-Dichlorobenzene	0.78	NV	D	R
2043	09/13/89	66585	U	1,3,5-Trinitrobenzene	10	R	N	S
2043	09/13/89	66587	U	1,3,5-Trinitrobenzene	10	R	N	S
3043	09/13/89	66586	U	1,3,5-Trinitrobenzene	10	R	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	1,3,5-Trinitrobenzene	15	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	1,3-Dichlorobenzene	4	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	1,3-Dichlorobenzene	4	NV	N	S
2728	04/04/93	113514	U	1,3-Dichlorobenzene	10	Z	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	1,3-Dichlorobenzene	4	NV	N	S
3098	08/13/92	3098-08/13/92-A-D1-5	U	1,3-Dichlorobenzene	0.72	NV	D	D
4011	11/14/90	EMGW_SYSGEN_1244	U	1,3-Dichlorobenzene	4	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	1,3-Dichlorobenzene	4	NV	N	S
4096	08/18/92	4096-08/18/92-B-D1-5	U	1,3-Dichlorobenzene	0.72	NV	D	R
4096	11/04/92	4096-11/04/92-A-D1-7	U	1,3-Dichlorobenzene	0.72	NV	D	R
2043	09/13/89	66585	U	1,3-Dinitrobenzene	10	R	N	S
2043	09/13/89	66587	U	1,3-Dinitrobenzene	10	R	N	S
3043	09/13/89	66586	U	1,3-Dinitrobenzene	10	R	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	1,3-Dinitrobenzene	15	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	1,4-Dichlorobenzene	4	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	1,4-Dichlorobenzene	4	NV	N	S
2728	04/04/93	113514	U	1,4-Dichlorobenzene	10	Z	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	1,4-Dichlorobenzene	4	NV	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
3098	08/13/92	3098-08/13/92-A-D1-5	U	1,4-Dichlorobenzene	1.2	NV	D	D
4011	11/14/90	EMGW_SYSGEN_1244	U	1,4-Dichlorobenzene	4	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	1,4-Dichlorobenzene	4	NV	N	S
4096	08/18/92	4096-08/18/92-B-D1-5	U	1,4-Dichlorobenzene	1.2	NV	D	R
4096	11/04/92	4096-11/04/92-A-D1-7	U	1,4-Dichlorobenzene	1.2	NV	D	R
2043	09/13/89	66585	U	1,4-Naphthoquinone	10	R	N	S
2043	09/13/89	66587	U	1,4-Naphthoquinone	10	R	N	S
3043	09/13/89	66586	U	1,4-Naphthoquinone	10	R	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	1,4-Naphthoquinone	15	NV	N	S
2043	09/13/89	66585	U	1-Naphthylamine	120	R	N	S
2043	09/13/89	66587	U	1-Naphthylamine	120	R	N	S
3043	09/13/89	66586	U	1-Naphthylamine	120	R	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	1-Naphthylamine	15	NV	N	S
2043	09/13/89	66585	U	2,3,4,6-Tetrachlorophenol	10	R	N	S
2043	09/13/89	66587	U	2,3,4,6-Tetrachlorophenol	10	R	N	S
3043	09/13/89	66586	U	2,3,4,6-Tetrachlorophenol	10	R	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	2,3,4,6-Tetrachlorophenol	4	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	2,4,5-Trichlorophenol	4	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	2,4,5-Trichlorophenol	4	NV	N	S
2728	04/04/93	113514	U	2,4,5-Trichlorophenol	25	Z	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	2,4,5-Trichlorophenol	4	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	2,4,5-Trichlorophenol	4	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	2,4,5-Trichlorophenol	4	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	2,4,6-Trichlorophenol	4	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	2,4,6-Trichlorophenol	4	NV	N	S
2728	04/04/93	113514	U	2,4,6-Trichlorophenol	10	Z	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	2,4,6-Trichlorophenol	4	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	2,4,6-Trichlorophenol	4	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	2,4,6-Trichlorophenol	4	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	2,4-Dichlorophenol	4	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	2,4-Dichlorophenol	4	NV	N	S
2728	04/04/93	113514	U	2,4-Dichlorophenol	10	Z	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	2,4-Dichlorophenol	4	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	2,4-Dichlorophenol	4	NV	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
4011	02/21/91	EMGW_SYSGEN_1245	U	2,4-Dichlorophenol	4	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	2,4-Dimethylphenol	4	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	2,4-Dimethylphenol	4	NV	N	S
2728	04/04/93	113514	U	2,4-Dimethylphenol	10	Z	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	2,4-Dimethylphenol	4	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	2,4-Dimethylphenol	4	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	2,4-Dimethylphenol	4	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	2,4-Dinitrophenol	4	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	2,4-Dinitrophenol	4	NV	N	S
2728	04/04/93	113514	U	2,4-Dinitrophenol	50	R	N	S
2728	04/04/93	113514	U	2,4-Dinitrophenol	50	Z	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	2,4-Dinitrophenol	4	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	2,4-Dinitrophenol	4	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	2,4-Dinitrophenol	4	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	2,4-Dinitrotoluene	15	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	2,4-Dinitrotoluene	15	NV	N	S
2728	04/04/93	113514	U	2,4-Dinitrotoluene	10	Z	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	2,4-Dinitrotoluene	15	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	2,4-Dinitrotoluene	15	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	2,4-Dinitrotoluene	15	NV	N	S
2043	09/13/89	66585	U	2,6-Dichlorophenol	10	R	N	S
2043	09/13/89	66587	U	2,6-Dichlorophenol	10	R	N	S
3043	09/13/89	66586	U	2,6-Dichlorophenol	10	R	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	2,6-Dichlorophenol	4	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	2,6-Dinitrotoluene	15	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	2,6-Dinitrotoluene	15	NV	N	S
2728	04/04/93	113514	U	2,6-Dinitrotoluene	10	Z	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	2,6-Dinitrotoluene	15	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	2,6-Dinitrotoluene	15	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	2,6-Dinitrotoluene	15	NV	N	S
2043	09/13/89	66585	U	2-Acetylaminofluorene	10	R	N	S
2043	09/13/89	66587	U	2-Acetylaminofluorene	10	R	N	S
3043	09/13/89	66586	U	2-Acetylaminofluorene	10	R	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	2-Acetylaminofluorene	15	NV	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2728	04/04/93	113514	U	2-Benzyl-4-chlorophenol	10	Z	N	S
2043	11/06/90	EMGW_SYSGEN_525	U	2-Chloroethylvinyl ether	10	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	2-Chloroethylvinyl ether	10	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	2-Chloroethylvinyl ether	10	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	2-Chloroethylvinyl ether	10	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	2-Chloroethylvinyl ether	10	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	2-Chloroethylvinyl ether	10	NV	N	S
2043	01/18/93	GW930118-12	U	2-Chloroethylvinyl ether	10	NV	N	S
2050	10/17/90	EMGW_SYSGEN_558	U	2-Chloroethylvinyl ether	10	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559	U	2-Chloroethylvinyl ether	10	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560	U	2-Chloroethylvinyl ether	10	NV	N	S
2050	11/02/92	2050-11/02/92-A-N	U	2-Chloroethylvinyl ether	3.3	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	2-Chloroethylvinyl ether	10	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	2-Chloroethylvinyl ether	10	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	2-Chloroethylvinyl ether	10	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	2-Chloroethylvinyl ether	10	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	2-Chloroethylvinyl ether	10	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	2-Chloroethylvinyl ether	10	NV	N	S
2066	01/06/93	GW930106-7	U	2-Chloroethylvinyl ether	10	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703	U	2-Chloroethylvinyl ether	10	NV	N	R
2096	11/04/92	2096-11/04/92-A-N	U	2-Chloroethylvinyl ether	3.3	NV	N	R
2098	10/15/90	EMGW_SYSGEN_712	U	2-Chloroethylvinyl ether	10	NV	N	D
2098	11/05/91	EMGW_SYSGEN_715	U	2-Chloroethylvinyl ether	10	NV	N	D
2098	11/23/92	GW921123-5	U	2-Chloroethylvinyl ether	3.3	NV	N	D
2104	09/12/90	EMGW_SYSGEN_719	U	2-Chloroethylvinyl ether	60	NV	N	R
2104	11/27/90	EMGW_SYSGEN_720	U	2-Chloroethylvinyl ether	10	NV	N	R
2104	03/07/91	EMGW_SYSGEN_721	U	2-Chloroethylvinyl ether	10	NV	N	R
2104	11/07/91	EMGW_SYSGEN_722	U	2-Chloroethylvinyl ether	10	NV	N	R
2104	11/02/92	2104-11/02/92-A-N	U	2-Chloroethylvinyl ether	3.3	NV	N	R
3024	11/13/90	EMGW_SYSGEN_995	U	2-Chloroethylvinyl ether	10	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	2-Chloroethylvinyl ether	10	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	2-Chloroethylvinyl ether	10	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	2-Chloroethylvinyl ether	10	NV	N	S
3024	01/13/93	GW930113-8	U	2-Chloroethylvinyl ether	10	NV	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
3043	11/05/90	EMGW_SYSGEN_1021	U	2-Chloroethylvinyl ether	10	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	2-Chloroethylvinyl ether	10	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	2-Chloroethylvinyl ether	10	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	2-Chloroethylvinyl ether	10	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	2-Chloroethylvinyl ether	10	NV	N	S
3043	01/18/93	GW930118-14	U	2-Chloroethylvinyl ether	10	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138	U	2-Chloroethylvinyl ether	10	NV	N	R
3096	11/04/92	3096-11/04/92-A-N	U	2-Chloroethylvinyl ether	3.3	NV	N	R
3098	10/15/90	EMGW_SYSGEN_1147	U	2-Chloroethylvinyl ether	10	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149	U	2-Chloroethylvinyl ether	10	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D	U	2-Chloroethylvinyl ether	10	NV	D	D
3098	08/13/92	3098-08/13/92-A-D1-5	U	2-Chloroethylvinyl ether	2.6	NV	D	D
3098	11/23/92	GW921123-6	U	2-Chloroethylvinyl ether	3.3	NV	N	D
4011	11/14/90	EMGW_SYSGEN_1244	U	2-Chloroethylvinyl ether	10	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	2-Chloroethylvinyl ether	10	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	2-Chloroethylvinyl ether	10	NV	N	S
4011	01/05/93	GW930105-7	U	2-Chloroethylvinyl ether	10	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297	U	2-Chloroethylvinyl ether	10	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5	U	2-Chloroethylvinyl ether	2.6	NV	D	R
4096	11/04/92	4096-11/04/92-A-N	U	2-Chloroethylvinyl ether	3.3	NV	N	R
4096	11/04/92	4096-11/04/92-A-D1-7	U	2-Chloroethylvinyl ether	2.6	NV	D	R
2043	05/17/90	EMGW_SYSGEN_523	U	2-Chloronaphthalene	4	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	2-Chloronaphthalene	4	NV	N	S
2728	04/04/93	113514	U	2-Chloronaphthalene	10	Z	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	2-Chloronaphthalene	4	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	2-Chloronaphthalene	4	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	2-Chloronaphthalene	4	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	2-Chlorophenol	4	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	2-Chlorophenol	4	NV	N	S
2728	04/04/93	113514	U	2-Chlorophenol	10	Z	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	2-Chlorophenol	4	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	2-Chlorophenol	4	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	2-Chlorophenol	4	NV	N	S
2728	04/04/93	113514	U	2-Methylnaphthalene	10	Z	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
4011	11/14/90	EMGW_SYSGEN_1244	U	2-Methylnaphthalene	4	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	2-Methylnaphthalene	4	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	2-Methylphenol	4	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	2-Methylphenol	4	NV	N	S
2728	04/04/93	113514	U	2-Methylphenol	10	Z	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	2-Methylphenol	4	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	2-Methylphenol	4	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	2-Methylphenol	4	NV	N	S
2043	09/13/89	66585	U	2-Naphthylamine	170	R	N	S
2043	09/13/89	66587	U	2-Naphthylamine	170	R	N	S
3043	09/13/89	66586	U	2-Naphthylamine	170	R	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	2-Naphthylamine	4	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	2-Nitroaniline	15	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	2-Nitroaniline	15	NV	N	S
2728	04/04/93	113514	U	2-Nitroaniline	25	Z	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	2-Nitroaniline	15	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	2-Nitroaniline	15	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	2-Nitroaniline	15	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	2-Nitrophenol	4	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	2-Nitrophenol	4	NV	N	S
2728	04/04/93	113514	U	2-Nitrophenol	10	Z	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	2-Nitrophenol	4	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	2-Nitrophenol	4	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	2-Nitrophenol	4	NV	N	S
2043	09/13/89	66585	U	2-Picoline	70	R	N	S
2043	09/13/89	66587	U	2-Picoline	70	R	N	S
3043	09/13/89	66586	U	2-Picoline	70	R	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	2-Picoline	15	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	3,3'-Dichlorobenzidine	15	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	3,3'-Dichlorobenzidine	15	NV	N	S
2728	04/04/93	113514	U	3,3'-Dichlorobenzidine	10	Z	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	3,3'-Dichlorobenzidine	15	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	3,3'-Dichlorobenzidine	15	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	3,3'-Dichlorobenzidine	15	NV	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2043	09/13/89	66585	U	3,3'-Dimethylbenzidine	80	R	N	S
2043	09/13/89	66587	U	3,3'-Dimethylbenzidine	80	R	N	S
3043	09/13/89	66586	U	3,3'-Dimethylbenzidine	80	R	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	3,3'-Dimethylbenzidine	15	NV	N	S
2043	09/13/89	66585	U	3-Methylcholanthrene	30	R	N	S
2043	09/13/89	66587	U	3-Methylcholanthrene	30	R	N	S
3043	09/13/89	66586	U	3-Methylcholanthrene	30	R	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	3-Methylcholanthrene	15	NV	N	S
2043	09/13/89	66585	U	3-Methylphenol	10	R	N	S
2043	09/13/89	66587	U	3-Methylphenol	10	R	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	3-Methylphenol	4	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	3-Methylphenol	4	NV	N	S
3043	09/13/89	66586	U	3-Methylphenol	10	R	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	3-Methylphenol	4	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	3-Methylphenol	4	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	3-Methylphenol	4	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	3-Nitroaniline	15	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	3-Nitroaniline	15	NV	N	S
2728	04/04/93	113514	U	3-Nitroaniline	25	Z	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	3-Nitroaniline	15	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	3-Nitroaniline	15	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	3-Nitroaniline	15	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	4,6-Dinitro-2-methylphenol	4	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	4,6-Dinitro-2-methylphenol	4	NV	N	S
2728	04/04/93	113514	U	4,6-Dinitro-2-methylphenol	25	R	N	S
2728	04/04/93	113514	U	4,6-Dinitro-2-methylphenol	25	Z	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	4,6-Dinitro-2-methylphenol	4	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	4,6-Dinitro-2-methylphenol	4	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	4,6-Dinitro-2-methylphenol	4	NV	N	S
2043	09/13/89	66585	U	4-Aminobiphenyl	50	R	N	S
2043	09/13/89	66587	U	4-Aminobiphenyl	50	R	N	S
3043	09/13/89	66586	U	4-Aminobiphenyl	50	R	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	4-Aminobiphenyl	15	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	4-Bromophenyl phenyl ether	15	NV	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2066	05/16/90	EMGW_SYSGEN_629	U	4-Bromophenyl phenyl ether	15	NV	N	S
2728	04/04/93	113514	U	4-Bromophenyl phenyl ether	10	Z	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	4-Bromophenyl phenyl ether	15	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	4-Bromophenyl phenyl ether	15	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	4-Bromophenyl phenyl ether	15	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	4-Chloro-3-methylphenol	4	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	4-Chloro-3-methylphenol	4	NV	N	S
2728	04/04/93	113514	U	4-Chloro-3-methylphenol	10	Z	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	4-Chloro-3-methylphenol	4	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	4-Chloro-3-methylphenol	4	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	4-Chloro-3-methylphenol	4	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	4-Chlorophenylphenyl ether	15	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	4-Chlorophenylphenyl ether	15	NV	N	S
2728	04/04/93	113514	U	4-Chlorophenylphenyl ether	10	Z	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	4-Chlorophenylphenyl ether	15	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	4-Chlorophenylphenyl ether	15	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	4-Chlorophenylphenyl ether	15	NV	N	S
2728	04/04/93	113514	U	4-Methylphenol	10	Z	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	4-Nitroaniline	15	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	4-Nitroaniline	15	NV	N	S
2728	04/04/93	113514	U	4-Nitroaniline	25	Z	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	4-Nitroaniline	15	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	4-Nitroaniline	15	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	4-Nitroaniline	15	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	4-Nitrophenol	4	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	4-Nitrophenol	4	NV	N	S
2728	04/04/93	113514	U	4-Nitrophenol	25	Z	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	4-Nitrophenol	4	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	4-Nitrophenol	4	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	4-Nitrophenol	4	NV	N	S
2043	09/13/89	66585	U	4-Nitroquinoline-1-oxide	10	R	N	S
2043	09/13/89	66587	U	4-Nitroquinoline-1-oxide	10	R	N	S
3043	09/13/89	66586	U	4-Nitroquinoline-1-oxide	10	R	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	4-Nitroquinoline-1-oxide	15	NV	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2043	09/13/89	66585	U	5-Nitro-o-toluidine	20	R	N	S
2043	09/13/89	66587	U	5-Nitro-o-toluidine	20	R	N	S
3043	09/13/89	66586	U	5-Nitro-o-toluidine	20	R	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	5-Nitro-o-toluidine	15	NV	N	S
2043	09/13/89	66585	U	7,12-Dimethylbenz(a)anthracene	20	R	N	S
2043	09/13/89	66587	U	7,12-Dimethylbenz(a)anthracene	20	R	N	S
3043	09/13/89	66586	U	7,12-Dimethylbenz(a)anthracene	20	R	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	7,12-Dimethylbenz(a)anthracene	15	NV	N	S
2043	09/13/89	66585	U	a,a-Dimethylphenethylamine	10	R	N	S
2043	09/13/89	66587	U	a,a-Dimethylphenethylamine	10	R	N	S
3043	09/13/89	66586	U	a,a-Dimethylphenethylamine	10	R	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	a,a-Dimethylphenethylamine	15	NV	N	S
2728	04/04/93	113514	U	Acenaphthene	10	Z	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Acenaphthene	4	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Acenaphthene	4	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Acenaphthylene	4	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Acenaphthylene	4	NV	N	S
2728	04/04/93	113514	U	Acenaphthylene	10	Z	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Acenaphthylene	4	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Acenaphthylene	4	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Acenaphthylene	4	NV	N	S
2043	09/13/89	66585	U	Acetophenone	10	R	N	S
2043	09/13/89	66587	U	Acetophenone	10	R	N	S
3043	09/13/89	66586	U	Acetophenone	10	R	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Acetophenone	15	NV	N	S
2043	09/13/89	66585	U	Aniline	10	R	N	S
2043	09/13/89	66587	U	Aniline	10	R	N	S
3043	09/13/89	66586	U	Aniline	10	R	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Aniline	4	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Anthracene	4	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Anthracene	4	NV	N	S
2728	04/04/93	113514	U	Anthracene	10	Z	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Anthracene	4	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Anthracene	4	NV	N	S

Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
4011	02/21/91	EMGW_SYSGEN_1245	U	Anthracene	4	NV	N	S
2043	09/13/89	66585	U	Aramite	10	R	N	S
2043	09/13/89	66587	U	Aramite	10	R	N	S
3043	09/13/89	66586	U	Aramite	10	R	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Aramite	15	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Benzo(a)anthracene	4	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Benzo(a)anthracene	4	NV	N	S
2728	04/04/93	113514	U	Benzo(a)anthracene	10	Z	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Benzo(a)anthracene	4	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Benzo(a)anthracene	4	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Benzo(a)anthracene	4	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Benzo(a)pyrene	4	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Benzo(a)pyrene	4	NV	N	S
2728	04/04/93	113514	U	Benzo(a)pyrene	10	Z	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Benzo(a)pyrene	4	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Benzo(a)pyrene	4	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Benzo(a)pyrene	4	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Benzo(b)fluoranthene	4	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Benzo(b)fluoranthene	4	NV	N	S
2728	04/04/93	113514	U	Benzo(b)fluoranthene	10	Z	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Benzo(b)fluoranthene	4	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Benzo(b)fluoranthene	4	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Benzo(b)fluoranthene	4	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Benzo(g,h,i)perylene	4	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Benzo(g,h,i)perylene	4	NV	N	S
2728	04/04/93	113514	U	Benzo(g,h,i)perylene	10	Z	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Benzo(g,h,i)perylene	4	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Benzo(g,h,i)perylene	4	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Benzo(g,h,i)perylene	4	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Benzo(k)fluoranthene	4	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Benzo(k)fluoranthene	4	NV	N	S
2728	04/04/93	113514	U	Benzo(k)fluoranthene	10	Z	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Benzo(k)fluoranthene	4	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Benzo(k)fluoranthene	4	NV	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
4011	02/21/91	EMGW_SYSGEN_1245	U	Benzo(k)fluoranthene	4	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Benzoic acid	4	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Benzoic acid	4	NV	N	S
2728	04/04/93	113514	U	Benzoic acid	50	Z	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Benzoic acid	4	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Benzoic acid	4	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Benzyl alcohol	40	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Benzyl alcohol	40	NV	N	S
2728	04/04/93	113514	U	Benzyl alcohol	10	Z	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Benzyl alcohol	40	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Benzyl alcohol	40	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Benzyl alcohol	40	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	bis(2-Chloroethoxy)methane	15	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	bis(2-Chloroethoxy)methane	15	NV	N	S
2728	04/04/93	113514	U	bis(2-Chloroethoxy)methane	10	Z	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	bis(2-Chloroethoxy)methane	15	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	bis(2-Chloroethoxy)methane	15	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	bis(2-Chloroethoxy)methane	15	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	bis(2-Chloroethyl)ether	15	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	bis(2-Chloroethyl)ether	15	NV	N	S
2728	04/04/93	113514	U	bis(2-Chloroethyl)ether	10	Z	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	bis(2-Chloroethyl)ether	15	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	bis(2-Chloroethyl)ether	15	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	bis(2-Chloroethyl)ether	15	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	bis(2-Chloroisopropyl) ether	15	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	bis(2-Chloroisopropyl) ether	15	NV	N	S
2728	04/04/93	113514	U	bis(2-Chloroisopropyl) ether	10	Z	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	bis(2-Chloroisopropyl) ether	15	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	bis(2-Chloroisopropyl) ether	15	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	bis(2-Chloroisopropyl) ether	4	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	bis(2-Ethylhexyl)phthalate	4	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	bis(2-Ethylhexyl)phthalate	4	NV	N	S
2728	04/04/93	113514	U	bis(2-Ethylhexyl)phthalate	10	Z	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	bis(2-Ethylhexyl)phthalate	4	NV	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
4011	11/14/90	EMGW_SYSGEN_1244	U	bis(2-Ethylhexyl)phthalate	4	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	bis(2-Ethylhexyl)phthalate	4	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Butyl benzyl phthalate	4	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Butyl benzyl phthalate	4	NV	N	S
2728	04/04/93	113514	U	Butyl benzyl phthalate	10	Z	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Butyl benzyl phthalate	4	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Butyl benzyl phthalate	4	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Butyl benzyl phthalate	4	NV	N	S
2728	04/04/93	113514	U	Carbazole	10	Z	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Chrysene	4	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Chrysene	4	NV	N	S
2728	04/04/93	113514	U	Chrysene	10	Z	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Chrysene	4	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Chrysene	4	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Chrysene	4	NV	N	S
2043	01/18/93	GW930118-12	U	Cumene	1	NV	N	S
2066	01/06/93	GW930106-7	U	Cumene	1	NV	N	S
3024	01/13/93	GW930113-8	U	Cumene	1	NV	N	S
3043	01/18/93	GW930118-14	U	Cumene	1	NV	N	S
4011	01/05/93	GW930105-7	U	Cumene	1	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Di-n-butyl phthalate	4	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Di-n-butyl phthalate	4	NV	N	S
2728	04/04/93	113514	U	Di-n-butyl phthalate	10	Z	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Di-n-butyl phthalate	4	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Di-n-butyl phthalate	4	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Di-n-butyl phthalate	4	NV	N	S
2728	04/04/93	113514	U	Di-n-octyl phthalate	10	Z	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Di-n-octyl phthalate	4	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Di-n-octyl phthalate	4	NV	N	S
2043	09/13/89	66585	U	Diallate	10	R	N	S
2043	09/13/89	66587	U	Diallate	10	R	N	S
3043	09/13/89	66586	U	Diallate	10	R	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Diallate	15	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Dibenzo(a,h)anthracene	4	NV	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2066	05/16/90	EMGW_SYSGEN_629	U	Dibenzo(a,h)anthracene	4	NV	N	S
2728	04/04/93	113514	U	Dibenzo(a,h)anthracene	10	Z	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Dibenzo(a,h)anthracene	4	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Dibenzo(a,h)anthracene	4	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Dibenzo(a,h)anthracene	4	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Dibenzofuran	4	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Dibenzofuran	4	NV	N	S
2728	04/04/93	113514	U	Dibenzofuran	10	Z	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Dibenzofuran	4	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Dibenzofuran	4	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Dibenzofuran	4	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Diethyl phthalate	4	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Diethyl phthalate	4	NV	N	S
2728	04/04/93	113514	U	Diethyl phthalate	10	Z	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Diethyl phthalate	4	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Diethyl phthalate	4	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Diethyl phthalate	4	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Dimethyl phthalate	4	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Dimethyl phthalate	4	NV	N	S
2728	04/04/93	113514	U	Dimethyl phthalate	10	Z	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Dimethyl phthalate	4	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Dimethyl phthalate	4	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Dimethyl phthalate	4	NV	N	S
2043	09/13/89	66585	U	Diphenylamine	10	R	N	S
2043	09/13/89	66587	U	Diphenylamine	10	R	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Diphenylamine	15	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Diphenylamine	15	NV	N	S
3043	09/13/89	66586	U	Diphenylamine	10	R	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Diphenylamine	15	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Diphenylamine	15	NV	N	S
2043	09/13/89	66585	U	Ethyl methanesulfonate	10	R	N	S
2043	09/13/89	66587	U	Ethyl methanesulfonate	10	R	N	S
3043	09/13/89	66586	U	Ethyl methanesulfonate	10	R	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Ethyl methanesulfonate	15	NV	N	S

Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2043	05/17/90	EMGW_SYSGEN_523	U	Fluoranthene	4	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Fluoranthene	4	NV	N	S
2728	04/04/93	113514	U	Fluoranthene	10	Z	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Fluoranthene	4	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Fluoranthene	4	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Fluoranthene	4	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Fluorene	4	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Fluorene	4	NV	N	S
2728	04/04/93	113514	U	Fluorene	10	Z	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Fluorene	4	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Fluorene	4	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Fluorene	4	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Hexachlorobenzene	4	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Hexachlorobenzene	4	NV	N	S
2728	04/04/93	113514	U	Hexachlorobenzene	10	Z	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Hexachlorobenzene	4	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Hexachlorobenzene	4	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Hexachlorobenzene	4	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Hexachlorobutadiene	4	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Hexachlorobutadiene	4	NV	N	S
2728	04/04/93	113514	U	Hexachlorobutadiene	10	Z	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Hexachlorobutadiene	4	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Hexachlorobutadiene	4	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Hexachlorobutadiene	4	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Hexachlorocyclopentadiene	4	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Hexachlorocyclopentadiene	4	NV	N	S
2728	04/04/93	113514	U	Hexachlorocyclopentadiene	10	Z	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Hexachlorocyclopentadiene	4	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Hexachlorocyclopentadiene	4	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Hexachlorocyclopentadiene	4	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Hexachloroethane	4	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Hexachloroethane	4	NV	N	S
2728	04/04/93	113514	U	Hexachloroethane	10	Z	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Hexachloroethane	4	NV	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
4011	11/14/90	EMGW_SYSGEN_1244	U	Hexachloroethane	4	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Hexachloroethane	4	NV	N	S
2043	09/13/89	66585	U	Hexachlorophene	500	R	N	S
2043	09/13/89	66587	U	Hexachlorophene	500	R	N	S
2043	09/14/89	66588	U	Hexachlorophene	500	R	N	S
3043	09/13/89	66586	U	Hexachlorophene	500	R	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Hexachlorophene	4	NV	N	S
2043	09/13/89	66585	U	Hexachloropropene	20	R	N	S
2043	09/13/89	66587	U	Hexachloropropene	20	R	N	S
3043	09/13/89	66586	U	Hexachloropropene	20	R	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Hexachloropropene	4	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Indeno(1,2,3-cd)pyrene	4	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Indeno(1,2,3-cd)pyrene	4	NV	N	S
2728	04/04/93	113514	U	Indeno(1,2,3-cd)pyrene	10	Z	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Indeno(1,2,3-cd)pyrene	4	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Indeno(1,2,3-cd)pyrene	4	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Indeno(1,2,3-cd)pyrene	4	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Isophorone	4	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Isophorone	4	NV	N	S
2728	04/04/93	113514	U	Isophorone	10	Z	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Isophorone	4	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Isophorone	4	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Isophorone	4	NV	N	S
2043	09/13/89	66585	U	Isosafrole	10	R	N	S
2043	09/13/89	66587	U	Isosafrole	10	R	N	S
3043	09/13/89	66586	U	Isosafrole	10	R	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Isosafrole	15	NV	N	S
2043	09/13/89	66585	U	Methapyrilene	40	R	N	S
2043	09/13/89	66587	U	Methapyrilene	40	R	N	S
3043	09/13/89	66586	U	Methapyrilene	40	R	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Methapyrilene	15	NV	N	S
2043	09/13/89	66585	U	Methyl methanesulfonate	10	R	N	S
2043	09/13/89	66587	U	Methyl methanesulfonate	10	R	N	S
3043	09/13/89	66586	U	Methyl methanesulfonate	10	R	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
4011	02/21/91	EMGW_SYSGEN_1245	U	Methyl methanesulfonate	15	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	N-Nitroso-di-n-propylamine	4	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	N-Nitroso-di-n-propylamine	4	NV	N	S
2728	04/04/93	113514	U	N-Nitroso-di-n-propylamine	10	Z	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	N-Nitroso-di-n-propylamine	4	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	N-Nitroso-di-n-propylamine	4	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	N-Nitroso-di-n-propylamine	4	NV	N	S
2043	09/13/89	66585	U	N-Nitrosodi-n-butylamine	20	R	N	S
2043	09/13/89	66587	U	N-Nitrosodi-n-butylamine	20	R	N	S
3043	09/13/89	66586	U	N-Nitrosodi-n-butylamine	20	R	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	N-Nitrosodi-n-butylamine	4	NV	N	S
2043	09/13/89	66585	U	N-Nitrosodiethylamine	10	R	N	S
2043	09/13/89	66587	U	N-Nitrosodiethylamine	10	R	N	S
3043	09/13/89	66586	U	N-Nitrosodiethylamine	10	R	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	N-Nitrosodiethylamine	4	NV	N	S
2043	09/13/89	66585	U	N-Nitrosodimethylamine	10	R	N	S
2043	09/13/89	66587	U	N-Nitrosodimethylamine	10	R	N	S
2728	04/04/93	113514	U	N-Nitrosodimethylamine	10	Z	N	S
3043	09/13/89	66586	U	N-Nitrosodimethylamine	10	R	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	N-Nitrosodimethylamine	4	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	N-Nitrosodiphenylamine	4	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	N-Nitrosodiphenylamine	4	NV	N	S
2728	04/04/93	113514	U	N-Nitrosodiphenylamine	10	Z	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	N-Nitrosodiphenylamine	4	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	N-Nitrosodiphenylamine	4	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	N-Nitrosodiphenylamine	4	NV	N	S
2043	09/13/89	66585	U	N-Nitrosomethylethylamine	10	R	N	S
2043	09/13/89	66587	U	N-Nitrosomethylethylamine	10	R	N	S
3043	09/13/89	66586	U	N-Nitrosomethylethylamine	10	R	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	N-Nitrosomethylethylamine	4	NV	N	S
2043	09/13/89	66585	U	N-Nitrosomorpholine	10	R	N	S
2043	09/13/89	66587	U	N-Nitrosomorpholine	10	R	N	S
3043	09/13/89	66586	U	N-Nitrosomorpholine	10	R	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	N-Nitrosomorpholine	15	NV	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2043	09/13/89	66585	U	N-Nitrosopiperidine	10	R	N	S
2043	09/13/89	66587	U	N-Nitrosopiperidine	10	R	N	S
3043	09/13/89	66586	U	N-Nitrosopiperidine	10	R	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	N-Nitrosopiperidine	15	NV	N	S
2043	09/13/89	66585	U	N-Nitrosopyrrolidine	10	R	N	S
2043	09/13/89	66587	U	N-Nitrosopyrrolidine	10	R	N	S
3043	09/13/89	66586	U	N-Nitrosopyrrolidine	10	R	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	N-Nitrosopyrrolidine	15	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Naphthalene	4	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Naphthalene	4	NV	N	S
2728	04/04/93	113514	U	Naphthalene	10	Z	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Naphthalene	4	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Naphthalene	4	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Naphthalene	4	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Nitrobenzene	4	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Nitrobenzene	4	NV	N	S
2728	04/04/93	113514	U	Nitrobenzene	10	Z	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Nitrobenzene	4	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Nitrobenzene	4	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Nitrobenzene	4	NV	N	S
2043	09/13/89	66585	U	O,O,O-Triethylphosphorothioate	10	R	N	S
2043	09/13/89	66587	U	O,O,O-Triethylphosphorothioate	10	R	N	S
3043	09/13/89	66586	U	O,O,O-Triethylphosphorothioate	10	R	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	o-Dichlorobenzene	4	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	o-Dichlorobenzene	4	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	o-Dichlorobenzene	4	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	o-Dichlorobenzene	4	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	o-Dichlorobenzene	4	NV	N	S
2043	09/13/89	66585	U	o-Toluidine	10	R	N	S
2043	09/13/89	66587	U	o-Toluidine	10	R	N	S
3043	09/13/89	66586	U	o-Toluidine	10	R	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	o-Toluidine	15	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	p-Chloroaniline	4	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	p-Chloroaniline	4	NV	N	S

Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2728	04/04/93	113514	U	p-Chloroaniline	10	Z	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	p-Chloroaniline	4	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	p-Chloroaniline	4	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	p-Chloroaniline	4	NV	N	S
2043	09/13/89	66585	U	p-Dimethylaminoazobenzene	30	R	N	S
2043	09/13/89	66587	U	p-Dimethylaminoazobenzene	30	R	N	S
3043	09/13/89	66586	U	p-Dimethylaminoazobenzene	30	R	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	p-Dimethylaminoazobenzene	15	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	p-Methylphenol (Cresol)	4	NV	N	S
2043	09/13/89	66585	U	p-Phenylenediamine	50	R	N	S
2043	09/13/89	66587	U	p-Phenylenediamine	50	R	N	S
3043	09/13/89	66586	U	p-Phenylenediamine	50	R	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	p-Phenylenediamine	15	NV	N	S
2043	09/13/89	66585	U	Pentachlorobenzene	20	R	N	S
2043	09/13/89	66587	U	Pentachlorobenzene	20	R	N	S
3043	09/13/89	66586	U	Pentachlorobenzene	20	R	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Pentachlorobenzene	4	NV	N	S
2043	09/13/89	66585	U	Pentachloroethane	20	R	N	S
2043	09/13/89	66587	U	Pentachloroethane	20	R	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	Pentachloroethane	5	NV	N	S
2043	01/18/93	GW930118-12	U	Pentachloroethane	5	NV	N	S
2066	01/06/93	GW930106-7	U	Pentachloroethane	5	NV	N	S
3024	01/13/93	GW930113-8	U	Pentachloroethane	5	NV	N	S
3043	09/13/89	66586	U	Pentachloroethane	20	R	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	Pentachloroethane	5	NV	N	S
3043	01/18/93	GW930118-14	U	Pentachloroethane	5	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Pentachloroethane	20	NV	N	S
4011	01/05/93	GW930105-7	U	Pentachloroethane	5	NV	N	S
2043	09/13/89	66585	U	Pentachloronitrobenzene	20	R	N	S
2043	09/13/89	66587	U	Pentachloronitrobenzene	20	R	N	S
3043	09/13/89	66586	U	Pentachloronitrobenzene	20	R	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Pentachloronitrobenzene	4	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Pentachlorophenol	4	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Pentachlorophenol	4	NV	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2728	04/04/93	113514	U	Pentachlorophenol	25	Z	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Pentachlorophenol	4	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Pentachlorophenol	4	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Pentachlorophenol	4	NV	N	S
2043	09/13/89	66585	U	Phenacetin	10	R	N	S
2043	09/13/89	66587	U	Phenacetin	10	R	N	S
3043	09/13/89	66586	U	Phenacetin	10	R	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Phenacetin	4	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Phenanthrene	4	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Phenanthrene	4	NV	N	S
2728	04/04/93	113514	U	Phenanthrene	10	Z	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Phenanthrene	4	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Phenanthrene	4	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Phenanthrene	4	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Phenol	4	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Phenol	4	NV	N	S
2728	04/04/93	113514	U	Phenol	10	Z	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Phenol	4	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Phenol	4	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Phenol	4	NV	N	S
2043	09/13/89	66585	U	Pronamide	30	R	N	S
2043	09/13/89	66587	U	Pronamide	30	R	N	S
3043	09/13/89	66586	U	Pronamide	30	R	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Pronamide	15	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Pyrene	4	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Pyrene	4	NV	N	S
2728	04/04/93	113514	U	Pyrene	10	Z	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Pyrene	4	NV	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Pyrene	4	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Pyrene	4	NV	N	S
2043	09/13/89	66585	U	Safrole	10	R	N	S
2043	09/13/89	66587	U	Safrole	10	R	N	S
3043	09/13/89	66586	U	Safrole	10	R	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Safrole	15	NV	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
4011	02/21/91	EMGW_SYSGEN_1245	U	Sulfotep	15	NV	N	S
2728	04/04/93	113514	U	Tributyl phosphate	10	Z	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Triethyl phosphorothioate	4	NV	N	S
2043	01/18/93	GW930118-12	U	1,1,1,2-Tetrachloroethane	1	NV	N	S
2066	01/06/93	GW930106-7	U	1,1,1,2-Tetrachloroethane	1	NV	N	S
3024	01/13/93	GW930113-8	U	1,1,1,2-Tetrachloroethane	1	NV	N	S
3043	01/18/93	GW930118-14	U	1,1,1,2-Tetrachloroethane	1	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	1,1,1,2-Tetrachloroethane	1	NV	N	S
4011	01/05/93	GW930105-7	U	1,1,1,2-Tetrachloroethane	1	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	1,1,1-Trichloroethane	1	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	U	1,1,1-Trichloroethane	1	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	U	1,1,1-Trichloroethane	1	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	1,1,1-Trichloroethane	1	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	1,1,1-Trichloroethane	1	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	1,1,1-Trichloroethane	1	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	1,1,1-Trichloroethane	1	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	1,1,1-Trichloroethane	1	NV	N	S
2043	01/18/93	GW930118-12	U	1,1,1-Trichloroethane	1	NV	N	S
2050	10/17/90	EMGW_SYSGEN_558	U	1,1,1-Trichloroethane	1	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559	U	1,1,1-Trichloroethane	1	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560	U	1,1,1-Trichloroethane	1	NV	N	S
2050	08/10/92	2050-08/10/92-B-N	U	1,1,1-Trichloroethane	10	NV	N	S
2050	11/02/92	2050-11/02/92-A-N	U	1,1,1-Trichloroethane	1.6	NV	N	S
2050	02/10/93	GW930210-8	U	1,1,1-Trichloroethane	10	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	1,1,1-Trichloroethane	1	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	1,1,1-Trichloroethane	1	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	1,1,1-Trichloroethane	1	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	1,1,1-Trichloroethane	1	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	1,1,1-Trichloroethane	1	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	1,1,1-Trichloroethane	1	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	1,1,1-Trichloroethane	1	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	1,1,1-Trichloroethane	1	NV	N	S
2066	01/06/93	GW930106-7	U	1,1,1-Trichloroethane	1	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703	U	1,1,1-Trichloroethane	1	NV	N	R

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2096	08/18/92	2096-08/18/92-B-N	U	1,1,1-Trichloroethane	10	NV	N	R
2096	11/04/92	2096-11/04/92-A-N	U	1,1,1-Trichloroethane	1.6	NV	N	R
2096	02/02/93	GW930202-8	U	1,1,1-Trichloroethane	10	NV	N	R
2098	10/15/90	EMGW_SYSGEN_712	U	1,1,1-Trichloroethane	1	NV	N	D
2098	11/05/91	EMGW_SYSGEN_715	U	1,1,1-Trichloroethane	1	NV	N	D
2098	11/23/92	GW921123-5	U	1,1,1-Trichloroethane	1.6	NV	N	D
2098	02/04/93	GW930204-7	U	1,1,1-Trichloroethane	10	NV	N	D
2104	06/14/90	EMGW_SYSGEN_718	U	1,1,1-Trichloroethane	1	NV	N	R
2104	09/12/90	EMGW_SYSGEN_719	U	1,1,1-Trichloroethane	1	NV	N	R
2104	11/27/90	EMGW_SYSGEN_720	U	1,1,1-Trichloroethane	1	NV	N	R
2104	03/07/91	EMGW_SYSGEN_721	U	1,1,1-Trichloroethane	1	NV	N	R
2104	11/07/91	EMGW_SYSGEN_722	U	1,1,1-Trichloroethane	1	NV	N	R
2104	08/10/92	2104-08/10/92-B-N	U	1,1,1-Trichloroethane	10	NV	N	R
2104	11/02/92	2104-11/02/92-A-N	U	1,1,1-Trichloroethane	1.6	NV	N	R
2104	02/02/93	GW930202-12	J	1,1,1-Trichloroethane	1	NV	N	R
2728	02/10/93	GW930210-5	U	1,1,1-Trichloroethane	10	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993	U	1,1,1-Trichloroethane	1	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	U	1,1,1-Trichloroethane	1	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	U	1,1,1-Trichloroethane	1	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	1,1,1-Trichloroethane	1	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	1,1,1-Trichloroethane	1	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	1,1,1-Trichloroethane	1	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	1,1,1-Trichloroethane	1	NV	N	S
3024	01/13/93	GW930113-8	U	1,1,1-Trichloroethane	1	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	1,1,1-Trichloroethane	1	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	1,1,1-Trichloroethane	1	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	1,1,1-Trichloroethane	1	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	1,1,1-Trichloroethane	1	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	1,1,1-Trichloroethane	1	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	1,1,1-Trichloroethane	1	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	1,1,1-Trichloroethane	1	NV	N	S
3043	01/18/93	GW930118-14	U	1,1,1-Trichloroethane	1	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138	U	1,1,1-Trichloroethane	1	NV	N	R
3096	08/18/92	3096-08/18/92-B-N	U	1,1,1-Trichloroethane	10	NV	N	R

Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
3096	11/04/92	3096-11/04/92-A-N	U	1,1,1-Trichloroethane	1.6	NV	N	R
3096	02/02/93	GW930202-9	U	1,1,1-Trichloroethane	10	NV	N	R
3098	10/15/90	EMGW_SYSGEN_1147	U	1,1,1-Trichloroethane	1	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149	U	1,1,1-Trichloroethane	1	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D	U	1,1,1-Trichloroethane	1	NV	D	D
3098	08/13/92	3098-08/13/92-A-D1-5	U	1,1,1-Trichloroethane	0.66	NV	D	D
3098	11/23/92	GW921123-6	U	1,1,1-Trichloroethane	1.6	NV	N	D
3098	02/04/93	GW930204-10	U	1,1,1-Trichloroethane	10	NV	N	D
3098	02/04/93	GW930204-12	U	1,1,1-Trichloroethane	10	NV	D	D
4011	10/05/90	4345	U	1,1,1-Trichloroethane	5	R	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	1,1,1-Trichloroethane	1	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	1,1,1-Trichloroethane	1	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	1,1,1-Trichloroethane	1	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	1,1,1-Trichloroethane	1	NV	N	S
4011	01/05/93	GW930105-7	U	1,1,1-Trichloroethane	1	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297	U	1,1,1-Trichloroethane	1	NV	N	R
4096	08/18/92	4096-08/18/92-B-N	U	1,1,1-Trichloroethane	10	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5	U	1,1,1-Trichloroethane	0.66	NV	D	R
4096	11/04/92	4096-11/04/92-A-N	U	1,1,1-Trichloroethane	1.6	NV	N	R
4096	11/04/92	4096-11/04/92-A-D1-7	U	1,1,1-Trichloroethane	0.66	NV	D	R
4096	02/02/93	GW930202-10	U	1,1,1-Trichloroethane	10	NV	N	R
4096	02/02/93	GW930202-11	U	1,1,1-Trichloroethane	10	NV	D	R
2043	05/17/90	EMGW_SYSGEN_523	U	1,1,2,2-Tetrachloroethane	1	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	U	1,1,2,2-Tetrachloroethane	1	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	U	1,1,2,2-Tetrachloroethane	1	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	1,1,2,2-Tetrachloroethane	1	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	1,1,2,2-Tetrachloroethane	1	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	1,1,2,2-Tetrachloroethane	1	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	1,1,2,2-Tetrachloroethane	1	NV	N	S
2043	01/18/93	GW930118-12	U	1,1,2,2-Tetrachloroethane	1	NV	N	S
2050	10/17/90	EMGW_SYSGEN_558	U	1,1,2,2-Tetrachloroethane	1	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559	U	1,1,2,2-Tetrachloroethane	1	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560	U	1,1,2,2-Tetrachloroethane	1	NV	N	S
2050	08/10/92	2050-08/10/92-B-N	U	1,1,2,2-Tetrachloroethane	10	NV	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2050	11/02/92	2050-11/02/92-A-N	U	1,1,2,2-Tetrachloroethane	2	NV	N	S
2050	02/10/93	GW930210-8	U	1,1,2,2-Tetrachloroethane	10	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	1,1,2,2-Tetrachloroethane	1	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	1,1,2,2-Tetrachloroethane	1	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	1,1,2,2-Tetrachloroethane	1	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	1,1,2,2-Tetrachloroethane	1	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	1,1,2,2-Tetrachloroethane	1	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	1,1,2,2-Tetrachloroethane	1	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	1,1,2,2-Tetrachloroethane	1	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	1,1,2,2-Tetrachloroethane	1	NV	N	S
2066	01/06/93	GW930106-7	U	1,1,2,2-Tetrachloroethane	1	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703	U	1,1,2,2-Tetrachloroethane	1	NV	N	R
2096	08/18/92	2096-08/18/92-B-N	U	1,1,2,2-Tetrachloroethane	10	NV	N	R
2096	11/04/92	2096-11/04/92-A-N	U	1,1,2,2-Tetrachloroethane	2	NV	N	R
2096	02/02/93	GW930202-8	U	1,1,2,2-Tetrachloroethane	10	NV	N	R
2098	10/15/90	EMGW_SYSGEN_712	U	1,1,2,2-Tetrachloroethane	1	NV	N	D
2098	11/05/91	EMGW_SYSGEN_715	U	1,1,2,2-Tetrachloroethane	1	NV	N	D
2098	11/23/92	GW921123-5	U	1,1,2,2-Tetrachloroethane	2	NV	N	D
2098	02/04/93	GW930204-7	U	1,1,2,2-Tetrachloroethane	10	NV	N	D
2104	06/14/90	EMGW_SYSGEN_718	U	1,1,2,2-Tetrachloroethane	1	NV	N	R
2104	09/12/90	EMGW_SYSGEN_719	U	1,1,2,2-Tetrachloroethane	1	NV	N	R
2104	11/27/90	EMGW_SYSGEN_720	U	1,1,2,2-Tetrachloroethane	1	NV	N	R
2104	03/07/91	EMGW_SYSGEN_721	U	1,1,2,2-Tetrachloroethane	1	NV	N	R
2104	11/07/91	EMGW_SYSGEN_722	U	1,1,2,2-Tetrachloroethane	1	NV	N	R
2104	08/10/92	2104-08/10/92-B-N	U	1,1,2,2-Tetrachloroethane	10	NV	N	R
2104	11/02/92	2104-11/02/92-A-N	U	1,1,2,2-Tetrachloroethane	2	NV	N	R
2104	02/02/93	GW930202-12	U	1,1,2,2-Tetrachloroethane	10	NV	N	R
2728	02/10/93	GW930210-5	U	1,1,2,2-Tetrachloroethane	10	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993	U	1,1,2,2-Tetrachloroethane	1	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	U	1,1,2,2-Tetrachloroethane	1	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	U	1,1,2,2-Tetrachloroethane	1	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	1,1,2,2-Tetrachloroethane	1	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	1,1,2,2-Tetrachloroethane	1	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	1,1,2,2-Tetrachloroethane	1	NV	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
3024	10/01/91	EMGW_SYSGEN_999	U	1,1,2,2-Tetrachloroethane	1	NV	N	S
3024	01/13/93	GW930113-8	U	1,1,2,2-Tetrachloroethane	1	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	1,1,2,2-Tetrachloroethane	1	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	1,1,2,2-Tetrachloroethane	1	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	1,1,2,2-Tetrachloroethane	1	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	1,1,2,2-Tetrachloroethane	1	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	1,1,2,2-Tetrachloroethane	1	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	1,1,2,2-Tetrachloroethane	1	NV	N	S
3043	01/18/93	GW930118-14	U	1,1,2,2-Tetrachloroethane	1	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138	U	1,1,2,2-Tetrachloroethane	1	NV	N	R
3096	08/18/92	3096-08/18/92-B-N	U	1,1,2,2-Tetrachloroethane	10	NV	N	R
3096	11/04/92	3096-11/04/92-A-N	U	1,1,2,2-Tetrachloroethane	2	NV	N	R
3096	02/02/93	GW930202-9	U	1,1,2,2-Tetrachloroethane	10	NV	N	R
3098	10/15/90	EMGW_SYSGEN_1147	U	1,1,2,2-Tetrachloroethane	1	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149	U	1,1,2,2-Tetrachloroethane	1	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D	U	1,1,2,2-Tetrachloroethane	1	NV	D	D
3098	08/13/92	3098-08/13/92-A-D1-5	U	1,1,2,2-Tetrachloroethane	2.3	NV	D	D
3098	11/23/92	GW921123-6	U	1,1,2,2-Tetrachloroethane	2	NV	N	D
3098	02/04/93	GW930204-10	U	1,1,2,2-Tetrachloroethane	10	NV	N	D
3098	02/04/93	GW930204-12	U	1,1,2,2-Tetrachloroethane	10	NV	D	D
4011	10/05/90	4345	U	1,1,2,2-Tetrachloroethane	5	R	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	1,1,2,2-Tetrachloroethane	1	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	1,1,2,2-Tetrachloroethane	1	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	1,1,2,2-Tetrachloroethane	1	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	1,1,2,2-Tetrachloroethane	1	NV	N	S
4011	01/05/93	GW930105-7	U	1,1,2,2-Tetrachloroethane	1	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297	U	1,1,2,2-Tetrachloroethane	1	NV	N	R
4096	08/18/92	4096-08/18/92-B-N	U	1,1,2,2-Tetrachloroethane	10	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5	U	1,1,2,2-Tetrachloroethane	2.3	NV	D	R
4096	11/04/92	4096-11/04/92-A-N	U	1,1,2,2-Tetrachloroethane	2	NV	N	R
4096	11/04/92	4096-11/04/92-A-D1-7	U	1,1,2,2-Tetrachloroethane	2.3	NV	D	R
4096	02/02/93	GW930202-10	U	1,1,2,2-Tetrachloroethane	10	NV	N	R
4096	02/02/93	GW930202-11	U	1,1,2,2-Tetrachloroethane	10	NV	D	R
2043	05/17/90	EMGW_SYSGEN_523	U	1,1,2-Trichloroethane	1	NV	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2043	08/06/90	EMGW_SYSGEN_524	U	1,1,2-Trichloroethane	1	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	U	1,1,2-Trichloroethane	1	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	1,1,2-Trichloroethane	1	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	1,1,2-Trichloroethane	1	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	1,1,2-Trichloroethane	1	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	1,1,2-Trichloroethane	1	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	1,1,2-Trichloroethane	1	NV	N	S
2043	01/18/93	GW930118-12	U	1,1,2-Trichloroethane	1	NV	N	S
2050	10/17/90	EMGW_SYSGEN_558	U	1,1,2-Trichloroethane	1	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559	U	1,1,2-Trichloroethane	1	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560	U	1,1,2-Trichloroethane	1	NV	N	S
2050	08/10/92	2050-08/10/92-B-N	U	1,1,2-Trichloroethane	10	NV	N	S
2050	11/02/92	2050-11/02/92-A-N	U	1,1,2-Trichloroethane	1.1	NV	N	S
2050	02/10/93	GW930210-8	U	1,1,2-Trichloroethane	10	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	1,1,2-Trichloroethane	1	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	1,1,2-Trichloroethane	1	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	1,1,2-Trichloroethane	1	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	1,1,2-Trichloroethane	1	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	1,1,2-Trichloroethane	1	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	1,1,2-Trichloroethane	1	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	1,1,2-Trichloroethane	1	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	1,1,2-Trichloroethane	1	NV	N	S
2066	01/06/93	GW930106-7	U	1,1,2-Trichloroethane	1	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703	U	1,1,2-Trichloroethane	1	NV	N	R
2096	08/18/92	2096-08/18/92-B-N	U	1,1,2-Trichloroethane	10	NV	N	R
2096	11/04/92	2096-11/04/92-A-N	U	1,1,2-Trichloroethane	1.1	NV	N	R
2096	02/02/93	GW930202-8	U	1,1,2-Trichloroethane	10	NV	N	R
2098	10/15/90	EMGW_SYSGEN_712	U	1,1,2-Trichloroethane	1	NV	N	D
2098	11/05/91	EMGW_SYSGEN_715	U	1,1,2-Trichloroethane	1	NV	N	D
2098	11/23/92	GW921123-5	U	1,1,2-Trichloroethane	1.1	NV	N	D
2098	02/04/93	GW930204-7	U	1,1,2-Trichloroethane	10	NV	N	D
2104	06/14/90	EMGW_SYSGEN_718	U	1,1,2-Trichloroethane	1	NV	N	R
2104	09/12/90	EMGW_SYSGEN_719	U	1,1,2-Trichloroethane	1	NV	N	R
2104	11/27/90	EMGW_SYSGEN_720	U	1,1,2-Trichloroethane	1	NV	N	R

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2104	03/07/91	EMGW_SYSGEN_721	U	1,1,2-Trichloroethane	1	NV	N	R
2104	11/07/91	EMGW_SYSGEN_722	U	1,1,2-Trichloroethane	1	NV	N	R
2104	08/10/92	2104-08/10/92-B-N	U	1,1,2-Trichloroethane	10	NV	N	R
2104	11/02/92	2104-11/02/92-A-N	U	1,1,2-Trichloroethane	1.1	NV	N	R
2104	02/02/93	GW930202-12	U	1,1,2-Trichloroethane	10	NV	N	R
2728	02/10/93	GW930210-5	U	1,1,2-Trichloroethane	10	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993	U	1,1,2-Trichloroethane	1	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	U	1,1,2-Trichloroethane	1	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	U	1,1,2-Trichloroethane	1	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	1,1,2-Trichloroethane	1	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	1,1,2-Trichloroethane	1	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	1,1,2-Trichloroethane	1	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	1,1,2-Trichloroethane	1	NV	N	S
3024	01/13/93	GW930113-8	U	1,1,2-Trichloroethane	1	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	1,1,2-Trichloroethane	1	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	1,1,2-Trichloroethane	1	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	1,1,2-Trichloroethane	1	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	1,1,2-Trichloroethane	1	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	1,1,2-Trichloroethane	1	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	1,1,2-Trichloroethane	1	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	1,1,2-Trichloroethane	1	NV	N	S
3043	01/18/93	GW930118-14	U	1,1,2-Trichloroethane	1	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138	U	1,1,2-Trichloroethane	1	NV	N	R
3096	08/18/92	3096-08/18/92-B-N	U	1,1,2-Trichloroethane	10	NV	N	R
3096	11/04/92	3096-11/04/92-A-N	U	1,1,2-Trichloroethane	1.1	NV	N	R
3096	02/02/93	GW930202-9	U	1,1,2-Trichloroethane	10	NV	N	R
3098	10/15/90	EMGW_SYSGEN_1147	U	1,1,2-Trichloroethane	1	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149	U	1,1,2-Trichloroethane	1	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D	U	1,1,2-Trichloroethane	1	NV	D	D
3098	08/13/92	3098-08/13/92-A-D1-5	U	1,1,2-Trichloroethane	0.87	NV	D	D
3098	11/23/92	GW921123-6	U	1,1,2-Trichloroethane	1.1	NV	N	D
3098	02/04/93	GW930204-10	U	1,1,2-Trichloroethane	10	NV	N	D
3098	02/04/93	GW930204-12	U	1,1,2-Trichloroethane	10	NV	D	D
4011	10/05/90	4345	U	1,1,2-Trichloroethane	5	R	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
4011	11/14/90	EMGW_SYSGEN_1244	U	1,1,2-Trichloroethane	1	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	1,1,2-Trichloroethane	1	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	1,1,2-Trichloroethane	1	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	1,1,2-Trichloroethane	1	NV	N	S
4011	01/05/93	GW930105-7	U	1,1,2-Trichloroethane	1	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297	U	1,1,2-Trichloroethane	1	NV	N	R
4096	08/18/92	4096-08/18/92-B-N	U	1,1,2-Trichloroethane	10	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5	U	1,1,2-Trichloroethane	0.87	NV	D	R
4096	11/04/92	4096-11/04/92-A-N	U	1,1,2-Trichloroethane	1.1	NV	N	R
4096	11/04/92	4096-11/04/92-A-D1-7	U	1,1,2-Trichloroethane	0.87	NV	D	R
4096	02/02/93	GW930202-10	U	1,1,2-Trichloroethane	10	NV	N	R
4096	02/02/93	GW930202-11	U	1,1,2-Trichloroethane	10	NV	D	R
2043	11/14/89	66683	U	1,1-Dichloroethane	2.5	NV	N	S
2043	02/20/90	EMGW_SYSGEN_522	U	1,1-Dichloroethane	1	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	1,1-Dichloroethane	1	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	U	1,1-Dichloroethane	1	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	U	1,1-Dichloroethane	1	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	1,1-Dichloroethane	1	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	1,1-Dichloroethane	1	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	1,1-Dichloroethane	1	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	1,1-Dichloroethane	1	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	1,1-Dichloroethane	1	NV	N	S
2043	01/18/93	GW930118-12	U	1,1-Dichloroethane	1	NV	N	S
2050	10/17/90	EMGW_SYSGEN_558	U	1,1-Dichloroethane	1	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559	U	1,1-Dichloroethane	1	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560	U	1,1-Dichloroethane	1	NV	N	S
2050	08/10/92	2050-08/10/92-B-N	U	1,1-Dichloroethane	10	NV	N	S
2050	11/02/92	2050-11/02/92-A-N	U	1,1-Dichloroethane	2.1	NV	N	S
2050	02/10/93	GW930210-8	U	1,1-Dichloroethane	10	NV	N	S
2066	11/06/89	66687	U	1,1-Dichloroethane	2.5	NV	N	S
2066	02/22/90	EMGW_SYSGEN_628	U	1,1-Dichloroethane	1	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	1,1-Dichloroethane	1	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	1,1-Dichloroethane	1	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	1,1-Dichloroethane	1	NV	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2066	02/26/91	EMGW_SYSGEN_633	U	1,1-Dichloroethane	1	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	1,1-Dichloroethane	1	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	1,1-Dichloroethane	1	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	1,1-Dichloroethane	1	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	1,1-Dichloroethane	1	NV	N	S
2066	01/06/93	GW930106-7	U	1,1-Dichloroethane	1	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703	U	1,1-Dichloroethane	1	NV	N	R
2096	08/18/92	2096-08/18/92-B-N	U	1,1-Dichloroethane	10	NV	N	R
2096	11/04/92	2096-11/04/92-A-N	U	1,1-Dichloroethane	2.1	NV	N	R
2096	02/02/93	GW930202-8	U	1,1-Dichloroethane	10	NV	N	R
2098	10/15/90	EMGW_SYSGEN_712	U	1,1-Dichloroethane	1	NV	N	D
2098	11/05/91	EMGW_SYSGEN_715	U	1,1-Dichloroethane	1	NV	N	D
2098	11/23/92	GW921123-5	U	1,1-Dichloroethane	2.1	NV	N	D
2098	02/04/93	GW930204-7	U	1,1-Dichloroethane	10	NV	N	D
2104	06/14/90	EMGW_SYSGEN_718	U	1,1-Dichloroethane	1	NV	N	R
2104	09/12/90	EMGW_SYSGEN_719	U	1,1-Dichloroethane	1	NV	N	R
2104	11/27/90	EMGW_SYSGEN_720	U	1,1-Dichloroethane	1	NV	N	R
2104	03/07/91	EMGW_SYSGEN_721	U	1,1-Dichloroethane	1	NV	N	R
2104	11/07/91	EMGW_SYSGEN_722	U	1,1-Dichloroethane	1	NV	N	R
2104	08/10/92	2104-08/10/92-B-N	U	1,1-Dichloroethane	10	NV	N	R
2104	11/02/92	2104-11/02/92-A-N	U	1,1-Dichloroethane	2.1	NV	N	R
2104	02/02/93	GW930202-12	U	1,1-Dichloroethane	10	NV	N	R
2728	02/10/93	GW930210-5	U	1,1-Dichloroethane	10	NV	N	S
3024	11/30/89	66735	U	1,1-Dichloroethane	2.5	NV	N	S
3024	02/18/90	EMGW_SYSGEN_992	U	1,1-Dichloroethane	1	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993	U	1,1-Dichloroethane	1	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	U	1,1-Dichloroethane	1	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	U	1,1-Dichloroethane	1	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	1,1-Dichloroethane	1	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	1,1-Dichloroethane	1	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	1,1-Dichloroethane	1	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	1,1-Dichloroethane	1	NV	N	S
3024	01/13/93	GW930113-8	U	1,1-Dichloroethane	1	NV	N	S
3043	11/14/89	66685	U	1,1-Dichloroethane	2.5	NV	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
3043	02/20/90	EMGW_SYSGEN_1018	U	1,1-Dichloroethane	1	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	1,1-Dichloroethane	1	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	1,1-Dichloroethane	1	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	1,1-Dichloroethane	1	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	1,1-Dichloroethane	1	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	1,1-Dichloroethane	1	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	1,1-Dichloroethane	1	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	1,1-Dichloroethane	1	NV	N	S
3043	01/18/93	GW930118-14	U	1,1-Dichloroethane	1	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138	U	1,1-Dichloroethane	1	NV	N	R
3096	08/18/92	3096-08/18/92-B-N	U	1,1-Dichloroethane	10	NV	N	R
3096	11/04/92	3096-11/04/92-A-N	U	1,1-Dichloroethane	2.1	NV	N	R
3096	02/02/93	GW930202-9	U	1,1-Dichloroethane	10	NV	N	R
3098	10/15/90	EMGW_SYSGEN_1147	U	1,1-Dichloroethane	1	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149	U	1,1-Dichloroethane	1	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D	U	1,1-Dichloroethane	1	NV	D	D
3098	08/13/92	3098-08/13/92-A-D1-5	U	1,1-Dichloroethane	0.78	NV	D	D
3098	11/23/92	GW921123-6	U	1,1-Dichloroethane	2.1	NV	N	D
3098	02/04/93	GW930204-10	U	1,1-Dichloroethane	10	NV	N	D
3098	02/04/93	GW930204-12	U	1,1-Dichloroethane	10	NV	D	D
4011	10/05/90	4345	U	1,1-Dichloroethane	5	R	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	1,1-Dichloroethane	1	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	1,1-Dichloroethane	1	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	1,1-Dichloroethane	1	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	1,1-Dichloroethane	1	NV	N	S
4011	01/05/93	GW930105-7	U	1,1-Dichloroethane	1	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297	U	1,1-Dichloroethane	1	NV	N	R
4096	08/18/92	4096-08/18/92-B-N	U	1,1-Dichloroethane	10	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5	U	1,1-Dichloroethane	0.78	NV	D	R
4096	11/04/92	4096-11/04/92-A-N	U	1,1-Dichloroethane	2.1	NV	N	R
4096	11/04/92	4096-11/04/92-A-D1-7	U	1,1-Dichloroethane	0.78	NV	D	R
4096	02/02/93	GW930202-10	U	1,1-Dichloroethane	10	NV	N	R
4096	02/02/93	GW930202-11	U	1,1-Dichloroethane	10	NV	D	R
2043	05/17/90	EMGW_SYSGEN_523	U	1,1-Dichloroethene	1	NV	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2043	08/06/90	EMGW_SYSGEN_524	U	1,1-Dichloroethene	1	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	U	1,1-Dichloroethene	1	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	1,1-Dichloroethene	1	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	1,1-Dichloroethene	1	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	1,1-Dichloroethene	1	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	1,1-Dichloroethene	1	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	1,1-Dichloroethene	1	NV	N	S
2043	01/18/93	GW930118-12	U	1,1-Dichloroethene	1	NV	N	S
2050	10/17/90	EMGW_SYSGEN_558	U	1,1-Dichloroethene	1	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559	U	1,1-Dichloroethene	1	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560	U	1,1-Dichloroethene	1	NV	N	S
2050	08/10/92	2050-08/10/92-B-N	U	1,1-Dichloroethene	10	NV	N	S
2050	11/02/92	2050-11/02/92-A-N	U	1,1-Dichloroethene	1.2	NV	N	S
2050	02/10/93	GW930210-8	U	1,1-Dichloroethene	10	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	1,1-Dichloroethene	1	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	1,1-Dichloroethene	1	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	1,1-Dichloroethene	1	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	1,1-Dichloroethene	1	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	1,1-Dichloroethene	1	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	1,1-Dichloroethene	1	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	1,1-Dichloroethene	1	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	1,1-Dichloroethene	1	NV	N	S
2066	01/06/93	GW930106-7	U	1,1-Dichloroethene	1	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703	U	1,1-Dichloroethene	1	NV	N	R
2096	08/18/92	2096-08/18/92-B-N	U	1,1-Dichloroethene	10	NV	N	R
2096	11/04/92	2096-11/04/92-A-N	U	1,1-Dichloroethene	1.2	NV	N	R
2096	02/02/93	GW930202-8	U	1,1-Dichloroethene	10	NV	N	R
2098	10/15/90	EMGW_SYSGEN_712	U	1,1-Dichloroethene	1	NV	N	D
2098	11/05/91	EMGW_SYSGEN_715	U	1,1-Dichloroethene	1	NV	N	D
2098	11/23/92	GW921123-5	U	1,1-Dichloroethene	1.2	NV	N	D
2098	02/04/93	GW930204-7	U	1,1-Dichloroethene	10	NV	N	D
2104	06/14/90	EMGW_SYSGEN_718	U	1,1-Dichloroethene	1	NV	N	R
2104	09/12/90	EMGW_SYSGEN_719	U	1,1-Dichloroethene	1	NV	N	R
2104	11/27/90	EMGW_SYSGEN_720	U	1,1-Dichloroethene	1	NV	N	R

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2104	03/07/91	EMGW_SYSGEN_721	U	1,1-Dichloroethene	1	NV	N	R
2104	11/07/91	EMGW_SYSGEN_722	U	1,1-Dichloroethene	1	NV	N	R
2104	08/10/92	2104-08/10/92-B-N	U	1,1-Dichloroethene	10	NV	N	R
2104	11/02/92	2104-11/02/92-A-N	U	1,1-Dichloroethene	1.2	NV	N	R
2104	02/02/93	GW930202-12	U	1,1-Dichloroethene	10	NV	N	R
2728	02/10/93	GW930210-5	U	1,1-Dichloroethene	10	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993	U	1,1-Dichloroethene	1	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	U	1,1-Dichloroethene	1	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	U	1,1-Dichloroethene	1	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	1,1-Dichloroethene	1	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	1,1-Dichloroethene	1	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	1,1-Dichloroethene	1	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	1,1-Dichloroethene	1	NV	N	S
3024	01/13/93	GW930113-8	U	1,1-Dichloroethene	1	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	1,1-Dichloroethene	1	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	1,1-Dichloroethene	1	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	1,1-Dichloroethene	1	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	1,1-Dichloroethene	1	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	1,1-Dichloroethene	1	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	1,1-Dichloroethene	1	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	1,1-Dichloroethene	1	NV	N	S
3043	01/18/93	GW930118-14	U	1,1-Dichloroethene	1	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138	U	1,1-Dichloroethene	1	NV	N	R
3096	08/18/92	3096-08/18/92-B-N	U	1,1-Dichloroethene	10	NV	N	R
3096	11/04/92	3096-11/04/92-A-N	U	1,1-Dichloroethene	1.2	NV	N	R
3096	02/02/93	GW930202-9	U	1,1-Dichloroethene	10	NV	N	R
3098	10/15/90	EMGW_SYSGEN_1147	U	1,1-Dichloroethene	1	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149	U	1,1-Dichloroethene	1	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D	U	1,1-Dichloroethene	1	NV	D	D
3098	08/13/92	3098-08/13/92-A-D1-5	U	1,1-Dichloroethene	0.93	NV	D	D
3098	11/23/92	GW921123-6	U	1,1-Dichloroethene	1.2	NV	N	D
3098	02/04/93	GW930204-10	U	1,1-Dichloroethene	10	NV	N	D
3098	02/04/93	GW930204-12	U	1,1-Dichloroethene	10	NV	D	D
4011	10/05/90	4345	U	1,1-Dichloroethene	5	R	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
4011	11/14/90	EMGW_SYSGEN_1244	U	1,1-Dichloroethene	1	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	1,1-Dichloroethene	1	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	1,1-Dichloroethene	1	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	1,1-Dichloroethene	1	NV	N	S
4011	01/05/93	GW930105-7	U	1,1-Dichloroethene	1	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297	U	1,1-Dichloroethene	1	NV	N	R
4096	08/18/92	4096-08/18/92-B-N	U	1,1-Dichloroethene	10	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5	U	1,1-Dichloroethene	0.93	NV	D	R
4096	11/04/92	4096-11/04/92-A-N	U	1,1-Dichloroethene	1.2	NV	N	R
4096	11/04/92	4096-11/04/92-A-D1-7	U	1,1-Dichloroethene	0.93	NV	D	R
4096	02/02/93	GW930202-10	U	1,1-Dichloroethene	10	NV	N	R
4096	02/02/93	GW930202-11	U	1,1-Dichloroethene	10	NV	D	R
2043	07/06/92	2043-07/06/92-A-N1-8	U	1,2,3-Trichloropropane	5	NV	N	S
2043	01/18/93	GW930118-12	U	1,2,3-Trichloropropane	5	NV	N	S
2050	11/02/92	2050-11/02/92-A-N	U	1,2,3-Trichloropropane	2.3	NV	N	S
2066	01/06/93	GW930106-7	U	1,2,3-Trichloropropane	5	NV	N	S
2096	11/04/92	2096-11/04/92-A-N	U	1,2,3-Trichloropropane	2.3	NV	N	R
2098	11/23/92	GW921123-5	U	1,2,3-Trichloropropane	2.3	NV	N	D
2104	11/02/92	2104-11/02/92-A-N	U	1,2,3-Trichloropropane	2.3	NV	N	R
3024	01/13/93	GW930113-8	U	1,2,3-Trichloropropane	5	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	1,2,3-Trichloropropane	5	NV	N	S
3043	01/18/93	GW930118-14	U	1,2,3-Trichloropropane	5	NV	N	S
3096	11/04/92	3096-11/04/92-A-N	U	1,2,3-Trichloropropane	2.3	NV	N	R
3098	11/23/92	GW921123-6	U	1,2,3-Trichloropropane	2.3	NV	N	D
4011	02/21/91	EMGW_SYSGEN_1245	U	1,2,3-Trichloropropane	1	NV	N	S
4011	01/05/93	GW930105-7	U	1,2,3-Trichloropropane	5	NV	N	S
4096	11/04/92	4096-11/04/92-A-N	U	1,2,3-Trichloropropane	2.3	NV	N	R
2043	07/06/92	2043-07/06/92-A-N1-8	U	1,2-Dibromo-3-chloropropane	2	NV	N	S
2043	01/18/93	GW930118-12	U	1,2-Dibromo-3-chloropropane	2	NV	N	S
2066	01/06/93	GW930106-7	U	1,2-Dibromo-3-chloropropane	2	NV	N	S
3024	01/13/93	GW930113-8	U	1,2-Dibromo-3-chloropropane	2	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	1,2-Dibromo-3-chloropropane	2	NV	N	S
3043	01/18/93	GW930118-14	U	1,2-Dibromo-3-chloropropane	2	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	1,2-Dibromo-3-chloropropane	20	NV	N	S

Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
4011	01/05/93	GW930105-7	U	1,2-Dibromo-3-chloropropane	2	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	1,2-Dibromoethane	2	NV	N	S
2043	01/18/93	GW930118-12	U	1,2-Dibromoethane	2	NV	N	S
2050	11/02/92	2050-11/02/92-A-N	U	1,2-Dibromoethane	1	NV	N	S
2066	01/06/93	GW930106-7	U	1,2-Dibromoethane	2	NV	N	S
2096	11/04/92	2096-11/04/92-A-N	U	1,2-Dibromoethane	1	NV	N	R
2098	11/23/92	GW921123-5	U	1,2-Dibromoethane	1	NV	N	D
2104	11/02/92	2104-11/02/92-A-N	U	1,2-Dibromoethane	1	NV	N	R
3024	01/13/93	GW930113-8	U	1,2-Dibromoethane	2	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	1,2-Dibromoethane	2	NV	N	S
3043	01/18/93	GW930118-14	U	1,2-Dibromoethane	2	NV	N	S
3096	11/04/92	3096-11/04/92-A-N	U	1,2-Dibromoethane	1	NV	N	R
3098	11/23/92	GW921123-6	U	1,2-Dibromoethane	1	NV	N	D
4011	02/21/91	EMGW_SYSGEN_1245	U	1,2-Dibromoethane	20	NV	N	S
4011	01/05/93	GW930105-7	U	1,2-Dibromoethane	2	NV	N	S
4096	11/04/92	4096-11/04/92-A-N	U	1,2-Dibromoethane	1	NV	N	R
2043	11/14/89	66683	U	1,2-Dichloroethane	2.5	NV	N	S
2043	02/20/90	EMGW_SYSGEN_522	U	1,2-Dichloroethane	1	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	1,2-Dichloroethane	1	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	U	1,2-Dichloroethane	1	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	U	1,2-Dichloroethane	1	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	1,2-Dichloroethane	1	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	1,2-Dichloroethane	1	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	1,2-Dichloroethane	1	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	1,2-Dichloroethane	1	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	1,2-Dichloroethane	1	NV	N	S
2043	01/18/93	GW930118-12	U	1,2-Dichloroethane	1	NV	N	S
2050	10/17/90	EMGW_SYSGEN_558	U	1,2-Dichloroethane	1	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559	U	1,2-Dichloroethane	1	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560	U	1,2-Dichloroethane	1	NV	N	S
2050	08/10/92	2050-08/10/92-B-N	U	1,2-Dichloroethane	10	NV	N	S
2050	11/02/92	2050-11/02/92-A-N	U	1,2-Dichloroethane	2.4	NV	N	S
2050	02/10/93	GW930210-8	U	1,2-Dichloroethane	10	NV	N	S
2066	11/06/89	66687	U	1,2-Dichloroethane	2.5	NV	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2066	02/22/90	EMGW_SYSGEN_628	U	1,2-Dichloroethane	1	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	1,2-Dichloroethane	1	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	1,2-Dichloroethane	1	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	1,2-Dichloroethane	1	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	1,2-Dichloroethane	1	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	1,2-Dichloroethane	1	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	1,2-Dichloroethane	1	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	1,2-Dichloroethane	1	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	1,2-Dichloroethane	1	NV	N	S
2066	01/06/93	GW930106-7	U	1,2-Dichloroethane	1	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703	U	1,2-Dichloroethane	1	NV	N	R
2096	08/18/92	2096-08/18/92-B-N	U	1,2-Dichloroethane	10	NV	N	R
2096	11/04/92	2096-11/04/92-A-N	U	1,2-Dichloroethane	2.4	NV	N	R
2096	02/02/93	GW930202-8	U	1,2-Dichloroethane	10	NV	N	R
2098	10/15/90	EMGW_SYSGEN_712	U	1,2-Dichloroethane	1	NV	N	D
2098	11/05/91	EMGW_SYSGEN_715	U	1,2-Dichloroethane	1	NV	N	D
2098	11/23/92	GW921123-5	U	1,2-Dichloroethane	2.4	NV	N	D
2098	02/04/93	GW930204-7	U	1,2-Dichloroethane	10	NV	N	D
2104	06/14/90	EMGW_SYSGEN_718	U	1,2-Dichloroethane	1	NV	N	R
2104	09/12/90	EMGW_SYSGEN_719	U	1,2-Dichloroethane	1	NV	N	R
2104	11/27/90	EMGW_SYSGEN_720	U	1,2-Dichloroethane	1	NV	N	R
2104	03/07/91	EMGW_SYSGEN_721	U	1,2-Dichloroethane	1	NV	N	R
2104	11/07/91	EMGW_SYSGEN_722	U	1,2-Dichloroethane	1	NV	N	R
2104	08/10/92	2104-08/10/92-B-N	U	1,2-Dichloroethane	10	NV	N	R
2104	11/02/92	2104-11/02/92-A-N	U	1,2-Dichloroethane	2.4	NV	N	R
2104	02/02/93	GW930202-12	U	1,2-Dichloroethane	10	NV	N	R
2728	02/10/93	GW930210-5	U	1,2-Dichloroethane	10	NV	N	S
3024	11/30/89	66735	U	1,2-Dichloroethane	2.5	NV	N	S
3024	02/18/90	EMGW_SYSGEN_992	U	1,2-Dichloroethane	1	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993	U	1,2-Dichloroethane	1	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	U	1,2-Dichloroethane	1	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	U	1,2-Dichloroethane	1	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	1,2-Dichloroethane	1	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	1,2-Dichloroethane	1	NV	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
3024	07/15/91	EMGW_SYSGEN_998	U	1,2-Dichloroethane	1	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	1,2-Dichloroethane	1	NV	N	S
3024	01/13/93	GW930113-8	U	1,2-Dichloroethane	1	NV	N	S
3043	11/14/89	66685	U	1,2-Dichloroethane	2.5	NV	N	S
3043	02/20/90	EMGW_SYSGEN_1018	U	1,2-Dichloroethane	1	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	1,2-Dichloroethane	1	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	1,2-Dichloroethane	1	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	1,2-Dichloroethane	1	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	1,2-Dichloroethane	1	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	1,2-Dichloroethane	1	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	1,2-Dichloroethane	1	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	1,2-Dichloroethane	1	NV	N	S
3043	01/18/93	GW930118-14	U	1,2-Dichloroethane	1	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138	U	1,2-Dichloroethane	1	NV	N	R
3096	08/18/92	3096-08/18/92-B-N	U	1,2-Dichloroethane	10	NV	N	R
3096	11/04/92	3096-11/04/92-A-N	U	1,2-Dichloroethane	2.4	NV	N	R
3096	02/02/93	GW930202-9	U	1,2-Dichloroethane	10	NV	N	R
3098	10/15/90	EMGW_SYSGEN_1147	U	1,2-Dichloroethane	1	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149	U	1,2-Dichloroethane	1	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D	U	1,2-Dichloroethane	1	NV	D	D
3098	08/13/92	3098-08/13/92-A-D1-5	U	1,2-Dichloroethane	0.66	NV	D	D
3098	11/23/92	GW921123-6	U	1,2-Dichloroethane	2.4	NV	N	D
3098	02/04/93	GW930204-10	U	1,2-Dichloroethane	10	NV	N	D
3098	02/04/93	GW930204-12	U	1,2-Dichloroethane	10	NV	D	D
4011	10/05/90	4345	U	1,2-Dichloroethane	5	R	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	1,2-Dichloroethane	1	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	1,2-Dichloroethane	1	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	1,2-Dichloroethane	1	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	1,2-Dichloroethane	1	NV	N	S
4011	01/05/93	GW930105-7	U	1,2-Dichloroethane	1	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297	U	1,2-Dichloroethane	1	NV	N	R
4096	08/18/92	4096-08/18/92-B-N	U	1,2-Dichloroethane	10	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5	U	1,2-Dichloroethane	0.66	NV	D	R
4096	11/04/92	4096-11/04/92-A-N	U	1,2-Dichloroethane	2.4	NV	N	R

Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
4096	11/04/92	4096-11/04/92-A-D1-7	U	1,2-Dichloroethane	0.66	NV	D	R
4096	02/02/93	GW930202-10	U	1,2-Dichloroethane	10	NV	N	R
4096	02/02/93	GW930202-11	U	1,2-Dichloroethane	10	NV	D	R
2043	05/17/90	EMGW_SYSGEN_523	U	1,2-Dichloroethene (Total)	1	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	U	1,2-Dichloroethene (Total)	1	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	U	1,2-Dichloroethene (Total)	1	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	1,2-Dichloroethene (Total)	1	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	1,2-Dichloroethene (Total)	1	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	1,2-Dichloroethene (Total)	1	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	1,2-Dichloroethene (Total)	1	NV	N	S
2050	10/17/90	EMGW_SYSGEN_558	U	1,2-Dichloroethene (Total)	1	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559	U	1,2-Dichloroethene (Total)	1	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560	U	1,2-Dichloroethene (Total)	1	NV	N	S
2050	08/10/92	2050-08/10/92-B-N	U	1,2-Dichloroethene (Total)	10	NV	N	S
2050	11/02/92	2050-11/02/92-A-N	U	1,2-Dichloroethene (Total)	1.2	NV	N	S
2050	02/10/93	GW930210-8	U	1,2-Dichloroethene (Total)	10	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	1,2-Dichloroethene (Total)	1	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	1,2-Dichloroethene (Total)	1	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	1,2-Dichloroethene (Total)	1	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	1,2-Dichloroethene (Total)	1	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	1,2-Dichloroethene (Total)	1	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	1,2-Dichloroethene (Total)	1	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	1,2-Dichloroethene (Total)	1	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	1,2-Dichloroethene (Total)	1	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703	U	1,2-Dichloroethene (Total)	1	NV	N	R
2096	08/18/92	2096-08/18/92-B-N	U	1,2-Dichloroethene (Total)	10	NV	N	R
2096	11/04/92	2096-11/04/92-A-N	U	1,2-Dichloroethene (Total)	1.2	NV	N	R
2096	02/02/93	GW930202-8	U	1,2-Dichloroethene (Total)	10	NV	N	R
2098	10/15/90	EMGW_SYSGEN_712	U	1,2-Dichloroethene (Total)	1	NV	N	D
2098	11/05/91	EMGW_SYSGEN_715	U	1,2-Dichloroethene (Total)	1	NV	N	D
2098	11/23/92	GW921123-5	U	1,2-Dichloroethene (Total)	1.2	NV	N	D
2098	02/04/93	GW930204-7	U	1,2-Dichloroethene (Total)	10	NV	N	D
2104	06/14/90	EMGW_SYSGEN_718	U	1,2-Dichloroethene (Total)	1	NV	N	R
2104	09/12/90	EMGW_SYSGEN_719	U	1,2-Dichloroethene (Total)	1	NV	N	R

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2104	11/27/90	EMGW_SYSGEN_720	U	1,2-Dichloroethene (Total)	1	NV	N	R
2104	03/07/91	EMGW_SYSGEN_721	U	1,2-Dichloroethene (Total)	1	NV	N	R
2104	11/07/91	EMGW_SYSGEN_722	U	1,2-Dichloroethene (Total)	1	NV	N	R
2104	08/10/92	2104-08/10/92-B-N	U	1,2-Dichloroethene (Total)	10	NV	N	R
2104	11/02/92	2104-11/02/92-A-N	U	1,2-Dichloroethene (Total)	1.2	NV	N	R
2104	02/02/93	GW930202-12	U	1,2-Dichloroethene (Total)	10	NV	N	R
2728	02/10/93	GW930210-5	U	1,2-Dichloroethene (Total)	10	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993	U	1,2-Dichloroethene (Total)	1	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	U	1,2-Dichloroethene (Total)	1	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	U	1,2-Dichloroethene (Total)	1	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	1,2-Dichloroethene (Total)	1	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	1,2-Dichloroethene (Total)	1	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	1,2-Dichloroethene (Total)	1	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	1,2-Dichloroethene (Total)	1	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	1,2-Dichloroethene (Total)	1	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	1,2-Dichloroethene (Total)	1	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	1,2-Dichloroethene (Total)	1	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	1,2-Dichloroethene (Total)	1	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	1,2-Dichloroethene (Total)	1	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	1,2-Dichloroethene (Total)	1	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138	U	1,2-Dichloroethene (Total)	1	NV	N	R
3096	08/18/92	3096-08/18/92-B-N	U	1,2-Dichloroethene (Total)	10	NV	N	R
3096	11/04/92	3096-11/04/92-A-N	U	1,2-Dichloroethene (Total)	1.2	NV	N	R
3096	02/02/93	GW930202-9	U	1,2-Dichloroethene (Total)	10	NV	N	R
3098	10/15/90	EMGW_SYSGEN_1147	U	1,2-Dichloroethene (Total)	1	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149	U	1,2-Dichloroethene (Total)	1	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D	U	1,2-Dichloroethene (Total)	1	NV	D	D
3098	11/23/92	GW921123-6	U	1,2-Dichloroethene (Total)	1.2	NV	N	D
3098	02/04/93	GW930204-10	U	1,2-Dichloroethene (Total)	10	NV	N	D
3098	02/04/93	GW930204-12	U	1,2-Dichloroethene (Total)	10	NV	D	D
4011	10/05/90	4345	U	1,2-Dichloroethene (Total)	5	R	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	1,2-Dichloroethene (Total)	1	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	1,2-Dichloroethene (Total)	1	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	1,2-Dichloroethene (Total)	1	NV	N	S

Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
4096	11/12/91	EMGW_SYSGEN_1297	U	1,2-Dichloroethene (Total)	1	NV	N	R
4096	08/18/92	4096-08/18/92-B-N	U	1,2-Dichloroethene (Total)	10	NV	N	R
4096	11/04/92	4096-11/04/92-A-N	U	1,2-Dichloroethene (Total)	1.2	NV	N	R
4096	02/02/93	GW930202-10	U	1,2-Dichloroethene (Total)	10	NV	N	R
4096	02/02/93	GW930202-11	U	1,2-Dichloroethene (Total)	10	NV	D	R
2043	05/17/90	EMGW_SYSGEN_523	U	1,2-Dichloropropane	1	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	U	1,2-Dichloropropane	1	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	U	1,2-Dichloropropane	1	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	1,2-Dichloropropane	1	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	1,2-Dichloropropane	1	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	1,2-Dichloropropane	1	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	1,2-Dichloropropane	1	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	1,2-Dichloropropane	1	NV	N	S
2043	01/18/93	GW930118-12	U	1,2-Dichloropropane	1	NV	N	S
2050	10/17/90	EMGW_SYSGEN_558	U	1,2-Dichloropropane	1	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559	U	1,2-Dichloropropane	1	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560	U	1,2-Dichloropropane	1	NV	N	S
2050	08/10/92	2050-08/10/92-B-N	U	1,2-Dichloropropane	10	NV	N	S
2050	11/02/92	2050-11/02/92-A-N	U	1,2-Dichloropropane	2	NV	N	S
2050	02/10/93	GW930210-8	U	1,2-Dichloropropane	10	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	1,2-Dichloropropane	1	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	1,2-Dichloropropane	1	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	1,2-Dichloropropane	1	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	1,2-Dichloropropane	1	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	1,2-Dichloropropane	1	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	1,2-Dichloropropane	1	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	1,2-Dichloropropane	1	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	1,2-Dichloropropane	1	NV	N	S
2066	01/06/93	GW930106-7	U	1,2-Dichloropropane	1	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703	U	1,2-Dichloropropane	1	NV	N	R
2096	08/18/92	2096-08/18/92-B-N	U	1,2-Dichloropropane	10	NV	N	R
2096	11/04/92	2096-11/04/92-A-N	U	1,2-Dichloropropane	2	NV	N	R
2096	02/02/93	GW930202-8	U	1,2-Dichloropropane	10	NV	N	R
2098	10/15/90	EMGW_SYSGEN_712	U	1,2-Dichloropropane	1	NV	N	D

Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2098	11/05/91	EMGW_SYSGEN_715	U	1,2-Dichloropropane	1	NV	N	D
2098	11/23/92	GW921123-5	U	1,2-Dichloropropane	2	NV	N	D
2098	02/04/93	GW930204-7	U	1,2-Dichloropropane	10	NV	N	D
2104	06/14/90	EMGW_SYSGEN_718	U	1,2-Dichloropropane	1	NV	N	R
2104	09/12/90	EMGW_SYSGEN_719	U	1,2-Dichloropropane	1	NV	N	R
2104	11/27/90	EMGW_SYSGEN_720	U	1,2-Dichloropropane	1	NV	N	R
2104	03/07/91	EMGW_SYSGEN_721	U	1,2-Dichloropropane	1	NV	N	R
2104	11/07/91	EMGW_SYSGEN_722	U	1,2-Dichloropropane	1	NV	N	R
2104	08/10/92	2104-08/10/92-B-N	U	1,2-Dichloropropane	10	NV	N	R
2104	11/02/92	2104-11/02/92-A-N	U	1,2-Dichloropropane	2	NV	N	R
2104	02/02/93	GW930202-12	U	1,2-Dichloropropane	10	NV	N	R
2728	02/10/93	GW930210-5	U	1,2-Dichloropropane	10	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993	U	1,2-Dichloropropane	1	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	U	1,2-Dichloropropane	1	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	U	1,2-Dichloropropane	1	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	1,2-Dichloropropane	1	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	1,2-Dichloropropane	1	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	1,2-Dichloropropane	1	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	1,2-Dichloropropane	1	NV	N	S
3024	01/13/93	GW930113-8	U	1,2-Dichloropropane	1	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	1,2-Dichloropropane	1	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	1,2-Dichloropropane	1	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	1,2-Dichloropropane	1	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	1,2-Dichloropropane	1	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	1,2-Dichloropropane	1	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	1,2-Dichloropropane	1	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	1,2-Dichloropropane	1	NV	N	S
3043	01/18/93	GW930118-14	U	1,2-Dichloropropane	1	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138	U	1,2-Dichloropropane	1	NV	N	R
3096	08/18/92	3096-08/18/92-B-N	U	1,2-Dichloropropane	10	NV	N	R
3096	11/04/92	3096-11/04/92-A-N	U	1,2-Dichloropropane	2	NV	N	R
3096	02/02/93	GW930202-9	U	1,2-Dichloropropane	10	NV	N	R
3098	10/15/90	EMGW_SYSGEN_1147	U	1,2-Dichloropropane	1	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149	U	1,2-Dichloropropane	1	NV	N	D

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
3098	11/05/91	EMGW_SYSGEN_1149D	U	1,2-Dichloropropane	1	NV	D	D
3098	08/13/92	3098-08/13/92-A-D1-5	U	1,2-Dichloropropane	1.1	NV	D	D
3098	11/23/92	GW921123-6	U	1,2-Dichloropropane	2	NV	N	D
3098	02/04/93	GW930204-10	U	1,2-Dichloropropane	10	NV	N	D
3098	02/04/93	GW930204-12	U	1,2-Dichloropropane	10	NV	D	D
4011	10/05/90	4345	U	1,2-Dichloropropane	5	R	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	1,2-Dichloropropane	1	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	1,2-Dichloropropane	1	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	1,2-Dichloropropane	1	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	1,2-Dichloropropane	1	NV	N	S
4011	01/05/93	GW930105-7	U	1,2-Dichloropropane	1	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297	U	1,2-Dichloropropane	1	NV	N	R
4096	08/18/92	4096-08/18/92-B-N	U	1,2-Dichloropropane	10	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5	U	1,2-Dichloropropane	1.1	NV	D	R
4096	11/04/92	4096-11/04/92-A-N	U	1,2-Dichloropropane	2	NV	N	R
4096	11/04/92	4096-11/04/92-A-D1-7	U	1,2-Dichloropropane	1.1	NV	D	R
4096	02/02/93	GW930202-10	U	1,2-Dichloropropane	10	NV	N	R
4096	02/02/93	GW930202-11	U	1,2-Dichloropropane	10	NV	D	R
2050	11/02/92	2050-11/02/92-A-N	U	1,3-Dichloropropene	3.1	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	1,4-Dioxane	5000	NV	N	S
2043	08/30/89	66572	U	2-Butanone	10	R	N	S
2043	08/30/89	66577	U	2-Butanone	10	R	D	S
2043	05/17/90	EMGW_SYSGEN_523	U	2-Butanone	2	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	U	2-Butanone	2	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	U	2-Butanone	2	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	2-Butanone	2	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	2-Butanone	2	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	2-Butanone	2	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	2-Butanone	2	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	2-Butanone	10	NV	N	S
2043	01/18/93	GW930118-12	U	2-Butanone	10	NV	N	S
2050	10/17/90	EMGW_SYSGEN_558	U	2-Butanone	2	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559	U	2-Butanone	2	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560	U	2-Butanone	2	NV	N	S

Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2050	08/10/92	2050-08/10/92-B-N	U	2-Butanone	10	NV	N	S
2050	11/02/92	2050-11/02/92-A-N	U	2-Butanone	3.8	NV	N	S
2050	02/10/93	GW930210-8	U	2-Butanone	10	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	2-Butanone	2	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	2-Butanone	2	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	2-Butanone	2	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	2-Butanone	2	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	2-Butanone	2	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	2-Butanone	2	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	2-Butanone	2	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	2-Butanone	2	NV	N	S
2066	01/06/93	GW930106-7	U	2-Butanone	10	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703	U	2-Butanone	2	NV	N	R
2096	08/18/92	2096-08/18/92-B-N	U	2-Butanone	10	NV	N	R
2096	11/04/92	2096-11/04/92-A-N	U	2-Butanone	3.8	NV	N	R
2096	02/02/93	GW930202-8	U	2-Butanone	10	NV	N	R
2098	10/15/90	EMGW_SYSGEN_712	U	2-Butanone	2	NV	N	D
2098	11/05/91	EMGW_SYSGEN_715	U	2-Butanone	2	NV	N	D
2098	11/23/92	GW921123-5	U	2-Butanone	3.8	NV	N	D
2098	02/04/93	GW930204-7	U	2-Butanone	10	NV	N	D
2104	06/14/90	EMGW_SYSGEN_718	U	2-Butanone	10	NV	N	R
2104	09/12/90	EMGW_SYSGEN_719	U	2-Butanone	2	NV	N	R
2104	11/27/90	EMGW_SYSGEN_720	U	2-Butanone	2	NV	N	R
2104	03/07/91	EMGW_SYSGEN_721	U	2-Butanone	2	NV	N	R
2104	11/07/91	EMGW_SYSGEN_722	U	2-Butanone	2	NV	N	R
2104	08/10/92	2104-08/10/92-B-N	U	2-Butanone	10	NV	N	R
2104	11/02/92	2104-11/02/92-A-N	U	2-Butanone	3.8	NV	N	R
2104	02/02/93	GW930202-12	U	2-Butanone	10	NV	N	R
2728	02/10/93	GW930210-5	U	2-Butanone	10	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993	U	2-Butanone	2	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	U	2-Butanone	2	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	U	2-Butanone	2	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	2-Butanone	2	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	2-Butanone	2	NV	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
3024	07/15/91	EMGW_SYSGEN_998	U	2-Butanone	2	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	2-Butanone	2	NV	N	S
3024	01/13/93	GW930113-8	U	2-Butanone	10	NV	N	S
3043	08/30/89	66573	U	2-Butanone	10	R	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	2-Butanone	2	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	2-Butanone	2	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	2-Butanone	2	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	2-Butanone	2	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	2-Butanone	2	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	2-Butanone	2	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	2-Butanone	5	NV	N	S
3043	01/18/93	GW930118-14	U	2-Butanone	10	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138	U	2-Butanone	2	NV	N	R
3096	08/18/92	3096-08/18/92-B-N	U	2-Butanone	10	NV	N	R
3096	11/04/92	3096-11/04/92-A-N	U	2-Butanone	3.8	NV	N	R
3096	02/02/93	GW930202-9	U	2-Butanone	10	NV	N	R
3098	10/15/90	EMGW_SYSGEN_1147	U	2-Butanone	2	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149	U	2-Butanone	2	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D	U	2-Butanone	2	NV	D	D
3098	08/13/92	3098-08/13/92-A-D1-5	U	2-Butanone	5.1	NV	D	D
3098	11/23/92	GW921123-6	U	2-Butanone	3.8	NV	N	D
3098	02/04/93	GW930204-10	U	2-Butanone	10	NV	N	D
3098	02/04/93	GW930204-12	U	2-Butanone	10	NV	D	D
4011	10/05/90	4345	U	2-Butanone	10	R	N	S
4011	10/05/90	4345	U	2-Butanone	10	R	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	2-Butanone	2	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	2-Butanone	2	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	2-Butanone	2	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	2-Butanone	2	NV	N	S
4011	01/05/93	GW930105-7	U	2-Butanone	10	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297	U	2-Butanone	2	NV	N	R
4096	08/18/92	4096-08/18/92-B-N	U	2-Butanone	10	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5	U	2-Butanone	5.1	NV	D	R
4096	11/04/92	4096-11/04/92-A-N	U	2-Butanone	3.8	NV	N	R

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
4096	11/04/92	4096-11/04/92-A-D1-7	U	2-Butanone	5.1	NV	D	R
4096	02/02/93	GW930202-10	J	2-Butanone	9	NV	N	R
4096	02/02/93	GW930202-11		2-Butanone	11	NV	D	R
2043	08/30/89	66572	U	2-Chloro-1,3-butadiene	5	R	N	S
2043	08/30/89	66577	U	2-Chloro-1,3-butadiene	5	R	D	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	2-Chloro-1,3-butadiene	5	NV	N	S
2043	01/18/93	GW930118-12	U	2-Chloro-1,3-butadiene	5	NV	N	S
2066	01/06/93	GW930106-7	U	2-Chloro-1,3-butadiene	5	NV	N	S
3024	01/13/93	GW930113-8	U	2-Chloro-1,3-butadiene	5	NV	N	S
3043	08/30/89	66573	U	2-Chloro-1,3-butadiene	5	R	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	2-Chloro-1,3-butadiene	5	NV	N	S
3043	01/18/93	GW930118-14	U	2-Chloro-1,3-butadiene	5	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	2-Chloro-1,3-butadiene	20	NV	N	S
4011	01/05/93	GW930105-7	U	2-Chloro-1,3-butadiene	5	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	2-Hexanone	2	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	U	2-Hexanone	2	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	U	2-Hexanone	2	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	2-Hexanone	2	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	2-Hexanone	2	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	2-Hexanone	2	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	2-Hexanone	2	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	2-Hexanone	10	NV	N	S
2043	01/18/93	GW930118-12	U	2-Hexanone	10	NV	N	S
2050	10/17/90	EMGW_SYSGEN_558	U	2-Hexanone	2	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559	U	2-Hexanone	2	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560	U	2-Hexanone	2	NV	N	S
2050	08/10/92	2050-08/10/92-B-N	U	2-Hexanone	10	NV	N	S
2050	11/02/92	2050-11/02/92-A-N	U	2-Hexanone	4.1	NV	N	S
2050	02/10/93	GW930210-8	U	2-Hexanone	10	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	2-Hexanone	2	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	2-Hexanone	2	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	2-Hexanone	2	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	2-Hexanone	2	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	2-Hexanone	2	NV	D	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2066	07/17/91	EMGW_SYSGEN_635	U	2-Hexanone	2	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	2-Hexanone	2	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	2-Hexanone	2	NV	N	S
2066	01/06/93	GW930106-7	U	2-Hexanone	10	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703	U	2-Hexanone	2	NV	N	R
2096	08/18/92	2096-08/18/92-B-N	U	2-Hexanone	10	NV	N	R
2096	11/04/92	2096-11/04/92-A-N	U	2-Hexanone	4.1	NV	N	R
2096	02/02/93	GW930202-8	U	2-Hexanone	10	NV	N	R
2098	10/15/90	EMGW_SYSGEN_712	U	2-Hexanone	2	NV	N	D
2098	11/05/91	EMGW_SYSGEN_715	U	2-Hexanone	2	NV	N	D
2098	11/23/92	GW921123-5	U	2-Hexanone	4.1	NV	N	D
2098	02/04/93	GW930204-7	U	2-Hexanone	10	NV	N	D
2104	06/14/90	EMGW_SYSGEN_718	U	2-Hexanone	10	NV	N	R
2104	09/12/90	EMGW_SYSGEN_719	U	2-Hexanone	2	NV	N	R
2104	11/27/90	EMGW_SYSGEN_720	U	2-Hexanone	2	NV	N	R
2104	03/07/91	EMGW_SYSGEN_721	U	2-Hexanone	2	NV	N	R
2104	11/07/91	EMGW_SYSGEN_722	U	2-Hexanone	2	NV	N	R
2104	08/10/92	2104-08/10/92-B-N	U	2-Hexanone	10	NV	N	R
2104	11/02/92	2104-11/02/92-A-N	U	2-Hexanone	4.1	NV	N	R
2104	02/02/93	GW930202-12	U	2-Hexanone	10	NV	N	R
2728	02/10/93	GW930210-5	U	2-Hexanone	10	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993	U	2-Hexanone	2	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	U	2-Hexanone	2	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	U	2-Hexanone	2	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	2-Hexanone	2	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	2-Hexanone	2	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	2-Hexanone	2	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	2-Hexanone	2	NV	N	S
3024	01/13/93	GW930113-8	U	2-Hexanone	10	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	2-Hexanone	2	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	2-Hexanone	2	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	2-Hexanone	2	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	2-Hexanone	2	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	2-Hexanone	2	NV	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
3043	10/01/91	EMGW_SYSGEN_1025	U	2-Hexanone	2	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	2-Hexanone	10	NV	N	S
3043	01/18/93	GW930118-14	U	2-Hexanone	10	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138	U	2-Hexanone	2	NV	N	R
3096	08/18/92	3096-08/18/92-B-N	U	2-Hexanone	10	NV	N	R
3096	11/04/92	3096-11/04/92-A-N	U	2-Hexanone	4.1	NV	N	R
3096	02/02/93	GW930202-9	U	2-Hexanone	10	NV	N	R
3098	10/15/90	EMGW_SYSGEN_1147	U	2-Hexanone	2	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149	U	2-Hexanone	2	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D	U	2-Hexanone	2	NV	D	D
3098	08/13/92	3098-08/13/92-A-D1-5	U	2-Hexanone	2.2	NV	D	D
3098	11/23/92	GW921123-6	U	2-Hexanone	4.1	NV	N	D
3098	02/04/93	GW930204-10	U	2-Hexanone	10	NV	N	D
3098	02/04/93	GW930204-12	U	2-Hexanone	10	NV	D	D
4011	10/05/90	4345	U	2-Hexanone	10	R	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	2-Hexanone	2	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	2-Hexanone	2	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	2-Hexanone	2	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	2-Hexanone	2	NV	N	S
4011	01/05/93	GW930105-7	U	2-Hexanone	10	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297	U	2-Hexanone	2	NV	N	R
4096	08/18/92	4096-08/18/92-B-N	U	2-Hexanone	10	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5	U	2-Hexanone	2.2	NV	D	R
4096	11/04/92	4096-11/04/92-A-N	U	2-Hexanone	4.1	NV	N	R
4096	11/04/92	4096-11/04/92-A-D1-7	U	2-Hexanone	2.2	NV	D	R
4096	02/02/93	GW930202-10	U	2-Hexanone	10	NV	N	R
4096	02/02/93	GW930202-11	U	2-Hexanone	10	NV	D	R
2043	05/17/90	EMGW_SYSGEN_523	U	4-Methyl-2-pentanone	2	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	U	4-Methyl-2-pentanone	2	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	U	4-Methyl-2-pentanone	2	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	4-Methyl-2-pentanone	2	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	4-Methyl-2-pentanone	2	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	4-Methyl-2-pentanone	2	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	4-Methyl-2-pentanone	2	NV	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2043	07/06/92	2043-07/06/92-A-N1-8	U	4-Methyl-2-pentanone	10	NV	N	S
2043	01/18/93	GW930118-12	U	4-Methyl-2-pentanone	10	NV	N	S
2050	10/17/90	EMGW_SYSGEN_558	U	4-Methyl-2-pentanone	2	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559	U	4-Methyl-2-pentanone	2	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560	U	4-Methyl-2-pentanone	2	NV	N	S
2050	08/10/92	2050-08/10/92-B-N	U	4-Methyl-2-pentanone	10	NV	N	S
2050	11/02/92	2050-11/02/92-A-N	U	4-Methyl-2-pentanone	3.5	NV	N	S
2050	02/10/93	GW930210-8	U	4-Methyl-2-pentanone	10	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	4-Methyl-2-pentanone	2	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	4-Methyl-2-pentanone	2	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	4-Methyl-2-pentanone	2	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	4-Methyl-2-pentanone	2	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	4-Methyl-2-pentanone	2	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	4-Methyl-2-pentanone	2	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	4-Methyl-2-pentanone	2	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	4-Methyl-2-pentanone	2	NV	N	S
2066	01/06/93	GW930106-7	U	4-Methyl-2-pentanone	10	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703	U	4-Methyl-2-pentanone	2	NV	N	R
2096	08/18/92	2096-08/18/92-B-N	U	4-Methyl-2-pentanone	10	NV	N	R
2096	11/04/92	2096-11/04/92-A-N	U	4-Methyl-2-pentanone	3.5	NV	N	R
2096	02/02/93	GW930202-8	U	4-Methyl-2-pentanone	10	NV	N	R
2098	10/15/90	EMGW_SYSGEN_712	U	4-Methyl-2-pentanone	2	NV	N	D
2098	11/05/91	EMGW_SYSGEN_715	U	4-Methyl-2-pentanone	2	NV	N	D
2098	11/23/92	GW921123-5	U	4-Methyl-2-pentanone	3.5	NV	N	D
2098	02/04/93	GW930204-7	U	4-Methyl-2-pentanone	10	NV	N	D
2104	06/14/90	EMGW_SYSGEN_718	U	4-Methyl-2-pentanone	2	NV	N	R
2104	09/12/90	EMGW_SYSGEN_719	U	4-Methyl-2-pentanone	2	NV	N	R
2104	11/27/90	EMGW_SYSGEN_720	U	4-Methyl-2-pentanone	2	NV	N	R
2104	03/07/91	EMGW_SYSGEN_721	U	4-Methyl-2-pentanone	2	NV	N	R
2104	11/07/91	EMGW_SYSGEN_722	U	4-Methyl-2-pentanone	2	NV	N	R
2104	08/10/92	2104-08/10/92-B-N	U	4-Methyl-2-pentanone	10	NV	N	R
2104	11/02/92	2104-11/02/92-A-N	U	4-Methyl-2-pentanone	3.5	NV	N	R
2104	02/02/93	GW930202-12	U	4-Methyl-2-pentanone	10	NV	N	R
2728	02/10/93	GW930210-5	U	4-Methyl-2-pentanone	10	NV	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
3024	06/11/90	EMGW_SYSGEN_993	U	4-Methyl-2-pentanone	2	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	U	4-Methyl-2-pentanone	2	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	U	4-Methyl-2-pentanone	2	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	4-Methyl-2-pentanone	2	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	4-Methyl-2-pentanone	2	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	4-Methyl-2-pentanone	2	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	4-Methyl-2-pentanone	2	NV	N	S
3024	01/13/93	GW930113-8	U	4-Methyl-2-pentanone	10	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	4-Methyl-2-pentanone	2	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	4-Methyl-2-pentanone	2	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	4-Methyl-2-pentanone	2	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	4-Methyl-2-pentanone	2	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	4-Methyl-2-pentanone	2	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	4-Methyl-2-pentanone	1	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	4-Methyl-2-pentanone	10	NV	N	S
3043	01/18/93	GW930118-14	U	4-Methyl-2-pentanone	10	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138	U	4-Methyl-2-pentanone	2	NV	N	R
3096	08/18/92	3096-08/18/92-B-N	U	4-Methyl-2-pentanone	10	NV	N	R
3096	11/04/92	3096-11/04/92-A-N	U	4-Methyl-2-pentanone	3.5	NV	N	R
3096	02/02/93	GW930202-9	U	4-Methyl-2-pentanone	10	NV	N	R
3098	10/15/90	EMGW_SYSGEN_1147	U	4-Methyl-2-pentanone	2	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149	U	4-Methyl-2-pentanone	2	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D	U	4-Methyl-2-pentanone	2	NV	D	D
3098	08/13/92	3098-08/13/92-A-D1-5	U	4-Methyl-2-pentanone	2.4	NV	D	D
3098	11/23/92	GW921123-6	U	4-Methyl-2-pentanone	3.5	NV	N	D
3098	02/04/93	GW930204-10	U	4-Methyl-2-pentanone	10	NV	N	D
3098	02/04/93	GW930204-12	U	4-Methyl-2-pentanone	10	NV	D	D
4011	10/05/90	4345	U	4-Methyl-2-pentanone	10	R	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	4-Methyl-2-pentanone	2	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	4-Methyl-2-pentanone	2	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	4-Methyl-2-pentanone	2	NV	N	S
4011	01/05/93	GW930105-7	U	4-Methyl-2-pentanone	10	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297	U	4-Methyl-2-pentanone	2	NV	N	R
4096	08/18/92	4096-08/18/92-B-N	U	4-Methyl-2-pentanone	10	NV	N	R

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
4096	08/18/92	4096-08/18/92-B-D1-5	U	4-Methyl-2-pentanone	2.4	NV	D	R
4096	11/04/92	4096-11/04/92-A-N	U	4-Methyl-2-pentanone	3.5	NV	N	R
4096	11/04/92	4096-11/04/92-A-D1-7	U	4-Methyl-2-pentanone	2.4	NV	D	R
4096	02/02/93	GW930202-10	J	4-Methyl-2-pentanone	3	NV	N	R
4096	02/02/93	GW930202-11	U	4-Methyl-2-pentanone	10	NV	D	R
2043	11/14/89	66683	U	Acetone	2.5	NV	N	S
2043	02/20/90	EMGW_SYSGEN_522	U	Acetone	2	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Acetone	2	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	U	Acetone	2	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	U	Acetone	2	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	Acetone	2	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	Acetone	2	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	Acetone	2	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	Acetone	2	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	Acetone	10	NV	N	S
2043	01/18/93	GW930118-12	U	Acetone	10	NV	N	S
2050	10/17/90	EMGW_SYSGEN_558	U	Acetone	2	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559	U	Acetone	2	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560	U	Acetone	2	NV	N	S
2050	08/10/92	2050-08/10/92-B-N	U	Acetone	10	NV	N	S
2050	11/02/92	2050-11/02/92-A-N		Acetone	4.3	NV	N	S
2050	02/10/93	GW930210-8	U	Acetone	10	NV	N	S
2066	11/06/89	66687	U	Acetone	2.5	NV	N	S
2066	02/22/90	EMGW_SYSGEN_628	U	Acetone	2	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Acetone	2	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	Acetone	2	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	Acetone	2	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	Acetone	2	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	Acetone	2	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	Acetone	2	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636		Acetone	10.7	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	Acetone	2	NV	N	S
2066	01/06/93	GW930106-7	U	Acetone	10	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703	U	Acetone	2	NV	N	R

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2096	08/18/92	2096-08/18/92-B-N	U	Acetone	10	NV	N	R
2096	11/04/92	2096-11/04/92-A-N	U	Acetone	4.3	NV	N	R
2096	02/02/93	GW930202-8	U	Acetone	10	NV	N	R
2098	10/15/90	EMGW_SYSGEN_712	U	Acetone	2	NV	N	D
2098	11/05/91	EMGW_SYSGEN_715	U	Acetone	2	NV	N	D
2098	11/23/92	GW921123-5	U	Acetone	4.3	NV	N	D
2098	02/04/93	GW930204-7	U	Acetone	10	NV	N	D
2104	06/14/90	EMGW_SYSGEN_718	U	Acetone	10	NV	N	R
2104	09/12/90	EMGW_SYSGEN_719	U	Acetone	2	NV	N	R
2104	11/27/90	EMGW_SYSGEN_720	U	Acetone	2	NV	N	R
2104	03/07/91	EMGW_SYSGEN_721	U	Acetone	2	NV	N	R
2104	11/07/91	EMGW_SYSGEN_722	U	Acetone	2	NV	N	R
2104	08/10/92	2104-08/10/92-B-N	U	Acetone	10	NV	N	R
2104	11/02/92	2104-11/02/92-A-N		Acetone	18	NV	N	R
2104	02/02/93	GW930202-12	U	Acetone	10	NV	N	R
2728	02/10/93	GW930210-5	U	Acetone	10	NV	N	S
3024	11/30/89	66735	U	Acetone	2.5	NV	N	S
3024	02/18/90	EMGW_SYSGEN_992	U	Acetone	2	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993	U	Acetone	2	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	U	Acetone	2	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	U	Acetone	2	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	Acetone	2	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	Acetone	2	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	Acetone	2	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	Acetone	2	NV	N	S
3024	01/13/93	GW930113-8	U	Acetone	10	NV	N	S
3043	11/14/89	66685	U	Acetone	2.5	NV	N	S
3043	02/20/90	EMGW_SYSGEN_1018	U	Acetone	2	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Acetone	2	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	Acetone	2	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	Acetone	2	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	Acetone	2	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	Acetone	2	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	Acetone	2	NV	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
3043	07/06/92	3043-07/06/92-A-N1-8	U	Acetone	10	NV	N	S
3043	01/18/93	GW930118-14	U	Acetone	10	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138	U	Acetone	2	NV	N	R
3096	08/18/92	3096-08/18/92-B-N	U	Acetone	10	NV	N	R
3096	11/04/92	3096-11/04/92-A-N	U	Acetone	4.3	NV	N	R
3096	02/02/93	GW930202-9	U	Acetone	10	NV	N	R
3098	10/15/90	EMGW_SYSGEN_1147	U	Acetone	2	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149	U	Acetone	2	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D	U	Acetone	2	NV	D	D
3098	08/13/92	3098-08/13/92-A-D1-5	U	Acetone	3.5	NV	D	D
3098	11/23/92	GW921123-6	U	Acetone	4.3	NV	N	D
3098	02/04/93	GW930204-10	U	Acetone	10	NV	N	D
3098	02/04/93	GW930204-12	U	Acetone	10	NV	D	D
4011	10/05/90	4345	U	Acetone	10	R	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Acetone	2	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245		Acetone	38.9	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	Acetone	2	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	Acetone	2	NV	N	S
4011	01/05/93	GW930105-7	U	Acetone	10	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297	U	Acetone	2	NV	N	R
4096	08/18/92	4096-08/18/92-B-N	U	Acetone	10	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5	U	Acetone	3.5	NV	D	R
4096	11/04/92	4096-11/04/92-A-N	U	Acetone	4.3	NV	N	R
4096	11/04/92	4096-11/04/92-A-D1-7		Acetone	4.2	NV	D	R
4096	02/02/93	GW930202-10	U	Acetone	10	NV	N	R
4096	02/02/93	GW930202-11	U	Acetone	10	NV	D	R
4011	02/21/91	EMGW_SYSGEN_1245	U	Acetonitrile	1000	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	Acrolein	50	NV	N	S
2043	01/18/93	GW930118-12	U	Acrolein	50	NV	N	S
2050	11/02/92	2050-11/02/92-A-N	U	Acrolein	58	NV	N	S
2066	01/06/93	GW930106-7	U	Acrolein	50	NV	N	S
2096	11/04/92	2096-11/04/92-A-N	U	Acrolein	58	NV	N	R
2098	11/23/92	GW921123-5	U	Acrolein	58	NV	N	D
2104	11/02/92	2104-11/02/92-A-N	U	Acrolein	58	NV	N	R

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
3024	01/13/93	GW930113-8	U	Acrolein	50	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	Acrolein	50	NV	N	S
3043	01/18/93	GW930118-14	U	Acrolein	50	NV	N	S
3096	11/04/92	3096-11/04/92-A-N	U	Acrolein	58	NV	N	R
3098	11/23/92	GW921123-6	U	Acrolein	58	NV	N	D
4011	02/21/91	EMGW_SYSGEN_1245	U	Acrolein	20	NV	N	S
4011	01/05/93	GW930105-7	U	Acrolein	50	NV	N	S
4096	11/04/92	4096-11/04/92-A-N	U	Acrolein	58	NV	N	R
2043	07/06/92	2043-07/06/92-A-N1-8	U	Acrylonitrile	50	NV	N	S
2043	01/18/93	GW930118-12	U	Acrylonitrile	50	NV	N	S
2050	11/02/92	2050-11/02/92-A-N	U	Acrylonitrile	43	NV	N	S
2066	01/06/93	GW930106-7	U	Acrylonitrile	50	NV	N	S
2096	11/04/92	2096-11/04/92-A-N	U	Acrylonitrile	43	NV	N	R
2098	11/23/92	GW921123-5	U	Acrylonitrile	43	NV	N	D
2104	11/02/92	2104-11/02/92-A-N	U	Acrylonitrile	43	NV	N	R
3024	01/13/93	GW930113-8	U	Acrylonitrile	50	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	Acrylonitrile	50	NV	N	S
3043	01/18/93	GW930118-14	U	Acrylonitrile	50	NV	N	S
3096	11/04/92	3096-11/04/92-A-N	U	Acrylonitrile	43	NV	N	R
3098	11/23/92	GW921123-6	U	Acrylonitrile	43	NV	N	D
4011	02/21/91	EMGW_SYSGEN_1245	U	Acrylonitrile	20	NV	N	S
4011	01/05/93	GW930105-7	U	Acrylonitrile	50	NV	N	S
4096	11/04/92	4096-11/04/92-A-N	U	Acrylonitrile	43	NV	N	R
2043	07/06/92	2043-07/06/92-A-N1-8	U	Allyl chloride	5	NV	N	S
2043	01/18/93	GW930118-12	U	Allyl chloride	5	NV	N	S
2066	01/06/93	GW930106-7	U	Allyl chloride	5	NV	N	S
3024	01/13/93	GW930113-8	U	Allyl chloride	5	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	Allyl chloride	5	NV	N	S
3043	01/18/93	GW930118-14	U	Allyl chloride	5	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Allyl chloride	20	NV	N	S
4011	01/05/93	GW930105-7	U	Allyl chloride	5	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Benzene	1	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	U	Benzene	1	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	U	Benzene	1	NV	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2043	02/28/91	EMGW_SYSGEN_526	U	Benzene	1	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	Benzene	1	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	Benzene	1	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	Benzene	1	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	Benzene	1	NV	N	S
2043	01/18/93	GW930118-12	U	Benzene	1	NV	N	S
2050	10/17/90	EMGW_SYSGEN_558	U	Benzene	1	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559	U	Benzene	1	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560	U	Benzene	1	NV	N	S
2050	08/10/92	2050-08/10/92-B-N	U	Benzene	10	NV	N	S
2050	11/02/92	2050-11/02/92-A-N	U	Benzene	1.6	NV	N	S
2050	02/10/93	GW930210-8	U	Benzene	10	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Benzene	1	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	Benzene	1	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	Benzene	1	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	Benzene	1	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	Benzene	1	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	Benzene	1	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	Benzene	1	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	Benzene	1	NV	N	S
2066	01/06/93	GW930106-7	U	Benzene	1	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703	U	Benzene	1	NV	N	R
2096	08/18/92	2096-08/18/92-B-N	U	Benzene	10	NV	N	R
2096	11/04/92	2096-11/04/92-A-N	U	Benzene	1.6	NV	N	R
2096	02/02/93	GW930202-8	U	Benzene	10	NV	N	R
2098	10/15/90	EMGW_SYSGEN_712	U	Benzene	1	NV	N	D
2098	11/05/91	EMGW_SYSGEN_715	U	Benzene	1	NV	N	D
2098	11/23/92	GW921123-5	U	Benzene	1.6	NV	N	D
2098	02/04/93	GW930204-7	U	Benzene	10	NV	N	D
2104	06/14/90	EMGW_SYSGEN_718	U	Benzene	1	NV	N	R
2104	09/12/90	EMGW_SYSGEN_719	U	Benzene	1	NV	N	R
2104	11/27/90	EMGW_SYSGEN_720	U	Benzene	1	NV	N	R
2104	03/07/91	EMGW_SYSGEN_721	U	Benzene	1	NV	N	R
2104	11/07/91	EMGW_SYSGEN_722	U	Benzene	1	NV	N	R

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2104	08/10/92	2104-08/10/92-B-N	U	Benzene	10	NV	N	R
2104	11/02/92	2104-11/02/92-A-N	U	Benzene	1.6	NV	N	R
2104	02/02/93	GW930202-12	U	Benzene	10	NV	N	R
2728	02/10/93	GW930210-5	U	Benzene	10	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993	U	Benzene	1	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	U	Benzene	1	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	U	Benzene	1	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	Benzene	1	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	Benzene	1	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	Benzene	1	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	Benzene	1	NV	N	S
3024	01/13/93	GW930113-8	U	Benzene	1	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Benzene	1	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	Benzene	1	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	Benzene	1	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	Benzene	1	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	Benzene	1	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	Benzene	1	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	Benzene	1	NV	N	S
3043	01/18/93	GW930118-14	U	Benzene	1	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138	U	Benzene	1	NV	N	R
3096	08/18/92	3096-08/18/92-B-N	U	Benzene	10	NV	N	R
3096	11/04/92	3096-11/04/92-A-N	U	Benzene	1.6	NV	N	R
3096	02/02/93	GW930202-9	U	Benzene	10	NV	N	R
3098	10/15/90	EMGW_SYSGEN_1147	U	Benzene	1	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149	U	Benzene	1	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D	U	Benzene	1	NV	D	D
3098	08/13/92	3098-08/13/92-A-D1-5	U	Benzene	1.3	NV	D	D
3098	11/23/92	GW921123-6	U	Benzene	1.6	NV	N	D
3098	02/04/93	GW930204-10	U	Benzene	10	NV	N	D
3098	02/04/93	GW930204-12	U	Benzene	10	NV	D	D
4011	10/05/90	4345	U	Benzene	5	R	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Benzene	1	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Benzene	1	NV	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
4011	07/30/91	EMGW_SYSGEN_1247	U	Benzene	1	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	Benzene	1	NV	N	S
4011	01/05/93	GW930105-7	U	Benzene	1	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297	U	Benzene	1	NV	N	R
4096	08/18/92	4096-08/18/92-B-N	U	Benzene	10	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5	U	Benzene	1.3	NV	D	R
4096	11/04/92	4096-11/04/92-A-N	U	Benzene	1.6	NV	N	R
4096	11/04/92	4096-11/04/92-A-D1-7	U	Benzene	1.3	NV	D	R
4096	02/02/93	GW930202-10	U	Benzene	10	NV	N	R
4096	02/02/93	GW930202-11	U	Benzene	10	NV	D	R
2043	05/17/90	EMGW_SYSGEN_523	U	Bromodichloromethane	1	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	U	Bromodichloromethane	1	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	U	Bromodichloromethane	1	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	Bromodichloromethane	1	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	Bromodichloromethane	1	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	Bromodichloromethane	1	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	Bromodichloromethane	1	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	Bromodichloromethane	1	NV	N	S
2043	01/18/93	GW930118-12	U	Bromodichloromethane	1	NV	N	S
2050	10/17/90	EMGW_SYSGEN_558	U	Bromodichloromethane	1	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559	U	Bromodichloromethane	1	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560	U	Bromodichloromethane	1	NV	N	S
2050	08/10/92	2050-08/10/92-B-N	U	Bromodichloromethane	10	NV	N	S
2050	11/02/92	2050-11/02/92-A-N	U	Bromodichloromethane	1.8	NV	N	S
2050	02/10/93	GW930210-8	U	Bromodichloromethane	10	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Bromodichloromethane	1	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	Bromodichloromethane	1	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	Bromodichloromethane	1	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	Bromodichloromethane	1	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	Bromodichloromethane	1	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	Bromodichloromethane	1	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	Bromodichloromethane	1	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	Bromodichloromethane	1	NV	N	S
2066	01/06/93	GW930106-7	U	Bromodichloromethane	1	NV	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2096	11/12/91	EMGW_SYSGEN_703	U	Bromodichloromethane	1	NV	N	R
2096	08/18/92	2096-08/18/92-B-N	U	Bromodichloromethane	10	NV	N	R
2096	11/04/92	2096-11/04/92-A-N	U	Bromodichloromethane	1.8	NV	N	R
2096	02/02/93	GW930202-8	U	Bromodichloromethane	10	NV	N	R
2098	10/15/90	EMGW_SYSGEN_712	U	Bromodichloromethane	1	NV	N	D
2098	11/05/91	EMGW_SYSGEN_715	U	Bromodichloromethane	1	NV	N	D
2098	11/23/92	GW921123-5	U	Bromodichloromethane	1.8	NV	N	D
2098	02/04/93	GW930204-7	U	Bromodichloromethane	10	NV	N	D
2104	06/14/90	EMGW_SYSGEN_718	U	Bromodichloromethane	1	NV	N	R
2104	09/12/90	EMGW_SYSGEN_719	U	Bromodichloromethane	1	NV	N	R
2104	11/27/90	EMGW_SYSGEN_720	U	Bromodichloromethane	1	NV	N	R
2104	03/07/91	EMGW_SYSGEN_721	U	Bromodichloromethane	1	NV	N	R
2104	11/07/91	EMGW_SYSGEN_722	U	Bromodichloromethane	1	NV	N	R
2104	08/10/92	2104-08/10/92-B-N	U	Bromodichloromethane	10	NV	N	R
2104	11/02/92	2104-11/02/92-A-N	U	Bromodichloromethane	1.8	NV	N	R
2104	02/02/93	GW930202-12	U	Bromodichloromethane	10	NV	N	R
2728	02/10/93	GW930210-5	U	Bromodichloromethane	10	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993	U	Bromodichloromethane	1	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	U	Bromodichloromethane	1	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	U	Bromodichloromethane	1	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	Bromodichloromethane	1	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	Bromodichloromethane	1	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	Bromodichloromethane	1	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	Bromodichloromethane	1	NV	N	S
3024	01/13/93	GW930113-8	U	Bromodichloromethane	1	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Bromodichloromethane	1	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	Bromodichloromethane	1	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	Bromodichloromethane	1	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	Bromodichloromethane	1	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	Bromodichloromethane	1	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	Bromodichloromethane	1	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	Bromodichloromethane	1	NV	N	S
3043	01/18/93	GW930118-14	U	Bromodichloromethane	1	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138	U	Bromodichloromethane	1	NV	N	R

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
3096	08/18/92	3096-08/18/92-B-N	U	Bromodichloromethane	10	NV	N	R
3096	11/04/92	3096-11/04/92-A-N	U	Bromodichloromethane	1.8	NV	N	R
3096	02/02/93	GW930202-9	U	Bromodichloromethane	10	NV	N	R
3098	10/15/90	EMGW_SYSGEN_1147	U	Bromodichloromethane	1	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149	U	Bromodichloromethane	1	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D	U	Bromodichloromethane	1	NV	D	D
3098	08/13/92	3098-08/13/92-A-D1-5	U	Bromodichloromethane	0.75	NV	D	D
3098	11/23/92	GW921123-6	U	Bromodichloromethane	1.8	NV	N	D
3098	02/04/93	GW930204-10	U	Bromodichloromethane	10	NV	N	D
3098	02/04/93	GW930204-12	U	Bromodichloromethane	10	NV	D	D
4011	10/05/90	4345	U	Bromodichloromethane	5	R	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Bromodichloromethane	1	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Bromodichloromethane	1	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	Bromodichloromethane	1	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	Bromodichloromethane	1	NV	N	S
4011	01/05/93	GW930105-7	U	Bromodichloromethane	1	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297	U	Bromodichloromethane	1	NV	N	R
4096	08/18/92	4096-08/18/92-B-N	U	Bromodichloromethane	10	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5	U	Bromodichloromethane	0.75	NV	D	R
4096	11/04/92	4096-11/04/92-A-N	U	Bromodichloromethane	1.8	NV	N	R
4096	11/04/92	4096-11/04/92-A-D1-7	U	Bromodichloromethane	0.75	NV	D	R
4096	02/02/93	GW930202-10	U	Bromodichloromethane	10	NV	N	R
4096	02/02/93	GW930202-11	U	Bromodichloromethane	10	NV	D	R
2043	05/17/90	EMGW_SYSGEN_523	U	Bromoform	1	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	U	Bromoform	1	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	U	Bromoform	1	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	Bromoform	1	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	Bromoform	1	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	Bromoform	1	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	Bromoform	1	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	Bromoform	1	NV	N	S
2043	01/18/93	GW930118-12	U	Bromoform	1	NV	N	S
2050	10/17/90	EMGW_SYSGEN_558	U	Bromoform	1	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559	U	Bromoform	1	NV	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2050	11/07/91	EMGW_SYSGEN_560	U	Bromoform	1	NV	N	S
2050	08/10/92	2050-08/10/92-B-N	U	Bromoform	10	NV	N	S
2050	11/02/92	2050-11/02/92-A-N	U	Bromoform	1.2	NV	N	S
2050	02/10/93	GW930210-8	U	Bromoform	10	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Bromoform	1	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	Bromoform	1	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	Bromoform	1	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	Bromoform	1	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	Bromoform	1	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	Bromoform	1	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	Bromoform	1	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	Bromoform	1	NV	N	S
2066	01/06/93	GW930106-7	U	Bromoform	1	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703	U	Bromoform	1	NV	N	R
2096	08/18/92	2096-08/18/92-B-N	U	Bromoform	10	NV	N	R
2096	11/04/92	2096-11/04/92-A-N	U	Bromoform	1.2	NV	N	R
2096	02/02/93	GW930202-8	U	Bromoform	10	NV	N	R
2098	10/15/90	EMGW_SYSGEN_712	U	Bromoform	1	NV	N	D
2098	11/05/91	EMGW_SYSGEN_715	U	Bromoform	1	NV	N	D
2098	11/23/92	GW921123-5	U	Bromoform	1.2	NV	N	D
2098	02/04/93	GW930204-7	U	Bromoform	10	NV	N	D
2104	06/14/90	EMGW_SYSGEN_718	U	Bromoform	1	NV	N	R
2104	09/12/90	EMGW_SYSGEN_719	U	Bromoform	1	NV	N	R
2104	11/27/90	EMGW_SYSGEN_720	U	Bromoform	1	NV	N	R
2104	03/07/91	EMGW_SYSGEN_721	U	Bromoform	1	NV	N	R
2104	11/07/91	EMGW_SYSGEN_722	U	Bromoform	1	NV	N	R
2104	08/10/92	2104-08/10/92-B-N	U	Bromoform	10	NV	N	R
2104	11/02/92	2104-11/02/92-A-N	U	Bromoform	1.2	NV	N	R
2104	02/02/93	GW930202-12	U	Bromoform	10	NV	N	R
2728	02/10/93	GW930210-5	U	Bromoform	10	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993	U	Bromoform	1	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	U	Bromoform	1	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	U	Bromoform	1	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	Bromoform	1	NV	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
3024	02/27/91	EMGW_SYSGEN_996	U	Bromoform	1	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	Bromoform	1	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	Bromoform	1	NV	N	S
3024	01/13/93	GW930113-8	U	Bromoform	1	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Bromoform	1	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	Bromoform	1	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	Bromoform	1	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	Bromoform	1	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	Bromoform	1	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	Bromoform	1	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	Bromoform	1	NV	N	S
3043	01/18/93	GW930118-14	U	Bromoform	1	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138	U	Bromoform	1	NV	N	R
3096	08/18/92	3096-08/18/92-B-N	U	Bromoform	10	NV	N	R
3096	11/04/92	3096-11/04/92-A-N	U	Bromoform	1.2	NV	N	R
3096	02/02/93	GW930202-9	U	Bromoform	10	NV	N	R
3098	10/15/90	EMGW_SYSGEN_1147	U	Bromoform	1	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149	U	Bromoform	1	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D	U	Bromoform	1	NV	D	D
3098	08/13/92	3098-08/13/92-A-D1-5	U	Bromoform	2.5	NV	D	D
3098	11/23/92	GW921123-6	U	Bromoform	1.2	NV	N	D
3098	02/04/93	GW930204-10	U	Bromoform	10	NV	N	D
3098	02/04/93	GW930204-12	U	Bromoform	10	NV	D	D
4011	10/05/90	4345	U	Bromoform	5	R	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Bromoform	1	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Bromoform	1	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	Bromoform	1	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	Bromoform	1	NV	N	S
4011	01/05/93	GW930105-7	U	Bromoform	1	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297	U	Bromoform	1	NV	N	R
4096	08/18/92	4096-08/18/92-B-N	U	Bromoform	10	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5	U	Bromoform	2.5	NV	D	R
4096	11/04/92	4096-11/04/92-A-N	U	Bromoform	1.2	NV	N	R
4096	11/04/92	4096-11/04/92-A-D1-7	U	Bromoform	2.5	NV	D	R

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
4096	02/02/93	GW930202-10	U	Bromoform	10	NV	N	R
4096	02/02/93	GW930202-11	U	Bromoform	10	NV	D	R
2043	05/17/90	EMGW_SYSGEN_523	U	Bromomethane	1	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	U	Bromomethane	1	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	U	Bromomethane	1	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	Bromomethane	1	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	Bromomethane	1	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	Bromomethane	1	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	Bromomethane	1	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	Bromomethane	5	NV	N	S
2043	01/18/93	GW930118-12	U	Bromomethane	5	NV	N	S
2050	10/17/90	EMGW_SYSGEN_558	U	Bromomethane	1	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559	U	Bromomethane	1	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560	U	Bromomethane	1	NV	N	S
2050	08/10/92	2050-08/10/92-B-N	U	Bromomethane	10	NV	N	S
2050	11/02/92	2050-11/02/92-A-N	U	Bromomethane	1.5	NV	N	S
2050	02/10/93	GW930210-8	U	Bromomethane	10	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Bromomethane	1	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	Bromomethane	1	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	Bromomethane	1	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	Bromomethane	1	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	Bromomethane	1	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	Bromomethane	1	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	Bromomethane	1	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	Bromomethane	1	NV	N	S
2066	01/06/93	GW930106-7	U	Bromomethane	5	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703	U	Bromomethane	1	NV	N	R
2096	08/18/92	2096-08/18/92-B-N	U	Bromomethane	10	NV	N	R
2096	11/04/92	2096-11/04/92-A-N	U	Bromomethane	1.5	NV	N	R
2096	02/02/93	GW930202-8	U	Bromomethane	10	NV	N	R
2098	10/15/90	EMGW_SYSGEN_712	U	Bromomethane	1	NV	N	D
2098	11/05/91	EMGW_SYSGEN_715	U	Bromomethane	1	NV	N	D
2098	11/23/92	GW921123-5	U	Bromomethane	1.5	NV	N	D
2098	02/04/93	GW930204-7	U	Bromomethane	10	NV	N	D

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2104	06/14/90	EMGW_SYSGEN_718	U	Bromomethane	10	NV	N	R
2104	09/12/90	EMGW_SYSGEN_719	U	Bromomethane	1	NV	N	R
2104	11/27/90	EMGW_SYSGEN_720	U	Bromomethane	1	NV	N	R
2104	03/07/91	EMGW_SYSGEN_721	U	Bromomethane	1	NV	N	R
2104	11/07/91	EMGW_SYSGEN_722	U	Bromomethane	1	NV	N	R
2104	08/10/92	2104-08/10/92-B-N	U	Bromomethane	10	NV	N	R
2104	11/02/92	2104-11/02/92-A-N	U	Bromomethane	1.5	NV	N	R
2104	02/02/93	GW930202-12	U	Bromomethane	10	NV	N	R
2728	02/10/93	GW930210-5	U	Bromomethane	10	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993	U	Bromomethane	1	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	U	Bromomethane	1	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	U	Bromomethane	1	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	Bromomethane	1	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	Bromomethane	1	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	Bromomethane	1	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	Bromomethane	1	NV	N	S
3024	01/13/93	GW930113-8	U	Bromomethane	5	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Bromomethane	1	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	Bromomethane	1	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	Bromomethane	1	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	Bromomethane	1	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	Bromomethane	1	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	Bromomethane	1	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	Bromomethane	5	NV	N	S
3043	01/18/93	GW930118-14	U	Bromomethane	5	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138	U	Bromomethane	1	NV	N	R
3096	08/18/92	3096-08/18/92-B-N	U	Bromomethane	10	NV	N	R
3096	11/04/92	3096-11/04/92-A-N	U	Bromomethane	1.5	NV	N	R
3096	02/02/93	GW930202-9	U	Bromomethane	10	NV	N	R
3098	10/15/90	EMGW_SYSGEN_1147	U	Bromomethane	1	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149	U	Bromomethane	1	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D	U	Bromomethane	1	NV	D	D
3098	08/13/92	3098-08/13/92-A-D1-5	U	Bromomethane	1	NV	D	D
3098	11/23/92	GW921123-6	U	Bromomethane	1.5	NV	N	D

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
3098	02/04/93	GW930204-10	U	Bromomethane	10	NV	N	D
3098	02/04/93	GW930204-12	U	Bromomethane	10	NV	D	D
4011	10/05/90	4345	U	Bromomethane	10	R	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Bromomethane	1	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Bromomethane	1	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	Bromomethane	1	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	Bromomethane	1	NV	N	S
4011	01/05/93	GW930105-7	U	Bromomethane	5	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297	U	Bromomethane	1	NV	N	R
4096	08/18/92	4096-08/18/92-B-N	U	Bromomethane	10	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5	U	Bromomethane	1	NV	D	R
4096	11/04/92	4096-11/04/92-A-N	U	Bromomethane	1.5	NV	N	R
4096	11/04/92	4096-11/04/92-A-D1-7	U	Bromomethane	1	NV	D	R
4096	02/02/93	GW930202-10	U	Bromomethane	10	NV	N	R
4096	02/02/93	GW930202-11	U	Bromomethane	10	NV	D	R
2043	05/17/90	EMGW_SYSGEN_523	U	Carbon disulfide	1	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	U	Carbon disulfide	1	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	U	Carbon disulfide	1	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	Carbon disulfide	1	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	Carbon disulfide	1	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528		Carbon disulfide	3.9	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	Carbon disulfide	1	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	Carbon disulfide	1	NV	N	S
2043	01/18/93	GW930118-12	U	Carbon disulfide	1	NV	N	S
2050	10/17/90	EMGW_SYSGEN_558	U	Carbon disulfide	1	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559	U	Carbon disulfide	1	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560	U	Carbon disulfide	1	NV	N	S
2050	08/10/92	2050-08/10/92-B-N	U	Carbon disulfide	10	NV	N	S
2050	11/02/92	2050-11/02/92-A-N	U	Carbon disulfide	1.6	NV	N	S
2050	02/10/93	GW930210-8	U	Carbon disulfide	10	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Carbon disulfide	1	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	Carbon disulfide	1	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	Carbon disulfide	1	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	Carbon disulfide	1	NV	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well	Sample		Lab		Validated		QA	
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type	Area
2066	02/26/91	EMGW_SYSGEN_633D	U	Carbon disulfide	1	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	Carbon disulfide	1	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	Carbon disulfide	1	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	Carbon disulfide	1	NV	N	S
2066	01/06/93	GW930106-7	U	Carbon disulfide	1	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703	U	Carbon disulfide	1	NV	N	R
2096	08/18/92	2096-08/18/92-B-N	U	Carbon disulfide	10	NV	N	R
2096	11/04/92	2096-11/04/92-A-N	U	Carbon disulfide	1.6	NV	N	R
2096	02/02/93	GW930202-8	U	Carbon disulfide	10	NV	N	R
2098	10/15/90	EMGW_SYSGEN_712	U	Carbon disulfide	1	NV	N	D
2098	11/05/91	EMGW_SYSGEN_715	U	Carbon disulfide	1	NV	N	D
2098	11/23/92	GW921123-5	U	Carbon disulfide	1.6	NV	N	D
2098	02/04/93	GW930204-7	U	Carbon disulfide	10	NV	N	D
2104	06/14/90	EMGW_SYSGEN_718	U	Carbon disulfide	1	NV	N	R
2104	09/12/90	EMGW_SYSGEN_719	U	Carbon disulfide	1	NV	N	R
2104	11/27/90	EMGW_SYSGEN_720	U	Carbon disulfide	1	NV	N	R
2104	03/07/91	EMGW_SYSGEN_721	U	Carbon disulfide	1	NV	N	R
2104	11/07/91	EMGW_SYSGEN_722	U	Carbon disulfide	1	NV	N	R
2104	08/10/92	2104-08/10/92-B-N	U	Carbon disulfide	10	NV	N	R
2104	11/02/92	2104-11/02/92-A-N	U	Carbon disulfide	1.6	NV	N	R
2104	02/02/93	GW930202-12	U	Carbon disulfide	10	NV	N	R
2728	02/10/93	GW930210-5	U	Carbon disulfide	10	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993	U	Carbon disulfide	1	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	U	Carbon disulfide	1	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	U	Carbon disulfide	1	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	Carbon disulfide	1	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	Carbon disulfide	1	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	Carbon disulfide	1	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	Carbon disulfide	1	NV	N	S
3024	01/13/93	GW930113-8	U	Carbon disulfide	1	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Carbon disulfide	1	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020		Carbon disulfide	2.3	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	Carbon disulfide	1	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	Carbon disulfide	1	NV	N	S

Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
3043	07/16/91	EMGW_SYSGEN_1024	U	Carbon disulfide	1	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	Carbon disulfide	1	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	Carbon disulfide	1	NV	N	S
3043	01/18/93	GW930118-14	U	Carbon disulfide	1	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138	U	Carbon disulfide	1	NV	N	R
3096	08/18/92	3096-08/18/92-B-N	U	Carbon disulfide	10	NV	N	R
3096	11/04/92	3096-11/04/92-A-N	U	Carbon disulfide	1.6	NV	N	R
3096	02/02/93	GW930202-9	U	Carbon disulfide	10	NV	N	R
3098	10/15/90	EMGW_SYSGEN_1147	U	Carbon disulfide	1	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149	U	Carbon disulfide	1	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D	U	Carbon disulfide	1	NV	D	D
3098	11/23/92	GW921123-6	U	Carbon disulfide	1.6	NV	N	D
3098	02/04/93	GW930204-10	U	Carbon disulfide	10	NV	N	D
3098	02/04/93	GW930204-12	U	Carbon disulfide	10	NV	D	D
4011	10/05/90	4345	J	Carbon disulfide	4	R	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Carbon disulfide	1	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Carbon disulfide	1	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	Carbon disulfide	1	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	Carbon disulfide	1	NV	N	S
4011	01/05/93	GW930105-7	U	Carbon disulfide	1	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297	U	Carbon disulfide	1	NV	N	R
4096	08/18/92	4096-08/18/92-B-N	U	Carbon disulfide	10	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5	U	Carbon disulfide	2.6	NV	D	R
4096	11/04/92	4096-11/04/92-A-N	U	Carbon disulfide	1.6	NV	N	R
4096	11/04/92	4096-11/04/92-A-D1-7	U	Carbon disulfide	2.6	NV	D	R
4096	02/02/93	GW930202-10	U	Carbon disulfide	10	NV	N	R
4096	02/02/93	GW930202-11	U	Carbon disulfide	10	NV	D	R
2043	05/17/90	EMGW_SYSGEN_523	U	Carbon Tetrachloride	1	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	U	Carbon Tetrachloride	1	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	U	Carbon Tetrachloride	1	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	Carbon Tetrachloride	1	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	Carbon Tetrachloride	1	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	Carbon Tetrachloride	1	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	Carbon Tetrachloride	1	NV	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2043	07/06/92	2043-07/06/92-A-N1-8	U	Carbon Tetrachloride	1	NV	N	S
2043	01/18/93	GW930118-12	U	Carbon Tetrachloride	1	NV	N	S
2050	10/17/90	EMGW_SYSGEN_558	U	Carbon Tetrachloride	1	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559	U	Carbon Tetrachloride	1	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560	U	Carbon Tetrachloride	1	NV	N	S
2050	08/10/92	2050-08/10/92-B-N	U	Carbon Tetrachloride	10	NV	N	S
2050	11/02/92	2050-11/02/92-A-N	U	Carbon Tetrachloride	1.5	NV	N	S
2050	02/10/93	GW930210-8	U	Carbon Tetrachloride	10	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Carbon Tetrachloride	1	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	Carbon Tetrachloride	1	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	Carbon Tetrachloride	1	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	Carbon Tetrachloride	1	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	Carbon Tetrachloride	1	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	Carbon Tetrachloride	1	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	Carbon Tetrachloride	1	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	Carbon Tetrachloride	1	NV	N	S
2066	01/06/93	GW930106-7	U	Carbon Tetrachloride	1	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703	U	Carbon Tetrachloride	1	NV	N	R
2096	08/18/92	2096-08/18/92-B-N	U	Carbon Tetrachloride	10	NV	N	R
2096	11/04/92	2096-11/04/92-A-N	U	Carbon Tetrachloride	1.5	NV	N	R
2096	02/02/93	GW930202-8	U	Carbon Tetrachloride	10	NV	N	R
2098	10/15/90	EMGW_SYSGEN_712	U	Carbon Tetrachloride	1	NV	N	D
2098	11/05/91	EMGW_SYSGEN_715	U	Carbon Tetrachloride	1	NV	N	D
2098	11/23/92	GW921123-5	U	Carbon Tetrachloride	1.5	NV	N	D
2098	02/04/93	GW930204-7	U	Carbon Tetrachloride	10	NV	N	D
2104	06/14/90	EMGW_SYSGEN_718	U	Carbon Tetrachloride	1	NV	N	R
2104	09/12/90	EMGW_SYSGEN_719	U	Carbon Tetrachloride	1	NV	N	R
2104	11/27/90	EMGW_SYSGEN_720	U	Carbon Tetrachloride	1	NV	N	R
2104	03/07/91	EMGW_SYSGEN_721	U	Carbon Tetrachloride	1	NV	N	R
2104	11/07/91	EMGW_SYSGEN_722	U	Carbon Tetrachloride	1	NV	N	R
2104	08/10/92	2104-08/10/92-B-N	U	Carbon Tetrachloride	10	NV	N	R
2104	11/02/92	2104-11/02/92-A-N	U	Carbon Tetrachloride	1.5	NV	N	R
2104	02/02/93	GW930202-12	U	Carbon Tetrachloride	10	NV	N	R
2728	02/10/93	GW930210-5	U	Carbon Tetrachloride	10	NV	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
3024	06/11/90	EMGW_SYSGEN_993	U	Carbon Tetrachloride	1	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	U	Carbon Tetrachloride	1	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	U	Carbon Tetrachloride	1	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	Carbon Tetrachloride	1	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	Carbon Tetrachloride	1	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	Carbon Tetrachloride	1	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	Carbon Tetrachloride	1	NV	N	S
3024	01/13/93	GW930113-8	U	Carbon Tetrachloride	1	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Carbon Tetrachloride	1	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	Carbon Tetrachloride	1	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	Carbon Tetrachloride	1	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	Carbon Tetrachloride	1	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	Carbon Tetrachloride	1	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	Carbon Tetrachloride	1	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	Carbon Tetrachloride	1	NV	N	S
3043	01/18/93	GW930118-14	U	Carbon Tetrachloride	1	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138	U	Carbon Tetrachloride	1	NV	N	R
3096	08/18/92	3096-08/18/92-B-N	U	Carbon Tetrachloride	10	NV	N	R
3096	11/04/92	3096-11/04/92-A-N	U	Carbon Tetrachloride	1.5	NV	N	R
3096	02/02/93	GW930202-9	U	Carbon Tetrachloride	10	NV	N	R
3098	10/15/90	EMGW_SYSGEN_1147	U	Carbon Tetrachloride	1	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149	U	Carbon Tetrachloride	1	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D	U	Carbon Tetrachloride	1	NV	D	D
3098	08/13/92	3098-08/13/92-A-D1-5	U	Carbon Tetrachloride	0.57	NV	D	D
3098	11/23/92	GW921123-6	U	Carbon Tetrachloride	1.5	NV	N	D
3098	02/04/93	GW930204-10	U	Carbon Tetrachloride	10	NV	N	D
3098	02/04/93	GW930204-12	U	Carbon Tetrachloride	10	NV	D	D
4011	10/05/90	4345	U	Carbon Tetrachloride	5	R	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Carbon Tetrachloride	1	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Carbon Tetrachloride	1	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	Carbon Tetrachloride	1	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	Carbon Tetrachloride	1	NV	N	S
4011	01/05/93	GW930105-7	U	Carbon Tetrachloride	1	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297	U	Carbon Tetrachloride	1	NV	N	R

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
4096	08/18/92	4096-08/18/92-B-N	U	Carbon Tetrachloride	10	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5	U	Carbon Tetrachloride	0.57	NV	D	R
4096	11/04/92	4096-11/04/92-A-N	U	Carbon Tetrachloride	1.5	NV	N	R
4096	11/04/92	4096-11/04/92-A-D1-7	U	Carbon Tetrachloride	0.57	NV	D	R
4096	02/02/93	GW930202-10	U	Carbon Tetrachloride	10	NV	N	R
4096	02/02/93	GW930202-11	U	Carbon Tetrachloride	10	NV	D	R
2043	05/17/90	EMGW_SYSGEN_523	U	Chlorobenzene	1	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	U	Chlorobenzene	1	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	U	Chlorobenzene	1	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	Chlorobenzene	1	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	Chlorobenzene	1	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	Chlorobenzene	1	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	Chlorobenzene	1	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	Chlorobenzene	1	NV	N	S
2043	01/18/93	GW930118-12	U	Chlorobenzene	1	NV	N	S
2050	10/17/90	EMGW_SYSGEN_558	U	Chlorobenzene	1	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559	U	Chlorobenzene	1	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560	U	Chlorobenzene	1	NV	N	S
2050	08/10/92	2050-08/10/92-B-N	U	Chlorobenzene	10	NV	N	S
2050	11/02/92	2050-11/02/92-A-N	U	Chlorobenzene	1.3	NV	N	S
2050	02/10/93	GW930210-8	U	Chlorobenzene	10	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Chlorobenzene	1	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	Chlorobenzene	1	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	Chlorobenzene	1	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	Chlorobenzene	1	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	Chlorobenzene	1	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	Chlorobenzene	1	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	Chlorobenzene	1	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	Chlorobenzene	1	NV	N	S
2066	01/06/93	GW930106-7	U	Chlorobenzene	1	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703	U	Chlorobenzene	1	NV	N	R
2096	08/18/92	2096-08/18/92-B-N	U	Chlorobenzene	10	NV	N	R
2096	11/04/92	2096-11/04/92-A-N	U	Chlorobenzene	1.3	NV	N	R
2096	02/02/93	GW930202-8	U	Chlorobenzene	10	NV	N	R

Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2098	10/15/90	EMGW_SYSGEN_712	U	Chlorobenzene	1	NV	N	D
2098	11/05/91	EMGW_SYSGEN_715	U	Chlorobenzene	1	NV	N	D
2098	11/23/92	GW921123-5	U	Chlorobenzene	1.3	NV	N	D
2098	02/04/93	GW930204-7	U	Chlorobenzene	10	NV	N	D
2104	06/14/90	EMGW_SYSGEN_718	U	Chlorobenzene	1	NV	N	R
2104	09/12/90	EMGW_SYSGEN_719	U	Chlorobenzene	1	NV	N	R
2104	11/27/90	EMGW_SYSGEN_720	U	Chlorobenzene	1	NV	N	R
2104	03/07/91	EMGW_SYSGEN_721	U	Chlorobenzene	1	NV	N	R
2104	11/07/91	EMGW_SYSGEN_722	U	Chlorobenzene	1	NV	N	R
2104	08/10/92	2104-08/10/92-B-N	U	Chlorobenzene	10	NV	N	R
2104	11/02/92	2104-11/02/92-A-N	U	Chlorobenzene	1.3	NV	N	R
2104	02/02/93	GW930202-12	U	Chlorobenzene	10	NV	N	R
2728	02/10/93	GW930210-5	U	Chlorobenzene	10	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993	U	Chlorobenzene	1	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	U	Chlorobenzene	1	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	U	Chlorobenzene	1	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	Chlorobenzene	1	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	Chlorobenzene	1	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	Chlorobenzene	1	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	Chlorobenzene	1	NV	N	S
3024	01/13/93	GW930113-8	U	Chlorobenzene	1	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Chlorobenzene	1	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	Chlorobenzene	1	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	Chlorobenzene	1	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	Chlorobenzene	1	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	Chlorobenzene	1	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	Chlorobenzene	1	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	Chlorobenzene	1	NV	N	S
3043	01/18/93	GW930118-14	U	Chlorobenzene	1	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138	U	Chlorobenzene	1	NV	N	R
3096	08/18/92	3096-08/18/92-B-N	U	Chlorobenzene	10	NV	N	R
3096	11/04/92	3096-11/04/92-A-N	U	Chlorobenzene	1.3	NV	N	R
3096	02/02/93	GW930202-9	U	Chlorobenzene	10	NV	N	R
3098	10/15/90	EMGW_SYSGEN_1147	U	Chlorobenzene	1	NV	N	D

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
3098	11/05/91	EMGW_SYSGEN_1149	U	Chlorobenzene	1	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D	U	Chlorobenzene	1	NV	D	D
3098	08/13/92	3098-08/13/92-A-D1-5	U	Chlorobenzene	0.51	NV	D	D
3098	11/23/92	GW921123-6	U	Chlorobenzene	1.3	NV	N	D
3098	02/04/93	GW930204-10	U	Chlorobenzene	10	NV	N	D
3098	02/04/93	GW930204-12	U	Chlorobenzene	10	NV	D	D
4011	10/05/90	4345	U	Chlorobenzene	5	R	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Chlorobenzene	1	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Chlorobenzene	1	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	Chlorobenzene	1	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	Chlorobenzene	1	NV	N	S
4011	01/05/93	GW930105-7	U	Chlorobenzene	1	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297	U	Chlorobenzene	1	NV	N	R
4096	08/18/92	4096-08/18/92-B-N	U	Chlorobenzene	10	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5	U	Chlorobenzene	0.51	NV	D	R
4096	11/04/92	4096-11/04/92-A-N	U	Chlorobenzene	1.3	NV	N	R
4096	11/04/92	4096-11/04/92-A-D1-7	U	Chlorobenzene	0.51	NV	D	R
4096	02/02/93	GW930202-10	U	Chlorobenzene	10	NV	N	R
4096	02/02/93	GW930202-11	U	Chlorobenzene	10	NV	D	R
2043	11/06/90	EMGW_SYSGEN_525	U	Chloroethane	1	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	Chloroethane	1	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	Chloroethane	1	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	Chloroethane	1	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	Chloroethane	1	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	Chloroethane	10	NV	N	S
2043	01/18/93	GW930118-12	U	Chloroethane	10	NV	N	S
2050	10/17/90	EMGW_SYSGEN_558	U	Chloroethane	1	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559	U	Chloroethane	1	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560	U	Chloroethane	1	NV	N	S
2050	08/10/92	2050-08/10/92-B-N	U	Chloroethane	10	NV	N	S
2050	11/02/92	2050-11/02/92-A-N	U	Chloroethane	1.4	NV	N	S
2050	02/10/93	GW930210-8	U	Chloroethane	10	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	Chloroethane	1	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	Chloroethane	1	NV	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2066	02/26/91	EMGW_SYSGEN_633D	U	Chloroethane	1	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	Chloroethane	1	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	Chloroethane	1	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	Chloroethane	1	NV	N	S
2066	01/06/93	GW930106-7	U	Chloroethane	10	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703	U	Chloroethane	1	NV	N	R
2096	08/18/92	2096-08/18/92-B-N	U	Chloroethane	10	NV	N	R
2096	11/04/92	2096-11/04/92-A-N	U	Chloroethane	1.4	NV	N	R
2096	02/02/93	GW930202-8	U	Chloroethane	10	NV	N	R
2098	10/15/90	EMGW_SYSGEN_712	U	Chloroethane	1	NV	N	D
2098	11/05/91	EMGW_SYSGEN_715	U	Chloroethane	1	NV	N	D
2098	11/23/92	GW921123-5	U	Chloroethane	1.4	NV	N	D
2098	02/04/93	GW930204-7	U	Chloroethane	10	NV	N	D
2104	09/12/90	EMGW_SYSGEN_719	U	Chloroethane	1	NV	N	R
2104	11/27/90	EMGW_SYSGEN_720	U	Chloroethane	1	NV	N	R
2104	03/07/91	EMGW_SYSGEN_721	U	Chloroethane	1	NV	N	R
2104	11/07/91	EMGW_SYSGEN_722	U	Chloroethane	1	NV	N	R
2104	08/10/92	2104-08/10/92-B-N	U	Chloroethane	10	NV	N	R
2104	11/02/92	2104-11/02/92-A-N	U	Chloroethane	1.4	NV	N	R
2104	02/02/93	GW930202-12	U	Chloroethane	10	NV	N	R
2728	02/10/93	GW930210-5	U	Chloroethane	10	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	Chloroethane	1	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	Chloroethane	1	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	Chloroethane	1	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	Chloroethane	1	NV	N	S
3024	01/13/93	GW930113-8	U	Chloroethane	10	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	Chloroethane	1	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	Chloroethane	1	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	Chloroethane	1	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	Chloroethane	1	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	Chloroethane	10	NV	N	S
3043	01/18/93	GW930118-14	U	Chloroethane	10	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138	U	Chloroethane	1	NV	N	R
3096	08/18/92	3096-08/18/92-B-N	U	Chloroethane	10	NV	N	R

Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
3096	11/04/92	3096-11/04/92-A-N	U	Chloroethane	1.4	NV	N	R
3096	02/02/93	GW930202-9	U	Chloroethane	10	NV	N	R
3098	10/15/90	EMGW_SYSGEN_1147	U	Chloroethane	1	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149	U	Chloroethane	1	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D	U	Chloroethane	1	NV	D	D
3098	08/13/92	3098-08/13/92-A-D1-5	U	Chloroethane	1.2	NV	D	D
3098	11/23/92	GW921123-6	U	Chloroethane	1.4	NV	N	D
3098	02/04/93	GW930204-10	U	Chloroethane	10	NV	N	D
3098	02/04/93	GW930204-12	U	Chloroethane	10	NV	D	D
4011	10/05/90	4345	U	Chloroethane	10	R	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Chloroethane	1	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Chloroethane	1	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	Chloroethane	1	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	Chloroethane	1	NV	N	S
4011	01/05/93	GW930105-7	U	Chloroethane	10	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297	U	Chloroethane	1	NV	N	R
4096	08/18/92	4096-08/18/92-B-N	U	Chloroethane	10	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5	U	Chloroethane	1.2	NV	D	R
4096	11/04/92	4096-11/04/92-A-N	U	Chloroethane	1.4	NV	N	R
4096	11/04/92	4096-11/04/92-A-D1-7	U	Chloroethane	1.2	NV	D	R
4096	02/02/93	GW930202-10	U	Chloroethane	10	NV	N	R
4096	02/02/93	GW930202-11	U	Chloroethane	10	NV	D	R
2043	05/17/90	EMGW_SYSGEN_523	U	Chloroform	1	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	U	Chloroform	1	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	U	Chloroform	1	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	Chloroform	1	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	Chloroform	1	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	Chloroform	1	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	Chloroform	1	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	Chloroform	1	NV	N	S
2043	01/18/93	GW930118-12	U	Chloroform	1	NV	N	S
2050	10/17/90	EMGW_SYSGEN_558	U	Chloroform	1	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559	U	Chloroform	1	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560	U	Chloroform	1	NV	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2050	08/10/92	2050-08/10/92-B-N	U	Chloroform	10	NV	N	S
2050	11/02/92	2050-11/02/92-A-N	U	Chloroform	1.8	NV	N	S
2050	02/10/93	GW930210-8	U	Chloroform	10	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Chloroform	1	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	Chloroform	1	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	Chloroform	1	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	Chloroform	1	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	Chloroform	1	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	Chloroform	1	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	Chloroform	1	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	Chloroform	1	NV	N	S
2066	01/06/93	GW930106-7	U	Chloroform	1	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703	U	Chloroform	1	NV	N	R
2096	08/18/92	2096-08/18/92-B-N	U	Chloroform	10	NV	N	R
2096	11/04/92	2096-11/04/92-A-N	U	Chloroform	1.8	NV	N	R
2096	02/02/93	GW930202-8	U	Chloroform	10	NV	N	R
2098	10/15/90	EMGW_SYSGEN_712	U	Chloroform	1	NV	N	D
2098	11/05/91	EMGW_SYSGEN_715	U	Chloroform	1	NV	N	D
2098	11/23/92	GW921123-5	U	Chloroform	1.8	NV	N	D
2098	02/04/93	GW930204-7	U	Chloroform	10	NV	N	D
2104	06/14/90	EMGW_SYSGEN_718	U	Chloroform	1	NV	N	R
2104	09/12/90	EMGW_SYSGEN_719	U	Chloroform	1	NV	N	R
2104	11/27/90	EMGW_SYSGEN_720	U	Chloroform	1	NV	N	R
2104	03/07/91	EMGW_SYSGEN_721	U	Chloroform	1	NV	N	R
2104	11/07/91	EMGW_SYSGEN_722	U	Chloroform	1	NV	N	R
2104	08/10/92	2104-08/10/92-B-N	U	Chloroform	10	NV	N	R
2104	11/02/92	2104-11/02/92-A-N	U	Chloroform	1.8	NV	N	R
2104	02/02/93	GW930202-12	U	Chloroform	10	NV	N	R
2728	02/10/93	GW930210-5	U	Chloroform	10	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993	U	Chloroform	1	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	U	Chloroform	1	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	U	Chloroform	1	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	Chloroform	1	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	Chloroform	1	NV	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
3024	07/15/91	EMGW_SYSGEN_998	U	Chloroform	1	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	Chloroform	1	NV	N	S
3024	01/13/93	GW930113-8	U	Chloroform	1	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Chloroform	1	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	Chloroform	1	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	Chloroform	1	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	Chloroform	1	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	Chloroform	1	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	Chloroform	1	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	Chloroform	1	NV	N	S
3043	01/18/93	GW930118-14	U	Chloroform	1	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138	U	Chloroform	1	NV	N	R
3096	08/18/92	3096-08/18/92-B-N	U	Chloroform	10	NV	N	R
3096	11/04/92	3096-11/04/92-A-N	U	Chloroform	1.8	NV	N	R
3096	02/02/93	GW930202-9	U	Chloroform	10	NV	N	R
3098	10/15/90	EMGW_SYSGEN_1147	U	Chloroform	1	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149	U	Chloroform	1	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D	U	Chloroform	1	NV	D	D
3098	08/13/92	3098-08/13/92-A-D1-5	U	Chloroform	0.81	NV	D	D
3098	11/23/92	GW921123-6	U	Chloroform	1.8	NV	N	D
3098	02/04/93	GW930204-10	U	Chloroform	10	NV	N	D
3098	02/04/93	GW930204-12	U	Chloroform	10	NV	D	D
4011	10/05/90	4345	U	Chloroform	5	R	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Chloroform	1	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Chloroform	1	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	Chloroform	1	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	Chloroform	1	NV	N	S
4011	01/05/93	GW930105-7	U	Chloroform	1	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297	U	Chloroform	1	NV	N	R
4096	08/18/92	4096-08/18/92-B-N	U	Chloroform	10	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5	U	Chloroform	0.81	NV	D	R
4096	11/04/92	4096-11/04/92-A-N	U	Chloroform	1.8	NV	N	R
4096	11/04/92	4096-11/04/92-A-D1-7	U	Chloroform	0.81	NV	D	R
4096	02/02/93	GW930202-10	U	Chloroform	10	NV	N	R

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
4096	02/02/93	GW930202-11	U	Chloroform	10	NV	D	R
2043	05/17/90	EMGW_SYSGEN_523	U	Chloromethane	1	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	U	Chloromethane	1	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	U	Chloromethane	1	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	Chloromethane	1	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	Chloromethane	1	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	Chloromethane	1	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	Chloromethane	1	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	Chloromethane	10	NV	N	S
2043	01/18/93	GW930118-12	U	Chloromethane	10	NV	N	S
2050	10/17/90	EMGW_SYSGEN_558	U	Chloromethane	1	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559	U	Chloromethane	1	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560	U	Chloromethane	1	NV	N	S
2050	08/10/92	2050-08/10/92-B-N	U	Chloromethane	10	NV	N	S
2050	11/02/92	2050-11/02/92-A-N	U	Chloromethane	1.6	NV	N	S
2050	02/10/93	GW930210-8	U	Chloromethane	10	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Chloromethane	1	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	Chloromethane	1	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	Chloromethane	1	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	Chloromethane	1	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	Chloromethane	1	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	Chloromethane	1	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	Chloromethane	1	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	Chloromethane	1	NV	N	S
2066	01/06/93	GW930106-7	U	Chloromethane	10	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703	U	Chloromethane	1	NV	N	R
2096	08/18/92	2096-08/18/92-B-N	U	Chloromethane	10	NV	N	R
2096	11/04/92	2096-11/04/92-A-N	U	Chloromethane	1.6	NV	N	R
2096	02/02/93	GW930202-8	U	Chloromethane	10	NV	N	R
2098	10/15/90	EMGW_SYSGEN_712	U	Chloromethane	1	NV	N	D
2098	11/05/91	EMGW_SYSGEN_715	U	Chloromethane	1	NV	N	D
2098	11/23/92	GW921123-5	U	Chloromethane	1.6	NV	N	D
2098	02/04/93	GW930204-7	U	Chloromethane	10	NV	N	D
2104	06/14/90	EMGW_SYSGEN_718	U	Chloromethane	10	NV	N	R

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2104	09/12/90	EMGW_SYSGEN_719	U	Chloromethane	1	NV	N	R
2104	11/27/90	EMGW_SYSGEN_720	U	Chloromethane	1	NV	N	R
2104	03/07/91	EMGW_SYSGEN_721	U	Chloromethane	1	NV	N	R
2104	11/07/91	EMGW_SYSGEN_722	U	Chloromethane	1	NV	N	R
2104	08/10/92	2104-08/10/92-B-N	U	Chloromethane	10	NV	N	R
2104	11/02/92	2104-11/02/92-A-N	U	Chloromethane	1.6	NV	N	R
2104	02/02/93	GW930202-12	U	Chloromethane	10	NV	N	R
2728	02/10/93	GW930210-5	U	Chloromethane	10	NV	N	S
2728	05/24/93	GW930524-3	U	Chloromethane	10	R	N	S
3024	06/11/90	EMGW_SYSGEN_993	U	Chloromethane	1	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	U	Chloromethane	1	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	U	Chloromethane	1	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	Chloromethane	1	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	Chloromethane	1	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	Chloromethane	1	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	Chloromethane	1	NV	N	S
3024	01/13/93	GW930113-8	U	Chloromethane	10	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Chloromethane	1	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	Chloromethane	1	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	Chloromethane	1	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	Chloromethane	1	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	Chloromethane	1	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	Chloromethane	1	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	Chloromethane	10	NV	N	S
3043	01/18/93	GW930118-14	U	Chloromethane	10	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138	U	Chloromethane	1	NV	N	R
3096	08/18/92	3096-08/18/92-B-N	U	Chloromethane	10	NV	N	R
3096	11/04/92	3096-11/04/92-A-N	U	Chloromethane	1.6	NV	N	R
3096	02/02/93	GW930202-9	U	Chloromethane	10	NV	N	R
3098	10/15/90	EMGW_SYSGEN_1147	U	Chloromethane	1	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149	U	Chloromethane	1	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D	U	Chloromethane	1	NV	D	D
3098	08/13/92	3098-08/13/92-A-D1-5	U	Chloromethane	4.7	NV	D	D
3098	11/23/92	GW921123-6	U	Chloromethane	1.6	NV	N	D

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
3098	02/04/93	GW930204-10	U	Chloromethane	10	NV	N	D
3098	02/04/93	GW930204-12	U	Chloromethane	10	NV	D	D
4011	10/05/90	4345	U	Chloromethane	10	R	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Chloromethane	1	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Chloromethane	1	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	Chloromethane	1	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	Chloromethane	1	NV	N	S
4011	01/05/93	GW930105-7	U	Chloromethane	10	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297	U	Chloromethane	1	NV	N	R
4096	08/18/92	4096-08/18/92-B-N	U	Chloromethane	10	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5	U	Chloromethane	4.7	NV	D	R
4096	11/04/92	4096-11/04/92-A-N	U	Chloromethane	1.6	NV	N	R
4096	11/04/92	4096-11/04/92-A-D1-7	U	Chloromethane	4.7	NV	D	R
4096	02/02/93	GW930202-10	U	Chloromethane	10	NV	N	R
4096	02/02/93	GW930202-11	U	Chloromethane	10	NV	D	R
3098	08/13/92	3098-08/13/92-A-D1-5	U	cis-1,2-Dichloroethene	1.3	NV	D	D
4096	08/18/92	4096-08/18/92-B-D1-5	U	cis-1,2-Dichloroethene	1.3	NV	D	R
4096	11/04/92	4096-11/04/92-A-D1-7	U	cis-1,2-Dichloroethene	1.3	NV	D	R
2043	05/17/90	EMGW_SYSGEN_523	U	cis-1,3-Dichloropropene	1	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	U	cis-1,3-Dichloropropene	1	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	U	cis-1,3-Dichloropropene	1	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	cis-1,3-Dichloropropene	1	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	cis-1,3-Dichloropropene	1	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	cis-1,3-Dichloropropene	1	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	cis-1,3-Dichloropropene	1	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	cis-1,3-Dichloropropene	1	NV	N	S
2043	01/18/93	GW930118-12	U	cis-1,3-Dichloropropene	1	NV	N	S
2050	10/17/90	EMGW_SYSGEN_558	U	cis-1,3-Dichloropropene	1	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559	U	cis-1,3-Dichloropropene	1	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560	U	cis-1,3-Dichloropropene	1	NV	N	S
2050	08/10/92	2050-08/10/92-B-N	U	cis-1,3-Dichloropropene	10	NV	N	S
2050	02/10/93	GW930210-8	U	cis-1,3-Dichloropropene	10	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	cis-1,3-Dichloropropene	1	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	cis-1,3-Dichloropropene	1	NV	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2066	11/06/90	EMGW_SYSGEN_631	U	cis-1,3-Dichloropropene	1	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	cis-1,3-Dichloropropene	1	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	cis-1,3-Dichloropropene	1	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	cis-1,3-Dichloropropene	1	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	cis-1,3-Dichloropropene	1	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	cis-1,3-Dichloropropene	1	NV	N	S
2066	01/06/93	GW930106-7	U	cis-1,3-Dichloropropene	1	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703	U	cis-1,3-Dichloropropene	1	NV	N	R
2096	08/18/92	2096-08/18/92-B-N	U	cis-1,3-Dichloropropene	10	NV	N	R
2096	11/04/92	2096-11/04/92-A-N	U	cis-1,3-Dichloropropene	3.1	NV	N	R
2096	02/02/93	GW930202-8	U	cis-1,3-Dichloropropene	10	NV	N	R
2098	10/15/90	EMGW_SYSGEN_712	U	cis-1,3-Dichloropropene	1	NV	N	D
2098	11/05/91	EMGW_SYSGEN_715	U	cis-1,3-Dichloropropene	1	NV	N	D
2098	11/23/92	GW921123-5	U	cis-1,3-Dichloropropene	3.1	NV	N	D
2098	02/04/93	GW930204-7	U	cis-1,3-Dichloropropene	10	NV	N	D
2104	06/14/90	EMGW_SYSGEN_718	U	cis-1,3-Dichloropropene	1	NV	N	R
2104	09/12/90	EMGW_SYSGEN_719	U	cis-1,3-Dichloropropene	1	NV	N	R
2104	11/27/90	EMGW_SYSGEN_720	U	cis-1,3-Dichloropropene	1	NV	N	R
2104	03/07/91	EMGW_SYSGEN_721	U	cis-1,3-Dichloropropene	1	NV	N	R
2104	11/07/91	EMGW_SYSGEN_722	U	cis-1,3-Dichloropropene	1	NV	N	R
2104	08/10/92	2104-08/10/92-B-N	U	cis-1,3-Dichloropropene	10	NV	N	R
2104	11/02/92	2104-11/02/92-A-N	U	cis-1,3-Dichloropropene	3.1	NV	N	R
2104	02/02/93	GW930202-12	U	cis-1,3-Dichloropropene	10	NV	N	R
2728	02/10/93	GW930210-5	U	cis-1,3-Dichloropropene	10	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993	U	cis-1,3-Dichloropropene	1	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	U	cis-1,3-Dichloropropene	1	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	U	cis-1,3-Dichloropropene	1	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	cis-1,3-Dichloropropene	1	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	cis-1,3-Dichloropropene	1	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	cis-1,3-Dichloropropene	1	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	cis-1,3-Dichloropropene	1	NV	N	S
3024	01/13/93	GW930113-8	U	cis-1,3-Dichloropropene	1	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	cis-1,3-Dichloropropene	1	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	cis-1,3-Dichloropropene	1	NV	N	S

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Table E-18 (Continued)
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Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
3043	11/05/90	EMGW_SYSGEN_1021	U	cis-1,3-Dichloropropene	1	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	cis-1,3-Dichloropropene	1	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	cis-1,3-Dichloropropene	1	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	cis-1,3-Dichloropropene	1	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	cis-1,3-Dichloropropene	1	NV	N	S
3043	01/18/93	GW930118-14	U	cis-1,3-Dichloropropene	1	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138	U	cis-1,3-Dichloropropene	1	NV	N	R
3096	08/18/92	3096-08/18/92-B-N	U	cis-1,3-Dichloropropene	10	NV	N	R
3096	11/04/92	3096-11/04/92-A-N	U	cis-1,3-Dichloropropene	3.1	NV	N	R
3096	02/02/93	GW930202-9	U	cis-1,3-Dichloropropene	10	NV	N	R
3098	10/15/90	EMGW_SYSGEN_1147	U	cis-1,3-Dichloropropene	1	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149	U	cis-1,3-Dichloropropene	1	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D	U	cis-1,3-Dichloropropene	1	NV	D	D
3098	08/13/92	3098-08/13/92-A-D1-5	U	cis-1,3-Dichloropropene	0.63	NV	D	D
3098	11/23/92	GW921123-6	U	cis-1,3-Dichloropropene	3.1	NV	N	D
3098	02/04/93	GW930204-10	U	cis-1,3-Dichloropropene	10	NV	N	D
3098	02/04/93	GW930204-12	U	cis-1,3-Dichloropropene	10	NV	D	D
4011	10/05/90	4345	U	cis-1,3-Dichloropropene	5	R	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	cis-1,3-Dichloropropene	1	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	cis-1,3-Dichloropropene	1	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	cis-1,3-Dichloropropene	1	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	cis-1,3-Dichloropropene	1	NV	N	S
4011	01/05/93	GW930105-7	U	cis-1,3-Dichloropropene	1	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297	U	cis-1,3-Dichloropropene	1	NV	N	R
4096	08/18/92	4096-08/18/92-B-N	U	cis-1,3-Dichloropropene	10	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5	U	cis-1,3-Dichloropropene	0.63	NV	D	R
4096	11/04/92	4096-11/04/92-A-N	U	cis-1,3-Dichloropropene	3.1	NV	N	R
4096	11/04/92	4096-11/04/92-A-D1-7	U	cis-1,3-Dichloropropene	0.63	NV	D	R
4096	02/02/93	GW930202-10	U	cis-1,3-Dichloropropene	10	NV	N	R
4096	02/02/93	GW930202-11	U	cis-1,3-Dichloropropene	10	NV	D	R
2043	05/17/90	EMGW_SYSGEN_523	U	Dibromochloromethane	1	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	U	Dibromochloromethane	1	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	U	Dibromochloromethane	1	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	Dibromochloromethane	1	NV	N	S

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Table E-18 (Continued)
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Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2043	02/28/91	EMGW_SYSGEN_526D	U	Dibromochloromethane	1	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	Dibromochloromethane	1	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	Dibromochloromethane	1	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	Dibromochloromethane	1	NV	N	S
2043	01/18/93	GW930118-12	U	Dibromochloromethane	1	NV	N	S
2050	10/17/90	EMGW_SYSGEN_558	U	Dibromochloromethane	1	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559	U	Dibromochloromethane	1	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560	U	Dibromochloromethane	1	NV	N	S
2050	08/10/92	2050-08/10/92-B-N	U	Dibromochloromethane	10	NV	N	S
2050	11/02/92	2050-11/02/92-A-N	U	Dibromochloromethane	1.4	NV	N	S
2050	02/10/93	GW930210-8	U	Dibromochloromethane	10	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Dibromochloromethane	1	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	Dibromochloromethane	1	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	Dibromochloromethane	1	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	Dibromochloromethane	1	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	Dibromochloromethane	1	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	Dibromochloromethane	1	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	Dibromochloromethane	1	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	Dibromochloromethane	1	NV	N	S
2066	01/06/93	GW930106-7	U	Dibromochloromethane	1	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703	U	Dibromochloromethane	1	NV	N	R
2096	08/18/92	2096-08/18/92-B-N	U	Dibromochloromethane	10	NV	N	R
2096	11/04/92	2096-11/04/92-A-N	U	Dibromochloromethane	1.4	NV	N	R
2096	02/02/93	GW930202-8	U	Dibromochloromethane	10	NV	N	R
2098	10/15/90	EMGW_SYSGEN_712	U	Dibromochloromethane	1	NV	N	D
2098	11/05/91	EMGW_SYSGEN_715	U	Dibromochloromethane	1	NV	N	D
2098	11/23/92	GW921123-5	U	Dibromochloromethane	1.4	NV	N	D
2098	02/04/93	GW930204-7	U	Dibromochloromethane	10	NV	N	D
2104	06/14/90	EMGW_SYSGEN_718	U	Dibromochloromethane	1	NV	N	R
2104	09/12/90	EMGW_SYSGEN_719	U	Dibromochloromethane	1	NV	N	R
2104	11/27/90	EMGW_SYSGEN_720	U	Dibromochloromethane	1	NV	N	R
2104	03/07/91	EMGW_SYSGEN_721	U	Dibromochloromethane	1	NV	N	R
2104	11/07/91	EMGW_SYSGEN_722	U	Dibromochloromethane	1	NV	N	R
2104	08/10/92	2104-08/10/92-B-N	U	Dibromochloromethane	10	NV	N	R

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2104	11/02/92	2104-11/02/92-A-N	U	Dibromochloromethane	1.4	NV	N	R
2104	02/02/93	GW930202-12	U	Dibromochloromethane	10	NV	N	R
2728	02/10/93	GW930210-5	U	Dibromochloromethane	10	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993	U	Dibromochloromethane	1	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	U	Dibromochloromethane	1	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	U	Dibromochloromethane	1	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	Dibromochloromethane	1	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	Dibromochloromethane	1	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	Dibromochloromethane	1	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	Dibromochloromethane	1	NV	N	S
3024	01/13/93	GW930113-8	U	Dibromochloromethane	1	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Dibromochloromethane	1	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	Dibromochloromethane	1	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	Dibromochloromethane	1	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	Dibromochloromethane	1	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	Dibromochloromethane	1	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	Dibromochloromethane	1	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	Dibromochloromethane	1	NV	N	S
3043	01/18/93	GW930118-14	U	Dibromochloromethane	1	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138	U	Dibromochloromethane	1	NV	N	R
3096	08/18/92	3096-08/18/92-B-N	U	Dibromochloromethane	10	NV	N	R
3096	11/04/92	3096-11/04/92-A-N	U	Dibromochloromethane	1.4	NV	N	R
3096	02/02/93	GW930202-9	U	Dibromochloromethane	10	NV	N	R
3098	10/15/90	EMGW_SYSGEN_1147	U	Dibromochloromethane	1	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149	U	Dibromochloromethane	1	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D	U	Dibromochloromethane	1	NV	D	D
3098	08/13/92	3098-08/13/92-A-D1-5	U	Dibromochloromethane	1.2	NV	D	D
3098	11/23/92	GW921123-6	U	Dibromochloromethane	1.4	NV	N	D
3098	02/04/93	GW930204-10	U	Dibromochloromethane	10	NV	N	D
3098	02/04/93	GW930204-12	U	Dibromochloromethane	10	NV	D	D
4011	10/05/90	4345	U	Dibromochloromethane	5	R	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Dibromochloromethane	1	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Dibromochloromethane	1	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	Dibromochloromethane	1	NV	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
4011	10/02/91	EMGW_SYSGEN_1248	U	Dibromochloromethane	1	NV	N	S
4011	01/05/93	GW930105-7	U	Dibromochloromethane	1	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297	U	Dibromochloromethane	1	NV	N	R
4096	08/18/92	4096-08/18/92-B-N	U	Dibromochloromethane	10	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5	U	Dibromochloromethane	1.2	NV	D	R
4096	11/04/92	4096-11/04/92-A-N	U	Dibromochloromethane	1.4	NV	N	R
4096	11/04/92	4096-11/04/92-A-D1-7	U	Dibromochloromethane	1.2	NV	D	R
4096	02/02/93	GW930202-10	U	Dibromochloromethane	10	NV	N	R
4096	02/02/93	GW930202-11	U	Dibromochloromethane	10	NV	D	R
2050	11/02/92	2050-11/02/92-A-N	U	Dibromomethane	2.5	NV	N	S
2096	11/04/92	2096-11/04/92-A-N	U	Dibromomethane	2.5	NV	N	R
2098	11/23/92	GW921123-5	U	Dibromomethane	2.5	NV	N	D
2104	11/02/92	2104-11/02/92-A-N	U	Dibromomethane	2.5	NV	N	R
3096	11/04/92	3096-11/04/92-A-N	U	Dibromomethane	2.5	NV	N	R
3098	11/23/92	GW921123-6	U	Dibromomethane	2.5	NV	N	D
4011	02/21/91	EMGW_SYSGEN_1245	U	Dibromomethane	1	NV	N	S
4096	11/04/92	4096-11/04/92-A-N	U	Dibromomethane	2.5	NV	N	R
2043	08/30/89	66572	U	Dichlorodifluoromethane	200	R	N	S
2043	08/30/89	66577	U	Dichlorodifluoromethane	200	R	D	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	Dichlorodifluoromethane	10	NV	N	S
2043	01/18/93	GW930118-12	U	Dichlorodifluoromethane	10	NV	N	S
2066	01/06/93	GW930106-7	U	Dichlorodifluoromethane	10	NV	N	S
3024	01/13/93	GW930113-8	U	Dichlorodifluoromethane	10	NV	N	S
3043	08/30/89	66573	U	Dichlorodifluoromethane	200	R	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	Dichlorodifluoromethane	10	NV	N	S
3043	01/18/93	GW930118-14	U	Dichlorodifluoromethane	10	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Dichlorodifluoromethane	1	NV	N	S
4011	01/05/93	GW930105-7	U	Dichlorodifluoromethane	10	NV	N	S
2043	08/30/89	66572	U	Ethyl cyanide	100	R	N	S
2043	08/30/89	66577	U	Ethyl cyanide	100	R	D	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	Ethyl cyanide	20	NV	N	S
2043	01/18/93	GW930118-12	U	Ethyl cyanide	20	NV	N	S
2066	01/06/93	GW930106-7	U	Ethyl cyanide	20	NV	N	S
3024	01/13/93	GW930113-8	U	Ethyl cyanide	20	NV	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
3043	08/30/89	66573	U	Ethyl cyanide	100	R	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	Ethyl cyanide	20	NV	N	S
3043	01/18/93	GW930118-14	U	Ethyl cyanide	20	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Ethyl cyanide	20	NV	N	S
4011	01/05/93	GW930105-7	U	Ethyl cyanide	20	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	Ethyl methacrylate	5	NV	N	S
2043	01/18/93	GW930118-12	U	Ethyl methacrylate	5	NV	N	S
2050	11/02/92	2050-11/02/92-A-N	U	Ethyl methacrylate	1.9	NV	N	S
2066	01/06/93	GW930106-7	U	Ethyl methacrylate	5	NV	N	S
2096	11/04/92	2096-11/04/92-A-N	U	Ethyl methacrylate	1.9	NV	N	R
2098	11/23/92	GW921123-5	U	Ethyl methacrylate	1.9	NV	N	D
2104	11/02/92	2104-11/02/92-A-N	U	Ethyl methacrylate	1.9	NV	N	R
3024	01/13/93	GW930113-8	U	Ethyl methacrylate	5	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	Ethyl methacrylate	5	NV	N	S
3043	01/18/93	GW930118-14	U	Ethyl methacrylate	5	NV	N	S
3096	11/04/92	3096-11/04/92-A-N	U	Ethyl methacrylate	1.9	NV	N	R
3098	11/23/92	GW921123-6	U	Ethyl methacrylate	1.9	NV	N	D
4011	02/21/91	EMGW_SYSGEN_1245	U	Ethyl methacrylate	20	NV	N	S
4011	01/05/93	GW930105-7	U	Ethyl methacrylate	5	NV	N	S
4096	11/04/92	4096-11/04/92-A-N	U	Ethyl methacrylate	1.9	NV	N	R
2043	05/17/90	EMGW_SYSGEN_523	U	Ethylbenzene	1	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	U	Ethylbenzene	1	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	U	Ethylbenzene	1	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	Ethylbenzene	1	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	Ethylbenzene	1	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	Ethylbenzene	1	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	Ethylbenzene	1	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	Ethylbenzene	1	NV	N	S
2043	01/18/93	GW930118-12	U	Ethylbenzene	1	NV	N	S
2050	10/17/90	EMGW_SYSGEN_558	U	Ethylbenzene	1	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559	U	Ethylbenzene	1	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560	U	Ethylbenzene	1	NV	N	S
2050	08/10/92	2050-08/10/92-B-N	U	Ethylbenzene	10	NV	N	S
2050	11/02/92	2050-11/02/92-A-N	U	Ethylbenzene	1.4	NV	N	S

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Table E-18 (Continued)
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Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2050	02/10/93	GW930210-8	U	Ethylbenzene	10	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Ethylbenzene	1	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	Ethylbenzene	1	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	Ethylbenzene	1	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	Ethylbenzene	1	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	Ethylbenzene	1	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	Ethylbenzene	1	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	Ethylbenzene	1	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	Ethylbenzene	1	NV	N	S
2066	01/06/93	GW930106-7	U	Ethylbenzene	1	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703	U	Ethylbenzene	1	NV	N	R
2096	08/18/92	2096-08/18/92-B-N	U	Ethylbenzene	10	NV	N	R
2096	11/04/92	2096-11/04/92-A-N	U	Ethylbenzene	1.4	NV	N	R
2096	02/02/93	GW930202-8	U	Ethylbenzene	10	NV	N	R
2098	10/15/90	EMGW_SYSGEN_712	U	Ethylbenzene	1	NV	N	D
2098	11/05/91	EMGW_SYSGEN_715	U	Ethylbenzene	1	NV	N	D
2098	11/23/92	GW921123-5	U	Ethylbenzene	1.4	NV	N	D
2098	02/04/93	GW930204-7	U	Ethylbenzene	10	NV	N	D
2104	06/14/90	EMGW_SYSGEN_718	U	Ethylbenzene	1	NV	N	R
2104	09/12/90	EMGW_SYSGEN_719	U	Ethylbenzene	1	NV	N	R
2104	11/27/90	EMGW_SYSGEN_720	U	Ethylbenzene	1	NV	N	R
2104	03/07/91	EMGW_SYSGEN_721	U	Ethylbenzene	1	NV	N	R
2104	11/07/91	EMGW_SYSGEN_722	U	Ethylbenzene	1	NV	N	R
2104	08/10/92	2104-08/10/92-B-N	U	Ethylbenzene	10	NV	N	R
2104	11/02/92	2104-11/02/92-A-N	U	Ethylbenzene	1.4	NV	N	R
2104	02/02/93	GW930202-12	U	Ethylbenzene	10	NV	N	R
2728	02/10/93	GW930210-5	U	Ethylbenzene	10	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993	U	Ethylbenzene	1	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	U	Ethylbenzene	1	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	U	Ethylbenzene	1	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	Ethylbenzene	1	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	Ethylbenzene	1	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	Ethylbenzene	1	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	Ethylbenzene	1	NV	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
3024	01/13/93	GW930113-8	U	Ethylbenzene	1	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Ethylbenzene	1	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	Ethylbenzene	1	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	Ethylbenzene	1	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	Ethylbenzene	1	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	Ethylbenzene	1	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	Ethylbenzene	1	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	Ethylbenzene	1	NV	N	S
3043	01/18/93	GW930118-14	U	Ethylbenzene	1	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138	U	Ethylbenzene	1	NV	N	R
3096	08/18/92	3096-08/18/92-B-N	U	Ethylbenzene	10	NV	N	R
3096	11/04/92	3096-11/04/92-A-N	U	Ethylbenzene	1.4	NV	N	R
3096	02/02/93	GW930202-9	U	Ethylbenzene	10	NV	N	R
3098	10/15/90	EMGW_SYSGEN_1147	U	Ethylbenzene	1	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149	U	Ethylbenzene	1	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D	U	Ethylbenzene	1	NV	D	D
3098	08/13/92	3098-08/13/92-A-D1-5		Ethylbenzene	2.8	NV	D	D
3098	11/23/92	GW921123-6	U	Ethylbenzene	1.4	NV	N	D
3098	02/04/93	GW930204-10	U	Ethylbenzene	10	NV	N	D
3098	02/04/93	GW930204-12	U	Ethylbenzene	10	NV	D	D
4011	10/05/90	4345	U	Ethylbenzene	5	R	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Ethylbenzene	1	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Ethylbenzene	1	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	Ethylbenzene	1	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	Ethylbenzene	1	NV	N	S
4011	01/05/93	GW930105-7	U	Ethylbenzene	1	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297	U	Ethylbenzene	1	NV	N	R
4096	08/18/92	4096-08/18/92-B-N	U	Ethylbenzene	10	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5	U	Ethylbenzene	0.81	NV	D	R
4096	11/04/92	4096-11/04/92-A-N	U	Ethylbenzene	1.4	NV	N	R
4096	11/04/92	4096-11/04/92-A-D1-7		Ethylbenzene	0.89	NV	D	R
4096	02/02/93	GW930202-10	U	Ethylbenzene	10	NV	N	R
4096	02/02/93	GW930202-11	U	Ethylbenzene	10	NV	D	R
2043	07/06/92	2043-07/06/92-A-N1-8	U	Iodomethane	5	NV	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2043	01/18/93	GW930118-12	U	Iodomethane	5	NV	N	S
2050	11/02/92	2050-11/02/92-A-N	U	Iodomethane	1.5	NV	N	S
2066	01/06/93	GW930106-7	U	Iodomethane	5	NV	N	S
2096	11/04/92	2096-11/04/92-A-N	U	Iodomethane	1.5	NV	N	R
2098	11/23/92	GW921123-5	U	Iodomethane	1.5	NV	N	D
2104	11/02/92	2104-11/02/92-A-N	U	Iodomethane	1.5	NV	N	R
3024	01/13/93	GW930113-8	U	Iodomethane	5	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	Iodomethane	5	NV	N	S
3043	01/18/93	GW930118-14	U	Iodomethane	5	NV	N	S
3096	11/04/92	3096-11/04/92-A-N	U	Iodomethane	1.5	NV	N	R
3098	11/23/92	GW921123-6	U	Iodomethane	1.5	NV	N	D
4011	02/21/91	EMGW_SYSGEN_1245	U	Iodomethane	20	NV	N	S
4011	01/05/93	GW930105-7	U	Iodomethane	5	NV	N	S
4096	11/04/92	4096-11/04/92-A-N	U	Iodomethane	1.5	NV	N	R
4011	02/21/91	EMGW_SYSGEN_1245	U	Isobutyl alcohol	3000	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	Methacrylonitrile	5	NV	N	S
2043	01/18/93	GW930118-12	U	Methacrylonitrile	5	NV	N	S
2066	01/06/93	GW930106-7	U	Methacrylonitrile	5	NV	N	S
3024	01/13/93	GW930113-8	U	Methacrylonitrile	5	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	Methacrylonitrile	5	NV	N	S
3043	01/18/93	GW930118-14	U	Methacrylonitrile	5	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Methacrylonitrile	20	NV	N	S
4011	01/05/93	GW930105-7	U	Methacrylonitrile	5	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	Methyl methacrylate	5	NV	N	S
2043	01/18/93	GW930118-12	U	Methyl methacrylate	5	NV	N	S
2066	01/06/93	GW930106-7	U	Methyl methacrylate	5	NV	N	S
3024	01/13/93	GW930113-8	U	Methyl methacrylate	5	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	Methyl methacrylate	5	NV	N	S
3043	01/18/93	GW930118-14	U	Methyl methacrylate	5	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Methyl methacrylate	2	NV	N	S
4011	01/05/93	GW930105-7	U	Methyl methacrylate	5	NV	N	S
2043	11/14/89	66683	U	Methylene chloride	2.5	NV	N	S
2043	02/20/90	EMGW_SYSGEN_522	U	Methylene chloride	1	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Methylene chloride	1	NV	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2043	08/06/90	EMGW_SYSGEN_524	U	Methylene chloride	1	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	U	Methylene chloride	1	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	Methylene chloride	1	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	Methylene chloride	1	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	Methylene chloride	1	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	Methylene chloride	1	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	Methylene chloride	10	NV	N	S
2043	01/18/93	GW930118-12	U	Methylene chloride	10	NV	N	S
2050	10/17/90	EMGW_SYSGEN_558	U	Methylene chloride	1	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559	U	Methylene chloride	1	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560	U	Methylene chloride	1	NV	N	S
2050	08/10/92	2050-08/10/92-B-N	U	Methylene chloride	10	NV	N	S
2050	11/02/92	2050-11/02/92-A-N	U	Methylene chloride	1.6	NV	N	S
2050	02/10/93	GW930210-8	U	Methylene chloride	10	NV	N	S
2066	11/06/89	66687	U	Methylene chloride	2.5	NV	N	S
2066	02/22/90	EMGW_SYSGEN_628	U	Methylene chloride	1	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Methylene chloride	1	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	Methylene chloride	1	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	Methylene chloride	1	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	Methylene chloride	1	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	Methylene chloride	1	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	Methylene chloride	1	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	Methylene chloride	1	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	Methylene chloride	1	NV	N	S
2066	01/06/93	GW930106-7	U	Methylene chloride	10	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703	U	Methylene chloride	1	NV	N	R
2096	08/18/92	2096-08/18/92-B-N	U	Methylene chloride	10	NV	N	R
2096	11/04/92	2096-11/04/92-A-N	U	Methylene chloride	1.6	NV	N	R
2096	02/02/93	GW930202-8	BJ	Methylene chloride	0.6	NV	N	R
2098	10/15/90	EMGW_SYSGEN_712	U	Methylene chloride	1	NV	N	D
2098	11/05/91	EMGW_SYSGEN_715	U	Methylene chloride	1	NV	N	D
2098	11/23/92	GW921123-5	U	Methylene chloride	1.6	NV	N	D
2098	02/04/93	GW930204-7	BJ	Methylene chloride	1	NV	N	D
2104	06/14/90	EMGW_SYSGEN_718	U	Methylene chloride	5	NV	N	R

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2104	09/12/90	EMGW_SYSGEN_719	U	Methylene chloride	1	NV	N	R
2104	11/27/90	EMGW_SYSGEN_720	U	Methylene chloride	1	NV	N	R
2104	03/07/91	EMGW_SYSGEN_721	U	Methylene chloride	1	NV	N	R
2104	11/07/91	EMGW_SYSGEN_722	U	Methylene chloride	1	NV	N	R
2104	08/10/92	2104-08/10/92-B-N	U	Methylene chloride	10	NV	N	R
2104	11/02/92	2104-11/02/92-A-N	J	Methylene chloride	0.81	NV	N	R
2104	02/02/93	GW930202-12	BJ	Methylene chloride	0.7	NV	N	R
2728	02/10/93	GW930210-5	U	Methylene chloride	10	NV	N	S
3024	11/30/89	66735	U	Methylene chloride	2.5	NV	N	S
3024	02/18/90	EMGW_SYSGEN_992	U	Methylene chloride	1	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993	U	Methylene chloride	1	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	U	Methylene chloride	1	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	U	Methylene chloride	1	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	Methylene chloride	1	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	Methylene chloride	1	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	Methylene chloride	1	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	Methylene chloride	1	NV	N	S
3024	01/13/93	GW930113-8	U	Methylene chloride	10	NV	N	S
3043	11/14/89	66685	U	Methylene chloride	2.5	NV	N	S
3043	02/20/90	EMGW_SYSGEN_1018	U	Methylene chloride	1	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Methylene chloride	1	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	Methylene chloride	1	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	Methylene chloride	1	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	Methylene chloride	1	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	Methylene chloride	1	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	Methylene chloride	2	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	Methylene chloride	10	NV	N	S
3043	01/18/93	GW930118-14	U	Methylene chloride	10	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138	U	Methylene chloride	1	NV	N	R
3096	08/18/92	3096-08/18/92-B-N	U	Methylene chloride	10	NV	N	R
3096	11/04/92	3096-11/04/92-A-N	U	Methylene chloride	1.6	NV	N	R
3096	02/02/93	GW930202-9	U	Methylene chloride	10	NV	N	R
3098	10/15/90	EMGW_SYSGEN_1147	U	Methylene chloride	1	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149	U	Methylene chloride	1	NV	N	D

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
3098	11/05/91	EMGW_SYSGEN_1149D	U	Methylene chloride	1	NV	D	D
3098	08/13/92	3098-08/13/92-A-D1-5	U	Methylene chloride	0.78	NV	D	D
3098	11/23/92	GW921123-6	U	Methylene chloride	1.6	NV	N	D
3098	02/04/93	GW930204-10	BJ	Methylene chloride	1	NV	N	D
3098	02/04/93	GW930204-12	U	Methylene chloride	10	NV	D	D
4011	10/05/90	4345	B	Methylene chloride	5	R	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Methylene chloride	1	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Methylene chloride	1	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	Methylene chloride	1	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	Methylene chloride	1	NV	N	S
4011	01/05/93	GW930105-7	U	Methylene chloride	10	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297	U	Methylene chloride	1	NV	N	R
4096	08/18/92	4096-08/18/92-B-N	U	Methylene chloride	10	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5	U	Methylene chloride	0.78	NV	D	R
4096	11/04/92	4096-11/04/92-A-N	U	Methylene chloride	1.6	NV	N	R
4096	11/04/92	4096-11/04/92-A-D1-7	U	Methylene chloride	0.78	NV	D	R
4096	02/02/93	GW930202-10	U	Methylene chloride	10	NV	N	R
4096	02/02/93	GW930202-11	U	Methylene chloride	10	NV	D	R
2043	05/17/90	EMGW_SYSGEN_523	U	Pyridine	4	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Pyridine	4	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Pyridine	4	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Pyridine	4	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Styrene	1	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	U	Styrene	1	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	U	Styrene	1	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	Styrene	1	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	Styrene	1	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	Styrene	1	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	Styrene	1	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	Styrene	1	NV	N	S
2043	01/18/93	GW930118-12	U	Styrene	1	NV	N	S
2050	10/17/90	EMGW_SYSGEN_558	U	Styrene	1	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559	U	Styrene	1	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560	U	Styrene	1	NV	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2050	08/10/92	2050-08/10/92-B-N	U	Styrene	10	NV	N	S
2050	11/02/92	2050-11/02/92-A-N	U	Styrene	1.2	NV	N	S
2050	02/10/93	GW930210-8	U	Styrene	10	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Styrene	1	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	Styrene	1	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	Styrene	1	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	Styrene	1	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	Styrene	1	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	Styrene	1	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	Styrene	1	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	Styrene	1	NV	N	S
2066	01/06/93	GW930106-7	U	Styrene	1	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703	U	Styrene	1	NV	N	R
2096	08/18/92	2096-08/18/92-B-N	U	Styrene	10	NV	N	R
2096	11/04/92	2096-11/04/92-A-N	U	Styrene	1.2	NV	N	R
2096	02/02/93	GW930202-8	U	Styrene	10	NV	N	R
2098	10/15/90	EMGW_SYSGEN_712	U	Styrene	1	NV	N	D
2098	11/05/91	EMGW_SYSGEN_715	U	Styrene	1	NV	N	D
2098	11/23/92	GW921123-5	U	Styrene	1.2	NV	N	D
2098	02/04/93	GW930204-7	U	Styrene	10	NV	N	D
2104	06/14/90	EMGW_SYSGEN_718	U	Styrene	1	NV	N	R
2104	09/12/90	EMGW_SYSGEN_719	U	Styrene	1	NV	N	R
2104	11/27/90	EMGW_SYSGEN_720	U	Styrene	1	NV	N	R
2104	03/07/91	EMGW_SYSGEN_721	U	Styrene	1	NV	N	R
2104	11/07/91	EMGW_SYSGEN_722	U	Styrene	1	NV	N	R
2104	08/10/92	2104-08/10/92-B-N	U	Styrene	10	NV	N	R
2104	11/02/92	2104-11/02/92-A-N	U	Styrene	1.2	NV	N	R
2104	02/02/93	GW930202-12	U	Styrene	10	NV	N	R
2728	02/10/93	GW930210-5	U	Styrene	10	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993	U	Styrene	1	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	U	Styrene	1	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	U	Styrene	1	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	Styrene	1	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	Styrene	1	NV	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
3024	07/15/91	EMGW_SYSGEN_998	U	Styrene	1	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	Styrene	1	NV	N	S
3024	01/13/93	GW930113-8	U	Styrene	1	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Styrene	1	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	Styrene	1	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	Styrene	1	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	Styrene	1	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	Styrene	1	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	Styrene	1	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	Styrene	1	NV	N	S
3043	01/18/93	GW930118-14	U	Styrene	1	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138	U	Styrene	1	NV	N	R
3096	08/18/92	3096-08/18/92-B-N	U	Styrene	10	NV	N	R
3096	11/04/92	3096-11/04/92-A-N	U	Styrene	1.2	NV	N	R
3096	02/02/93	GW930202-9	U	Styrene	10	NV	N	R
3098	10/15/90	EMGW_SYSGEN_1147	U	Styrene	1	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149	U	Styrene	1	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D	U	Styrene	1	NV	D	D
3098	08/13/92	3098-08/13/92-A-D1-5	U	Styrene	15	NV	D	D
3098	11/23/92	GW921123-6	U	Styrene	1.2	NV	N	D
3098	02/04/93	GW930204-10	U	Styrene	10	NV	N	D
3098	02/04/93	GW930204-12	U	Styrene	10	NV	D	D
4011	10/05/90	4345	U	Styrene	5	R	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Styrene	1	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Styrene	20	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	Styrene	1	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	Styrene	1	NV	N	S
4011	01/05/93	GW930105-7	U	Styrene	1	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297	U	Styrene	1	NV	N	R
4096	08/18/92	4096-08/18/92-B-N	U	Styrene	10	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5	U	Styrene	15	NV	D	R
4096	11/04/92	4096-11/04/92-A-N	U	Styrene	1.2	NV	N	R
4096	11/04/92	4096-11/04/92-A-D1-7	U	Styrene	15	NV	D	R
4096	02/02/93	GW930202-10	U	Styrene	10	NV	N	R

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
4096	02/02/93	GW930202-11	U	Styrene	10	NV	D	R
4011	02/21/91	EMGW_SYSGEN_1245	U	t-1,4-Dichloro-2-butene	20	NV	N	S
2043	11/14/89	66683	U	Tetrachloroethene	2.5	NV	N	S
2043	02/20/90	EMGW_SYSGEN_522	U	Tetrachloroethene	1	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Tetrachloroethene	1	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	U	Tetrachloroethene	1	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	U	Tetrachloroethene	1	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	Tetrachloroethene	1	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	Tetrachloroethene	1	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	Tetrachloroethene	1	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	Tetrachloroethene	1	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	Tetrachloroethene	1	NV	N	S
2043	01/18/93	GW930118-12	U	Tetrachloroethene	1	NV	N	S
2050	10/17/90	EMGW_SYSGEN_558	U	Tetrachloroethene	1	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559	U	Tetrachloroethene	1	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560	U	Tetrachloroethene	1	NV	N	S
2050	08/10/92	2050-08/10/92-B-N	U	Tetrachloroethene	10	NV	N	S
2050	11/02/92	2050-11/02/92-A-N	U	Tetrachloroethene	1.5	NV	N	S
2050	02/10/93	GW930210-8	U	Tetrachloroethene	10	NV	N	S
2066	11/06/89	66687	U	Tetrachloroethene	2.5	NV	N	S
2066	02/22/90	EMGW_SYSGEN_628	U	Tetrachloroethene	1	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Tetrachloroethene	1	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	Tetrachloroethene	1	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	Tetrachloroethene	1	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	Tetrachloroethene	1	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	Tetrachloroethene	1	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	Tetrachloroethene	1	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	Tetrachloroethene	1	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	Tetrachloroethene	1	NV	N	S
2066	01/06/93	GW930106-7	U	Tetrachloroethene	1	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703	U	Tetrachloroethene	1	NV	N	R
2096	08/18/92	2096-08/18/92-B-N	U	Tetrachloroethene	10	NV	N	R
2096	11/04/92	2096-11/04/92-A-N	U	Tetrachloroethene	1.5	NV	N	R
2096	02/02/93	GW930202-8	U	Tetrachloroethene	10	NV	N	R

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2098	10/15/90	EMGW_SYSGEN_712	U	Tetrachloroethene	1	NV	N	D
2098	11/05/91	EMGW_SYSGEN_715	U	Tetrachloroethene	1	NV	N	D
2098	11/23/92	GW921123-5	U	Tetrachloroethene	1.5	NV	N	D
2098	02/04/93	GW930204-7	U	Tetrachloroethene	10	NV	N	D
2104	06/14/90	EMGW_SYSGEN_718	U	Tetrachloroethene	1	NV	N	R
2104	09/12/90	EMGW_SYSGEN_719	U	Tetrachloroethene	1	NV	N	R
2104	11/27/90	EMGW_SYSGEN_720	U	Tetrachloroethene	1	NV	N	R
2104	03/07/91	EMGW_SYSGEN_721	U	Tetrachloroethene	1	NV	N	R
2104	11/07/91	EMGW_SYSGEN_722	U	Tetrachloroethene	1	NV	N	R
2104	08/10/92	2104-08/10/92-B-N	U	Tetrachloroethene	10	NV	N	R
2104	11/02/92	2104-11/02/92-A-N	U	Tetrachloroethene	1.5	NV	N	R
2104	02/02/93	GW930202-12	U	Tetrachloroethene	10	NV	N	R
2728	02/10/93	GW930210-5	U	Tetrachloroethene	10	NV	N	S
3024	11/30/89	66735	U	Tetrachloroethene	2.5	NV	N	S
3024	02/18/90	EMGW_SYSGEN_992	U	Tetrachloroethene	1	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993	U	Tetrachloroethene	1	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	U	Tetrachloroethene	1	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	U	Tetrachloroethene	1	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	Tetrachloroethene	1	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	Tetrachloroethene	1	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	Tetrachloroethene	1	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	Tetrachloroethene	1	NV	N	S
3024	01/13/93	GW930113-8	U	Tetrachloroethene	1	NV	N	S
3043	11/14/89	66685	U	Tetrachloroethene	2.5	NV	N	S
3043	02/20/90	EMGW_SYSGEN_1018	U	Tetrachloroethene	1	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Tetrachloroethene	1	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	Tetrachloroethene	1	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	Tetrachloroethene	1	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	Tetrachloroethene	1	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	Tetrachloroethene	1	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	Tetrachloroethene	1	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	Tetrachloroethene	1	NV	N	S
3043	01/18/93	GW930118-14	U	Tetrachloroethene	1	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138	U	Tetrachloroethene	1	NV	N	R

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
3096	08/18/92	3096-08/18/92-B-N	U	Tetrachloroethene	10	NV	N	R
3096	11/04/92	3096-11/04/92-A-N	U	Tetrachloroethene	1.5	NV	N	R
3096	02/02/93	GW930202-9	U	Tetrachloroethene	10	NV	N	R
3098	10/15/90	EMGW_SYSGEN_1147	U	Tetrachloroethene	1	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149	U	Tetrachloroethene	1	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D	U	Tetrachloroethene	1	NV	D	D
3098	08/13/92	3098-08/13/92-A-D1-5	U	Tetrachloroethene	0.51	NV	D	D
3098	11/23/92	GW921123-6	U	Tetrachloroethene	1.5	NV	N	D
3098	02/04/93	GW930204-10	U	Tetrachloroethene	10	NV	N	D
3098	02/04/93	GW930204-12	U	Tetrachloroethene	10	NV	D	D
4011	10/05/90	4345	U	Tetrachloroethene	5	R	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Tetrachloroethene	1	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Tetrachloroethene	1	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	Tetrachloroethene	1	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	Tetrachloroethene	1	NV	N	S
4011	01/05/93	GW930105-7	U	Tetrachloroethene	1	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297	U	Tetrachloroethene	1	NV	N	R
4096	08/18/92	4096-08/18/92-B-N	U	Tetrachloroethene	10	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5		Tetrachloroethene	5.4	NV	D	R
4096	11/04/92	4096-11/04/92-A-N	U	Tetrachloroethene	1.5	NV	N	R
4096	11/04/92	4096-11/04/92-A-D1-7	U	Tetrachloroethene	0.51	NV	D	R
4096	02/02/93	GW930202-10	U	Tetrachloroethene	10	NV	N	R
4096	02/02/93	GW930202-11	U	Tetrachloroethene	10	NV	D	R
2043	11/14/89	66683	U	Toluene	2.5	NV	N	S
2043	02/20/90	EMGW_SYSGEN_522	U	Toluene	1	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Toluene	1	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	U	Toluene	1	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	U	Toluene	1	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	Toluene	1	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	Toluene	1	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	Toluene	1	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	Toluene	1	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	Toluene	1	NV	N	S
2043	01/18/93	GW930118-12	U	Toluene	1	NV	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2050	10/17/90	EMGW_SYSGEN_558	U	Toluene	1	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559	U	Toluene	1	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560	U	Toluene	1	NV	N	S
2050	08/10/92	2050-08/10/92-B-N	U	Toluene	10	NV	N	S
2050	11/02/92	2050-11/02/92-A-N	U	Toluene	1.5	NV	N	S
2050	02/10/93	GW930210-8	U	Toluene	10	NV	N	S
2066	11/06/89	66687	U	Toluene	2.5	NV	N	S
2066	02/22/90	EMGW_SYSGEN_628	U	Toluene	1	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Toluene	1	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	Toluene	1	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	Toluene	1	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	Toluene	1	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	Toluene	1	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	Toluene	1	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	Toluene	1	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	Toluene	1	NV	N	S
2066	01/06/93	GW930106-7	U	Toluene	1	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703	U	Toluene	1	NV	N	R
2096	08/18/92	2096-08/18/92-B-N	U	Toluene	10	NV	N	R
2096	11/04/92	2096-11/04/92-A-N	U	Toluene	1.5	NV	N	R
2096	02/02/93	GW930202-8	U	Toluene	10	NV	N	R
2098	10/15/90	EMGW_SYSGEN_712	U	Toluene	1	NV	N	D
2098	11/05/91	EMGW_SYSGEN_715	U	Toluene	1	NV	N	D
2098	11/23/92	GW921123-5	U	Toluene	1.5	NV	N	D
2098	02/04/93	GW930204-7	U	Toluene	10	NV	N	D
2104	06/14/90	EMGW_SYSGEN_718	U	Toluene	1	NV	N	R
2104	09/12/90	EMGW_SYSGEN_719	U	Toluene	1	NV	N	R
2104	11/27/90	EMGW_SYSGEN_720	U	Toluene	1	NV	N	R
2104	03/07/91	EMGW_SYSGEN_721	U	Toluene	1	NV	N	R
2104	11/07/91	EMGW_SYSGEN_722	U	Toluene	1	NV	N	R
2104	08/10/92	2104-08/10/92-B-N	U	Toluene	10	NV	N	R
2104	11/02/92	2104-11/02/92-A-N	U	Toluene	1.5	NV	N	R
2104	02/02/93	GW930202-12	U	Toluene	10	NV	N	R
2728	02/10/93	GW930210-5	U	Toluene	10	NV	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
3024	11/30/89	66735	U	Toluene	2.5	NV	N	S
3024	02/18/90	EMGW_SYSGEN_992	U	Toluene	1	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993	U	Toluene	1	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	U	Toluene	1	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	U	Toluene	1	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	Toluene	1	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	Toluene	1	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	Toluene	1	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	Toluene	1	NV	N	S
3024	01/13/93	GW930113-8	U	Toluene	1	NV	N	S
3043	11/14/89	66685	U	Toluene	2.5	NV	N	S
3043	02/20/90	EMGW_SYSGEN_1018	U	Toluene	1	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Toluene	1	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	Toluene	1	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	Toluene	1	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	Toluene	1	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	Toluene	1	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	Toluene	1	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	Toluene	1	NV	N	S
3043	01/18/93	GW930118-14	U	Toluene	1	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138	U	Toluene	1	NV	N	R
3096	08/18/92	3096-08/18/92-B-N	U	Toluene	10	NV	N	R
3096	11/04/92	3096-11/04/92-A-N	U	Toluene	1.5	NV	N	R
3096	02/02/93	GW930202-9	U	Toluene	10	NV	N	R
3098	10/15/90	EMGW_SYSGEN_1147	U	Toluene	1	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149	U	Toluene	1	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D	U	Toluene	1	NV	D	D
3098	08/13/92	3098-08/13/92-A-D1-5		Toluene	3.1	NV	D	D
3098	11/23/92	GW921123-6	U	Toluene	1.5	NV	N	D
3098	02/04/93	GW930204-10	U	Toluene	10	NV	N	D
3098	02/04/93	GW930204-12	U	Toluene	10	NV	D	D
4011	10/05/90	4345	U	Toluene	5	R	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Toluene	1	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Toluene	1	NV	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
4011	07/30/91	EMGW_SYSGEN_1247	U	Toluene	1	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	Toluene	1	NV	N	S
4011	01/05/93	GW930105-7	U	Toluene	1	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297	U	Toluene	1	NV	N	R
4096	08/18/92	4096-08/18/92-B-N	U	Toluene	10	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5	U	Toluene	0.48	NV	D	R
4096	11/04/92	4096-11/04/92-A-N	U	Toluene	1.5	NV	N	R
4096	11/04/92	4096-11/04/92-A-D1-7		Toluene	1.2	NV	D	R
4096	02/02/93	GW930202-10	J	Toluene	10	NV	N	R
4096	02/02/93	GW930202-11	U	Toluene	10	NV	D	R
2043	11/06/90	EMGW_SYSGEN_525	U	trans-1,2-Dichloroethene	1	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	trans-1,2-Dichloroethene	1	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	trans-1,2-Dichloroethene	1	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	trans-1,2-Dichloroethene	1	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	trans-1,2-Dichloroethene	1	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	trans-1,2-Dichloroethene	1	NV	N	S
2043	01/18/93	GW930118-12	U	trans-1,2-Dichloroethene	1	NV	N	S
2050	10/17/90	EMGW_SYSGEN_558	U	trans-1,2-Dichloroethene	1	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559	U	trans-1,2-Dichloroethene	1	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560	U	trans-1,2-Dichloroethene	1	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	trans-1,2-Dichloroethene	1	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	trans-1,2-Dichloroethene	1	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	trans-1,2-Dichloroethene	1	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	trans-1,2-Dichloroethene	1	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	trans-1,2-Dichloroethene	1	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	trans-1,2-Dichloroethene	1	NV	N	S
2066	01/06/93	GW930106-7	U	trans-1,2-Dichloroethene	1	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703	U	trans-1,2-Dichloroethene	1	NV	N	R
2098	10/15/90	EMGW_SYSGEN_712	U	trans-1,2-Dichloroethene	1	NV	N	D
2098	11/05/91	EMGW_SYSGEN_715	U	trans-1,2-Dichloroethene	1	NV	N	D
2104	09/12/90	EMGW_SYSGEN_719	U	trans-1,2-Dichloroethene	1	NV	N	R
2104	11/27/90	EMGW_SYSGEN_720	U	trans-1,2-Dichloroethene	1	NV	N	R
2104	03/07/91	EMGW_SYSGEN_721	U	trans-1,2-Dichloroethene	1	NV	N	R
2104	11/07/91	EMGW_SYSGEN_722	U	trans-1,2-Dichloroethene	1	NV	N	R

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
3024	11/13/90	EMGW_SYSGEN_995	U	trans-1,2-Dichloroethene	1	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	trans-1,2-Dichloroethene	1	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	trans-1,2-Dichloroethene	1	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	trans-1,2-Dichloroethene	1	NV	N	S
3024	01/13/93	GW930113-8	U	trans-1,2-Dichloroethene	1	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	trans-1,2-Dichloroethene	1	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	trans-1,2-Dichloroethene	1	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	trans-1,2-Dichloroethene	1	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	trans-1,2-Dichloroethene	1	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	trans-1,2-Dichloroethene	1	NV	N	S
3043	01/18/93	GW930118-14	U	trans-1,2-Dichloroethene	1	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138	U	trans-1,2-Dichloroethene	1	NV	N	R
3098	10/15/90	EMGW_SYSGEN_1147	U	trans-1,2-Dichloroethene	1	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149	U	trans-1,2-Dichloroethene	1	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D	U	trans-1,2-Dichloroethene	1	NV	D	D
3098	08/13/92	3098-08/13/92-A-D1-5	U	trans-1,2-Dichloroethene	1.3	NV	D	D
4011	11/14/90	EMGW_SYSGEN_1244	U	trans-1,2-Dichloroethene	1	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	trans-1,2-Dichloroethene	1	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	trans-1,2-Dichloroethene	1	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	trans-1,2-Dichloroethene	1	NV	N	S
4011	01/05/93	GW930105-7	U	trans-1,2-Dichloroethene	1	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297	U	trans-1,2-Dichloroethene	1	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5	U	trans-1,2-Dichloroethene	1.3	NV	D	R
4096	11/04/92	4096-11/04/92-A-D1-7	U	trans-1,2-Dichloroethene	1.3	NV	D	R
2043	05/17/90	EMGW_SYSGEN_523	U	trans-1,3-Dichloropropene	1	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	U	trans-1,3-Dichloropropene	1	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	U	trans-1,3-Dichloropropene	1	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	trans-1,3-Dichloropropene	1	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	trans-1,3-Dichloropropene	1	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	trans-1,3-Dichloropropene	1	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	trans-1,3-Dichloropropene	1	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	trans-1,3-Dichloropropene	1	NV	N	S
2043	01/18/93	GW930118-12	U	trans-1,3-Dichloropropene	1	NV	N	S
2050	10/17/90	EMGW_SYSGEN_558	U	trans-1,3-Dichloropropene	1	NV	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2050	09/30/91	EMGW_SYSGEN_559	U	trans-1,3-Dichloropropene	1	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560	U	trans-1,3-Dichloropropene	1	NV	N	S
2050	08/10/92	2050-08/10/92-B-N	U	trans-1,3-Dichloropropene	10	NV	N	S
2050	11/02/92	2050-11/02/92-A-N	U	trans-1,3-Dichloropropene	2.9	NV	N	S
2050	02/10/93	GW930210-8	U	trans-1,3-Dichloropropene	10	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	trans-1,3-Dichloropropene	1	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	trans-1,3-Dichloropropene	1	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	trans-1,3-Dichloropropene	1	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	trans-1,3-Dichloropropene	1	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	trans-1,3-Dichloropropene	1	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	trans-1,3-Dichloropropene	1	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	trans-1,3-Dichloropropene	1	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	trans-1,3-Dichloropropene	1	NV	N	S
2066	01/06/93	GW930106-7	U	trans-1,3-Dichloropropene	1	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703	U	trans-1,3-Dichloropropene	1	NV	N	R
2096	08/18/92	2096-08/18/92-B-N	U	trans-1,3-Dichloropropene	10	NV	N	R
2096	11/04/92	2096-11/04/92-A-N	U	trans-1,3-Dichloropropene	2.9	NV	N	R
2096	02/02/93	GW930202-8	U	trans-1,3-Dichloropropene	10	NV	N	R
2098	10/15/90	EMGW_SYSGEN_712	U	trans-1,3-Dichloropropene	1	NV	N	D
2098	11/05/91	EMGW_SYSGEN_715	U	trans-1,3-Dichloropropene	1	NV	N	D
2098	11/23/92	GW921123-5	U	trans-1,3-Dichloropropene	2.9	NV	N	D
2098	02/04/93	GW930204-7	U	trans-1,3-Dichloropropene	10	NV	N	D
2104	06/14/90	EMGW_SYSGEN_718	U	trans-1,3-Dichloropropene	1	NV	N	R
2104	09/12/90	EMGW_SYSGEN_719	U	trans-1,3-Dichloropropene	1	NV	N	R
2104	11/27/90	EMGW_SYSGEN_720	U	trans-1,3-Dichloropropene	1	NV	N	R
2104	03/07/91	EMGW_SYSGEN_721	U	trans-1,3-Dichloropropene	1	NV	N	R
2104	11/07/91	EMGW_SYSGEN_722	U	trans-1,3-Dichloropropene	1	NV	N	R
2104	08/10/92	2104-08/10/92-B-N	U	trans-1,3-Dichloropropene	10	NV	N	R
2104	11/02/92	2104-11/02/92-A-N	U	trans-1,3-Dichloropropene	2.9	NV	N	R
2104	02/02/93	GW930202-12	U	trans-1,3-Dichloropropene	10	NV	N	R
2728	02/10/93	GW930210-5	U	trans-1,3-Dichloropropene	10	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993	U	trans-1,3-Dichloropropene	1	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	U	trans-1,3-Dichloropropene	1	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	U	trans-1,3-Dichloropropene	1	NV	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
3024	11/13/90	EMGW_SYSGEN_995	U	trans-1,3-Dichloropropene	1	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	trans-1,3-Dichloropropene	1	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	trans-1,3-Dichloropropene	1	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	trans-1,3-Dichloropropene	1	NV	N	S
3024	01/13/93	GW930113-8	U	trans-1,3-Dichloropropene	1	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	trans-1,3-Dichloropropene	1	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	trans-1,3-Dichloropropene	1	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	trans-1,3-Dichloropropene	1	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	trans-1,3-Dichloropropene	1	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	trans-1,3-Dichloropropene	1	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	trans-1,3-Dichloropropene	1	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	trans-1,3-Dichloropropene	1	NV	N	S
3043	01/18/93	GW930118-14	U	trans-1,3-Dichloropropene	1	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138	U	trans-1,3-Dichloropropene	1	NV	N	R
3096	08/18/92	3096-08/18/92-B-N	U	trans-1,3-Dichloropropene	10	NV	N	R
3096	11/04/92	3096-11/04/92-A-N	U	trans-1,3-Dichloropropene	2.9	NV	N	R
3096	02/02/93	GW930202-9	U	trans-1,3-Dichloropropene	10	NV	N	R
3098	10/15/90	EMGW_SYSGEN_1147	U	trans-1,3-Dichloropropene	1	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149	U	trans-1,3-Dichloropropene	1	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D	U	trans-1,3-Dichloropropene	1	NV	D	D
3098	08/13/92	3098-08/13/92-A-D1-5	U	trans-1,3-Dichloropropene	0.39	NV	D	D
3098	11/23/92	GW921123-6	U	trans-1,3-Dichloropropene	2.9	NV	N	D
3098	02/04/93	GW930204-10	U	trans-1,3-Dichloropropene	10	NV	N	D
3098	02/04/93	GW930204-12	U	trans-1,3-Dichloropropene	10	NV	D	D
4011	10/05/90	4345	U	trans-1,3-Dichloropropene	5	R	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	trans-1,3-Dichloropropene	1	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	trans-1,3-Dichloropropene	1	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	trans-1,3-Dichloropropene	1	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	trans-1,3-Dichloropropene	1	NV	N	S
4011	01/05/93	GW930105-7	U	trans-1,3-Dichloropropene	1	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297	U	trans-1,3-Dichloropropene	1	NV	N	R
4096	08/18/92	4096-08/18/92-B-N	U	trans-1,3-Dichloropropene	10	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5	U	trans-1,3-Dichloropropene	0.39	NV	D	R
4096	11/04/92	4096-11/04/92-A-N	U	trans-1,3-Dichloropropene	2.9	NV	N	R

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
4096	11/04/92	4096-11/04/92-A-D1-7	U	trans-1,3-Dichloropropene	0.39	NV	D	R
4096	02/02/93	GW930202-10	U	trans-1,3-Dichloropropene	10	NV	N	R
4096	02/02/93	GW930202-11	U	trans-1,3-Dichloropropene	10	NV	D	R
2043	07/06/92	2043-07/06/92-A-N1-8	U	trans-1,4-Dichloro-2-butene	20	NV	N	S
2043	01/18/93	GW930118-12	U	trans-1,4-Dichloro-2-butene	20	NV	N	S
2066	01/06/93	GW930106-7	U	trans-1,4-Dichloro-2-butene	20	NV	N	S
2096	11/04/92	2096-11/04/92-A-N	U	trans-1,4-Dichloro-2-butene	1.7	NV	N	R
2098	11/23/92	GW921123-5	U	trans-1,4-Dichloro-2-butene	1.7	NV	N	D
2104	11/02/92	2104-11/02/92-A-N	U	trans-1,4-Dichloro-2-butene	1.7	NV	N	R
3024	01/13/93	GW930113-8	U	trans-1,4-Dichloro-2-butene	20	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	trans-1,4-Dichloro-2-butene	20	NV	N	S
3043	01/18/93	GW930118-14	U	trans-1,4-Dichloro-2-butene	20	NV	N	S
3096	11/04/92	3096-11/04/92-A-N	U	trans-1,4-Dichloro-2-butene	1.7	NV	N	R
3098	11/23/92	GW921123-6	U	trans-1,4-Dichloro-2-butene	1.7	NV	N	D
4011	01/05/93	GW930105-7	U	trans-1,4-Dichloro-2-butene	20	NV	N	S
4096	11/04/92	4096-11/04/92-A-N	U	trans-1,4-Dichloro-2-butene	1.7	NV	N	R
2043	11/14/89	66683	U	Trichloroethene	2.5	NV	N	S
2043	02/20/90	EMGW_SYSGEN_522	U	Trichloroethene	1	NV	N	S
2043	05/17/90	EMGW_SYSGEN_523	U	Trichloroethene	1	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	U	Trichloroethene	1	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	U	Trichloroethene	1	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	Trichloroethene	1	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	Trichloroethene	1	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	Trichloroethene	1	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	Trichloroethene	1	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	Trichloroethene	1	NV	N	S
2043	01/18/93	GW930118-12	U	Trichloroethene	1	NV	N	S
2050	10/17/90	EMGW_SYSGEN_558	U	Trichloroethene	1	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559	U	Trichloroethene	1	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560	U	Trichloroethene	1	NV	N	S
2050	08/10/92	2050-08/10/92-B-N	U	Trichloroethene	10	NV	N	S
2050	11/02/92	2050-11/02/92-A-N	U	Trichloroethene	1.3	NV	N	S
2050	02/10/93	GW930210-8	U	Trichloroethene	10	NV	N	S
2066	11/06/89	66687	U	Trichloroethene	2.5	NV	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2066	02/22/90	EMGW_SYSGEN_628	U	Trichloroethene	1	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Trichloroethene	1	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	Trichloroethene	1	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	Trichloroethene	1	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	Trichloroethene	1	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	Trichloroethene	1	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	Trichloroethene	1	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	Trichloroethene	1	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	Trichloroethene	1	NV	N	S
2066	01/06/93	GW930106-7	U	Trichloroethene	1	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703	U	Trichloroethene	1	NV	N	R
2096	08/18/92	2096-08/18/92-B-N	U	Trichloroethene	10	NV	N	R
2096	11/04/92	2096-11/04/92-A-N	U	Trichloroethene	1.3	NV	N	R
2096	02/02/93	GW930202-8	U	Trichloroethene	10	NV	N	R
2098	10/15/90	EMGW_SYSGEN_712	U	Trichloroethene	1	NV	N	D
2098	11/05/91	EMGW_SYSGEN_715	U	Trichloroethene	1	NV	N	D
2098	11/23/92	GW921123-5	U	Trichloroethene	1.3	NV	N	D
2098	02/04/93	GW930204-7	U	Trichloroethene	10	NV	N	D
2104	06/14/90	EMGW_SYSGEN_718	U	Trichloroethene	1	NV	N	R
2104	09/12/90	EMGW_SYSGEN_719	U	Trichloroethene	1	NV	N	R
2104	11/27/90	EMGW_SYSGEN_720	U	Trichloroethene	1	NV	N	R
2104	03/07/91	EMGW_SYSGEN_721	U	Trichloroethene	1	NV	N	R
2104	11/07/91	EMGW_SYSGEN_722	U	Trichloroethene	1	NV	N	R
2104	08/10/92	2104-08/10/92-B-N	U	Trichloroethene	10	NV	N	R
2104	11/02/92	2104-11/02/92-A-N	U	Trichloroethene	1.3	NV	N	R
2104	02/02/93	GW930202-12	U	Trichloroethene	10	NV	N	R
2728	02/10/93	GW930210-5	U	Trichloroethene	10	NV	N	S
3024	11/30/89	66735	U	Trichloroethene	2.5	NV	N	S
3024	02/18/90	EMGW_SYSGEN_992	U	Trichloroethene	1	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993	U	Trichloroethene	1	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	U	Trichloroethene	1	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	U	Trichloroethene	1	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	Trichloroethene	1	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	Trichloroethene	1	NV	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
3024	07/15/91	EMGW_SYSGEN_998	U	Trichloroethene	1	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	Trichloroethene	1	NV	N	S
3024	01/13/93	GW930113-8	U	Trichloroethene	1	NV	N	S
3043	11/14/89	66685	U	Trichloroethene	2.5	NV	N	S
3043	02/20/90	EMGW_SYSGEN_1018	U	Trichloroethene	1	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Trichloroethene	1	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	Trichloroethene	1	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	Trichloroethene	1	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	Trichloroethene	1	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	Trichloroethene	1	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	Trichloroethene	1	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	Trichloroethene	1	NV	N	S
3043	01/18/93	GW930118-14	U	Trichloroethene	1	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138	U	Trichloroethene	1	NV	N	R
3096	08/18/92	3096-08/18/92-B-N	U	Trichloroethene	10	NV	N	R
3096	11/04/92	3096-11/04/92-A-N	U	Trichloroethene	1.3	NV	N	R
3096	02/02/93	GW930202-9	U	Trichloroethene	10	NV	N	R
3098	10/15/90	EMGW_SYSGEN_1147	U	Trichloroethene	1	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149	U	Trichloroethene	1	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D	U	Trichloroethene	1	NV	D	D
3098	08/13/92	3098-08/13/92-A-D1-5	U	Trichloroethene	1.4	NV	D	D
3098	11/23/92	GW921123-6	U	Trichloroethene	1.3	NV	N	D
3098	02/04/93	GW930204-10	U	Trichloroethene	10	NV	N	D
3098	02/04/93	GW930204-12	U	Trichloroethene	10	NV	D	D
4011	10/05/90	4345	U	Trichloroethene	5	R	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Trichloroethene	1	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Trichloroethene	1	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	Trichloroethene	1	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	Trichloroethene	1	NV	N	S
4011	01/05/93	GW930105-7	U	Trichloroethene	1	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297	U	Trichloroethene	1	NV	N	R
4096	08/18/92	4096-08/18/92-B-N	U	Trichloroethene	10	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5	U	Trichloroethene	1.4	NV	D	R
4096	11/04/92	4096-11/04/92-A-N	U	Trichloroethene	1.3	NV	N	R

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
4096	11/04/92	4096-11/04/92-A-D1-7	U	Trichloroethene	1.4	NV	D	R
4096	02/02/93	GW930202-10	U	Trichloroethene	10	NV	N	R
4096	02/02/93	GW930202-11	U	Trichloroethene	10	NV	D	R
2043	07/06/92	2043-07/06/92-A-N1-8	U	Trichlorofluoromethane	1	NV	N	S
2043	01/18/93	GW930118-12	U	Trichlorofluoromethane	1	NV	N	S
2050	11/02/92	2050-11/02/92-A-N	U	Trichlorofluoromethane	1.5	NV	N	S
2066	01/06/93	GW930106-7	U	Trichlorofluoromethane	1	NV	N	S
2096	11/04/92	2096-11/04/92-A-N	U	Trichlorofluoromethane	1.5	NV	N	R
2098	11/23/92	GW921123-5	U	Trichlorofluoromethane	1.5	NV	N	D
2104	11/02/92	2104-11/02/92-A-N	U	Trichlorofluoromethane	1.5	NV	N	R
3024	01/13/93	GW930113-8	U	Trichlorofluoromethane	1	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	Trichlorofluoromethane	1	NV	N	S
3043	01/18/93	GW930118-14	U	Trichlorofluoromethane	1	NV	N	S
3096	11/04/92	3096-11/04/92-A-N	U	Trichlorofluoromethane	1.5	NV	N	R
3098	08/13/92	3098-08/13/92-A-D1-5	U	Trichlorofluoromethane	0.93	NV	D	D
3098	11/23/92	GW921123-6	U	Trichlorofluoromethane	1.5	NV	N	D
4011	02/21/91	EMGW_SYSGEN_1245	U	Trichlorofluoromethane	1	NV	N	S
4011	01/05/93	GW930105-7	U	Trichlorofluoromethane	1	NV	N	S
4096	08/18/92	4096-08/18/92-B-D1-5	U	Trichlorofluoromethane	0.93	NV	D	R
4096	11/04/92	4096-11/04/92-A-N	U	Trichlorofluoromethane	1.5	NV	N	R
4096	11/04/92	4096-11/04/92-A-D1-7	U	Trichlorofluoromethane	0.93	NV	D	R
2043	05/17/90	EMGW_SYSGEN_523	U	Vinyl Acetate	2	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	U	Vinyl Acetate	2	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	U	Vinyl Acetate	2	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	Vinyl Acetate	2	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	Vinyl Acetate	2	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	Vinyl Acetate	2	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	Vinyl Acetate	2	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	Vinyl Acetate	10	NV	N	S
2043	01/18/93	GW930118-12	U	Vinyl Acetate	10	NV	N	S
2050	10/17/90	EMGW_SYSGEN_558	U	Vinyl Acetate	2	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559	U	Vinyl Acetate	2	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560	U	Vinyl Acetate	2	NV	N	S
2050	11/02/92	2050-11/02/92-A-N	U	Vinyl Acetate	3.5	NV	N	S

Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2066	05/16/90	EMGW_SYSGEN_629	U	Vinyl Acetate	2	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	Vinyl Acetate	2	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	Vinyl Acetate	2	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	Vinyl Acetate	2	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	Vinyl Acetate	2	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	Vinyl Acetate	2	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	Vinyl Acetate	2	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	Vinyl Acetate	2	NV	N	S
2066	01/06/93	GW930106-7	U	Vinyl Acetate	10	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703	U	Vinyl Acetate	2	NV	N	R
2096	11/04/92	2096-11/04/92-A-N	U	Vinyl Acetate	3.5	NV	N	R
2098	10/15/90	EMGW_SYSGEN_712	U	Vinyl Acetate	2	NV	N	D
2098	11/05/91	EMGW_SYSGEN_715	U	Vinyl Acetate	2	NV	N	D
2098	11/23/92	GW921123-5	U	Vinyl Acetate	3.5	NV	N	D
2104	06/14/90	EMGW_SYSGEN_718	U	Vinyl Acetate	2	NV	N	R
2104	09/12/90	EMGW_SYSGEN_719	U	Vinyl Acetate	2	NV	N	R
2104	11/27/90	EMGW_SYSGEN_720	U	Vinyl Acetate	2	NV	N	R
2104	03/07/91	EMGW_SYSGEN_721	U	Vinyl Acetate	2	NV	N	R
2104	11/07/91	EMGW_SYSGEN_722	U	Vinyl Acetate	2	NV	N	R
2104	11/02/92	2104-11/02/92-A-N	U	Vinyl Acetate	3.5	NV	N	R
3024	06/11/90	EMGW_SYSGEN_993	U	Vinyl Acetate	2	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	U	Vinyl Acetate	2	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	U	Vinyl Acetate	2	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	Vinyl Acetate	2	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	Vinyl Acetate	2	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	Vinyl Acetate	2	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	Vinyl Acetate	2	NV	N	S
3024	01/13/93	GW930113-8	U	Vinyl Acetate	10	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Vinyl Acetate	2	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	Vinyl Acetate	2	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	Vinyl Acetate	2	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	Vinyl Acetate	2	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	Vinyl Acetate	2	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	Vinyl Acetate	2	NV	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
3043	07/06/92	3043-07/06/92-A-N1-8	U	Vinyl Acetate	10	NV	N	S
3043	01/18/93	GW930118-14	U	Vinyl Acetate	10	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138	U	Vinyl Acetate	2	NV	N	R
3096	11/04/92	3096-11/04/92-A-N	U	Vinyl Acetate	3.5	NV	N	R
3098	10/15/90	EMGW_SYSGEN_1147	U	Vinyl Acetate	2	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149	U	Vinyl Acetate	2	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D	U	Vinyl Acetate	2	NV	D	D
3098	08/13/92	3098-08/13/92-A-D1-5	U	Vinyl Acetate	1.2	NV	D	D
3098	11/23/92	GW921123-6	U	Vinyl Acetate	3.5	NV	N	D
4011	10/05/90	4345	U	Vinyl Acetate	10	R	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Vinyl Acetate	2	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Vinyl Acetate	2	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	Vinyl Acetate	2	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	Vinyl Acetate	2	NV	N	S
4011	01/05/93	GW930105-7	U	Vinyl Acetate	10	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297	U	Vinyl Acetate	2	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5	U	Vinyl Acetate	1.2	NV	D	R
4096	11/04/92	4096-11/04/92-A-N	U	Vinyl Acetate	3.5	NV	N	R
4096	11/04/92	4096-11/04/92-A-D1-7	U	Vinyl Acetate	1.2	NV	D	R
2043	05/17/90	EMGW_SYSGEN_523	U	Vinyl chloride	1	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	U	Vinyl chloride	1	NV	N	S
2043	11/06/90	EMGW_SYSGEN_525	U	Vinyl chloride	1	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	Vinyl chloride	1	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	Vinyl chloride	1	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	Vinyl chloride	1	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	Vinyl chloride	1	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	Vinyl chloride	5	NV	N	S
2043	01/18/93	GW930118-12	U	Vinyl chloride	5	NV	N	S
2050	10/17/90	EMGW_SYSGEN_558	U	Vinyl chloride	1	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559	U	Vinyl chloride	1	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560	U	Vinyl chloride	1	NV	N	S
2050	08/10/92	2050-08/10/92-B-N	U	Vinyl chloride	10	NV	N	S
2050	11/02/92	2050-11/02/92-A-N	U	Vinyl chloride	1.7	NV	N	S
2050	02/10/93	GW930210-8	U	Vinyl chloride	10	NV	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2066	05/16/90	EMGW_SYSGEN_629	U	Vinyl chloride	1	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	Vinyl chloride	1	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	Vinyl chloride	1	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	Vinyl chloride	1	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	Vinyl chloride	1	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	Vinyl chloride	1	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	Vinyl chloride	1	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	Vinyl chloride	1	NV	N	S
2066	01/06/93	GW930106-7	U	Vinyl chloride	5	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703	U	Vinyl chloride	1	NV	N	R
2096	08/18/92	2096-08/18/92-B-N	U	Vinyl chloride	10	NV	N	R
2096	11/04/92	2096-11/04/92-A-N	U	Vinyl chloride	1.7	NV	N	R
2096	02/02/93	GW930202-8	U	Vinyl chloride	10	NV	N	R
2098	10/15/90	EMGW_SYSGEN_712	U	Vinyl chloride	1	NV	N	D
2098	11/05/91	EMGW_SYSGEN_715	U	Vinyl chloride	1	NV	N	D
2098	11/23/92	GW921123-5	U	Vinyl chloride	1.7	NV	N	D
2098	02/04/93	GW930204-7	U	Vinyl chloride	10	NV	N	D
2104	06/14/90	EMGW_SYSGEN_718	U	Vinyl chloride	10	NV	N	R
2104	09/12/90	EMGW_SYSGEN_719	U	Vinyl chloride	1	NV	N	R
2104	11/27/90	EMGW_SYSGEN_720	U	Vinyl chloride	1	NV	N	R
2104	03/07/91	EMGW_SYSGEN_721	U	Vinyl chloride	1	NV	N	R
2104	11/07/91	EMGW_SYSGEN_722	U	Vinyl chloride	1	NV	N	R
2104	08/10/92	2104-08/10/92-B-N	U	Vinyl chloride	10	NV	N	R
2104	11/02/92	2104-11/02/92-A-N	U	Vinyl chloride	1.7	NV	N	R
2104	02/02/93	GW930202-12	U	Vinyl chloride	10	NV	N	R
2728	02/10/93	GW930210-5	U	Vinyl chloride	10	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993	U	Vinyl chloride	1	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	U	Vinyl chloride	1	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	U	Vinyl chloride	1	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	Vinyl chloride	1	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	Vinyl chloride	1	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	Vinyl chloride	1	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	Vinyl chloride	1	NV	N	S
3024	01/13/93	GW930113-8	U	Vinyl chloride	5	NV	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
3043	05/17/90	EMGW_SYSGEN_1019	U	Vinyl chloride	1	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	Vinyl chloride	1	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	Vinyl chloride	1	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	Vinyl chloride	1	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	Vinyl chloride	1	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	Vinyl chloride	1	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	Vinyl chloride	5	NV	N	S
3043	01/18/93	GW930118-14	U	Vinyl chloride	5	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138	U	Vinyl chloride	1	NV	N	R
3096	08/18/92	3096-08/18/92-B-N	U	Vinyl chloride	10	NV	N	R
3096	11/04/92	3096-11/04/92-A-N	U	Vinyl chloride	1.7	NV	N	R
3096	02/02/93	GW930202-9	U	Vinyl chloride	10	NV	N	R
3098	10/15/90	EMGW_SYSGEN_1147	U	Vinyl chloride	1	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149	U	Vinyl chloride	1	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D	U	Vinyl chloride	1	NV	D	D
3098	08/13/92	3098-08/13/92-A-D1-5	U	Vinyl chloride	2.3	NV	D	D
3098	11/23/92	GW921123-6	U	Vinyl chloride	1.7	NV	N	D
3098	02/04/93	GW930204-10	U	Vinyl chloride	10	NV	N	D
3098	02/04/93	GW930204-12	U	Vinyl chloride	10	NV	D	D
4011	10/05/90	4345	U	Vinyl chloride	10	R	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Vinyl chloride	1	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Vinyl chloride	1	NV	N	S
4011	07/30/91	EMGW_SYSGEN_1247	U	Vinyl chloride	1	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	Vinyl chloride	1	NV	N	S
4011	01/05/93	GW930105-7	U	Vinyl chloride	5	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297	U	Vinyl chloride	1	NV	N	R
4096	08/18/92	4096-08/18/92-B-N	U	Vinyl chloride	10	NV	N	R
4096	08/18/92	4096-08/18/92-B-D1-5	U	Vinyl chloride	2.3	NV	D	R
4096	11/04/92	4096-11/04/92-A-N	U	Vinyl chloride	1.7	NV	N	R
4096	11/04/92	4096-11/04/92-A-D1-7	U	Vinyl chloride	2.3	NV	D	R
4096	02/02/93	GW930202-10	U	Vinyl chloride	10	NV	N	R
4096	02/02/93	GW930202-11	U	Vinyl chloride	10	NV	D	R
2043	05/17/90	EMGW_SYSGEN_523	U	Xylenes, Total	1	NV	N	S
2043	08/06/90	EMGW_SYSGEN_524	U	Xylenes, Total	1	NV	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2043	11/06/90	EMGW_SYSGEN_525	U	Xylenes, Total	1	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526	U	Xylenes, Total	1	NV	N	S
2043	02/28/91	EMGW_SYSGEN_526D	U	Xylenes, Total	1	NV	D	S
2043	07/16/91	EMGW_SYSGEN_528	U	Xylenes, Total	1	NV	N	S
2043	10/01/91	EMGW_SYSGEN_529	U	Xylenes, Total	1	NV	N	S
2043	07/06/92	2043-07/06/92-A-N1-8	U	Xylenes, Total	1	NV	N	S
2043	01/18/93	GW930118-12	U	Xylenes, Total	1	NV	N	S
2050	10/17/90	EMGW_SYSGEN_558	U	Xylenes, Total	1	NV	N	S
2050	09/30/91	EMGW_SYSGEN_559	U	Xylenes, Total	1	NV	N	S
2050	11/07/91	EMGW_SYSGEN_560	U	Xylenes, Total	1	NV	N	S
2050	08/10/92	2050-08/10/92-B-N	U	Xylenes, Total	10	NV	N	S
2050	11/02/92	2050-11/02/92-A-N	U	Xylenes, Total	1	NV	N	S
2050	02/10/93	GW930210-8	U	Xylenes, Total	10	NV	N	S
2066	05/16/90	EMGW_SYSGEN_629	U	Xylenes, Total	1	NV	N	S
2066	08/06/90	EMGW_SYSGEN_630	U	Xylenes, Total	1	NV	N	S
2066	11/06/90	EMGW_SYSGEN_631	U	Xylenes, Total	1	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633	U	Xylenes, Total	1	NV	N	S
2066	02/26/91	EMGW_SYSGEN_633D	U	Xylenes, Total	1	NV	D	S
2066	07/17/91	EMGW_SYSGEN_635	U	Xylenes, Total	1	NV	N	S
2066	10/02/91	EMGW_SYSGEN_636	U	Xylenes, Total	1	NV	N	S
2066	01/02/92	EMGW_SYSGEN_637	U	Xylenes, Total	1	NV	N	S
2066	01/06/93	GW930106-7	U	Xylenes, Total	1	NV	N	S
2096	11/12/91	EMGW_SYSGEN_703	U	Xylenes, Total	1	NV	N	R
2096	08/18/92	2096-08/18/92-B-N	U	Xylenes, Total	10	NV	N	R
2096	11/04/92	2096-11/04/92-A-N	U	Xylenes, Total	1	NV	N	R
2096	02/02/93	GW930202-8	U	Xylenes, Total	10	NV	N	R
2098	10/15/90	EMGW_SYSGEN_712	U	Xylenes, Total	1	NV	N	D
2098	11/05/91	EMGW_SYSGEN_715	U	Xylenes, Total	1	NV	N	D
2098	11/23/92	GW921123-5	U	Xylenes, Total	1	NV	N	D
2098	02/04/93	GW930204-7	U	Xylenes, Total	10	NV	N	D
2104	06/14/90	EMGW_SYSGEN_718	U	Xylenes, Total	1	NV	N	R
2104	09/12/90	EMGW_SYSGEN_719	U	Xylenes, Total	1	NV	N	R
2104	11/27/90	EMGW_SYSGEN_720	U	Xylenes, Total	1	NV	N	R
2104	03/07/91	EMGW_SYSGEN_721	U	Xylenes, Total	1	NV	N	R

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
2104	11/07/91	EMGW_SYSGEN_722	U	Xylenes, Total	1	NV	N	R
2104	08/10/92	2104-08/10/92-B-N	U	Xylenes, Total	10	NV	N	R
2104	11/02/92	2104-11/02/92-A-N	U	Xylenes, Total	1	NV	N	R
2104	02/02/93	GW930202-12	U	Xylenes, Total	10	NV	N	R
2728	02/10/93	GW930210-5	U	Xylenes, Total	10	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993	U	Xylenes, Total	1	NV	N	S
3024	06/11/90	EMGW_SYSGEN_993D	U	Xylenes, Total	1	NV	D	S
3024	08/08/90	EMGW_SYSGEN_994	U	Xylenes, Total	1	NV	N	S
3024	11/13/90	EMGW_SYSGEN_995	U	Xylenes, Total	1	NV	N	S
3024	02/27/91	EMGW_SYSGEN_996	U	Xylenes, Total	1	NV	N	S
3024	07/15/91	EMGW_SYSGEN_998	U	Xylenes, Total	1	NV	N	S
3024	10/01/91	EMGW_SYSGEN_999	U	Xylenes, Total	1	NV	N	S
3024	01/13/93	GW930113-8	U	Xylenes, Total	1	NV	N	S
3043	05/17/90	EMGW_SYSGEN_1019	U	Xylenes, Total	1	NV	N	S
3043	08/07/90	EMGW_SYSGEN_1020	U	Xylenes, Total	1	NV	N	S
3043	11/05/90	EMGW_SYSGEN_1021	U	Xylenes, Total	1	NV	N	S
3043	02/28/91	EMGW_SYSGEN_1022	U	Xylenes, Total	1	NV	N	S
3043	07/16/91	EMGW_SYSGEN_1024	U	Xylenes, Total	1	NV	N	S
3043	10/01/91	EMGW_SYSGEN_1025	U	Xylenes, Total	1	NV	N	S
3043	07/06/92	3043-07/06/92-A-N1-8	U	Xylenes, Total	1	NV	N	S
3043	01/18/93	GW930118-14	U	Xylenes, Total	1	NV	N	S
3096	11/12/91	EMGW_SYSGEN_1138	U	Xylenes, Total	1	NV	N	R
3096	08/18/92	3096-08/18/92-B-N	U	Xylenes, Total	10	NV	N	R
3096	11/04/92	3096-11/04/92-A-N	U	Xylenes, Total	1	NV	N	R
3096	02/02/93	GW930202-9	U	Xylenes, Total	10	NV	N	R
3098	10/15/90	EMGW_SYSGEN_1147	U	Xylenes, Total	1	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149	U	Xylenes, Total	1	NV	N	D
3098	11/05/91	EMGW_SYSGEN_1149D	U	Xylenes, Total	1	NV	D	D
3098	11/23/92	GW921123-6	U	Xylenes, Total	1	NV	N	D
3098	02/04/93	GW930204-10	U	Xylenes, Total	10	NV	N	D
3098	02/04/93	GW930204-12	U	Xylenes, Total	10	NV	D	D
4011	10/05/90	4345	U	Xylenes, Total	5	R	N	S
4011	11/14/90	EMGW_SYSGEN_1244	U	Xylenes, Total	1	NV	N	S
4011	02/21/91	EMGW_SYSGEN_1245	U	Xylenes, Total	1	NV	N	S

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Table E-18 (Continued)
Rejected/Nonvalidated Organic Data for Background Monitoring Wells in the Great Miami Aquifer

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	Area
4011	07/30/91	EMGW_SYSGEN_1247	U	Xylenes, Total	1	NV	N	S
4011	10/02/91	EMGW_SYSGEN_1248	U	Xylenes, Total	1	NV	N	S
4011	01/05/93	GW930105-7	U	Xylenes, Total	1	NV	N	S
4096	11/12/91	EMGW_SYSGEN_1297	U	Xylenes, Total	1	NV	N	R
4096	08/18/92	4096-08/18/92-B-N	U	Xylenes, Total	10	NV	N	R
4096	11/04/92	4096-11/04/92-A-N	U	Xylenes, Total	1	NV	N	R
4096	02/02/93	GW930202-10	U	Xylenes, Total	10	NV	N	R
4096	02/02/93	GW930202-11	U	Xylenes, Total	10	NV	D	R

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Table E-19
Rejected/Nonvalidated Organic Data for Background Surface Water in the Great Miami River

Well	Sample		Lab		Validated		QA
No.	Date	ID	qualifier	Constituent	Result	Qualifier	type
W-1	05/20/93	120064-2	U	4-Nitroaniline	25	R	N
W-1	05/20/93	120068-1	U	4-Nitroaniline	25	R	D
W-1	05/20/93	120072-2	U	4-Nitroaniline	25	R	T

Table E-20
Rejected/Nonvalidated Organic Data for Background Surface Water in Paddys Run

Well No.	Sample		Lab qualifier	Constituent	Validated		QA type
	Date	ID			Result	Qualifier	
W-5	03/25/93	113493	U	2,4-Dinitrophenol	50	R	N
W-5	03/25/93	113493	U	4,6-Dinitro-2-methylphenol	25	R	N

APPENDIX F

STATISTICAL PROCEDURES, EQUATIONS, AND RESULTS

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Table F-1
Formulas for Summary Statistics

Statistic	Formula
Shapiro-Wilk Test (Gilbert 1987, Equations 12.3 and 12.4)	$$W = \frac{1}{d}\left[\sum_{i=1}^{k} a_i \left(x_{[n-i+1]} - x_{[i]}\right)\right]^2$$ where: $d = \sum_{i=1}^{n} x_i^2 - \frac{1}{n}\left(\sum_{i=1}^{n} x_i\right)^2$ $k = \frac{n}{2}$ if n is even $= \frac{n-1}{2}$ if n is odd a_i = Shapiro-Wilk coefficient x_i = i^{th} data value in the ordered data set x_i^2 = square of the ith data value in the ordered data set n = number of data points W = Shapiro-Wilk test statistic
Shapiro-Francia Test (Shapiro-Francia, 1972)	$$W' = \frac{\left[\sum_{i=1}^{n} m_i X_i\right]^2}{(n-1)s^2 \sum_{i=1}^{n} m_i^2}$$ where: $m_i = \Phi^{-1}$ at $\left(\frac{1}{n+1}\right)$ m_i = normal quantile Φ^{-1} = inverse of standard normal distribution x_i = i^{th} data value in the ordered data set s^2 = sample arithmetic variance W^1 = Shapiro-Francia test statistic
Rosner's Test for Many Outliers (Gilbert 1987, Equations 15.1 to 15.3)	See page F-23.
Sample Arithmetic Mean (Gilbert 1987, Equation 4.3)	$$\bar{x} = \frac{1}{n}\sum_{i=1}^{n} x_i$$ where: n = number of data points x_i = i^{th} data value in the ordered data set $\bar{x}$ = arithmetic mean

TABLE F-1
(Continued)

Statistic	Formula
Sample Arithmetic Standard Deviation (Gilbert 1987, Equation 4.4)	$s^2 = \frac{1}{n-1} \sum_{i=1}^{n} (x_i - \bar{x})^2$ $s = \sqrt{s^2}$ where: n = number of data points x_i = data set value $\bar{x}$ = arithmetic mean s^2 = arithmetic variance s = arithmetic standard deviation
Estimated Coefficient of Variation (Gilbert 1987, Page 34)	$CV = s/\bar{x}$ where: $\bar{x}$ = sample arithmetic mean s = sample arithmetic standard deviation CV = estimated coefficient of variation
Estimated Mean of a Lognormal Distribution (Gilbert 1987, Equation 13.7)	$\hat{\mu} = \exp\left(\bar{y} + \frac{s_y^2}{2}\right)$ where: $\bar{y}$ = arithmetic mean of the ln transformed data s_y = arithmetic standard deviation of the ln transformed data $\hat{\mu}$ = estimated mean of a lognormal distribution
Estimated Standard Deviation of a Lognormal Distribution (Gilbert 1987, Equation 13.8)	$\hat{\sigma} = \sqrt{\hat{\mu}^2 [\exp s_y^2 - 1]}$ where: $\hat{\mu}$ = estimated mean of a lognormal distribution s_y = arithmetic standard deviation of the ln transformed data $\hat{\sigma}$ = estimated standard deviation of the lognormal distribution

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TABLE F-1
(Continued)

Statistic	Formula
Sample Median - Nonparametric Technique (Gilbert 1987, Equation 13.15 and 13.16)	If n is odd: $$\text{sample median} = x_{[(n+1)/2]}$$ If n is even: $$\text{sample median} = \frac{1}{2}\left(x_{[n/2]} + x_{[(n+2)/2]}\right)$$ where: $x_{[i]}$ = i^{th} data value in the ordered data set; n = number of data points
Upper 95% Confidence Limit on the Mean - Normal Distribution (Gilbert 1987, Equation 11.6)	$$95\%\ UCL_N = \bar{x} + t_{0.95,n-1}\frac{s}{\sqrt{n}}$$ where: $\bar{x}$ = arithmetic mean; $t_{0.95,n-1}$ = student t distribution value; n = number of data points; s = arithmetic standard deviation; 95% UCL_N = one-sided upper 95% confidence limit for a normal distribution
Upper 95% Confidence Limit on the Arithmetic Mean for Lognormal Distribution (Gilbert 1987, Equation 13.13)	$$95\%\ UCL_L = \exp\left(\bar{y} + 0.5\, s_y^2 + \frac{s_y H_{0.95}}{\sqrt{n-1}}\right)$$ where: $\bar{y}$ = arithmetic mean of the ln transformed data; s_y^2 = arithmetic variance of the ln transformed data; s_y = arithmetic standard deviation of the ln transformed data; $H_{0.95}$ = value used to compute one-sided 95% confidence limit on a lognormal mean; n = number of data points; 95% UCL_L = one-sided upper 95% confidence limit for a lognormal distribution

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TABLE F-1
(Continued)

Statistic	Formula
Upper 95% Confidence Limit on the Median - Nonparametric Technique (Gilbert 1987, Equation 13.22)	$U = \frac{n + 1 + Z_{0.95}\sqrt{n}}{2}$ $95\%\ UCL_{NP} = x_{[f(U)]}$ where: n = number of data points $Z_{0.95}$ = upper 95% limit from a standard normal curve for a Z distribution U = rank in an ascending order data set that corresponds to the one-sided upper 95% confidence limit for nonparametric distribution f(U) = U rounded up to an integer (e.g., 24.2 → 25) $95\%\ UCL_{NP}$ = data point in the ascending ordered data set at rank f(u)
0.95 Quantitle - Normal Distribution (Gilbert 1987, Equation 11.1)	$95^{th}\ Percentile_N = \bar{x} + s\ Z_{0.95}$ where: $\bar{x}$ = arithmetic mean s = arithmetic standard deviation $Z_{0.95}$ = 0.95 limit from a standard normal curve for a Z distribution $95^{th}\ Percentile_N$ = 95th percentile for normal distribution
0.95 Quantile - Lognormal Distribution (Gilbert 1987, Equation 13.24)	$95^{th}\ Percentile_L = \exp(\bar{y} + s_y\ Z_{0.95})$ where: $\bar{y}$ = arithmetic mean of the ln transformed data s_y = arithmetic standard deviation of the ln transformed data $Z_{0.95}$ = upper 95% limit from a standard normal curve for a distribution $95^{th}\ Percentile_L$ = 95th percentile for lognormal distribution
0.95 Quantile - Nonparametric Technique	$Q = 0.95\ n$ $95^{th}\ Percentile_{NP} = x_{[f(Q)]}$ where: n = number of data points Q = rank in an ascending order data set that corresponds to the 95th percentile based on a nonparametric technique f(Q) = Q rounded up to an integer (e.g., 14.1 → 15) $95^{th}\ Percentile_{NP}$ = data point in the ascending order data set at rank f(Q)
F-test	See page F-52.
T-test	See page F-57.
Wilcoxon Rank Sum test	See page F-60.
Kruskal-Wallis test	See page F-64.

Shapiro-Wilk Test for Normality

The W test developed by Shapiro and Wilk (Gilbert 1987, Equations 12.3 and 12.4) was used to determine whether or not a data set has been drawn from a population which is normally distributed for sample size of 50 or less. By conducting this test on the natural logarithm of each data value, the W test was used to determine whether or not the sample was drawn from an underlying lognormal distribution. The null hypothesis to be tested is:

H_o: The population has a normal (lognormal when the data is transformed) distribution.

versus

H_A: The population does not have a normal (lognormal when the data is transformed) distribution.

If H_o is rejected, then H_A is accepted.

The following presents a step-by-step procedure for conducting the W test. The equation for calculating W is:

$$W = \frac{1}{d}\left[\sum_{i=1}^{k} a_i \left(x_{[n-i+1]} - x_{[i]}\right)\right]^2$$

1. Compute the denominator (d) of the W test statistic

$$d = \sum_{i=1}^{n} x_i^2 - \frac{1}{n}\left(\sum_{i=1}^{n} x_i\right)^2$$

where:

$$\sum_{i=1}^{n} x_i = x_1 + x_2 + ... + x_n$$

$$\sum_{i=1}^{n} x_i^2 = x_i^2 + x_2^2 + ... + x_n^2$$

2. Order the n data points in ascending order (smallest to largest) such that $x_1 \leq x_2 \leq x_3 \leq ... < x_n$

3. Compute k, where:

$$k = \frac{n}{2} \text{ if } n \text{ is even}$$

$$k = \frac{n-1}{2} \text{ if } n \text{ is odd}$$

4. Find the coefficients $a_1, a_2, a_3, ..., a_k$ for the sample size n from Table F-2.

5. Compute W

$$W = \frac{1}{d}\left[\sum_{i=1}^{k} a_i \left(x_{n-i+1} - x_i\right)\right]^2$$

6. Reject H_o at the α significance level if W is less than the quantile given in Table F-3.

To test the null hypothesis that the population has a lognormal distribution, transform the observed data to $y_1, y_2, ..., y_n$ where $y_i = \ln x_i$. Repeat steps 1 through 6 as described above.

Table F-2
Coefficients ai for the Shapiro-Wilk W Test for Normality

f\n	2	3	4	5	6	7	8	9	10
1	0.7071	0.7071	0.6872	0.6646	0.6431	0.6233	0.6052	0.5888	0.5739
2	-	0.0000	0.1677	0.2413	0.2806	0.3031	0.3164	0.3244	0.3291
3	-	-	-	0.0000	0.0875	0.1401	0.1743	0.1976	0.2141
4	-	-	-	-	-	0.0000	0.0561	0.0947	0.1224
5	-	-	-	-	-	-	-	0.0000	0.0399

f\n	11	12	13	14	15	16	17	18	19	20
1	0.5601	0.5475	0.5359	0.5251	0.5150	0.5056	0.4968	0.4886	0.4808	0.4734
2	0.3315	0.3325	0.3325	0.3318	0.3306	0.3290	0.3273	0.3253	0.3232	0.3211
3	0.2260	0.2347	0.2412	0.2460	0.2495	0.2521	0.2540	0.2553	0.2561	0.2565
4	0.1429	0.1586	0.1707	0.1802	0.1878	0.1939	0.1988	0.2027	0.2059	0.2085
5	0.0695	0.0922	0.1099	0.1240	0.1353	0.1447	0.1524	0.1587	0.1641	0.1686
6	0.0000	0.0303	0.0539	0.0727	0.0880	0.1005	0.1109	0.1197	0.1271	0.1334
7	-	-	0.0000	0.0240	0.0433	0.0593	0.0725	0.0837	0.0932	0.1013
8	-	-	-	-	0.0000	0.0196	0.0359	0.0496	0.0612	0.0711
9	-	-	-	-	-	-	0.0000	0.0163	0.0303	0.0422
10	-	-	-	-	-	-	-	-	0.0000	0.0140

f\n	21	22	23	24	25	26	27	28	29	30
1	0.4643	0.4590	0.4542	0.4493	0.4450	0.4407	0.4366	0.4328	0.4291	0.4254
2	0.3185	0.3156	0.3126	0.3098	0.3069	0.3043	0.3018	0.2992	0.2968	0.2944
3	0.2578	0.2571	0.2563	0.2554	0.2543	0.2533	0.2522	0.2510	0.2499	0.2487
4	0.2119	0.2131	0.2139	0.2145	0.2148	0.2151	0.2152	0.2151	0.2150	0.2148
5	0.1736	0.1764	0.1787	0.1807	0.1822	0.1836	0.1848	0.1857	0.1864	0.1870
6	0.1399	0.1443	0.1480	0.1512	0.1539	0.1563	0.1584	0.1601	0.1616	0.1630
7	0.1092	0.1150	0.1201	0.1245	0.1283	0.1316	0.1346	0.1372	0.1395	0.1415
8	0.0804	0.0878	0.0941	0.0997	0.1046	0.1089	0.1128	0.1162	0.1192	0.1219
9	0.0530	0.0618	0.0696	0.0764	0.0823	0.0876	0.0923	0.0965	0.1002	0.1036
10	0.0263	0.0368	0.0459	0.0539	0.0610	0.0672	0.0728	0.0778	0.0822	0.0862
11	0.0000	0.0122	0.0228	0.0321	0.0403	0.0476	0.0540	0.0598	0.0650	0.0697
12	-	-	0.0000	0.0107	0.0200	0.0284	0.0358	0.0424	0.0483	0.0537
13	-	-	-	-	0.0000	0.0094	0.0178	0.0253	0.0320	0.0381
14	-	-	-	-	-	-	0.0000	0.0084	0.0159	0.0227
15	-	-	-	-	-	-	-	-	0.0000	0.0076

Table F-2 (Continued)
Coefficients ai for the Shapiro-Wilk W Test for Normality

f\n	31	32	33	34	35	36	37	38	39	40
1	0.4220	0.4188	0.4156	0.4127	0.4096	0.4068	0.4040	0.4015	0.3989	0.3964
2	0.2921	0.2898	0.2876	0.2854	0.2834	0.2813	0.2794	0.2774	0.2755	0.2737
3	0.2475	0.2462	0.2451	0.2439	0.2427	0.2415	0.2403	0.2391	0.2380	0.2368
4	0.2145	0.2141	0.2137	0.2132	0.2127	0.2121	0.2116	0.2110	0.2104	0.2098
5	0.1874	0.1878	0.1880	0.1882	0.1883	0.1883	0.1883	0.1881	0.1880	0.1878
6	0.1641	0.1651	0.1660	0.1667	0.1673	0.1678	0.1683	0.1686	0.1689	0.1691
7	0.1433	0.1449	0.1463	0.1475	0.1487	0.1496	0.1505	0.1513	0.1520	0.1526
8	0.1243	0.1265	0.1284	0.1301	0.1317	0.1331	0.1344	0.1356	0.1366	0.1376
9	0.1066	0.1093	0.1116	0.1140	0.1160	0.1179	0.1196	0.1211	0.1225	0.1237
10	0.0899	0.0931	0.0961	0.0988	0.1013	0.1036	0.1056	0.1075	0.1092	0.1108
11	0.0739	0.0777	0.0812	0.0844	0.0873	0.0900	0.0924	0.0947	0.0967	0.0986
12	0.0585	0.0629	0.0669	0.0706	0.0739	0.0770	0.0798	0.0824	0.0848	0.0870
13	0.0435	0.0485	0.0530	0.0572	0.0610	0.0645	0.0677	0.0706	0.0733	0.0759
14	0.0289	0.0344	0.0395	0.0441	0.0484	0.0523	0.0559	0.0592	0.0622	0.0651
15	0.0144	0.0206	0.0262	0.0314	0.0361	0.0404	0.0444	0.0481	0.0515	0.0546
16	0.0000	0.0068	0.0131	0.0187	0.0239	0.0287	0.0331	0.0372	0.4090	0.0444
17	-	-	0.0000	0.0062	0.0119	0.0172	0.0220	0.0264	0.0305	0.0343
18	-	-	-	-	0.0000	0.0057	0.0110	0.0158	0.0203	0.0244
19	-	-	-	-	-	-	0.0000	0.0053	0.0101	0.0146
20	-	-	-	-	-	-	-	-	0.0000	0.0049

f\n	41	42	43	44	45	46	47	48	49	50
1	0.3940	0.3917	0.3894	0.3872	0.3850	0.3830	0.3808	0.3789	0.3770	0.3751
2	0.2719	0.2701	0.2684	0.2667	0.2651	0.2635	0.2620	0.2604	0.2589	0.2574
3	0.2357	0.2345	0.2334	0.2323	0.2313	0.2302	0.2291	0.2281	0.2271	0.2260
4	0.2091	0.2085	0.2078	0.2072	0.2065	0.2058	0.2052	0.2045	0.2038	0.2032
5	0.1876	0.1874	0.1871	0.1868	0.1865	0.1862	0.1859	0.1855	0.1851	0.1847
6	0.1693	0.1694	0.1695	0.1695	0.1695	0.1695	0.1695	0.1693	0.1692	0.1691
7	0.1531	0.1535	0.1539	0.1542	0.1545	0.1548	0.1550	0.1551	0.1553	0.1554
8	0.1384	0.1392	0.1398	0.1405	0.1410	0.1415	0.1420	0.1423	0.1427	0.1430
9	0.1249	0.1259	0.1269	0.1278	0.1286	0.1293	0.1300	0.1306	0.1312	0.1317
10	0.1123	0.1136	0.1149	0.1160	0.1170	0.1180	0.1189	0.1197	0.1205	0.1212
11	0.1004	0.1020	0.1035	0.1049	0.1062	0.1073	0.1085	0.1095	0.1105	0.1113
12	0.0891	0.0909	0.0927	0.0943	0.0959	0.0972	0.0986	0.0998	0.1010	0.1020
13	0.0782	0.0804	0.0824	0.0842	0.0860	0.0876	0.0892	0.0906	0.0919	0.0932
14	0.0677	0.0701	0.0724	0.0745	0.0765	0.0783	0.0801	0.0817	0.0832	0.0846
15	0.0575	0.0602	0.0628	0.0651	0.0673	0.0694	0.0713	0.0731	0.0748	0.0764
16	0.0476	0.0506	0.0534	0.0560	0.0584	0.0607	0.0628	0.0648	0.0667	0.0685
17	0.0379	0.0411	0.0442	0.0471	0.0497	0.0522	0.0546	0.0568	0.0588	0.0608
18	0.0283	0.0318	0.0352	0.0383	0.0412	0.0439	0.0465	0.0489	0.0511	0.0532
19	0.0188	0.0227	0.0263	0.0296	0.0328	0.0357	0.0385	0.0411	0.0436	0.0459
20	0.0094	0.0136	0.0175	0.0211	0.0245	0.0277	0.0307	0.0335	0.0361	0.0386
21	0.0000	0.0045	0.0087	0.0126	0.0163	0.0197	0.0229	0.0259	0.0288	0.0314
22	-	-	0.0000	0.0042	0.0081	0.0118	0.0153	0.0185	0.0215	0.0244
23	-	-	-	-	0.0000	0.0039	0.0076	0.0111	0.0143	0.0174
24	-	-	-	-	-	-	0.0000	0.0037	0.0071	0.0104
25	-	-	-	-	-	-	-	-	0.0000	0.0035

Source: Table A-6, Gilbert 1987.

Table F-3
Quantiles of the Shapiro-Wilk W Test for Normality
(Values of W Such That 100 p% of the Distribution of W Is Less Than W_p)

n	$W_{0.01}$	$W_{0.02}$	$W_{0.05}$	$W_{0.10}$	$W_{0.50}$
3	0.753	0.756	0.767	0.789	0.959
4	0.687	0.707	0.748	0.792	0.935
5	0.686	0.715	0.762	0.806	0.927
6	0.713	0.743	0.788	0.826	0.927
7	0.730	0.760	0.803	0.838	0.928
8	0.749	0.778	0.818	0.851	0.932
9	0.764	0.791	0.829	0.859	0.935
10	0.781	0.806	0.842	0.869	0.938
11	0.792	0.817	0.850	0.876	0.940
12	0.805	0.828	0.859	0.883	0.943
13	0.814	0.837	0.866	0.889	0.945
14	0.825	0.846	0.874	0.895	0.947
15	0.835	0.855	0.881	0.901	0.950
16	0.844	0.863	0.887	0.906	0.952
17	0.851	0.869	0.892	0.910	0.954
18	0.858	0.874	0.897	0.914	0.956
19	0.863	0.879	0.901	0.917	0.957
20	0.868	0.884	0.905	0.920	0.959
21	0.873	0.888	0.908	0.923	0.960
22	0.878	0.892	0.911	0.926	0.961
23	0.881	0.895	0.914	0.928	0.962
24	0.884	0.898	0.916	0.930	0.963
25	0.886	0.901	0.918	0.931	0.964
26	0.891	0.904	0.920	0.933	0.965
27	0.894	0.906	0.923	0.935	0.965
28	0.896	0.908	0.924	0.936	0.966
29	0.898	0.910	0.926	0.937	0.966
30	0.900	0.912	0.927	0.939	0.967
31	0.902	0.914	0.929	0.940	0.967
32	0.904	0.915	0.930	0.941	0.968
33	0.906	0.917	0.931	0.942	0.968
34	0.908	0.919	0.933	0.943	0.969
35	0.910	0.920	0.934	0.944	0.969
36	0.912	0.922	0.935	0.945	0.970
37	0.914	0.924	0.936	0.946	0.970
38	0.916	0.925	0.938	0.947	0.971
39	0.917	0.927	0.939	0.948	0.971
40	0.919	0.928	0.940	0.949	0.972
41	0.920	0.929	0.941	0.950	0.972
42	0.922	0.930	0.942	0.951	0.972
43	0.923	0.932	0.943	0.951	0.973
44	0.924	0.933	0.944	0.952	0.973
45	0.926	0.934	0.945	0.953	0.973
46	0.927	0.935	0.945	0.953	0.974
47	0.928	0.936	0.946	0.954	0.974
48	0.929	0.937	0.947	0.954	0.974
49	0.929	0.937	0.947	0.955	0.974
50	0.930	0.938	0.947	0.955	0.974

Source: Table A-7, Gilbert 1987

Example:

To illustrate the application of the Shapiro-Wilk test, the data in Table F-4 is used.

1. Compute d, the denominator of the W test.

$$d = \sum_{i=1}^{n} x_i^2 - \frac{1}{n}\left(\sum_{i=1}^{n} x_i\right)^2$$

$$= 0.0808 - \frac{1}{36}(1.634)^2$$

$$= 0.0066$$

2. Order data points from low to high.

3. Compute k for n = 36

$$k = \frac{n}{2}$$

$$k = \frac{36}{2} = 18$$

4. Find coefficients $a_1, a_2, ..., a_{15}$ for n = 36 from Table F-2.

$a_1 = 0.4068$	$a_6 = 0.1678$	$a_{11} = 0.0900$	$a_{16} = 0.0287$
$a_2 = 0.2813$	$a_7 = 0.1496$	$a_{12} = 0.0770$	$a_{17} = 0.0172$
$a_3 = 0.2415$	$a_8 = 0.1331$	$a_{13} = 0.0645$	$a_{18} = 0.0057$
$a_4 = 0.2121$	$a_9 = 0.1179$	$a_{14} = 0.0523$	
$a_5 = 0.1883$	$a_{10} = 0.1036$	$a_{15} = 0.0404$	

Table F-4
Example Data Set Number 1

Chemical	Validated result, mg/L	Validation qualifier	Concentration used in statistics (a)	
			Normal	Lognormal
Barium	0.034	UJ	0.017	-4.075
Barium	0.049	U	0.0245	-3.709
Barium	0.05	U	0.025	-3.689
Barium	0.05	U	0.025	-3.689
Barium	0.05	U	0.025	-3.689
Barium	0.05	U	0.025	-3.689
Barium	0.064	U	0.032	-3.442
Barium	0.035	-	0.035	-3.352
Barium	0.035	-	0.035	-3.352
Barium	0.039	-	0.039	-3.244
Barium	0.04	-	0.04	-3.219
Barium	0.04	-	0.04	-3.219
Barium	0.04	J	0.04	-3.219
Barium	0.04	J	0.04	-3.219
Barium	0.043	-	0.043	-3.147
Barium	0.044	-	0.044	-3.124
Barium	0.044	-	0.044	-3.124
Barium	0.045	-	0.045	-3.101
Barium	0.045	J	0.045	-3.101
Barium	0.047	-	0.047	-3.058
Barium	0.048	-	0.048	-3.037
Barium	0.049	J	0.049	-3.016
Barium	0.05	-	0.05	-2.996
Barium	0.0514	J	0.0514	-2.968
Barium	0.052	J	0.052	-2.957
Barium	0.054	J	0.054	-2.919
Barium	0.055	-	0.055	-2.900
Barium	0.057	-	0.057	-2.865
Barium	0.06	-	0.06	-2.813
Barium	0.06	-	0.06	-2.813
Barium	0.061	-	0.061	-2.797
Barium	0.061	J	0.061	-2.797
Barium	0.062	-	0.062	-2.781
Barium	0.064	-	0.064	-2.749
Barium	0.066	-	0.066	-2.718
Barium	0.073	J	0.073	-2.617
Total			1.634	-113.201

(a) When the validation qualifier contains a "U", then one-half of the concentration is used in the statistical calculations.

5. Compute W.

$$W = \frac{1}{d}\left[\sum_{i=1}^{k} a_i\,(x_{n-i+1} - x_i)\right]^2$$

$$= \frac{1}{d}\left[a_1\,(x_{36-1+1} - x_1) + a_2\,(x_{36-2+1} - x_2) + \ldots + a_{18}\,(x_{36-18+1} - x_{18})\right]^2$$

$$= \frac{1}{d}\left[a_1\,(x_{36} - x_1) + a_2(x_{35} - x_2) + \ldots + a_{18}\,(x_{19} - x_{18})\right]^2$$

$$= \frac{1}{d}\,[0.4068\,(0.073 - 0.017) + 0.2813\,(0.066 - 0.0245) + 0.2415\,(0.064 - 0.025)$$

$$+ 0.2121\,(0.062 - 0.025) + 0.1883\,(0.061 - 0.025) + 0.1678\,(0.061 - 0.025)$$

$$+ 0.1496\,(0.060 - 0.032) + 0.1331\,(0.06 - 0.035) + 0.1179\,(0.057 - 0.035)$$

$$+ 0.1036\,(0.055 - 0.039) + 0.0900\,(0.054 - 0.04) + 0.0770\,(0.052 - 0.04)$$

$$+ 0.0645\,(0.0514 - 0.040) + 0.0523\,(0.050 - 0.040) + 0.0404\,(0.049 - 0.043)$$

$$+ 0.0287\,(0.048 - 0.044) + 0.0172\,(0.047 - 0.044) + 0.0057\,(0.045 - 0.045)]^2$$

$$= \frac{(0.080)^2}{0.0066}$$

$$= 0.971$$

6. Fail to reject H_o at the 0.05 significance level because $W_{test} = 0.971$ is greater than $W_{critical}$ of 0.935, the quantile given in Table F-3, and conclude that the data were drawn from a population with an underlying normal distribution.

The W test was repeated after the transformation of $y_i = \ln x_i$ resulted in $W_{test} = 0.928$. Because the calculated value is less than the critical value ($W_{critical} = 0.935$), there is sufficient evidence to reject the null hypothesis. The conclusion is that the data set was not drawn from a population having an underlying lognormal distribution.

When the W test fails to reject the null hypotheses for both the normal and lognormal distributions, the W_{test} value which exceeds the $W_{critical}$ value the most is selected as the distribution for the data set. When the W test rejects the null hypotheses for both the

normal and lognormal distribution but one is close ($W_{test} > 0.95\ W_{critical}$) to the test value, then this distribution (normal or lognormal) is selected. If both the normal and lognormal W_{test} values are not close to $W_{critical}$, then the distribution is considered to be undefined and nonparametric statistical analyses will be used to described the data set.

Shapiro-Francia Test for Normality

The W test developed by Shapiro and Wilk was used to determine whether or not a data set has been drawn from a population which is normally distributed for sample size of 50 or less while the Shapiro-Francia test (Shapiro and Francia, 1972) was used when the sample size was greater than 50.

Like the Shapiro-Wilk test, the Shapiro-Francia test statistic (W') can be calculated using the natural logarithm of each data value. This is used to determine whether or not the sample was drawn from an underlying lognormal distribution. The null hypothesis to be tested is:

H_o: The population has normal (lognormal when data is transformed) distribution.

versus

H_A: The population does not have a normal (lognormal when data is transformed) distribution.

If H_o is rejected, then H_A is accepted.

To calculate the test statistic one can use the following formula:

$$W' = \frac{\left[\sum_{i=1}^{n} m_i x_i\right]^2}{(n-1)\, s^2 \sum_{i=1}^{n} m_i^2}$$

where x_i represents the ith ordered value of the sample and where m_i denotes the approximate expected value of the ith ordered normal quantile. The value for m_i can be approximately computed as:

$$m_i = \Phi^{-1} at \left(\frac{i}{n+1}\right)$$

where Φ^{-1} denotes the inverse of the standard normal distribution with zero mean and unit variance. These values can be computed by hand using a normal probability table (Table F-5) or via simple commands in many statistical computer packages.

1. Order the n data points in assending order (smallest to largest) such that $x_1 \leq x_2 \leq x_3 \leq \ldots \leq x_n$.
2. Computer $[i/(n+1)]$ when n is the total number of samples and i is the ith data point.
3. Compute the normal quantile (m_i).
4. Compute the square of the normal quantile.
5. Compute the multiplication of the normal quantile times the corresponding data value.
6. Compute the arithmetic standard deviation.

$$s = \sqrt{\frac{\sum_{i=1}^{n} (x_i - \bar{x})^2}{n-1}}$$

where:

$$\bar{x} = \frac{\sum_{i=1}^{n} x_i}{n}$$

7. Compute the denominator of Shapiro-Francia Test.
8. Compute the numerator of the Shapiro-Francia Test.
9. Compute W'.
10. Reject H_o at the α significance level is W' is less than the quantile given in Table F-6.

Table F-5
Standard Normal Curve for a Z Distribution

Z	0	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
-3.4	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0002
-3.3	0.0005	0.0005	0.0005	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0003
-3.2	0.0007	0.0007	0.0006	0.0006	0.0006	0.0006	0.0006	0.0005	0.0005	0.0005
-3.1	0.0010	0.0009	0.0009	0.0009	0.0008	0.0008	0.0008	0.0008	0.0007	0.0007
-3.0	0.0013	0.0013	0.0013	0.0012	0.0012	0.0011	0.0011	0.0011	0.0010	0.0010
-2.9	0.0019	0.0018	0.0018	0.0017	0.0016	0.0016	0.0015	0.0015	0.0014	0.0014
-2.8	0.0026	0.0025	0.0024	0.0023	0.0023	0.0022	0.0021	0.0021	0.0020	0.0019
-2.7	0.0035	0.0034	0.0033	0.0032	0.0031	0.0030	0.0029	0.0028	0.0027	0.0026
-2.6	0.0047	0.0045	0.0044	0.0043	0.0041	0.0040	0.0039	0.0038	0.0037	0.0036
-2.5	0.0062	0.0060	0.0059	0.0057	0.0055	0.0054	0.0052	0.0051	0.0049	0.0048
-2.4	0.0082	0.0080	0.0078	0.0075	0.0073	0.0071	0.0069	0.0068	0.0066	0.0064
-2.3	0.0107	0.0104	0.0102	0.0099	0.0096	0.0094	0.0091	0.0089	0.0087	0.0084
-2.2	0.0139	0.0136	0.0132	0.0129	0.0125	0.0122	0.0119	0.0116	0.0113	0.0110
-2.1	0.0179	0.0174	0.0170	0.0166	0.0162	0.0158	0.0154	0.0150	0.0146	0.0143
-2.0	0.0228	0.0222	0.0217	0.0212	0.0207	0.0202	0.0197	0.0192	0.0188	0.0183
-1.9	0.0287	0.0281	0.0274	0.0268	0.0262	0.0256	0.0250	0.0244	0.0239	0.0233
-1.8	0.0359	0.0351	0.0344	0.0336	0.0329	0.0322	0.0314	0.0307	0.0301	0.0294
-1.7	0.0446	0.0436	0.0427	0.0418	0.0409	0.0401	0.0392	0.0384	0.0375	0.0367
-1.6	0.0548	0.0537	0.0526	0.0516	0.0505	0.0495	0.0485	0.0475	0.0465	0.0455
-1.5	0.0668	0.0655	0.0643	0.0630	0.0618	0.0606	0.0594	0.0582	0.0571	0.0559
-1.4	0.0808	0.0793	0.0778	0.0764	0.0749	0.0735	0.0721	0.0708	0.0694	0.0681
-1.3	0.0968	0.0951	0.0934	0.0918	0.0901	0.0885	0.0869	0.0853	0.0838	0.0823
-1.2	0.1151	0.1131	0.1112	0.1093	0.1075	0.1056	0.1038	0.1020	0.1003	0.0985
-1.1	0.1357	0.1335	0.1314	0.1292	0.1271	0.1251	0.1230	0.1210	0.1190	0.1170
-1.0	0.1587	0.1562	0.1539	0.1515	0.1492	0.1469	0.1446	0.1423	0.1401	0.1379
-0.9	0.1841	0.1814	0.1788	0.1762	0.1736	0.1711	0.1685	0.1660	0.1635	0.1611
-0.8	0.2119	0.2090	0.2061	0.2033	0.2005	0.1977	0.1949	0.1922	0.1894	0.1867
-0.7	0.2420	0.2389	0.2358	0.2327	0.2296	0.2266	0.2236	0.2206	0.2177	0.2148
-0.6	0.2743	0.2709	0.2676	0.2643	0.2611	0.2578	0.2546	0.2514	0.2483	0.2451
-0.5	0.3085	0.3050	0.3015	0.2981	0.2946	0.2912	0.2877	0.2843	0.2810	0.2776
-0.4	0.3446	0.3409	0.3372	0.3336	0.3300	0.3264	0.3228	0.3192	0.3156	0.3121
-0.3	0.3821	0.3783	0.3745	0.3707	0.3669	0.3632	0.3594	0.3557	0.3520	0.3483
-0.2	0.4207	0.4168	0.4129	0.4090	0.4052	0.4013	0.3974	0.3936	0.3897	0.3859
-0.1	0.4602	0.4562	0.4522	0.4483	0.4443	0.4404	0.4364	0.4325	0.4286	0.4247
-0.0	0.5000	0.4960	0.4920	0.4880	0.4840	0.4801	0.4761	0.4721	0.4681	0.4641
0.0	0.5000	0.5040	0.5080	0.5120	0.5160	0.5199	0.5239	0.5279	0.5319	0.5359
0.1	0.5398	0.5438	0.5478	0.5517	0.5557	0.5596	0.5636	0.5675	0.5714	0.5753
0.2	0.5793	0.5832	0.5871	0.5910	0.5948	0.5987	0.6026	0.6064	0.6103	0.6141
0.3	0.6179	0.6217	0.6255	0.6293	0.6331	0.6368	0.6406	0.6443	0.6480	0.6517
0.4	0.6554	0.6591	0.6628	0.6664	0.6700	0.6736	0.6772	0.6808	0.6844	0.6879
0.5	0.6915	0.6950	0.6985	0.7019	0.7054	0.7088	0.7123	0.7157	0.7190	0.7224
0.6	0.7257	0.7291	0.7324	0.7357	0.7389	0.7422	0.7454	0.7486	0.7517	0.7549
0.7	0.7580	0.7611	0.7642	0.7673	0.7704	0.7734	0.7764	0.7794	0.7823	0.7852
0.8	0.7881	0.7910	0.7939	0.7967	0.7995	0.8023	0.8051	0.8078	0.8106	0.8133
0.9	0.8159	0.8186	0.8212	0.8238	0.8264	0.8289	0.8315	0.8340	0.8365	0.8389

Table F-5 (Continued)
Standard Normal Curve for a Z Distribution

Z	0	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
1.0	0.8413	0.8438	0.8461	0.8485	0.8508	0.8531	0.8554	0.8577	0.8599	0.8621
1.1	0.8643	0.8665	0.8686	0.8708	0.8729	0.8749	0.8770	0.8790	0.8810	0.8830
1.2	0.8849	0.8869	0.8888	0.8907	0.8925	0.8944	0.8962	0.8980	0.8997	0.9015
1.3	0.9032	0.9049	0.9066	0.9082	0.9099	0.9115	0.9131	0.9147	0.9162	0.9177
1.4	0.9192	0.9207	0.9222	0.9236	0.9251	0.9265	0.9279	0.9292	0.9306	0.9319
1.5	0.9332	0.9345	0.9357	0.9370	0.9382	0.9394	0.9406	0.9418	0.9429	0.9441
1.6	0.9452	0.9463	0.9474	0.9484	0.9495	0.9505	0.9515	0.9525	0.9535	0.9545
1.7	0.9554	0.9564	0.9573	0.9582	0.9591	0.9599	0.9608	0.9616	0.9625	0.9633
1.8	0.9641	0.9649	0.9656	0.9664	0.9671	0.9678	0.9686	0.9693	0.9699	0.9706
1.9	0.9713	0.9719	0.9726	0.9732	0.9738	0.9744	0.9750	0.9756	0.9761	0.9767
2.0	0.9772	0.9778	0.9783	0.9788	0.9793	0.9798	0.9803	0.9808	0.9812	0.9817
2.1	0.9821	0.9826	0.9830	0.9834	0.9838	0.9842	0.9846	0.9850	0.9854	0.9857
2.2	0.9861	0.9864	0.9868	0.9871	0.9875	0.9878	0.9881	0.9884	0.9887	0.9890
2.3	0.9893	0.9896	0.9898	0.9901	0.9904	0.9906	0.9909	0.9911	0.9913	0.9916
2.4	0.9918	0.9920	0.9922	0.9925	0.9927	0.9929	0.9931	0.9932	0.9934	0.9936
2.5	0.9938	0.9940	0.9941	0.9943	0.9945	0.9946	0.9948	0.9949	0.9951	0.9952
2.6	0.9953	0.9955	0.9956	0.9957	0.9959	0.9960	0.9961	0.9962	0.9963	0.9964
2.7	0.9965	0.9966	0.9967	0.9968	0.9969	0.9970	0.9971	0.9972	0.9973	0.9974
2.8	0.9974	0.9975	0.9976	0.9977	0.9977	0.9978	0.9979	0.9979	0.9980	0.9981
2.9	0.9981	0.9982	0.9982	0.9983	0.9984	0.9984	0.9985	0.9985	0.9986	0.9986
3.0	0.9987	0.9987	0.9987	0.9988	0.9988	0.9989	0.9989	0.9989	0.9990	0.9990
3.1	0.9990	0.9991	0.9991	0.9991	0.9992	0.9992	0.9992	0.9992	0.9993	0.9993
3.2	0.9993	0.9993	0.9994	0.9994	0.9994	0.9994	0.9994	0.9995	0.9995	0.9995
3.3	0.9995	0.9995	0.9995	0.9996	0.9996	0.9996	0.9996	0.9996	0.9996	0.9997
3.4	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9998

Source: Devore, J.L., 1982. "Probability & Statistics for Engineering and the Sciences", Table A-3, Brooks/Cole Publishing Company, Monterey, CA.

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TABLE F-6

PERCENTAGE POINTS OF THE W' TEST FOR n > 50

n	0.01	0.05
51	0.935	0.954
53	0.938	0.957
55	0.940	0.958
57	0.944	0.961
59	0.945	0.962
61	0.947	0.963
63	0.947	0.964
65	0.948	0.965
67	0.950	0.966
69	0.951	0.966
71	0.953	0.967
73	0.956	0.968
75	0.956	0.969
77	0.957	0.969
79	0.957	0.970
81	0.958	0.970
83	0.960	0.971
85	0.961	0.972
87	0.961	0.972
89	0.961	0.972
91	0.962	0.973
93	0.963	0.973
95	0.965	0.974
97	0.965	0.975
99	0.967	0.976

Source: Table A-3, U.S. EPA 1992.

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To test the null hypothesis that the population has a lognormal distribution, transform the observed data to y_i, $y_2 ... y_n$ where $y_i = \ln x_i$. Repeat steps 1 through 10 as described above.

Example:

To illustrate the application of the Shapiro-Francia test, the data in Table F-7 is used.

1. Order the n data points in ascending order (smallest to largest) as in Column 2.

2. Compute (i/(n+1)) where n is the total number of samples (n = 83) which is presented in Column 3.

3. Compute the normal quantile (m_i) corresponding to Column 3 probabilities. The normal quantiles are presented in Column 4.

4. Compute the square of the normal quantiles which are presented in Column 5.

5. Compute the multiplication of the normal quantiles (Column 4) times the corresponding data point (Column 2). These results are presented in Column 6.

6. Compute the arithmetic standard deviation.

   s = 0.019 (See arithmetic standard deviation example for the procedure for calculation of this value; note that the data sets are not the same.)

7. Compute the denominator of the Shapiro-Francia Test.

$$(n-1)\, s^2 \sum_{i=1}^{n} m_i^2 = 82\ (0.019)^2\ (75.611)$$
$$= 2.238$$

8. Compute the numerator of the Shapiro-Francia Test.

$$\left[\sum_{i=1}^{n} m_i x_{(i)}\right]^2 = [0.742]^2$$

$$=0.551$$

9. Compute W'.

$$W' = \frac{0.551}{2.238}$$

$$= 0.246$$

10. Reject H_o at the 0.05 significance level because $W'_{test} = 0.246$ is less than $W_{critical}$ of 0.985, the quantile given in Table F-6, and concluded that the data were not drawn from a population with an underlying normal distribution.

The Shapiro-Francia Test was repeated after the transformation of $y_i = \ln x_i$ resulted in $W'_{test} = 0.659$. Because the calculated value is less than the critical value ($W_{critical}$ = 0.985), it is concluded that the data set was not drawn from a population having an underlying lognormal distribution.

When the W' test fails to reject the null hypotheses for both the normal and lognormal distributions, the W'_{test} value which exceeds the $W'_{critical}$ value the most is selected as the distribution for the data set. When the W' test rejects the null hypotheses for both the normal and lognormal distribution but one is close ($W'_{test} > 0.95\ W'_{critical}$) to the test value, then this distribution is (normal or lognormal) selected. If both the normal and lognormal W'_{test} are not close to $W'_{critical}$, then the distribution is considered to be undefined and nonparametric statistical analyses will be used to describe the data set.

Table F-7
Example Data Set Number 2

Rank	xi	(i/(n+1))	Normal quantile, mi	mi^2	mi*xi
1	0.001	0.012	-2.260	5.108	-0.002
2	0.001	0.024	-1.981	3.923	-0.002
3	0.001	0.036	-1.803	3.250	-0.002
4	0.001	0.048	-1.668	2.784	-0.002
5	0.001	0.060	-1.559	2.430	-0.002
6	0.001	0.071	-1.465	2.147	-0.001
7	0.001	0.083	-1.383	1.913	-0.001
8	0.001	0.095	-1.309	1.714	-0.001
9	0.001	0.107	-1.242	1.542	-0.001
10	0.001	0.119	-1.180	1.392	-0.001
11	0.001	0.131	-1.122	1.259	-0.001
12	0.001	0.143	-1.068	1.140	-0.001
13	0.001	0.155	-1.016	1.033	-0.001
14	0.001	0.167	-0.967	0.936	-0.001
15	0.001	0.179	-0.921	0.848	-0.001
16	0.001	0.190	-0.876	0.768	-0.001
17	0.001	0.202	-0.833	0.694	-0.001
18	0.001	0.214	-0.792	0.627	-0.001
19	0.001	0.226	-0.751	0.565	-0.001
20	0.001	0.238	-0.712	0.508	-0.001
21	0.001	0.250	-0.674	0.455	-0.001
22	0.001	0.262	-0.637	0.406	-0.001
23	0.001	0.274	-0.601	0.362	-0.001
24	0.001	0.286	-0.566	0.320	-0.001
25	0.001	0.298	-0.531	0.282	-0.001
26	0.001	0.310	-0.497	0.247	0.000
27	0.001	0.321	-0.464	0.215	0.000
28	0.001	0.333	-0.431	0.186	0.000
29	0.001	0.345	-0.398	0.159	0.000
30	0.001	0.357	-0.366	0.134	0.000
31	0.001	0.369	-0.334	0.112	0.000
32	0.001	0.381	-0.303	0.092	0.000
33	0.001	0.393	-0.272	0.074	0.000
34	0.001	0.405	-0.241	0.058	0.000
35	0.001	0.417	-0.210	0.044	0.000
36	0.001	0.429	-0.180	0.032	0.000
37	0.001	0.440	-0.150	0.022	0.000
38	0.001	0.452	-0.120	0.014	0.000
39	0.001	0.464	-0.090	0.008	0.000
40	0.001	0.476	-0.060	0.004	0.000
41	0.001	0.488	-0.030	0.001	0.000
42	0.001	0.500	0.000	0.000	0.000
43	0.001	0.512	0.030	0.001	0.000
44	0.001	0.524	0.060	0.004	0.000
45	0.001	0.536	0.090	0.008	0.000
46	0.001	0.548	0.120	0.014	0.000
47	0.001	0.560	0.150	0.022	0.000
48	0.001	0.571	0.180	0.032	0.000
49	0.001	0.583	0.210	0.044	0.000
50	0.001	0.595	0.241	0.058	0.000

Table F-7 (Continued)
Example Data Set Number 2

Rank	xi	(i/(n+1))	Normal quantile, mi	mi^2	mi*xi
51	0.001	0.607	0.272	0.074	0.000
52	0.001	0.619	0.303	0.092	0.000
53	0.001	0.631	0.334	0.112	0.000
54	0.001	0.643	0.366	0.134	0.000
55	0.0014	0.655	0.398	0.159	0.001
56	0.0015	0.667	0.431	0.186	0.001
57	0.0015	0.679	0.464	0.215	0.001
58	0.0016	0.690	0.497	0.247	0.001
59	0.002	0.702	0.531	0.282	0.001
60	0.002	0.714	0.566	0.320	0.001
61	0.0025	0.726	0.601	0.362	0.002
62	0.0025	0.738	0.637	0.406	0.002
63	0.0025	0.750	0.674	0.455	0.002
64	0.0025	0.762	0.712	0.508	0.002
65	0.0026	0.774	0.751	0.565	0.002
66	0.003	0.786	0.792	0.627	0.002
67	0.004	0.798	0.833	0.694	0.003
68	0.004	0.810	0.876	0.768	0.004
69	0.004	0.821	0.921	0.848	0.004
70	0.0044	0.833	0.967	0.936	0.004
71	0.005	0.845	1.016	1.033	0.005
72	0.005	0.857	1.068	1.140	0.005
73	0.005	0.869	1.122	1.259	0.006
74	0.005	0.881	1.180	1.392	0.006
75	0.006	0.893	1.242	1.542	0.007
76	0.006	0.905	1.309	1.714	0.008
77	0.009	0.917	1.383	1.913	0.012
78	0.011	0.929	1.465	2.147	0.016
79	0.028	0.940	1.559	2.430	0.044
80	0.029	0.952	1.668	2.784	0.048
81	0.06	0.964	1.803	3.250	0.108
82	0.08	0.976	1.981	3.923	0.158
83	0.14	0.988	2.260	5.108	0.316
Total				75.611	0.742

Rosner's Test for Many Outliers

To use Rosner's Test (Gilbert 1987, Equations 15.1 to 15.3) it is necessary to specify an upper limit of the number of potential outliers present. This analysis was performed for up to ten outliers. Rosner's Test requires the calculation of a test statistic R_{i+1} using the following equation:

$$R_{i+1} = \frac{|x^{(i)} - \bar{x}^{(i)}|}{s^{(i)}}$$

where:

R_{i+1} = test statistic for deciding whether the i + 1 most extreme values in the complete data set are statistical outliers

i = 0 for the first suspected outlier

i = 1 for the second suspected outlier

.
.
.

i = 9 for the tenth suspected outlier

$$\bar{x}^{(i)} = \frac{1}{n-i} \sum_{j=1}^{n-i} x_j$$

$\bar{x}^{(i)}$ = sample arithmetic mean of the remaining data set after the i most extreme observations have been deleted

$$s^{(i)} = \left[\frac{1}{n-i}\sum_{j-1}^{n-i}(x_j - \bar{x}^{(i)})^2\right]^{1/2}$$

$s^{(i)}$ = sample standard deviation of the remaining data set after the i most extreme observations have been deleted

and

x_j = j^{th} observation in the data set

n = total number of observations in the data set

A suspected extreme value is determined to be an outlier if the calculated value of R_{i+1} exceeds the critical value λ_{i+1} for a sample of size n (Table F-8).

In applying Rosner's Test when there is only one suspected outlier, i = 0 and

$$R_{i+1} = R_1 = \frac{|x^{(0)} - \bar{x}^{(0)}|}{s^{(0)}}$$

and

$x^{(0)}$ = suspected outlier

$\bar{x}^{(0)}$ = sample arithmetic mean of the n observations including the suspected outlier

$s^{(0)}$ = sample arithmetic standard deviation of the n observations including the suspected outlier

Table F-8
Approximate Critical Values Lamda (i+1) for Rosner's Generalized ESD Many-Outlier Procedure for alpha = 0.05

n	1	2	3	4	5	10
25	2.82	2.80	2.78	2.76	2.73	2.59
26	2.84	2.82	2.80	2.78	2.76	2.62
27	2.86	2.84	2.82	2.80	2.78	2.65
28	2.88	2.86	2.84	2.82	2.80	2.68
29	2.89	2.88	2.86	2.84	2.82	2.71
30	2.91	2.89	2.88	2.86	2.84	2.73
31	2.92	2.91	2.89	2.88	2.86	2.76
32	2.94	2.92	2.91	2.89	2.88	2.78
33	2.95	2.94	2.92	2.91	2.89	2.80
34	2.97	2.95	2.94	2.92	2.91	2.82
35	2.98	2.97	2.95	2.94	2.92	2.84
36	2.99	2.98	2.97	2.95	2.94	2.86
37	3.00	2.99	2.98	2.97	2.95	2.88
38	3.01	3.00	2.99	2.98	2.97	2.89
39	3.03	3.01	3.00	2.99	2.98	2.91
40	3.04	3.03	3.01	3.00	2.99	2.92
41	3.05	3.04	3.03	3.01	3.00	2.94
42	3.06	3.05	3.04	3.03	3.01	2.95
43	3.07	3.06	3.05	3.04	3.03	2.97
44	3.08	3.07	3.06	3.05	3.04	2.98
45	3.09	3.08	3.07	3.06	3.05	2.99
46	3.09	3.09	3.08	3.07	3.06	3.00
47	3.10	3.09	3.09	3.08	3.07	3.01
48	3.11	3.10	3.09	3.09	3.08	3.03
49	3.12	3.11	3.10	3.09	3.09	3.04
50	3.13	3.12	3.11	3.10	3.09	3.05
60	3.20	3.19	3.19	3.18	3.17	3.14
70	3.26	3.25	3.25	3.24	3.24	3.21
80	3.31	3.30	3.30	3.29	3.29	3.26
90	3.35	3.34	3.34	3.34	3.33	3.31
100	3.38	3.38	3.38	3.37	3.37	3.35
150	3.52	3.51	3.51	3.51	3.51	3.50
200	3.61	3.60	3.60	3.60	3.60	3.59
250	3.67	3.67	3.67	3.67	3.67	3.66
300	3.72	3.72	3.72	3.72	3.72	3.71
350	3.77	3.77	3.77	3.77	3.76	3.76
400	3.80	3.80	3.80	3.80	3.80	3.80
450	3.84	3.84	3.84	3.84	3.83	3.83
500	3.86	3.86	3.86	3.86	3.86	3.86
750	3.95	3.95	3.95	3.95	3.95	3.95
1000	4.02	4.02	4.02	4.02	4.02	4.02
2000	4.20	4.20	4.20	4.20	4.20	4.20
3000	4.29	4.29	4.29	4.29	4.29	4.29
4000	4.36	4.36	4.36	4.36	4.36	4.36
5000	4.41	4.41	4.41	4.41	4.41	4.41

Source: Table A-16, Gilbert 1987.

When Rosner's Test is applied in a situation where there are two suspectd outliers, i=1 and

$$R_{i+1} = R_2 = \frac{|x^{(1)} - \bar{x}^{(1)}|}{s^{(1)}}$$

and

$x^{(1)}$ = the second suspected outlier

$\bar{x}^{(1)}$ = the sample arithmetic mean after the first suspected outlier $x^{(0)}$ has been deleted from the data set

$s^{(1)}$ = the sample arithmetic standard deviation after the first suspected outlier $x^{(0)}$ has been deleted from the data set

Example:

Table F-9 presents example data set number 3 which is used for this example. The highest and lowest posted concentrations of 4850 μg/L and 189 μg/L, respectively, are considered to be potential outliers. To begin with, Rosner's Test is applied to determine whether or not the value of 4850 μg/L is a statistical outlier. In this case, i = 0 and

$$R_1 = \frac{|x^{(0)} - \bar{x}^{(0)}|}{s^{(0)}}$$

The data are best described by a lognormal distribution and as such

$$R_1 = \frac{|y^{(0)} - \bar{y}^{(0)}|}{s^{(0)}}$$

where:

$y^{(0)}$ = $\ln x^{(0)}$

= $\ln (4850)$

= 8.487

Table F-9
Example Data Set Number 3

Chemical	Validated result, ug/L	Validation qualifier	Concentration used in statistics (a)	
			Normal	Lognormal
Manganese	189	-	189	5.242
Manganese	301	-	301	5.707
Manganese	351	-	351	5.861
Manganese	370	-	370	5.914
Manganese	386	-	386	5.956
Manganese	422	-	422	6.045
Manganese	437	-	437	6.080
Manganese	451	-	451	6.111
Manganese	456	-	456	6.122
Manganese	481	-	481	6.176
Manganese	488	J	488	6.190
Manganese	521	-	521	6.256
Manganese	534	-	534	6.280
Manganese	535	-	535	6.282
Manganese	543	-	543	6.297
Manganese	581	-	581	6.365
Manganese	615	-	615	6.422
Manganese	619	J	619	6.428
Manganese	747	J	747	6.616
Manganese	766	-	766	6.641
Manganese	785	-	785	6.666
Manganese	840	-	840	6.733
Manganese	941	-	941	6.847
Manganese	1050	-	1050	6.957
Manganese	1070	J	1070	6.975
Manganese	1090	-	1090	6.994
Manganese	1150	-	1150	7.048
Manganese	1460	-	1460	7.286
Manganese	1500	J	1500	7.313
Manganese	4850	-	4850	8.487

(a) When the validation qualifier contains a "U", then one-half of the concentration is used in the statistical calculations.

$\overline{y}^{(0)}$ = sample arithmetic mean of ln x using all 30 observations in the data set

= 6.477

$s^{(0)}$ = sample arithmetic standard deviation of ln x using all 30 observations in the data set

= 0.6098

Thus

$$R_1 = \frac{|8.487 - 6.477|}{0.6098}$$

$$= 3.296$$

Because R_1 = 3.296 is greater than the critical value of λ_{i+1} = 2.91 (Table F-8) for a significance level of 0.05, Rosner's Test indicates that the observed value of 4850 μg/L is a statistical outlier.

Next Rosner's Test is used to determine whether or not there is sufficient evidence to conclude that the minimum value of 189 μg/L is a statistical outlier.

After deleting the maximum value of 4850 μg/L from the data set, calculate

$$R_2 = \frac{|y^{(1)} - \overline{y}^{(1)}|}{s^{(1)}}$$

where:

$y^{(1)}$ = ln (189)

= 5.242

$\overline{y}^{(1)}$ = 6.407

$s^{(1)}$ = 0.4889

Then

$$R_2 = \frac{|5.242 - 6.407|}{0.489}$$

$$= 2.38$$

Because R_2 = 2.38 is less than the critical value of λ_2 = 2.89 (Table F-8) for a significance level of 0.05, Rosner's Test indicates that there is insufficient evidence to reject the observed value of 189 μg/L. The value is not a statistical outlier. This test is repeated on the high and low ends until there is insufficient evidence to reject the null hypothesis or 10 outliers are identified. This test identifies outliers but professional judgment was used to determine whether the value should be removed from the data set.

Data Averaging

Data averaging was conducted when two or more samples were collected at the same sampling location on the same day (i.e., duplicates, triplicates, etc.). Multiple samples collected on a particular day and location were averaged to obtain one sample per day at the sampling location. Data averaging was conducted to avoid statistical bias which would have resulted from favoring one day's multiple sampling over one sample on a particular day. The data was separated into data groups by the following: media (i.e., Glacial Overburden, Great Miami Aquifer, Great Miami River, and Paddys Run), constituent type (i.e., radiological, inorganic, and organic constituents), and filter type (i.e., filtered and unfiltered). The following steps were repeated for each of the above data groups:

1. Nondetect values were assigned a value of one-half the detection limit.
2. The data were sorted by three key parameters: 1) chemical name, 2) sample location, and 3) sampling date.
3. A record-by-record comparison was performed to identify records for which all three sort parameters were the same. This step identified multiple samples collected on a particular day for a specific constituent.
4. A sample arithmetic mean was calculated on the records with matching key parameters.
5. If all of the values being averaged were nondetects, the average was also a nondetect. If one or more of the values being averaged were detect values, then the resulting average was also considered to be a detect value.
6. A new line was added to the database for the averages of the matching records.
7. The individual records that were combined to create the average line were removed from the statistical data set.

Example:

The example data set is presented in Table F-10. To simplify this example, only one constituent was selected. Seven ammonia samples were collected from 1988 to 1993. The following steps were performed to calculate the averaged values that were used in the statistical analysis:

1. Nondetect values were assigned a value of one-half the detection limit. This occurred for five of the seven values (i.e., <1 equals 0.05).

Table F-10
Example Data Set Number 4

Well No.	Sample Date	Sample ID	Lab qualifier	Constituent	Validated Result	Validated Qualifier	QA type	ASL
W-1	05/20/93	120068-1		Alkalinity as CaCO3	245	J	D	3
W-1	05/20/93	120072-2		Alkalinity as CaCO3	245	J	T	3
W-1	06/23/93	120416		Alkalinity as CaCO3	233	-	N	3
W-1	06/23/93	120414		Alkalinity as CaCO3	230	-	D	3
W-1	05/20/93	120068-1		Aluminum	1.27	-	D	3
W-1	05/20/93	120072-2		Aluminum	1.33	-	T	3
W-1	06/23/93	120416		Aluminum	2.14	-	N	3
W-1	06/23/93	120414		Aluminum	1.64	-	D	3
W-1	08/29/88	1092		Ammonia	0.1	J	N	3
W-1	04/03/89	1178		Ammonia	0.11	-	N	3
W-1	05/20/93	120064-2	U	Ammonia	0.1	UJ	N	3
W-1	05/20/93	120068-1	U	Ammonia	0.1	UJ	D	3
W-1	05/20/93	120072-2	U	Ammonia	0.1	UJ	T	3
W-1	06/23/93	120416	U	Ammonia	0.1	U	N	3
W-1	06/23/93	120414	U	Ammonia	0.1	U	D	3
W-1	05/20/93	120068-1	U	Antimony	0.005	U	D	3
W-1	05/20/93	120072-2	U	Antimony	0.005	U	T	3
W-1	06/23/93	120416	UW	Antimony	0.005	UJ	N	3
W-1	06/23/93	120414	UW	Antimony	0.005	UJ	D	3
W-1	08/29/88	1092	U	Arsenic	0.005	U	N	4
W-1	04/03/89	1178	U	Arsenic	0.002	U	N	3
W-1	05/20/93	120068-1	B	Arsenic	0.0039	-	D	3
W-1	05/20/93	120072-2	B	Arsenic	0.0032	-	T	3
W-1	06/23/93	120416	BW	Arsenic	0.0025	J	N	3
W-1	06/23/93	120414	U	Arsenic	0.002	U	D	3
W-1	06/16/88	1035		Barium	0.089	-	N	3
W-1	08/29/88	1092		Barium	0.1	-	N	4
W-1	04/03/89	1178		Barium	0.0493	-	N	3
W-1	05/20/93	120068-1	B	Barium	0.0884	-	D	3
W-1	05/20/93	120072-2	B	Barium	0.0893	-	T	3
W-1	06/23/93	120416	B	Barium	0.0906	-	N	3
W-1	06/23/93	120414	B	Barium	0.0847	-	D	3
W-1	05/20/93	120068-1	U	Beryllium	0.002	U	D	3
W-1	05/20/93	120072-2	U	Beryllium	0.002	U	T	3
W-1	06/23/93	120416	U	Beryllium	0.002	U	N	3
W-1	06/23/93	120414	U	Beryllium	0.002	U	D	3
W-1	06/16/88	1035		Cadmium	0.006	-	N	3
W-1	08/29/88	1092	U	Cadmium	0.002	U	N	4
W-1	04/03/89	1178		Cadmium	0.0098	-	N	3
W-1	05/20/93	120068-1	U	Cadmium	0.005	U	D	3
W-1	05/20/93	120072-2	U	Cadmium	0.005	U	T	3
W-1	06/23/93	120416	U	Cadmium	0.005	U	N	3
W-1	06/23/93	120414	U	Cadmium	0.005	U	D	3
W-1	06/16/88	1035		Calcium	77	-	N	3
W-1	08/29/88	1092		Calcium	70.1	-	N	4
W-1	04/03/89	1178		Calcium	61.2	-	N	3
W-1	05/20/93	120068-1		Calcium	76.5	-	D	3
W-1	05/20/93	120072-2		Calcium	77.1	-	T	3
W-1	06/23/93	120416		Calcium	72.3	-	N	3
W-1	06/23/93	120414		Calcium	68.4	-	D	3

2. The data were sorted by three key parameters: 1) chemical name (ammonia), 2) sample location (W-1), and 3) sampling date. There only was one sampling location for W-1 and W-5; however, multiple sampling locations (wells) were sampled for the glacial overburden and Great Miami Aquifer (5 and 24, respectively).

3. A record-by-record comparison identified the following matches: three samples collected on May 20, 1993 and two samples collected on June 23, 1993. Individual records were identified on August 29, 1988 and April 3, 1989.

4. All samples collected on May 20 and June 23, 1993, had nondetect values of <0.1 (0.05 for statistics); therefore, the averaged value for these two days was a nondetect value of <0.1.

5. The averaged values are both nondetects, since all of the data used to calculate the average value were nondetects.

6. New lines were added to the database for these two averaged records from the matching key parameters.

7. The five lines that were combined to create the averaged records were removed from the statistical database.

Sample Arithmetic Mean - Normal Distribution

The sample arithmetic mean for a normal distribution is given by:

$$\bar{x} = \frac{\sum_{i=1}^{n} x_i}{n}$$

Example:

Using example data set number 1 presented in Table F-4, the sample arithmetic mean is calculated as follows:

$$\bar{x} = [0.017 + 0.0245 + ... + 0.066 + 0.073]/36$$

$$= 0.045$$

Sample Arithmetic Standard Deviation - Normal Distribution

The sample arithmetic standard deviation for a population based on a sample is given by:

$$s = \sqrt{\frac{\sum_{i=1}^{n} (x_i - \bar{x})^2}{n-1}} = \sqrt{\frac{\sum_{i=1}^{n} x_i^2 - \left(\sum_{i=1}^{n} x_i\right)^2 / n}{n-1}}$$

Example:

Using example data set number 1 presented in Table F-4, the sample arithmetic standard deviation for a normal distribution is calculated as follows where n = 36 and:

$$\sum_{i=1}^{n} x_i^2 = (0.017)^2 + (0.0245)^2 + \ldots + (0.066)^2 + (0.073)^2$$

$$= 0.081$$

$$\left(\sum_{i=1}^{n} x_i\right)^2 = [0.017 + 0.0245 + \ldots + 0.066 + 0.073]^2$$

$$= 2.670$$

$$s = \sqrt{\frac{0.081 - 2.670/36}{36 - 1}}$$

$$= 0.014$$

Estimated Coefficient of Variation - Normal Distribution

The estimated coefficient of variation for a normal distribution is calculated by the following:

$$CV = s/\bar{x}$$

where:

$\bar{x}$ = arithmetic mean
s = sample standard deviation
CV = estimated coefficient of variation

Example:

Using example data set number 1 presented in Table F-4, the estimated coefficient of variation for a normal distribution is calculated as follows:

$\bar{x}$ = 0.045
s = 0.014

$$\begin{aligned} CV &= 0.014/0.045 \\ &= 0.31 \end{aligned}$$

Estimated Mean of a Lognormal Distribution

The estimated mean of a lognormal distribution (Gilbert 1987, Equation 13.7) can be calculated by using the sample mean ($\overline{y}$) and the sample standard deviation (s_y) of the log-transformed data. The formula is as follows:

$$\hat{\mu} = \exp\left(\overline{y} + \frac{s_y^2}{2}\right)$$

Example:

Using the data in Table F-4, the estimated mean of a lognormal distribution is calculated as follows where n = 36 and:

$$\overline{y} = \frac{\sum_{i=1}^{n} \ln(x_i)}{n} = \left[\frac{[\ln(0.017) + \ln(0.0245) + \ldots\ldots + \ln(0.066) + \ln(0.0073)]}{36}\right]$$

$$= \frac{-113.201}{36}$$

$$= -3.144$$

$$s_y = \sqrt{\frac{\sum_{i=1}^{n} (\ln(x_i) - \overline{y})^2}{n-1}} = \sqrt{\frac{\sum_{i=1}^{n} [\ln(x_i)]^2 - \left(\sum_{i=1}^{n} \ln(x_i)\right)^2 / n}{n-1}}$$

$$\sum_{i=1}^{n} [\ln(x_i)]^2 = \ln(0.017)^2 + \ln(0.0245)^2 + \ldots + \ln(0.066)^2 + \ln(0.073)^2$$

$$= 360.063$$

$$\sum_{i=1}^{n} [\ln(x_i)] = \ln(0.017) + \ln(0.0245) + \ldots + \ln(0.066) + \ln(0.073)$$

$$= -113.201$$

$$s_y = \sqrt{\frac{360.063 - (-113.201)^2/36}{36-1}}$$

$$= 0.342$$

$$\hat{\mu} = \exp\left[-3.144 + \frac{(0.342)^2}{2}\right]$$

$$= 0.046$$

Estimated Standard Deviation of a Lognormal Distribution

The estimated standard deviation of a lognormal distribution (Gilbert 1987, Equation 13.8) can be calculated by using the estimate for the mean of the lognormal distribution ($\hat{\mu}$) and the sample standard deviation (s_y) of the log-transformed data. The formula is as follows:

$$\hat{\sigma} = \sqrt{\hat{\mu}^2 \, [\exp\,(s_y^2) - 1]}$$

Example:

Data in Table F-4 were used to calculate the estimated standard deviation of a lognormal distribution. The parameters used in this example were presented in the example for estimating the mean of a lognormal distribution where $\hat{\mu} = 0.046$ and $s_y = 0.342$. Therefore, the estimated standard deviation of a lognormal distribution is calculated as follows:

$$\hat{\sigma} = \sqrt{(0.046)^2 \, [\exp\,(0.342)^2 - 1]}$$

$$= 0.0162$$

Sample Median - Nonparametric Technique

The true median of an underlying distribution (Gilbert 1989, Equations 13.15 and 13.16) is that value above which and below which half of the distribution lies. The median of any distriubtion, no matter what it's shape, can be estimated by the following:

$$\textit{Sample median} = x_{[(n+1)/2]} \textit{ if } n \textit{ is odd}$$

$$= \frac{x_{[n/2]} + x_{[(n+2/2]}}{2} \textit{ if } n \textit{ is even}$$

where:

$x_{[i]}$ = i^{th} data value in the ordered data set

Example:

Using example data set number 1 presented in Table F-4, the sample median is calculated as follows where n = 36 and:

$$\textit{Median} = \frac{x_{[36/2]}\ x_{[(36+2)/2]}}{2}$$

$$= \frac{x_{18} + x_{19}}{2}$$

$$= (0.045 + 0.045)/2$$

$$= 0.045$$

If n were 35 rather than 36, then the median would be at x_{18} = 0.045.

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Upper One-sided 95% Confidence Limit - Normal Distribution

The mean ($\bar{x}_1$) for a sample of size n is referred to as a point estimate of the true but unknown population mean (μ). If a second sample of size n is drawn from the sample population, the sample mean ($\bar{x}_2$) will most likely not be equal to $\bar{x}_1$. In fact if the sampling process is replicated many times, the sample means themselves will have a distribution. Further, the distribution of means of samples of size n will tend toward a normal distribution, if n is sufficiently large.

The 100 (1-α) Upper Confidence Limit (Gilbert 1987, Equation 11.6) of the population mean (μ) can also be calculated. When α = 0.05, the upper one-sided 95 percent confidence limit is:

$$95\%\ UCL_N = \bar{x} + t_{0.95,n-1}\frac{s}{\sqrt{n}}$$

where:

$$\bar{x} = \frac{1}{n}\sum_{i=1}^{n} x_i$$

$$s = \left[\frac{1}{n-1}\sum_{i=1}^{n}(x_i - \bar{x})^2\right]^{1/2}$$

$t_{0.95\ n-1}$ = value from the "t" distribution in Table F-11.

It should be noted that the 95 percent confidence limit for a second sample of size n drawn from the same population will most likely not be the same as that for the first sample. In theory if a limit estimate is calculated for the means of a very large set of samples of size n, the true population mean will be less than the limit 95 percent of these limits. If the number of degrees of freedom is not listed in Table F-11, then linear interpolation was performed to obtain the t-value.

Table F-11
Quantiles of the t Distribution (Values of t Such that 100p% of the Distribution Is Less Than tp)

Degrees of freedom	t at 0.60	t at 0.70	t at 0.80	t at 0.90	t at 0.95	t at 0.975	t at 0.990	t at 0.995
1	0.325	0.727	1.376	3.078	6.314	12.706	31.821	63.656
2	0.289	0.617	1.061	1.886	2.920	4.303	6.965	9.925
3	0.277	0.584	0.978	1.638	2.353	3.182	4.541	5.841
4	0.271	0.569	0.941	1.533	2.132	2.776	3.747	4.604
5	0.267	0.559	0.920	1.476	2.015	2.571	3.365	4.032
6	0.265	0.553	0.906	1.440	1.943	2.447	3.143	3.707
7	0.263	0.549	0.896	1.415	1.895	2.365	2.998	3.499
8	0.262	0.546	0.889	1.397	1.860	2.306	2.896	3.355
9	0.261	0.543	0.883	1.383	1.833	2.262	2.821	3.250
10	0.260	0.542	0.879	1.372	1.812	2.228	2.764	3.169
11	0.260	0.540	0.876	1.363	1.796	2.201	2.718	3.106
12	0.259	0.539	0.873	1.356	1.782	2.179	2.681	3.055
13	0.259	0.538	0.870	1.350	1.771	2.160	2.650	3.012
14	0.258	0.537	0.868	1.345	1.761	2.145	2.624	2.977
15	0.258	0.536	0.866	1.341	1.753	2.131	2.602	2.947
16	0.258	0.535	0.865	1.337	1.746	2.120	2.583	2.921
17	0.257	0.534	0.863	1.333	1.740	2.110	2.567	2.898
18	0.257	0.534	0.862	1.330	1.734	2.101	2.552	2.878
19	0.257	0.533	0.861	1.328	1.729	2.093	2.539	2.861
20	0.257	0.533	0.860	1.325	1.725	2.086	2.528	2.845
21	0.257	0.532	0.859	1.323	1.721	2.080	2.518	2.831
22	0.256	0.532	0.858	1.321	1.717	2.074	2.508	2.819
23	0.256	0.532	0.858	1.319	1.714	2.069	2.500	2.807
24	0.256	0.531	0.857	1.318	1.711	2.064	2.492	2.797
25	0.256	0.531	0.856	1.316	1.708	2.060	2.485	2.787
26	0.256	0.531	0.856	1.315	1.706	2.056	2.479	2.779
27	0.256	0.531	0.855	1.314	1.703	2.052	2.473	2.771
28	0.256	0.530	0.855	1.313	1.701	2.048	2.467	2.763
29	0.256	0.530	0.854	1.311	1.699	2.045	2.462	2.756
30	0.256	0.530	0.854	1.310	1.697	2.042	2.457	2.750
40	0.255	0.529	0.851	1.303	1.684	2.021	2.423	2.704
60	0.254	0.527	0.848	1.296	1.671	2.000	2.390	2.660
120	0.254	0.526	0.845	1.289	1.658	1.980	2.358	2.617
Infinite	0.253	0.524	0.842	1.282	1.645	1.960	2.326	2.576

Source: Table A-2, Gilbert 1987.

Example:

Using example data set number 1 in Table F-4, the upper one-sided 95 percent confidence limit for a normal distribution was calculated as follows:

$n = 36$

$\overline{x} = 0.045$

$s = 0.014$

$t_{0.95,35} = 1.6905$

$$95\%\ UCL_N = 0.045 + (1.6905)\ \frac{0.014}{\sqrt{36}}$$

$$= 0.049$$

Upper One-Sided 95% Confidence Limit - Lognormal Distribution

The procedure for calculating the upper 95% confidence limit for the lognormal distribution (Gilbert 1987, Equation 13.13) is given by:

$$95\%\ UCL_L = \exp\left[\bar{y} + 0.5\, s_y^2 + \frac{s_y H_{0.95}}{\sqrt{n-1}}\right]$$

where:

y = ln x

$\bar{y}$ = arithmetic mean of y

s_y = standard deviation of y

n = number of data points

$H_{0.95}$ = value from Table F-12 for sample of size n

Example:

The data presented in Table F-4 were used for this example. The mean of the log transformed data ($\bar{y}$) equals -3.144 and the standard deviation of the log transformed data equals 0.342. These were previously calculated in the section on calculating the estimated mean of a lognormal distribution. Tables for determining H values are presented individually by number of data points for various significance levels. A summary of these tables for a 0.05 significance level ($H_{0.95}$) is presented in Table F-12. When the number of data points was not listed in this Table F-12 then linear interpolation between columns was performed. In addition, if s_y did not match the s_y in the first column of Table F-12, then linear interpolation between column values was performed. The upper 95% one-sided confidence limit for the lognormal distribution is calculated as follows:

where:

n = 36
y = -3.144 (see estimated mean of lognormal distribution example)
s_y = 0.342
$H_{0.95}$ = 1.807 (linear interpolation between s_y values)

Table F-12
Values of H (1-alpha) for Computing One-Sided (Upper) 95% Confidence Limits on a Lognormal Mean

	Number of data points															
sy	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
0.10	2.750	2.222	2.035	1.942	1.886	1.849	1.822	1.802	1.787	1.775	1.763	1.756	1.749	1.743	1.738	1.733
0.20	3.295	2.463	2.198	2.069	1.992	1.943	1.908	1.881	1.860	1.843	1.830	1.818	1.809	1.800	1.793	1.787
0.30	4.109	2.777	4.402	2.226	2.125	2.058	2.011	1.977	1.949	1.927	1.909	1.894	1.882	1.871	1.861	1.853
0.40	5.220	3.175	2.651	2.415	2.282	2.195	2.134	2.089	2.054	2.026	2.003	1.984	1.968	1.954	1.942	1.931
0.50	6.495	3.658	2.947	2.638	2.465	2.354	2.277	2.220	2.176	2.141	2.112	2.088	2.068	2.050	2.035	2.021
0.60	7.807	4.209	3.287	2.892	2.673	2.534	2.439	2.368	2.314	2.271	2.235	2.206	2.181	2.160	2.141	2.124
0.70	9.120	4.801	3.662	3.173	2.904	2.735	2.618	2.532	2.466	2.414	2.371	2.336	2.306	2.280	2.258	2.238
0.80	10.43	5.414	4.062	3.477	3.155	2.952	2.813	2.710	2.632	2.570	2.520	2.479	2.443	2.412	2.386	2.362
0.90	11.74	6.038	4.478	3.796	3.420	3.184	3.021	2.902	2.810	2.738	2.679	2.631	2.589	2.554	2.523	2.496
1.00	13.05	6.669	4.905	4.127	3.698	3.426	3.239	3.103	2.998	2.915	2.848	2.792	2.744	2.704	2.669	2.638
1.25	16.33	8.265	6.001	4.490	4.426	4.068	3.820	3.639	3.500	3.389	3.300	3.226	3.163	3.109	3.062	3.021
1.50	19.60	9.874	7.120	5.880	5.184	4.741	4.433	4.207	4.033	3.896	3.784	3.691	3.612	3.544	3.485	3.434
1.75	22.87	11.49	8.250	6.758	5.960	5.432	5.065	4.795	4.587	4.422	4.288	4.176	4.081	4.000	3.929	3.867
2.00	26.14	13.11	9.387	7.701	6.747	6.135	5.710	5.396	5.154	4.962	4.805	4.675	4.564	4.470	4.387	4.314
2.50	32.69	16.35	11.67	9.546	8.339	7.563	7.021	6.621	6.312	6.067	5.866	5.698	5.557	5.435	5.328	5.236
3.00	39.23	19.60	13.97	11.40	9.945	9.006	8.350	7.864	7.489	7.191	6.947	6.743	6.570	6.422	6.293	6.179
3.50	45.77	22.85	16.27	13.27	11.56	10.46	9.688	9.118	8.677	8.326	8.039	7.799	7.596	7.422	7.269	7.136
4.00	52.31	26.11	16.58	15.14	13.18	11.92	11.03	10.38	9.872	9.469	9.140	8.864	8.630	8.429	8.254	8.100
4.50	58.85	29.36	20.88	17.01	14.80	13.38	12.38	11.64	11.07	10.62	10.24	9.933	9.669	9.442	9.244	9.070
5.00	65.39	32.62	23.19	18.88	16.43	14.84	13.73	12.91	12.27	11.77	11.35	11.01	10.71	10.46	10.24	10.04
6.00	78.47	39.13	27.81	22.63	19.68	17.78	16.44	15.45	14.69	14.08	13.58	13.16	12.81	12.50	12.23	12.00
7.00	91.55	45.65	32.43	26.39	22.94	20.72	19.16	18.00	17.10	16.39	15.81	15.32	14.90	14.55	14.24	13.96
8.00	104.6	52.16	37.06	30.14	26.20	23.66	21.87	20.55	19.53	18.71	18.04	17.48	17.01	16.60	16.24	15.93
9.00	117.7	58.68	41.68	33.90	29.46	26.60	24.59	23.10	21.95	21.03	20.28	19.65	19.11	18.65	18.25	17.90
10.00	130.8	65.20	46.31	37.66	32.73	29.54	27.31	25.66	24.38	23.35	22.51	21.82	21.22	20.71	20.26	19.87

Table F-12 (Continued)
Values of H (1-alpha) for Computing One-Sided (Upper) 95% Confidence Limits on a Lognormal Mean

	Number of data points															
sy	19	21	23	25	28	31	36	41	46	51	61	71	81	101	121	161
0.10	1.729	1.722	1.716	1.711	1.706	1.701	1.695	1.690	1.687	1.684	1.679	1.676	1.674	1.670	1.668	1.664
0.20	1.781	1.771	1.763	1.756	1.749	1.742	1.734	1.727	1.722	1.718	1.711	1.706	1.703	1.697	1.693	1.688
0.30	1.845	1.833	1.822	1.813	1.802	1.793	1.783	1.773	1.766	1.761	1.752	1.745	1.740	1.733	1.727	1.720
0.40	1.921	1.905	1.892	1.881	1.867	1.856	1.841	1.830	1.821	1.813	1.802	1.794	1.787	1.777	1.770	1.761
0.50	2.009	1.989	1.973	1.959	1.942	1.928	1.910	1.896	1.884	1.876	1.861	1.851	1.842	1.830	1.822	1.810
0.60	2.110	2.085	2.065	2.048	2.027	2.010	1.988	1.971	1.957	1.946	1.929	1.916	1.906	1.891	1.881	1.866
0.70	2.221	2.191	2.167	2.147	2.122	2.102	2.075	2.055	2.038	2.025	2.005	1.989	1.977	1.950	1.947	1.930
0.80	2.342	2.307	2.279	2.255	2.225	2.202	2.171	2.146	2.127	2.112	2.088	2.070	2.056	2.035	2.020	2.001
0.90	2.472	2.432	2.399	2.371	2.337	2.310	2.273	2.246	2.224	2.206	2.178	2.157	2.141	2.117	2.100	2.077
1.00	2.611	2.564	2.526	2.495	2.456	2.423	2.383	2.352	2.327	2.306	2.275	2.251	2.232	2.205	2.186	2.160
1.25	2.984	2.923	2.873	2.830	2.779	2.737	2.682	2.641	2.607	2.580	2.538	2.507	2.483	2.447	2.421	2.387
1.50	3.388	3.311	3.248	3.195	3.130	3.077	3.008	2.956	2.915	2.881	2.828	2.789	2.758	2.713	2.681	2.637
1.75	3.812	3.719	3.643	3.579	3.501	3.437	3.355	3.292	3.241	3.200	3.136	3.089	3.052	2.997	2.958	2.906
2.00	4.251	4.141	4.052	3.977	3.886	3.812	3.715	3.640	3.582	3.533	3.458	3.403	3.359	3.295	3.250	3.188
2.50	5.153	5.013	4.898	4.802	4.683	4.565	4.463	4.367	4.290	4.226	4.131	4.059	4.003	3.920	3.861	3.781
3.00	6.078	5.907	5.766	5.649	5.504	5.383	5.234	5.117	5.023	4.947	4.828	4.740	4.671	4.569	4.496	4.399
3.50	7.016	6.815	6.649	6.510	6.340	6.201	6.020	5.881	5.771	5.681	5.540	5.435	5.354	5.233	5.148	5.032
4.00	7.963	7.731	7.540	7.380	7.184	7.024	6.816	6.656	6.528	6.424	6.262	6.141	6.047	5.908	5.809	5.675
4.50	8.916	8.652	8.437	8.257	8.034	7.854	7.618	7.437	7.293	7.174	6.991	6.854	6.747	6.590	6.478	6.326
5.00	9.872	9.579	9.338	9.137	8.889	8.688	8.424	8.222	8.061	7.929	7.728	7.572	7.453	7.277	7.152	6.982
6.00	11.79	11.44	11.15	10.91	10.61	10.36	10.05	9.803	9.608	9.449	9.202	9.017	8.873	8.661	8.509	8.305
7.00	13.72	13.31	12.97	12.68	12.33	12.05	11.68	11.39	11.16	10.98	10.69	10.47	10.30	10.05	9.676	9.637
8.00	15.65	15.18	14.79	14.47	14.05	13.74	13.31	12.99	12.73	12.51	12.18	11.93	11.74	11.45	11.25	10.97
9.00	17.59	17.05	16.62	16.25	15.80	15.43	14.95	14.58	14.29	14.05	13.67	13.39	13.18	12.85	12.63	12.32
10.00	19.52	18.93	18.44	18.04	17.53	17.13	16.59	16.18	15.85	15.59	15.17	14.86	14.62	14.26	14.01	13.66

Source: Land, C.E., "Tables of Confidence Limits for Linear Functions of the Normal Mean and Variance," Selected Tables in Mathematical Statistics, Vol. III, American Mathematical Society, Providence, RI, pp. 385-419, 1975.

$$95\%\ UCL_L = \exp\left[-3.144 + 0.5(0.342)^2 + \frac{(0.342)\ (1.807)}{\sqrt{36-1}}\right]$$

$$= \exp\ (-2.981)$$

$$= 0.051$$

Thus the upper one-sided 95% confidence limit for the lognormal distribution is 0.051.

Upper One-Sided 95% Confidence Limit - Nonparametric Technique

The upper 95% one-sided confidence limit for an undefined distribution is based on a noparametric technique (Gilbert 1987, Equation 13.2). It is simply the upper 95% confidence limit on the median of the data set. The following equations are used to calculate the upper one-sided 95% confidence limit for an undefined distribution:

$$U = \frac{n+1 + Z_{0.95}\sqrt{n}}{2}$$

$$95\%\ UCL_{NP} = x_{[f(U)]}$$

where:

n = number of data points

$Z_{0.95}$ = upper 95% limit from a standard normal curve for a Z distribution [Table F-5 at 0.95 ($Z_{0.95}$) = 1.645]

U = rank in an ascending order data set that corresponds to the one-sided 95% confidence limit on the median

f(U) = U rounded up to an integer (e.g., 24.2 → 25)

Example:

Using the data presented in Table F-4, the upper one-sided 95% confidence limit on the median is calculated by the following steps.

1. Order the data in ascending order
2. Determine the number of data points (36)
3. Obtain the $Z_{0.95}$ from Table F-5 (1.645)

4. Calculate U

$$U = \frac{36+1 + 1.645\sqrt{36}}{2}$$

$$= 23.435$$

5. Round up to an integer (24)

6. Determine the "U"th value in the ascending order data set value at the 24th rank = (0.514)

The 95% UCL_{NP} for this data set is 0.514.

95th Percentile - Normal Distribution

The 95th Percentile (or Quantile) for a normal distribution are used to determine maximum background concentrations from data sets that are normally distributed. The 95th percentile for a normal distribution (Gilber 1987, Equation 11.1) is calculated based on the following equation:

$$95^{th}\ Percentile_N = \bar{x} + Z_{0.95}\, s$$

where:

$\bar{x}$ = sample arithmetic mean

s = sample arithmetic standard deviation

$Z_{0.95}$ = upper 95% limit from a standard normal curve for a Z distribution [Table F-5 at 0.95 ($Z_{0.95}$) = 1.645]

Example:

Using example data set number 1 in Table F-4, the 95th percentile for a normal distribution was calculated by the following:

$\bar{x}$ = 0.045

s = 0.014

$Z_{0.95}$ = 1.645

$$95^{th}\ Percentile_N = 0.045 + (1.645)\ (0.014)$$

$$= 0.068$$

95th Percentile - Lognormal Distribution

The 95th Percentile (or Quantile) for a lognormal distribution (Gilbert 1987, Equation 13.24) is calculated based on the following equation.

$$95^{th}\ Percentile_L = \exp(\bar{y} + Z_{0.95}\, s_y) = \exp(\bar{y})\exp(Z_{0.95}\, s_y)$$

where:

$\bar{y}$ = sample arithmetic mean of y

s_y = sample arithmetic standard deviation of y

$Z_{0.95}$ = upper 95% limit from a standard normal curve for a Z distribution [Table F-5 at 0.95 ($Z_{0.95}$) = 1.645]

Example:

Using example data set number 1 in Table F-4, the 95th Percentile for a lognormal distribution was calculated by the following:

$\bar{y}$ = -3.144

s_y = 0.342

$Z_{0.95}$ = 1.645

$$95^{th}\ Percentile_L = \exp[-3.144 + (1.645)(0.342)]$$

$$= \exp(-2.581)$$

$$= 0.0757$$

95th Percentile - Nonparametric Technique

The 95th for an undefined distribution is based on a nonparametric technique. It is calculated by the following equations:

$$Q = 0.95\ n$$

$$95^{th}\ \text{Percentile}_{NP} = x_{[f(Q)]}$$

where:

n = number of data points

Q = rank in an ascending order data set that corresponds to the one-sided 0.95 quantile based on a nonparametric technique

f(Q) = Q rounded up to an integer (e.g., 14.1 → 15)

Example:

Using the example data set presented in Table F-4, the 95th percentile based on a nonparametric technique is calculated by the following steps:

1. Order the data in ascending order
2. Determine the number of data point (36)
3. Calculate Q

   Q = (0.95) (36)

   = 34.2

4. Round Q up to an integer (35)
5. Determine the "Q"th value in the ascending order data set (value at 35th rank = 0.066)

The 95th Percentile_{NP} for this data set is 0.066.

F-Test

The F-test is conducted to test whether there is no difference between two population variances from a combined data set that is normally distributed. By conducting this test on the natural logarithms of each data value, the F-test was used to determine whether there is no difference between population variances from a combined data set that is lognormally distributed. An alpha of 0.05 was selected for this test. The null hypothesis to be tested is:

H_o: The populations have equivalent variances ($\sigma_1^2 = \sigma_2^2$)

versus

The alternative hypothesis		Rejection Region for a Level 0.05 Test
H_A: $\sigma_1^2 > \sigma_2^2$		$F_{test} \geq F_{0.05,\, n_1 - 1,\, n_2 - 1}$
H_A: $\sigma_1^2 < \sigma_2^2$		$F_{test} \leq F_{0.95,\, n_1 - 1,\, n_2 - 1}$
H_A: $\sigma_1^2 \neq \sigma_2^2$	either	$F_{test} \geq F_{0.025,\, n_1 - 1,\, n_2 - 1}$ or
		$F_{test} \leq F_{0.975,\, n_1 - 1,\, n_2 - 1}$

The following is the procedure to determine whether the two groups have variances which are statistically significantly different.

1. Calculate the sample variances of the two groups (s_1^2 and s_2^2).

2. Calculate the test statistic.

$$F_{test} = s_1^2/s_2^2$$

3. Determine the two $F_{critical}$ values. These critical values are $F_{0.025,\, n_1 - 1,\, n_2 - 1}$, which is obtained from Table F-13, while $F_{0.975,\, n_1 - 1,\, n_2 - 1}$ is obtained from $1/F_{0.025,\, n_2 - 1,\, n_1 - 1}$.

4. Compare F_{test} versus the $F_{critical}$ values.

Based on the rejection table listed above, when F_{test} is between the two $F_{critical}$ values, there is insufficient information to conclude that the sample variances are from two different populations. Some statistical packages provide p-values (significance levels) based on the F-test statistic (F_{test}). When using these statistical packages, a p-value (significance level) of 0.05 was used. When the p-value was greater than or equal to 0.05, then the null hypothesis (H_o) was not rejected. When the p-value was less than 0.05, then the null hypothesis was rejected or the alternative hypothesis was accepted.

Table F-13
Percentage Points of the F Distribution (F[0.025,df1,df2])

df2\df1	1	2	3	4	5	6	7	8	9	10	12	15	20	24	30	40	60	120	Infinite
1	647.8	799.5	864.2	899.6	921.8	937.1	948.2	956.6	963.3	968.6	976.7	984.9	993.1	997.3	1,001	1,006	1,010	1,014	1,018
2	38.51	39.00	39.17	39.25	39.30	39.33	39.36	39.37	39.39	39.40	39.41	39.43	39.45	39.46	39.46	39.47	39.48	39.49	39.50
3	17.44	16.04	15.44	15.10	14.88	14.73	14.62	14.54	14.47	14.42	14.34	14.25	14.17	14.12	14.08	14.04	13.99	13.95	13.90
4	12.22	10.65	9.98	9.60	9.36	9.20	9.07	8.98	8.90	8.84	8.75	8.66	8.56	8.51	8.46	8.41	8.36	8.31	8.26
5	10.01	8.43	7.76	7.39	7.15	6.98	6.85	6.76	6.68	6.62	6.52	6.43	6.33	6.28	6.23	6.18	6.12	6.07	6.02
6	8.81	7.26	6.60	6.23	5.99	5.82	5.70	5.60	5.52	5.46	5.37	5.27	5.17	5.12	5.07	5.01	4.96	4.90	4.85
7	8.07	6.54	5.89	5.52	5.29	5.12	4.99	4.90	4.82	4.76	4.67	4.57	4.47	4.41	4.36	4.31	4.25	4.20	4.14
8	7.57	6.06	5.42	5.05	4.82	4.65	4.53	4.43	4.36	4.30	4.20	4.10	4.00	3.95	3.89	3.84	3.78	3.73	3.67
9	7.21	5.71	5.08	4.72	4.48	4.32	4.20	4.10	4.03	3.96	3.87	3.77	3.67	3.61	3.56	3.51	3.45	3.39	3.33
10	6.94	5.46	4.83	4.47	4.24	4.07	3.95	3.85	3.78	3.72	3.62	3.52	3.42	3.37	3.31	3.26	3.20	3.14	3.08
11	6.72	5.26	4.63	4.28	4.04	3.88	3.76	3.66	3.59	3.53	3.43	3.33	3.23	3.17	3.12	3.06	3.00	2.94	2.88
12	6.55	5.10	4.47	4.12	3.89	3.73	3.61	3.51	3.44	3.37	3.28	3.18	3.07	3.02	2.96	2.91	2.85	2.79	2.72
13	6.41	4.97	4.35	4.00	3.77	3.60	3.48	3.39	3.31	3.25	3.15	3.05	2.95	2.89	2.84	2.78	2.72	2.66	2.60
14	6.30	4.86	4.24	3.89	3.66	3.50	3.38	3.29	3.21	3.15	3.05	2.95	2.84	2.79	2.73	2.67	2.61	2.55	2.49
15	6.20	4.77	4.15	3.80	3.58	3.41	3.29	3.20	3.12	3.06	2.96	2.86	2.76	2.70	2.64	2.59	2.52	2.46	2.40
16	6.12	4.69	4.08	3.73	3.50	3.34	3.22	3.12	3.05	2.99	2.89	2.79	2.68	2.63	2.57	2.51	2.45	2.38	2.32
17	6.04	4.62	4.01	3.66	3.44	3.28	3.16	3.06	2.98	2.92	2.82	2.72	2.62	2.56	2.50	2.44	2.38	2.32	2.25
18	5.98	4.56	3.95	3.61	3.38	3.22	3.10	3.01	2.93	2.87	2.77	2.67	2.56	2.50	2.44	2.38	2.32	2.26	2.19
19	5.92	4.51	3.90	3.56	3.33	3.17	3.05	2.96	2.88	2.82	2.72	2.62	2.51	2.45	2.39	2.33	2.27	2.20	2.13
20	5.87	4.46	3.86	3.51	3.29	3.13	3.01	2.91	2.84	2.77	2.68	2.57	2.46	2.41	2.35	2.29	2.22	2.16	2.09
21	5.83	4.42	3.82	3.48	3.25	3.09	2.97	2.87	2.80	2.73	2.64	2.53	2.42	2.37	2.31	2.25	2.18	2.11	2.04
22	5.79	4.38	3.78	3.44	3.22	3.05	2.93	2.84	2.76	2.70	2.60	2.50	2.39	2.33	2.27	2.21	2.14	2.08	2.00
23	5.75	4.35	3.75	3.41	3.18	3.02	2.90	2.81	2.73	2.67	2.57	2.47	2.36	2.30	2.24	2.18	2.11	2.04	1.97
24	5.72	4.32	3.72	3.38	3.15	2.99	2.87	2.78	2.70	2.64	2.54	2.44	2.33	2.27	2.21	2.15	2.08	2.01	1.94
25	5.69	4.29	3.69	3.35	3.13	2.97	2.85	2.75	2.68	2.61	2.51	2.41	2.30	2.24	2.18	2.12	2.05	1.98	1.91
26	5.66	4.27	3.67	3.33	3.10	2.94	2.82	2.73	2.65	2.59	2.49	2.39	2.28	2.22	2.16	2.09	2.03	1.95	1.88
27	5.63	4.24	3.65	3.31	3.08	2.92	2.80	2.71	2.63	2.57	2.47	2.36	2.25	2.19	2.13	2.07	2.00	1.93	1.85
28	5.61	4.22	3.63	3.29	3.06	2.90	2.78	2.69	2.61	2.55	2.45	2.34	2.23	2.17	2.11	2.05	1.98	1.91	1.83
29	5.59	4.20	3.61	3.27	3.04	2.88	2.76	2.67	2.59	2.53	2.43	2.32	2.21	2.15	2.09	2.03	1.96	1.89	1.81
30	5.57	4.18	3.59	3.25	3.03	2.87	2.75	2.65	2.57	2.51	2.41	2.31	2.20	2.14	2.07	2.01	1.94	1.87	1.79
40	5.42	4.05	3.46	3.13	2.90	2.74	2.62	2.53	2.45	2.39	2.29	2.18	2.07	2.01	1.94	1.88	1.80	1.72	1.64
60	5.29	3.93	3.34	3.01	2.79	2.63	2.51	2.41	2.33	2.27	2.17	2.06	1.94	1.88	1.82	1.74	1.67	1.58	1.48
120	5.15	3.80	3.23	2.89	2.67	2.52	2.39	2.30	2.22	2.16	2.05	1.94	1.82	1.76	1.69	1.61	1.53	1.43	1.31
Infinite	5.02	3.69	3.12	2.79	2.57	2.41	2.29	2.19	2.11	2.05	1.94	1.83	1.71	1.64	1.57	1.48	1.39	1.27	1.00

Example:

The log transformed data column from Table F-14 was used to conduct the F-test. The procedure for determining whether the two populations have the same sample variances was calculated as follows:

1. Calculate the sample variances.

$$s^2 = \frac{1}{n-1} \sum_{i=1}^{n} (x_i - \bar{x})^2$$

$$s_1^2 = 1.415$$

$$s_2^2 = 1.853$$

2. Calculate the test statistic.

$$F_{test} = s_1^2/s_2^2$$
$$= 1.415/1.853$$
$$= 0.764$$

3. Determine the two $F_{critical}$ values.

$$F_{0.025,9,14} = 3.21$$
$$F_{0.975,9,14} = 1/F_{0.025,14,9}$$
$$= 1/3.80$$
$$= 0.263$$

Table F-14
Example Data Set Number 5

No. of data points	FEMP				Private			
	Total Uranium, ug/L	Validation qualifier	Conc. used in statistics (a)		Total Uranium, ug/L	Validation qualifier	Conc. used in statistics (a)	
			Normal	Log-normal			Normal	Log-normal
1	0.1	UJ	0.05	-2.996	0.1	UJ	0.05	-2.996
2	0.5	J	0.5	-0.693	0.1	UJ	0.05	-2.996
3	0.7	J	0.7	-0.357	0.1	UJ	0.05	-2.996
4	1	-	1	0.000	0.1	UJ	0.05	-2.996
5	1.1	-	1.1	0.095	0.1	U	0.05	-2.996
6	1.2325		1.2325	0.209	0.55	U*	0.275	-1.291
7	1.791	-	1.791	0.583	0.55	U*	0.275	-1.291
8	2	J	2	0.693	0.476	J	0.476	-0.742
9	2	-	2	0.693	0.735	J	0.735	-0.308
10	3.852	-	3.852	1.349	0.756	J	0.756	-0.280
11					0.851	J	0.851	-0.161
12					1	J	1	0.000
13					1	J	1	0.000
14					1	-	1	0.000
15					1.5	-	1.5	0.405
Average			1.423	-0.042			0.541	-1.243

(a) When the validation qualifier contains a "U", then one-half of the concentration is used in the statistical calculations.

4. Compare F_{test} versus the $F_{critical}$ values.

$$F_{0.975,\ 9,\ 14} < F_{test} \textit{ and } F_{0.025,\ 9,\ 14} > F_{test}$$

$$0.263 < 0.764 \textit{ and } 3.21 > 0.764$$

Since F_{test} is between the two $F_{critical}$ values, the null hypothesis (H_o) is not rejected. If F_{test} were not between the $F_{critical}$ values, the null hypothesis would be rejected. Based on these results, there is insufficient evidence to conclude that the sample variances are from two different populations (lognormally distributed).

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T-Test

The T-test is conducted to test whether there is no difference between two population means with equal variances from a combined data set that is normally distributed. By conducting this test on the natural logarithms at each data value, the T-test was used to determine whether there is no difference between two population means with equal variances from a combined data set that is lognormally distributed. An alpha of 0.05 was selected for this test. The null hypothesis to be tested is:

H_o: The populations have equal means

versus

The alternative hypothesis		Rejection Region for a Level 0.05 Test
H_A: $\mu_1 > \mu_2$		$T_{test} \geq T_{0.95,\, n_1 + n_2 - 2}$
H_A: $\mu_1 < \mu_2$		$T_{test} \leq -T_{0.95,\, n_1 + n_2 - 2}$
H_A: $\mu_1 \neq \mu_2$	either	$T_{test} \geq T_{0.975,\, n_1 + n_2 - 2}$ or $T_{test} \leq -T_{0.975,\, n_1 + n_2 - 2}$

The following is the procedure to determine whether the two groups have means which are statistically significantly different.

1. Calculate the sample means of the two groups ($\overline{x}_1$ and $\overline{x}_2$).

2. Calculate the sample variances of the two groups (s_1^2 and s_2^2).

3. Calculate the estimated pooled standard deviation.

$$s = \left[\frac{\left((n_1 - 1)s_1^2 + (n_2 - 1)s_2^2\right)}{n_1 + n_2 - 2} \right]^{0.5}$$

4. Calculate the test statistic.

$$T_{test} = \frac{\overline{x}_1 - \overline{x}_2}{s\sqrt{\frac{1}{n_1} + \frac{1}{n_2}}}$$

5. Determine the critical values ($T_{critical}$) from Table F-11.

6. Compare T_{test} versus the $T_{critical}$ values.

Based on the rejection table listed above, when the T_{test} statistic is between the two critical values, there is insufficient information to conclude that the means are from two different populations. Some statistical packages provide p-values (significance levels) based on the T_{test} statistics. When using these statistical packages, a p-value (significance level) of less than 0.05 was used. When the p-value was greater than or equal to 0.05, then the null hypothesis (H_o) was not rejected. When the p-value was less than 0.05, then the null hypothesis was rejected or the alternative hypothesis was accepted.

Example:

The log transformed data column from Table F-14 was used to conduct the T-test. The procedure for determining whether the two populations have the same means is as follows:

1. Calculate the sample means.

$\overline{x}_1$ = -0.042 (from Table F-14)

$\overline{x}_2$ = -1.243 (from Table F-14)

2. Calculate the sample variances.

s_1^2 = 1.415 (from F-test example)

s_2^2 = 1.853 (from F-test example)

3. Calculate the estimated pooled standard deviation.

$$s = \left[\frac{(10 - 1)(1.415) + (15 - 1)(1.853)}{10 + 15 - 2}\right]^{0.5}$$

$$= 1.297$$

4. Calculate the test statistic.

$$T_{test} = \frac{((-0.042) - (-1.243))}{1.297\sqrt{\frac{1}{10} + \frac{1}{15}}}$$

$$= 2.268$$

5. Determine the critical values from Table F-11.

$$T_{0.975,\,23} = 2.069$$

6. Compare T_{test} versus the critical values.

$T_{test} \geq T_{0.975,\,23}$ and $T_{test} \geq -T_{0.975,\,23}$

$2.268 \geq 2.069$ and $2.268 \geq -2.069$

Since T_{test} is greater than $T_{0.975,\,23}$, the null hypothesis is rejected. Based on these results, there is a statistically significant difference between these two means. Furthermore, these data sets are not from the same lognormal distribution.

The Wilcoxon Rank Sum Test

The Wilcoxon Rank Sum test is a procedure which can be used to determine whether two sample groups have equivalent means. This test assumes that the distributions of the two populations are identical in shape (variance), but the distributions need not be symmetric. The Wilcoxon Rank Sum test was used when comparing two populations (i.e., FEMP vs. private wells in the glacial overburden), while the Kruskal-Wallis test was used when comparing three or more populations (i.e., Dry Fork, Ross, and Shandon tributaries of the Great Miami Aquifer). In general, the Wilcoxon Rank Sum test should be employed whenever the proportion of nondetects is greater than 15 percent but less than 90 percent. However, in order to provide valid results, the Wilcoxon Rank Sum test should not be used unless both data sets contain at least four samples. The following equations present a step-by-step procedure for conducting the Wilcoxon Rank Sum test.

1. Combine the Group 1 with the Group 2 data and rank the ordered values from 1 to N. Assume there are n Group 1 samples and m Group 2 samples so that N = m + n.

2. Compute the Wilcoxon statistic W:

$$W = \sum_{i=1}^{n} E_i - \frac{1}{2} n (n + 1)$$

   where E_i are the ranks of the Group 1 samples. (Large values of the statistic W give evidence that the groups are not from the same populations.)

3. Compute an approximate Z_{test}. To find the critical value of W, a normal approximation to its distribution is used. The expected value and standard deviation of W under the null hypothesis (i.e., the groups are from the same population) are given by the formulas

$$E(W) = \frac{1}{2} mn; \qquad SD(W) = \sqrt{\frac{1}{12} mn (N + 1)}$$

An approximate Z_{test} for the Wilcoxon Rank Sum test may be calculated by the following equations:

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$$Z_{test} = \frac{W - E(W) - \frac{1}{2}}{SD(W)}$$

The factor of ½ in the numerator serves as a continuity correction since the discrete distribution of the statistic W is being approximated by the continuous normal distribution. If n,m > 10 and ties are present, an adjustment to the approximate Z_{test} must be made:

$$Z_{RS} = \frac{W - E(W) - \frac{1}{2}}{SD'(W)} \quad where\ SD' = \left(\frac{mm}{12} \left[N + 1 - \frac{\sum_{j=i}^{g} t_j (t_j^2 - 1)}{N(N-1)} \right] \right)^{\frac{1}{2}}$$

and g is the number of tied groups and t_j is the number of tied data in the jth group.

4. For a one-tailed 0.05 significance level test for H_O versus the H_A (i.e., the measurements from population 1 tend to exceed those from population 2), reject H_O and accept H_A if $Z_m \geq Z_{(1-\alpha)}$. For a one-tailed α significance level test for H_O versus the H_A that the measurements from population 2 tend to exceed those from population 1, reject H_O and accept H_A if $Z_m \leq Z_{(1-\alpha)}$.

Example:

The data for this example are presented in Table F-15.

1. Combine the FEMP and private Total Uranium data and rank the ordered values from 1 to 25 as shown in Table F-15.

2. Compute the Wilcoxon statistic W:

$$W = \sum_{i=1}^{n} E_i - \frac{1}{2}n(n+1) = 178 - \frac{1}{2}(10)(11) = 123$$

3. Compute an approximate Z_{test}. The expected value and standard deviation of W under the null hypothesis are given by the formulas

$$E(W) = \frac{1}{2}(15)(10) = 75; \qquad SD(W) = \sqrt{\frac{1}{12}(15)(10)(25+1)} = 18.0$$

Table F-15
Example Data Set Number 6

Overall ranks	Total Uranium values used in calculations (a)	Type of well	Ranks	
			Private	FEMP
1	0.05	Private	1	N/A
2	0.05	Private	2	N/A
3	0.05	Private	3	N/A
4	0.05	Private	4	N/A
5	0.05	Private	5	N/A
6	0.05	FEMP	N/A	6
7	0.275	Private	7	N/A
8	0.275	Private	8	N/A
9	0.476	Private	9	N/A
10	0.5	FEMP	N/A	10
11	0.7	FEMP	N/A	11
12	0.735	Private	12	N/A
13	0.756	Private	13	N/A
14	0.851	Private	14	N/A
15	1	Private	15	N/A
16	1	Private	16	N/A
17	1	Private	17	N/A
18	1	FEMP	N/A	18
19	1.1	FEMP	N/A	19
20	1.2325	FEMP	N/A	20
21	1.5	Private	21	N/A
22	1.791	FEMP	N/A	22
23	2	FEMP	N/A	23
24	2	FEMP	N/A	24
25	3.852	FEMP	N/A	25
Sum			147	178

(a) These values are from Table F-14.

An approximate Z_{test} for the Wilcoxon Rank-Sum test then follows as:

$$Z_{test} = \frac{W - E(W) - \frac{1}{2}}{SD(W)} = \frac{123 - 75 - 0.5}{18.0} = 2.639$$

4. Compare the approximate Z_{test} to the upper 95th percentile of the standard normal distribution $Z_{0.05} = 1.645$. Since the approximate Z_{test} is greater than 1.645, the null hypothesis may be rejected at the 5 percent significance level, suggesting that there is statistically significant evidence that the populations have different means. The FEMP and private wells for Total Uranium in the Glacial Overburden are not from the same populations and not not be combined.

Kruskal-Wallis Test for Comparing Populations

The Kruskal-Wallis test (Gilbert 1987) for comparing populations does not require that data sets be drawn from underlying distributions that are normal or even symmetric, but the K distributions are assumed to be identical in shape. The null hypothesis is

H_o: The populations from which the data sets have been drawn have the same means.

The alternative hypothesis is

H_A: At least one population has a mean larger or smaller than at least one other population.

The data can be illustrated as follows:

Population

1	2	3	...	k
x_{11}	x_{21}	x_{31}	...	x_{k1}
x_{12}	x_{22}	x_{32}	...	x_{k2}
.	.	.		.
.	.	.	...	.
.	.	.		.
x_{1n_1}	x_{2n_2}	x_{3n_3}	...	x_{kn_k}

The total number of data points is $m = n_1 + n_2 + ... + n_k$; the n_i need not be equal.

Theses steps must be followed:

1. Rank the m data points from smallest to largest in which the smallest value has rank 1 and the largest value has rank m. If data points are equal ("ties") assign the midrank (e.g., data points 10 and 11 are the same; therefore, 10.5 is used for the rank of both points). If less-than-minimum detectable values occur, treat them as tied values that are less than the smallest detected value that is greater than the minimum detection limit. Suppose the m ranked values are as follows:

Data Value	Actual Rank	Assigned Rank
<0.05	1	2
<0.05	2	2
<0.05	3	2
0.08	4	4
0.09	5	5
0.12	6	6.5
0.12	7	6.5
0.20	8	8
0.21	9	10
0.21	10	10
0.21	11	10

2. Compute R_j the sum of the ranks for each data set.

3. If there are no tied or less-than-minimum detectable values, compute.

$$K_w = \left[\frac{12}{m\ (m + 1)} \sum_{j=1}^{k} \frac{R_j^2}{n_j} \right] - 3\ (m + 1)$$

where:

m	= total number of data values over all data sets
R_j	= sum of ranks of the jth data set
n_j	= number of values in the jth data set
k	= number of data sets

4. If there are ties or less-than-detectable values, compute:

$$K_w' = \frac{K_w}{1 - \frac{1}{m\ (m^2 - 1)} \sum_{j=1}^{g} t_j\ (t_j^2 - 1)}$$

where:

g = number of groups with ties
t_j = the number of tied data in the jth group

5. Reject H_o at α level and accept H_a if K_w (K_w') is equal to or greater than $\chi_{1-\alpha,k-1}$ using a probability level of 1-α and k-1 degress of freedom taken from Table F-16.

Example:

To illustrate the application of the Kruskal-Wallis K_w test consider the example data set presented in Table F-16. For these data, m = 30 + 30 + 21 = 81.

1. Rank all 81 observations (Table F-17).

2. The sum of the ranks for each group are as follows (Table F-18).

R_1 = 1454
R_2 = 1209.5
R_3 = 657.5

3. Compute:

$$K_w = \left[\frac{12}{m\ (m+1)} \sum_{j=1}^{k} \frac{R_j^2}{n_j}\right] - 3\ (m+1)$$

$$= \left[\frac{12}{81\ (82)} \left(\frac{(1454)^2}{30} + \frac{(1209.5)^2}{30} + \frac{(657.5)^2}{21}\right)\right] - 3\ (82)$$

$$= 0.001807\ (70{,}471 + 48{,}763 + 20{,}586) - 246$$

$$= 252.61 - 246$$

$$= 6.61$$

Table F-16
Quantiles of the Chi-Square Distribution with v Degrees of Freedom

Degrees of freedom, v	Probability of obtaining a value of chi-squred smaller than the table value													
	0.005	0.010	0.025	0.05	0.100	0.250	0.500	0.750	0.900	0.950	0.975	0.990	0.995	0.999
1	0.00	0.00	0.00	0.00	0.02	0.10	0.45	1.32	2.71	3.84	5.02	6.63	7.88	10.83
2	0.01	0.02	0.05	0.10	0.21	0.58	1.39	2.77	4.61	5.99	7.38	9.21	10.60	13.82
3	0.07	0.11	0.22	0.35	0.58	1.21	2.37	4.11	6.25	7.81	9.35	11.34	12.84	16.27
4	0.21	0.30	0.48	0.71	1.06	1.92	3.36	5.39	7.78	9.49	11.14	13.28	14.86	18.47
5	0.41	0.55	0.83	1.15	1.61	2.67	4.35	6.63	9.24	11.07	12.83	15.09	16.75	20.51
6	0.68	0.87	1.24	1.64	2.20	3.45	5.35	7.84	10.64	12.59	14.45	16.81	18.55	22.46
7	0.99	1.24	1.69	2.17	2.83	4.25	6.35	9.04	12.02	14.07	16.01	18.48	20.28	24.32
8	1.34	1.65	2.18	2.73	3.49	5.07	7.34	10.22	13.36	15.51	17.53	20.09	21.95	26.12
9	1.73	2.09	2.70	3.33	4.17	5.90	8.34	11.39	14.68	16.92	19.02	21.67	23.59	27.88
10	2.16	2.56	3.25	3.94	4.87	6.74	9.34	12.55	15.99	18.31	20.48	23.21	25.19	29.59
11	2.60	3.05	3.82	4.57	5.58	7.58	10.34	13.70	17.28	19.68	21.92	24.73	26.76	31.26
12	3.07	3.57	4.40	5.23	6.30	8.44	11.34	14.85	18.55	21.03	23.34	26.22	28.30	32.91
13	3.57	4.11	5.01	5.89	7.04	9.30	12.34	15.98	19.81	22.36	24.74	27.69	29.82	34.53
14	4.07	4.66	5.63	6.57	7.79	10.17	13.34	17.12	21.06	23.68	26.12	29.14	31.32	36.12
15	4.60	5.23	6.26	7.26	8.55	11.04	14.34	18.25	22.31	25.00	27.49	30.58	32.80	37.70
16	5.14	5.81	6.91	7.96	9.31	11.91	15.34	19.37	23.54	26.30	28.85	32.00	34.27	39.25
17	5.70	6.41	7.56	8.67	10.09	12.79	16.34	20.49	24.77	27.59	30.19	33.41	35.72	40.79
18	6.26	7.01	8.23	9.39	10.86	13.68	17.34	21.60	25.99	28.87	31.53	34.81	37.16	42.31
19	6.84	7.63	8.91	10.12	11.65	14.56	18.34	22.72	27.20	30.14	32.85	36.19	38.58	43.82
20	7.43	8.26	9.59	10.85	12.44	15.45	19.34	23.83	28.41	31.41	34.17	37.57	40.00	45.31
21	8.03	8.90	10.28	11.59	13.24	16.34	20.34	24.93	29.62	32.67	35.48	38.93	41.40	46.80
22	8.64	9.54	10.98	12.34	14.04	17.24	21.34	26.04	30.81	33.92	36.78	40.29	42.80	48.27
23	9.26	10.20	11.69	13.09	14.85	18.14	22.34	27.14	32.01	35.17	38.08	41.64	44.18	49.73
24	9.89	10.86	12.40	13.85	15.66	19.04	23.34	28.24	33.20	36.42	39.36	42.98	45.56	51.18
25	10.52	11.52	13.12	14.61	16.47	19.94	24.34	29.34	34.38	37.65	40.65	44.31	46.93	52.62
26	11.16	12.20	13.84	15.38	17.29	20.84	25.34	30.43	35.56	38.89	41.92	45.64	48.29	54.05
27	11.81	12.88	14.57	16.15	18.11	21.75	26.34	31.53	36.74	40.11	43.19	46.96	49.65	55.48
28	12.46	13.56	15.31	16.93	18.94	22.66	27.34	32.62	37.92	41.34	44.46	48.28	50.99	56.89
29	13.12	14.26	16.05	17.71	19.77	23.57	28.34	33.71	39.09	42.56	45.72	49.59	52.34	58.30
30	13.79	14.95	16.79	18.49	20.60	24.48	29.34	34.80	40.26	43.77	46.98	50.89	53.67	59.70
40	20.71	22.16	24.43	26.51	29.05	33.66	39.34	45.62	51.81	55.76	59.34	63.69	66.77	73.40
50	27.99	29.71	32.36	34.76	37.69	42.94	49.33	56.33	63.17	67.50	71.42	76.15	79.49	86.66
60	35.53	37.48	40.48	43.19	46.46	52.29	59.33	66.98	74.40	79.08	83.30	88.38	91.95	99.61
70	43.28	45.44	48.76	51.74	55.33	61.70	69.33	77.58	85.53	90.53	95.02	100.43	104.21	112.32
80	51.17	53.54	57.15	60.39	64.28	71.14	79.33	88.13	96.58	101.88	106.63	112.33	116.32	124.84
90	59.20	61.75	65.65	69.13	73.29	80.62	89.33	98.65	107.57	113.15	118.14	124.12	128.30	137.21
100	67.33	70.06	74.22	77.93	82.36	90.13	99.33	109.14	118.50	124.34	129.56	135.81	140.17	149.45
X	-2.58	-2.33	-1.96	-1.65	-1.28	-0.67	0	0.674	1.282	1.645	1.96	2.326	2.576	3.090

For degrees of freedom (v) > 100, chi-squared=v[1-2/9v+X *(2/9v)^0.5]^3 or chi-squared=0.5*[X+(2v-1)^0.5]^2 if less accuracy is needed, where X is given in the last row of the table.

Source: Table A-19, Gilbert 1987.

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Table F-17. Ranking of Example Data Set Number 7 (Concentrations in μg/L)

Rank	Group	Chemical A	Rank	Group	Chemical A
1	1	189	43	1	521
2	2	251	44.5	1	534
3	3	288	44.5	2	534
4.5	1	301	46	1	535
4.5	2	301	47	1	543
6	2	303	48	3	560
7	3	304	49	2	561
8	3	338	50	2	566
9	3	345	51	1	581
10	2	348	52	2	583
11	1	351	53	1	615
12	3	352	54	1	619
13	3	356	55.5	2	621
14	3	358	55.5	2	621
15	2	360	57	2	654
16	2	364	58	2	667
17.5	2	366	59	3	681
17.5	2	366	60	2	745
19	1	370	61	1	747
20	2	371	62	3	759
21	3	372	63	1	766
22	3	378	64	1	785
23	1	386	65	2	812
24	2	387	66	2	829
25	2	405	67	1	840
26.5	2	406	68	3	931
26.5	3	406	69	1	941
28	3	420	70	2	1020
29	1	422	71	2	1040
30	1	437	72	1	1050
31	1	451	73	1	1070
32	1	456	74	1	1090
33	3	459	75	1	1150
34	3	464	76	2	1300
35	3	467	77	2	1410
36	3	472	78	1	1460
37	1	481	79	1	1500
38	2	482	80	3	1750
39	3	483	81	1	4850
40.5	2	486			
40.5	2	486			
42	1	488			

Group 1 = Dry Fork
Group 2 = Ross
Group 3 = Shandon
) = ties

Table F-18. Ranking of Example Data Set Number 7 by Group (Concentrations in μg/L)

	Dry Fork	Ross	Shandon
	1	2	3
	4.5	4.5	7
	11	6	8
	19	10	9
	23	15	12
	29	16	13
	30	17.5	14
	31	17.5	21
	32	20	22
	37	24	26.5
	42	25	28
	43	26.5	33
	44.5	38	34
	46	40.5	35
	47	40.5	36
	51	44.5	39
	53	49	48
	54	50	59
	61	52	62
	63	55.5	68
	64	55.5	80
	67	57	
	69	58	
	72	60	
	73	65	
	74	66	
	75	70	
	78	71	
	79	76	
	81	77	
Sum	1454	1209.5	657.5

4. Because there are ties, calculate a modified K_w':

$$K_w' = \frac{K_w}{1 - \frac{1}{m\,(m^2 - 1)} \sum_{j=1}^{g} t_j\,(t_j^2 - 1)}$$

where:

g	= 6 =	number of groups with ties
t_1	= 2 =	number of data points in the first tied group (Rank 4.5)
t_2	= 2 =	number of data points in the second tied group (Rank 17.5)
t_3	= 2 =	number of data points in the third tied group (Rank 26.5)
t_4	= 2 =	number of data points in the fourth tied group (Rank 46.5)
t_5	= 2 =	number of data points in the fifth tied group (Rank 44.5)
t_6	= 2 =	number of data points in the sixth tied group (Rank 55.5)

$$K_w' = \frac{6.61}{1 - \frac{1}{81\,[(81)^2 - 1]}\,[\,2(3) + 2(3) + 2(3) + 2(3) + 2(3) + 2(3)]}$$

$$= \frac{6.61}{0.99993}$$

$$= 6.61$$

5. Because $K_w' = 6.61$ is greater than $\chi^2_{0.95,2} = 5.99$, the null hypothesis H_o is rejected at the $\alpha = 0.05$ level. The conclusion is that at least one population being compared has a mean different from the other populations.

APPENDIX G

SUMMARY OF REVISIONS TO THE "CHARACTERIZATION OF BACKGROUND WATER QUALITY FOR STREAMS AND GROUNDWATER" DRAFT REPORT (MAY 1993)

SUMMARY OF REVISIONS TO THE "CHARACTERIZATION OF BACKGROUND WATER QUALITY FOR STREAMS AND GROUNDWATER" DRAFT REPORT (MAY 1993)

In May 1993, a draft version of the "Background Water Quality" report was submitted to the U.S. Environmental Protect Agency (EPA) and the Ohio Environmental Protection Agency (OEPA). The report was approved by these agencies in October/November 1993, pending incorporation of comment responses and inclusion of new data collected during the field programs conducted in the spring and summer of 1993. In the initial draft, the data evaluated were those that were available and validated as of March 31, 1993. Since that date, the quantity of validated data in the Fernald Environmental Management Project (FEMP) database has increased substantially because: many new surface water and groundwater samples were collected and analyzed for the 1993 field program; some pre-1993 data have been located, validated, and entered into the FEMP database as part of the ongoing remediation investigation (RI) effort; and some pre-1993 nonvalidated data in the FEMP database last year have since gone through the validation process and are now validated.

As a result, there is a greater quantity of validated data available, which improves the ability to accurately characterize background conditions. Additionally, for the 1993 field programs, both filtered and unfiltered radiological and inorganic samples were collected and analyzed. Prior to 1993, the majority of metals analyzed were for filtered samples, while nearly all the radiological analyses were for unfiltered samples. In the draft document, only dissolved metals and total radiological background statistics were computed and reported. For this revised document, separate statistics are computed for filtered and unfiltered inorganic data, as well as filtered and unfiltered radiological data.

At the time that the draft report was prepared, no validated Remedial Investigation/Feasibility Study (RI/FS) data were available for sampling point W-5 on Paddys Run. Since then, the location has been sampled on two different dates. Sampling point W-1 on the Great Miami River was sampled on three different occasions in 1988 and 1989 for the RI/FS program. In 1993, sampling point W-1 was sampled on two more occasions. The quantity of background data for groundwater in the glacial overburden and the Great Miami Aquifer has also increased. Table G-1 shows the number of data records evaluated in the draft report (May 1993) and the number of data records evaluated for this revised document. In addition to the radiological, inorganic, and organic data evaluated, field measurements are also included in this revised document.

In the draft report, 51 wells were evaluated as potential candidates for background wells. From those wells, 30 were considered to be representative of background conditions (five wells in the glacial overburden and 25 wells in the Great Miami Aquifer). For this report, the same 51 wells were

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Table G-1

Quantity of Validated Data Evaluated for Draft Report (May 1993) and Revised Report (May 1994)

	Radiological Data		Inorganic Data		Organic Data		Total Records	
	Draft Report	Revised Report	Draft Report	Revised Report	Draft Report	Revised Report	Draft Report	Revised Report
Glacial overburden	301	445	494	794	67	371	862	1610
Great Miami Aquifer	1630	2001	2785	3612	853	1746	5268	7359
Great Miami River	97	124	121	374	9	699	227	1197
Paddys Run	0	70	0	189	0	395	0	654
TOTAL	**2028**	**2640**	**3400**	**4969**	**929**	**3211**	**6357**	**10820**

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re-evaluated for their adequacy to represent background conditions. During the re-evaluation, three wells (2383, 2384, and 3044) that were initially used to characterize background water quality in the Great Miami Aquifer have now been eliminated because they are located close to Paddys Run and may be influenced by surface water that has infiltrated from the stream. Conversely, two wells (2105 and 2728) have now been added to the list of background wells.

No data existed for well 2728 as of March 31, 1993; the 1993 data indicate that the well is representative of background conditions. Well 2105 was discarded for the draft report because of one unusual sample that had nondetect concentrations of calcium and magnesium, but high concentrations of sodium and chloride (sample 3782). The other samples from this well exhibit normal concentrations of major cations and anions. Based on professional judgment, it was decided that sample 3782 should be deleted, and well 2105 has been included as one of the usable wells for background characterization. Overall, the number of background wells representing the Great Miami Aquifer decreased by one to 24. The number of wells representing the glacial overburden did not change; the same five wells used for the draft report are still used in this document.

Based on a review of data collected in 1993, it was decided that radiological data from well 2098 should be removed from the background water quality data set. It appears that the radiological water chemistry of well 2098 is being affected by runoff from the FEMP. Of the wells chosen to represent Great Miami Aquifer background water quality, well 2098 had the highest unfiltered and filtered total uranium results, 5.1 and 4.6 ug/L, respectively. Surface water samples were also collected in 1993 from a drainage ditch directly north of well 2098. Replicate samples were taken, with the highest unfiltered and filtered total uranium results being 13.9 and 13.6 ug/L, respectively, thus indicating the possibility of the FEMP affecting the values measured for radiological parameters for samples collected from well 2098. Therefore, in order not to bias statistical computations, radiological constituents from well 2098 have been removed from the background data set. However, inorganic, organic, and field parameter data remain because well 2098 results were similar to those from other Great Miami Aquifer background wells.

During evaluation of RI/FS background data for the draft report, nonvalidated data and high nondetect data were removed from the data set before statistical analyses proceeded. (A description of high nondetect data and the protocol for disposition of these data are included in Section 4.2 of this report.) The same two types of data were removed from the current background data set evaluated for this report.

For the draft report, potential outlier data were identified but not discarded from the data set. According to EPA guidance (1989b, 1992), each potential outlier should be checked against the original data package and validation records to determine if an error occurred during the analysis, the validation process, or any transcriptions of the datum. If no evidence of error can be clearly

identified, then the datum should be assumed to be a real value and retained for evaluation. However, this approach was intended for "on-site" data or areas that could potentially be contaminated; it was not intended for strict application to background characterization.

It can be important to delete outliers during background characterization, because one or two unusually high values in a small data set could distort some of the statistics that are being generated. For the revised document, a few examples of outlier data have been rejected from the data set used to represent background conditions. In most cases, the identification of outliers was accomplished using professional judgment because a statistical test to identify outliers is not available for cases where the data distribution type is undefined. Where the data distribution could be shown to be normal or lognormal, "Rosner's Test of Many Outliers" (Gilbert 1987) was used to statistically evaluate whether a potential outlier was in fact an outlier.

A description of the process used to identify and delete outliers is found in Section 4.2, and a description of Rosner's test is found in Appendix F of this document. The outlier data that were removed from the background data set are listed in Appendices C, D, and E for radiological inorganic, and organic data, respectively.

Another step performed during this effort that was not performed during preparation of the draft report is "data averaging." This occurred whenever more than one sample was collected for one location on a single date. In other words, data from duplicate or triplicate samples were averaged into a single value for each analyte for specific dates. The averaged values were then used in the data pool to calculate statistics. This procedure was done in order to reduce the bias that would occur if duplicate or triplicate sample data were each treated as individual samples. The averaging was particularly needed for 1993 data for the surface water sampling sites (W-1, W-5) at which multiple single-day samples were collected to ensure that at least one "valid" RI/FS sample was available.

During preparation of the draft report, each group of data was assigned to one of these three categories:

- Pathway 1: $\geq$ 6 detect values and $\geq$ 40 percent detection frequency
- Pathway 2: 3 to 5 detect values, or 10 to 40 percent frequency of detection
- Pathway 3: $<$3 detect values, or $<$10 percent frequency of detection

The data groups assigned to Pathway 1 were then tested to determine whether the data were normally or lognormally distributed using the Shapiro-Wilk or Shapiro-Francia test (see Appendix F). Based on the results of these tests, all data groups in the "Pathway 1" category were assigned one of the following distribution classifications:

- N = Normal distribution accepted
- L = Lognormal distribution accepted
- N* = Both normal and lognormal distributions tested positive, but normal distribution was a better fit
- L* = Both normal and lognormal distributions tested positive, but lognormal distribution was a better fit
- NQ = Normal distribution, approximately
- LQ = Lognormal distribution, approximately

Any data group in the "Pathway 1" category that did not pass for either normal or lognormal distribution was assigned the distribution of "NQ" or "LQ"; i.e., whichever distribution the data most closely fit.

For the revised report, the data groups were first evaluated to determine if they belonged to the "Pathway 1" category. If so, they were tested for normal and lognormal distributions using the Shapiro-Wilk or Shapiro-Francia test, as was done previously. If the calculated statistic (W or W') exceeded a critical value (W_{crit}), then the data group was assigned one of the first four distributions listed above (i.e., N, L, N*, or L*). If the calculated statistic was less than W_{crit} but greater than 0.95 W_{crit}, then the data group was assigned a distribution classification of NQ or LQ. If the calculated statistic was less than the 0.95 W_{crit} value, then the data group was labeled as having an undefined distribution. In other words, a few of the "Pathway 1" data groups have now been assigned to the undefined distribution (U) category. This did not occur in the draft report. In the draft report, every "Pathway 1" data group was placed in either a normal (N, N*, and NQ) or lognormal (L, L*, LQ) category.

For the revised report, a second test was implemented to check whether a data group was lognormally distributed. If a data group passed the Shapiro-Wilk or Shapiro-Francia test for lognormal distribution and had a log variance value less than 2.0, then lognormal distribution was assumed for the data group. However, for a few data groups, the log variance value was greater than 2.0. For this situation, the data distribution was considered to be undefined (U), irrespective of the results of the Shapiro-Wilk or Shapiro-Francia test.

In the current report, there are no longer any "Pathway 2" and "Pathway 3" categories. Any data group that did not meet the criteria for "Pathway 1" (i.e., $\geq$ 6 detects and $\geq$ 40 percent detection frequency), or met the "Pathway 1" criteria but could not be classified as having a normal or lognormal distribution, was assigned an undefined "U" classification. In summary, there are now three categories of data groups evaluated in this report — normal, lognormal, and undefined

distributions. The Pathway 1, 2, and 3 terminology used in the draft report is not utilized in this revised document. This revision was implemented in order to limit the statistics reported to those most appropriate and useful for the particular data distribution.

The following information is presented in this report for each data group evaluated:

1) number of analyses
2) number of detections
3) frequency of detection
4) minimum detect value
5) maximum detect value
6) minimum nondetect value
7) maximum nondetect value

Items 6 and 7 were not provided in the draft report. Median values, which were listed for all data groups in the draft report, are now presented only for the undefined data groups.

For data groups with normal distribution, statistics provided in the revised report (in addition to the common statistical parameters listed above) are arithmetic mean, standard deviation, coefficient of variation, one-sided 95 percent upper confidence level (UCL), and 95th percentile. These are the same as in the draft report, except 95 percent upper tolerance level (UTL) has been replaced with 95th percentile and two-sided 95 percent UCL has been replaced with one-sided 95 percent UCL. The basis for the change from UTLs to 95th percentile was from EPA Region V comments on recent FEMP RI reports. The two-sided 95 percent UCL was used for the draft report, but is now replaced by the more appropriate one-sided 95 percent UCL. An additional change is that any statistics relating to a lognormal distribution were eliminated from the "normal" portion of the summary statistics tables since this information does not apply to a data set that is normally distributed.

For data groups with lognormal distribution, statistics provided in the revised report (in addition to the common statistical parameters listed above) include an estimated mean of a lognormal distribution, estimated standard deviation of a lognormal distribution, one-sided 95 percent UCL, and 95th percentile. The change to the one-sided 95 percent UCL and the 95th percentile is based on the same reasoning as for data groups having normal distributions. Statistics relating to normal distributions were eliminated because they do not apply to a data set that is lognormally distributed. The geometric mean and geometric standard deviation have been replaced by the estimated mean of a lognormal distribution and estimated standard deviation of a lognormal distribution, respectively, based on EPA Region V comments on recent FEMP RI reports.

For an undefined distribution, statistics provided in the revised report (in addition to the common statistical parameters listed above) include the median, one-sided 95 percent UCL, and 95th percentile.

The median was reported in the draft report. The equations used to calculate the one-sided 95 percent UCL and 95th percentile for an undefined distribution are presented in Appendix F.

Additional changes to the draft "Background Water Quality" report involve incorporating comment responses as discussed in correspondence from the Department of Energy to EPA and OEPA, dated August 31, 1993. The primary "response to comments" revisions include: adding groundwater elevation contours to figures showing background well locations; justifying that sampling point W-1 is an appropriate background water quality location on the Great Miami River; expanding the discussion of the screening process used to select appropriate background wells; providing clarifications suggested by reviewers; and correcting errors noted by reviewers.

Some minor changes were also made to the draft document to promote consistency with the Operable Unit 5 RI Report. These changes primarily involved descriptions of site setting, sample and analysis programs, data validation, and updating the numbers and types of FEMP monitoring wells. A description of the RCRA groundwater monitoring program was also added to Chapter 2.

APPENDIX H

SUMMARY STATISTICS OF INORGANIC CONSTITUENTS FOR BACKGROUND MONITORING WELLS IN THE TRIBUTARY SECTIONS OF THE GREAT MIAMI AQUIFER

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Table H-1
Summary Statistics of Unfiltered Radiological Constituents for Background Monitoring Wells in the Ross Section, Great Miami Aquifer

Statistics	Cesium-137	Neptunium-237	Plutonium-238	Plutonium-239/240	Radium-226	Radium-228
No. of analyses	21	28	24	18	29	29
No. of detections	1	2	3	2	12	5
Detection frequency (%)	5	7	13	11	41	17
Minimum Detection	N/A	0.25	0.048	0.081	0.094	1.3
Maximum Detection	5.8	0.39	0.089	0.083	1.1	4.5
Minimum Nondetect	< 7.4	< 0.0024	< 0.026	< 0.003	< 0.066	< 1.6
Maximum Nondetect	< 12	< 0.43	< 0.1	< 0.070	< 0.8	< 3.0
Distribution	U	U	U	U	L	U
Normal						
Mean	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A
Lognormal						
Mean	N/A	N/A	N/A	N/A	0.24	N/A
Standard deviation	N/A	N/A	N/A	N/A	0.27	N/A
95% UCL	N/A	N/A	N/A	N/A	0.36	N/A
95th Percentile	N/A	N/A	N/A	N/A	0.71	N/A
Nonparametric						
Median	< 9.5	< 0.22	< 0.062	< 0.052	N/A	< 2.3
95% UCL	< 10	< 0.38	< 0.094	< 0.057	N/A	< 2.7
95th Percentile	< 12	0.25	0.059	0.083	N/A	4.3

Table H-1 (Continued)
Summary Statistics of Unfiltered Radiological Constituents for Background Monitoring Wells in the Ross Section, Great Miami Aquifer

Statistics	Ruthenium-106	Strontium-90	Technetium-99	Total Thorium	Thorium-228	Thorium-230
No. of analyses	21	28	28	13	27	26
No. of detections	0	0	1	2	12	12
Detection frequency (%)	0	0	4	15	44	46
Minimum Detection	N/A	N/A	N/A	2	0.22	0.26
Maximum Detection	N/A	N/A	22	2.1	1.4	1.7
Minimum Nondetect	< 65	< 0.89	< 8.1	< 1.5	< 0.17	< 0.2
Maximum Nondetect	< 101	< 1.5	< 30	< 2.6	< 0.58	< 0.58
Distribution	U	U	U	U	L	LQ
Normal						
Mean	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A
Lognormal						
Mean	N/A	N/A	N/A	N/A	0.30	0.42
Standard deviation	N/A	N/A	N/A	N/A	0.22	0.41
95% UCL	N/A	N/A	N/A	N/A	0.40	0.61
95th Percentile	N/A	N/A	N/A	N/A	0.72	1.2
Nonparametric						
Median	< 80	< 1.1	< 19	< 2.3	N/A	N/A
95% UCL	< 86	< 1.2	< 21	< 2.6	N/A	N/A
95th Percentile	< 99	< 1.5	< 30	2.1	N/A	N/A

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Table H-1 (Continued)
Summary Statistics of Unfiltered Radiological Constituents for Background Monitoring Wells in the Ross Section, Great Miami Aquifer

Statistics	Thorium-232	Total Uranium	Uranium-234	Uranium-235/236	Uranium-238
No. of analyses	20	29	29	29	29
No. of detections	6	18	26	1	17
Detection frequency (%)	30	62	90	3	59
Minimum Detection	0.14	0.24	0.19	N/A	0.21
Maximum Detection	0.32	2.2	0.82	0.17	0.77
Minimum Nondetect	< 0.15	< 0.1	< 0.22	< 0.092	< 0.19
Maximum Nondetect	< 0.29	< 1.0	< 0.24	< 0.29	< 0.62
Distribution	U	LQ	N	U	L
Normal					
Mean	N/A	N/A	0.38	N/A	N/A
Standard deviation	N/A	N/A	0.16	N/A	N/A
Coefficient of variation	N/A	N/A	0.43	N/A	N/A
95% UCL	N/A	N/A	0.43	N/A	N/A
95th Percentile	N/A	N/A	0.65	N/A	N/A
Lognormal					
Mean	N/A	0.59	N/A	N/A	0.29
Standard deviation	N/A	0.83	N/A	N/A	0.20
95% UCL	N/A	0.97	N/A	N/A	0.37
95th Percentile	N/A	1.9	N/A	N/A	0.67
Nonparametric					
Median	< 0.26	N/A	N/A	< 0.21	N/A
95% UCL	0.14	N/A	N/A	< 0.23	N/A
95th Percentile	0.24	N/A	N/A	< 0.29	N/A

Note:
(1) Concentrations are reported in pCi/L except Total Thorium and Total Uranium, which are in ug/L.
(2) N/A = Not applicable.
(3) Distribution types: N = Normal, L = Lognormal, N* = Normal (but also passed Lognormal test), L* = Lognormal (but also passed Normal test), NQ = Qualified Normal, LQ = Qualified Lognormal, U = Undefined.
(4) Mean types: Normal = arithmetic mean, Lognormal = estimated mean of a lognormal distribution.
(5) Standard deviation types: Normal = arithmetic standard deviation, Lognormal = estimated standard deviation of a lognormal distribution.

Table H-2
Summary Statistics of Unfiltered Radiological Constituents for Background Monitoring Wells in the Shandon Section, Great Miami Aquifer

Statistics	Cesium-137	Neptunium-237	Plutonium-238	Plutonium-239/240	Radium-226	Radium-228
No. of analyses	24	22	17	19	37	38
No. of detections	0	0	3	3	31	12
Detection frequency (%)	0	0	18	16	84	32
Minimum Detection	N/A	N/A	0.022	0.016	0.24	1.5
Maximum Detection	N/A	N/A	0.075	0.050	2	4.8
Minimum Nondetect	< 5.8	< 0.035	< 0.014	< 0.014	< 0.07	< 1.3
Maximum Nondetect	< 12	< 0.43	< 0.089	< 0.089	< 1	< 3.2
Distribution	U	U	U	U	NQ	U
Normal						
Mean	N/A	N/A	N/A	N/A	0.77	N/A
Standard deviation	N/A	N/A	N/A	N/A	0.53	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	0.69	N/A
95% UCL	N/A	N/A	N/A	N/A	0.92	N/A
95th Percentile	N/A	N/A	N/A	N/A	1.6	N/A
Lognormal						
Mean	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A
Nonparametric						
Median	< 9.0	< 0.27	< 0.06	< 0.06	N/A	< 2.6
95% UCL	< 9.8	< 0.34	< 0.086	< 0.086	N/A	< 3.0
95th Percentile	< 11	< 0.41	0.075	0.050	N/A	3.8

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Table H-2 (Continued)
Summary Statistics of Unfiltered Radiological Constituents for Background Monitoring Wells in the Shandon Section, Great Miami Aquifer

Statistics	Ruthenium-106	Strontium-90	Technetium-99	Total Thorium	Thorium-228	Thorium-230
No. of analyses	28	28	40	16	40	38
No. of detections	0	2	1	1	13	18
Detection frequency (%)	0	7	3	6	33	47
Minimum Detection	N/A	0.65	N/A	N/A	0.22	0.19
Maximum Detection	N/A	2.0	26	0.97	2.9	2.5
Minimum Nondetect	< 58	< 0.37	< 4	< 1.2	< 0.1	< 0.2
Maximum Nondetect	< 91	< 1.6	< 30	< 3.8	< 0.63	< 0.63
Distribution	U	U	U	U	U	LQ
Normal						
Mean	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A
Lognormal						
Mean	N/A	N/A	N/A	N/A	N/A	0.32
Standard deviation	N/A	N/A	N/A	N/A	N/A	0.24
95% UCL	N/A	N/A	N/A	N/A	N/A	0.40
95th Percentile	N/A	N/A	N/A	N/A	N/A	0.77
Nonparametric						
Median	< 77	< 1.1	< 18	< 2.7	< 0.34	N/A
95% UCL	< 80	< 1.2	< 20	< 3.0	< 0.54	N/A
95th Percentile	< 89	0.65	< 30	0.97	1.6	N/A

Table H-2 (Continued)
Summary Statistics of Unfiltered Radiological Constituents for Background Monitoring Wells in the Shandon Section, Great Miami Aquifer

Statistics	Thorium-232	Total Uranium	Uranium-234	Uranium-235/236	Uranium-238
No. of analyses	23	48	37	36	43
No. of detections	2	18	14	3	10
Detection frequency (%)	9	38	38	8	23
Minimum Detection	0.1	0.1	0.14	0.094	0.14
Maximum Detection	0.2	3.1	1.3	0.26	0.9
Minimum Nondetect	< 0.1	< 0.1	< 0.17	< 0.1	< 0.11
Maximum Nondetect	< 0.42	< 1	< 0.73	< 0.39	< 1.0
Distribution	U	U	U	U	U
Normal					
Mean	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A
Lognormal					
Mean	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A
Nonparametric					
Median	< 0.24	< 0.1	< 0.30	< 0.23	< 0.39
95% UCL	< 0.32	0.1	0.14	< 0.24	< 1
95th Percentile	0.1	1.2	1.3	0.24	0.5

Note:
(1) Concentrations are reported in pCi/L except Total Thorium and Total Uranium, which are in ug/L.
(2) N/A = Not applicable.
(3) Distribution types: N = Normal, L = Lognormal, N* = Normal (but also passed Lognormal test), L* = Lognormal (but also passed Normal test), NQ = Qualified Normal, LQ= Qualified Lognormal, U = Undefined.
(4) Mean types: Normal = arithmetic mean, Lognormal = estimated mean of a lognormal distribution.
(5) Standard deviation types: Normal = arithmetic standard deviation, Lognormal = estimated standard deviation of a lognormal distribution.

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Table H-3
Summary Statistics of Unfiltered Radiological Constituents for Background Monitoring Wells in the Dry Fork Section, Great Miami Aquifer

Statistics	Cesium-137	Neptunium-237	Plutonium-238	Plutonium-239/240	Radium-226	Radium-228
No. of analyses	25	31	21	22	39	39
No. of detections	1	2	0	0	13	6
Detection frequency (%)	4	6	0	0	33	15
Minimum Detection	N/A	0.45	N/A	N/A	0.071	1.0
Maximum Detection	6.7	0.62	N/A	N/A	0.9	5.2
Minimum Nondetect	< 7.7	< 0.0023	< 0.0075	< 0.008	< 0.058	< 0.19
Maximum Nondetect	< 12	< 0.48	< 0.094	< 0.086	< 1.1	< 3.2
Distribution	U	U	U	U	U	U
Normal						
Mean	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A
Lognormal						
Mean	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A
Nonparametric						
Median	< 9.8	< 0.22	< 0.047	< 0.051	< 0.5	< 2.3
95% UCL	< 10	< 0.28	< 0.065	< 0.063	< 1.1	< 2.7
95th Percentile	< 12	0.45	< 0.086	< 0.083	0.87	3.1

Table H-3 (Continued)
Summary Statistics of Unfiltered Radiological Constituents for Background Monitoring Wells in the Dry Fork Section, Great Miami Aquifer

Statistics	Ruthenium-106	Strontium-90	Technetium-99	Total Thorium	Thorium-228	Thorium-230
No. of analyses	27	31	31	21	34	34
No. of detections	0	2	0	0	12	14
Detection frequency (%)	0	6	0	0	35	41
Minimum Detection	N/A	3.0	N/A	N/A	0.075	0.18
Maximum Detection	N/A	4.8	N/A	N/A	0.77	2.1
Minimum Nondetect	< 64	< 0.53	< 7.6	< 0.85	< 0.14	< 0.16
Maximum Nondetect	< 170	< 1.7	< 29	< 2.8	< 0.67	< 0.67
Distribution	U	U	U	U	U	LQ
Normal						
Mean	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A
Lognormal						
Mean	N/A	N/A	N/A	N/A	N/A	0.32
Standard deviation	N/A	N/A	N/A	N/A	N/A	0.30
95% UCL	N/A	N/A	N/A	N/A	N/A	0.43
95th Percentile	N/A	N/A	N/A	N/A	N/A	0.86
Nonparametric						
Median	< 83	< 1.1	< 18	< 1.9	< 0.50	N/A
95% UCL	< 88	< 1.2	< 19	< 2.1	0.075	N/A
95th Percentile	< 150	3.0	< 29	< 2.5	0.71	N/A

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Table H-3 (Continued)
Summary Statistics of Unfiltered Radiological Constituents for Background Monitoring Wells in the Dry Fork Section, Great Miami Aquifer

Statistics	Thorium-232	Total Uranium	Uranium-234	Uranium-235/236	Uranium-238
No. of analyses	28	38	32	32	32
No. of detections	1	33	25	1	15
Detection frequency (%)	4	87	78	3	47
Minimum Detection	N/A	0.14	0.2	N/A	0.22
Maximum Detection	0.77	2.4	0.75	0.11	0.93
Minimum Nondetect	< 0.13	< 0.1	< 0.21	< 0.1	< 0.1
Maximum Nondetect	< 0.31	< 0.55	< 0.31	< 0.31	< 0.50
Distribution	U	LQ	NQ	U	L
Normal					
Mean	N/A	N/A	0.34	N/A	N/A
Standard deviation	N/A	N/A	0.17	N/A	N/A
Coefficient of variation	N/A	N/A	0.51	N/A	N/A
95% UCL	N/A	N/A	0.39	N/A	N/A
95th Percentile	N/A	N/A	0.62	N/A	N/A
Lognormal					
Mean	N/A	0.61	N/A	N/A	0.25
Standard deviation	N/A	0.72	N/A	N/A	0.18
95% UCL	N/A	0.87	N/A	N/A	0.31
95th Percentile	N/A	1.8	N/A	N/A	0.58
Nonparametric					
Median	< 0.22	N/A	N/A	< 0.21	N/A
95% UCL	< 0.24	N/A	N/A	< 0.25	N/A
95th Percentile	< 0.31	N/A	N/A	< 0.31	N/A

Note:
(1) Concentrations are reported in pCi/L except Total Thorium and Total Uranium, which are in ug/L.
(2) N/A = Not applicable.
(3) Distribution types: N = Normal, L = Lognormal, N* = Normal (but also passed Lognormal test), L* = Lognormal (but also passed Normal test), NQ = Qualified Normal, LQ = Qualified Lognormal, U = Undefined.
(4) Mean types: Normal = arithmetic mean, Lognormal = estimated mean of a lognormal distribution.
(5) Standard deviation types: Normal = arithmetic standard deviation, Lognormal = estimated standard deviation of a lognormal distribution.

Table H-4
Summary Statistics of Filtered Radiological Constituents for Background Monitoring Wells in the Ross Section, Great Miami Aquifer

Statistics	Cesium-137	Neptunium-237	Plutonium-238	Plutonium-239/240	Radium-226	Radium-228
No. of analyses	0	0	0	0	1	1
No. of detections	0	0	0	0	0	0
Detection frequency (%)	0	0	0	0	0	0
Minimum Detection	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Detection	N/A	N/A	N/A	N/A	N/A	N/A
Minimum Nondetect	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Nondetect	N/A	N/A	N/A	N/A	< 0.9	< 1.7
Distribution	N/A	N/A	N/A	N/A	U	U
Normal						
Mean	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A
Lognormal						
Mean	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A
Nonparametric						
Median	N/A	N/A	N/A	N/A	< 0.9	< 1.7
95% UCL	N/A	N/A	N/A	N/A	< 0.9	< 1.7
95th Percentile	N/A	N/A	N/A	N/A	< 0.9	< 1.7

Table H-4 (Continued)
Summary Statistics of Filtered Radiological Constituents for Background Monitoring Wells in the Ross Section, Great Miami Aquifer

Statistics	Ruthenium-106	Strontium-90	Technetium-99	Total Thorium	Thorium-228	Thorium-230
No. of analyses	0	0	0	N/A	1	0
No. of detections	0	0	0	N/A	0	0
Detection frequency (%)	0	0	0	N/A	0	0
Minimum Detection	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Detection	N/A	N/A	N/A	N/A	N/A	N/A
Minimum Nondetect	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Nondetect	N/A	N/A	N/A	N/A	< 0.2	N/A
Distribution	N/A	N/A	N/A	N/A	U	N/A
Normal						
Mean	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A
Lognormal						
Mean	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A
Nonparametric						
Median	N/A	N/A	N/A	< 1.8 *	< 0.2	N/A
95% UCL	N/A	N/A	N/A	< 1.8 *	< 0.2	N/A
95th Percentile	N/A	N/A	N/A	< 1.8 *	< 0.2	N/A

Table H-4 (Continued)
Summary Statistics of Filtered Radiological Constituents for Background Monitoring Wells in the Ross Section, Great Miami Aquifer

Statistics	Thorium-232	Total Uranium	Uranium-234	Uranium-235/236	Uranium-238
No. of analyses	1	1	0	0	0
No. of detections	0	1	0	0	0
Detection frequency (%)	0	100	0	0	0
Minimum Detection	N/A	N/A	N/A	N/A	N/A
Maximum Detection	N/A	0.8	N/A	N/A	N/A
Minimum Nondetect	N/A	N/A	N/A	N/A	N/A
Maximum Nondetect	< 0.2	N/A	N/A	N/A	N/A
Distribution	U	U	N/A	N/A	N/A
Normal					
Mean	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A
Lognormal					
Mean	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A
Nonparametric					
Median	< 0.2	0.8	N/A	N/A	N/A
95% UCL	< 0.2	0.8	N/A	N/A	N/A
95th Percentile	< 0.2	0.8	N/A	N/A	N/A

Note:
(1) Concentrations are reported in pCi/L except Total Thorium and Total Uranium, which are in ug/L.
(2) N/A = Not applicable.
(3) Distribution types: N = Normal, L = Lognormal, N* = Normal (but also passed Lognormal test), L* = Lognormal (but also passed Normal test), NQ = Qualified Normal, LQ= Qualified Lognormal, U = Undefined.
(4) Mean types: Normal = arithmetic mean, Lognormal = estimated mean of a lognormal distribution.
(5) Standard deviation types: Normal = arithmetic standard deviation, Lognormal = estimated standard deviation of a lognormal distribution.
* Total Thorium statistics are calculated from Thorium-232 statistics.

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Table H-5
Summary Statistics of Filtered Radiological Constituents for Background Monitoring Wells in the Shandon Section, Great Miami Aquifer

Statistics	Cesium-137	Neptunium-237	Plutonium-238	Plutonium-239/240	Radium-226	Radium-228
No. of analyses	1	1	1	1	6	8
No. of detections	0	1	0	1	6	0
Detection frequency (%)	0	100	0	100	100	0
Minimum Detection	N/A	N/A	N/A	N/A	0.20	N/A
Maximum Detection	N/A	0.12	N/A	0.042	1.5	N/A
Minimum Nondetect	N/A	N/A	N/A	N/A	N/A	< 1.7
Maximum Nondetect	< 13	N/A	< 0.04	N/A	N/A	< 2.9
Distribution	U	U	U	U	N*	U
Normal						
Mean	N/A	N/A	N/A	N/A	0.93	N/A
Standard deviation	N/A	N/A	N/A	N/A	0.47	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	0.51	N/A
95% UCL	N/A	N/A	N/A	N/A	1.3	N/A
95th Percentile	N/A	N/A	N/A	N/A	1.5	N/A
Lognormal						
Mean	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A
Nonparametric						
Median	< 13	0.12	< 0.04	0.042	N/A	< 2.1
95% UCL	< 13	0.12	< 0.04	0.042	N/A	< 2.4
95th Percentile	< 13	0.12	< 0.04	0.042	N/A	< 2.9

Table H-5 (Continued)
Summary Statistics of Filtered Radiological Constituents for Background Monitoring Wells in the Shandon Section, Great Miami Aquifer

Statistics	Ruthenium-106	Strontium-90	Technetium-99	Total Thorium	Thorium-228	Thorium-230
No. of analyses	1	1	1	N/A	7	7
No. of detections	0	0	0	N/A	3	2
Detection frequency (%)	0	0	0	N/A	43	29
Minimum Detection	N/A	N/A	N/A	N/A	0.2	0.1
Maximum Detection	N/A	N/A	N/A	N/A	0.2	0.29
Minimum Nondetect	N/A	N/A	N/A	N/A	< 0.1	< 0.1
Maximum Nondetect	< 144	< 0.8	< 14	N/A	< 0.3	< 0.3
Distribution	U	U	U	N/A	U	U
Normal						
Mean	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A
Lognormal						
Mean	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A
Nonparametric						
Median	< 144	< 0.8	< 14	< 1.8 *	< 0.3	< 0.3
95% UCL	< 144	< 0.8	< 14	2.8 *	0.2	0.29
95th Percentile	< 144	< 0.8	< 14	2.8 *	0.2	0.29

Table H-5 (Continued)
Summary Statistics of Filtered Radiological Constituents for Background Monitoring Wells in the Shandon Section, Great Miami Aquifer

Statistics	Thorium-232	Total Uranium	Uranium-234	Uranium-235/236	Uranium-238
No. of analyses	7	8	7	6	7
No. of detections	3	6	5	0	6
Detection frequency (%)	43	75	71	0	86
Minimum Detection	0.1	0.1	0.23	N/A	0.23
Maximum Detection	0.3	0.6	0.8	N/A	0.9
Minimum Nondetect	< 0.07	< 0.1	< 0.4	< 0.043	N/A
Maximum Nondetect	< 0.2	< 1	< 0.5	< 0.2	< 0.5
Distribution	U	N*	U	U	N*
Normal					
Mean	N/A	0.29	N/A	N/A	0.52
Standard deviation	N/A	0.21	N/A	N/A	0.24
Coefficient of variation	N/A	0.71	N/A	N/A	0.46
95% UCL	N/A	0.43	N/A	N/A	0.70
95th Percentile	N/A	0.60	N/A	N/A	0.90
Lognormal					
Mean	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A
Nonparametric					
Median	< 0.2	N/A	0.42	< 0.15	N/A
95% UCL	0.3	N/A	0.8	< 0.2	N/A
95th Percentile	0.3	N/A	0.8	< 0.2	N/A

Table H-6
Summary Statistics of Filtered Radiological Constituents for Background Monitoring Wells in the Dry Fork Section, Great Miami Aquifer

Statistics	Cesium-137	Neptunium-237	Plutonium-238	Plutonium-239/240	Radium-226	Radium-228
No. of analyses	0	0	0	0	4	4
No. of detections	0	0	0	0	4	0
Detection frequency (%)	0	0	0	0	100	0
Minimum Detection	N/A	N/A	N/A	N/A	0.9	N/A
Maximum Detection	N/A	N/A	N/A	N/A	2	N/A
Minimum Nondetect	N/A	N/A	N/A	N/A	N/A	< 1.7
Maximum Nondetect	N/A	N/A	N/A	N/A	N/A	< 2
Distribution	N/A	N/A	N/A	N/A	U	U
Normal						
Mean	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A
Lognormal						
Mean	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A
Nonparametric						
Median	N/A	N/A	N/A	N/A	1.4	< 1.8
95% UCL	N/A	N/A	N/A	N/A	2	< 2
95th Percentile	N/A	N/A	N/A	N/A	2	< 2

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Table H-6 (Continued)
Summary Statistics of Filtered Radiological Constituents for Background Monitoring Wells in the Dry Fork Section, Great Miami Aquifer

Statistics	Ruthenium-106	Strontium-90	Technetium-99	Total Thorium	Thorium-228	Thorium-230
No. of analyses	0	0	0	N/A	2	4
No. of detections	0	0	0	N/A	1	0
Detection frequency (%)	0	0	0	N/A	50	0
Minimum Detection	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Detection	N/A	N/A	N/A	N/A	0.4	N/A
Minimum Nondetect	N/A	N/A	N/A	N/A	N/A	< 0.2
Maximum Nondetect	N/A	N/A	N/A	N/A	< 0.3	< 0.3
Distribution	N/A	N/A	N/A	N/A	U	U
Normal						
Mean	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A
Lognormal						
Mean	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A
Nonparametric						
Median	N/A	N/A	N/A	< 2.8 *	0.28	< 0.28
95% UCL	N/A	N/A	N/A	< 3.7 *	0.4	< 0.3
95th Percentile	N/A	N/A	N/A	< 3.7 *	0.4	< 0.3

Table H-6 (Continued)
Summary Statistics of Filtered Radiological Constituents for Background Monitoring Wells in the Dry Fork Section, Great Miami Aquifer

Statistics	Thorium-232	Total Uranium	Uranium-234	Uranium-235/236	Uranium-238
No. of analyses	3	3	4	4	4
No. of detections	0	3	4	0	3
Detection frequency (%)	0	100	100	0	75
Minimum Detection	N/A	0.6	0.25	N/A	0.4
Maximum Detection	N/A	0.7	0.9	N/A	0.8
Minimum Nondetect	< 0.3	N/A	N/A	< 0.1	N/A
Maximum Nondetect	< 0.4	N/A	N/A	< 0.1	< 0.2
Distribution	U	U	U	U	U
Normal					
Mean	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A
Lognormal					
Mean	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A
Nonparametric					
Median	< 0.3	0.65	0.7	< 0.1	0.5
95% UCL	< 0.4	0.7	0.9	< 0.1	0.8
95th Percentile	< 0.4	0.7	0.9	< 0.1	0.8

Note:
(1) Concentrations are reported in pCi/L except Total Thorium and Total Uranium, which are in ug/L.
(2) N/A = Not applicable.
(3) Distribution types: N = Normal, L = Lognormal, N* = Normal (but also passed Lognormal test), L* = Lognormal (but also passed Normal test), NQ = Qualified Normal, LQ = Qualified Lognormal, U = Undefined.
(4) Mean types: Normal = arithmetic mean, Lognormal = estimated mean of a lognormal distribution.
(5) Standard deviation types: Normal = arithmetic standard deviation, Lognormal = estimated standard deviation of a lognormal distribution.
* Total Thorium statistics are calculated from Thorium-232 statistics.

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Table H-7
Summary Statistics of Filtered Inorganic Constituents for Background Monitoring Wells in the Ross Section, Great Miami Aquifer

Statistics	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper
No. of analyses	3	2	27	34	2	34	34	34	2	33
No. of detections	0	0	3	29	0	4	33	9	0	16
Detection frequency (%)	0	0	11	85	0	12	97	26	0	48
Minimum Detection	N/A	N/A	0.3	0.0274	N/A	0.0054	70.2	0.01	N/A	0.01
Maximum Detection	N/A	N/A	0.55	0.073	N/A	0.01	120	0.041	N/A	0.176
Minimum Nondetect	< 0.024	< 0.027	< 0.002	< 0.034	< 0.001	< 0.002	N/A	< 0.004	< 0.005	< 0.003
Maximum Nondetect	< 0.0982	< 0.027	< 0.003	< 0.064	< 0.001	< 0.005	< 92.6	< 0.0358	< 0.005	< 0.018
Distribution	U	U	U	N*	U	U	NQ	U	U	U
Normal										
Mean	N/A	N/A	N/A	0.045	N/A	N/A	95.8	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	0.013	N/A	N/A	14.3	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	0.29	N/A	N/A	0.150	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	0.049	N/A	N/A	100	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	0.067	N/A	N/A	119	N/A	N/A	N/A
Lognormal										
Mean	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nonparametric										
Median	< 0.024	< 0.027	< 0.002	N/A	< 0.001	< 0.00295	N/A	< 0.02	< 0.005	< 0.018
95% UCL	< 0.0982	< 0.027	< 0.003	N/A	< 0.001	< 0.005	N/A	< 0.02	< 0.005	0.015
95th Percentile	< 0.0982	< 0.027	0.3	N/A	< 0.001	0.006	N/A	0.03	< 0.005	0.14

Table H-7 (Continued)
Summary Statistics of Filtered Inorganic Constituents for Background Monitoring Wells in the Ross Section, Great Miami Aquifer

Statistics	Cyanide	Iron	Lead	Magnesium	Manganese	Mercury	Molybdenum	Nickel	Potassium
No. of analyses	2	34	23	34	34	34	32	34	34
No. of detections	0	9	1	34	17	4	9	2	34
Detection frequency (%)	0	26	4	100	50	12	28	6	100
Minimum Detection	N/A	0.007	N/A	15.7	0.002	0.0003	0.01	0.0235	1.37
Maximum Detection	N/A	0.4	0.005	34.7	0.073	0.0005	0.04	0.024	3.28
Minimum Nondetect	< 0.02	< 0.005	< 0.002	N/A	< 0.001	< 0.0002	< 0.01	< 0.011	N/A
Maximum Nondetect	< 0.02	< 0.1	< 0.008	N/A	< 0.02	< 0.0002	< 0.02	< 0.03	N/A
Distribution	U	U	U	NQ	U	U	U	U	N
Normal									
Mean	N/A	N/A	N/A	26.8	N/A	N/A	N/A	N/A	2.37
Standard deviation	N/A	N/A	N/A	5.63	N/A	N/A	N/A	N/A	0.487
Coefficient of variation	N/A	N/A	N/A	0.210	N/A	N/A	N/A	N/A	0.206
95% UCL	N/A	N/A	N/A	28.5	N/A	N/A	N/A	N/A	2.51
95th Percentile	N/A	N/A	N/A	36.1	N/A	N/A	N/A	N/A	3.17
Lognormal									
Mean	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nonparametric									
Median	< 0.02	< 0.0466	< 0.002	N/A	0.006	< 0.0002	< 0.02	< 0.02	N/A
95% UCL	< 0.02	< 0.057	< 0.002	N/A	0.009	< 0.0002	< 0.02	< 0.02	N/A
95th Percentile	< 0.02	0.145	< 0.008	N/A	0.0208	0.0005	0.027	0.0235	N/A

Table H-7 (Continued)
Summary Statistics of Filtered Inorganic Constituents for Background Monitoring Wells in the Ross Section, Great Miami Aquifer

Statistics	Selenium	Silicon	Silver	Sodium	Thallium	TDS	Vanadium	Zinc
No. of analyses	24	1	32	34	2	2	3	2
No. of detections	3	1	3	34	0	2	1	0
Detection frequency (%)	13	100	9	100	0	100	33	0
Minimum Detection	0.004	N/A	0.0128	6.44	N/A	380	N/A	N/A
Maximum Detection	0.006	3.46	0.033	55	N/A	480	0.0179	N/A
Minimum Nondetect	< 0.001	N/A	< 0.0005	N/A	< 0.003	N/A	< 0.004	< 0.003
Maximum Nondetect	< 0.005	N/A	< 0.02	N/A	< 0.003	N/A	< 0.004	< 0.003
Distribution	U	U	U	L	U	U	U	U
Normal								
Mean	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lognormal								
Mean	N/A	N/A	N/A	15.2	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	6.46	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	17.3	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	27.3	N/A	N/A	N/A	N/A
Nonparametric								
Median	< 0.002	3.46	< 0.01	N/A	< 0.003	430	< 0.004	< 0.003
95% UCL	< 0.005	3.46	< 0.01	N/A	< 0.003	480	0.0179	< 0.003
95th Percentile	0.005	3.46	0.0142	N/A	< 0.003	480	0.0179	< 0.003

Note:
(1) Concentrations are reported in mg/L.
(2) N/A = Not applicable.
(3) Distribution types: N = Normal, L = Lognormal, N* = Normal (but also passed Lognormal test), L* = Lognormal (but also passed Normal test), NQ = Qualified Normal, LQ = Qualified Lognormal, U = Undefined.
(4) Mean types: Normal = arithmetic mean, Lognormal = estimated mean of a lognormal distribution.
(5) Standard deviation types: Normal = arithmetic standard deviation, Lognormal = estimated standard deviation of a lognormal distribution.

Table H-8
Summary Statistics of Filtered Inorganic Constituents for Background Monitoring Wells in the Shandon Section, Great Miami Aquifer

Statistics	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper
No. of analyses	17	7	30	41	17	37	42	42	17	43
No. of detections	9	0	19	40	6	8	42	16	0	6
Detection frequency (%)	53	0	63	98	35	22	100	38	0	14
Minimum Detection	0.0816	N/A	0.002	0.037	0.001	0.002	63.6	0.02	N/A	0.01
Maximum Detection	0.175	N/A	0.26	0.82	0.0023	0.0082	145	0.0441	N/A	0.022
Minimum Nondetect	< 0.02	< 0.027	< 0.002	N/A	< 0.001	< 0.002	N/A	< 0.003	< 0.005	< 0.0032
Maximum Nondetect	< 0.04	< 0.031	< 0.01	< 0.2	< 0.001	< 0.005	N/A	< 0.02	< 0.02	< 0.03
Distribution	U	U	U	NQ	U	U	LQ	U	U	U
Normal										
Mean	N/A	N/A	N/A	0.39	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	0.24	N/A	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	0.62	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	0.45	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	0.78	N/A	N/A	N/A	N/A	N/A	N/A
Lognormal										
Mean	N/A	N/A	N/A	N/A	N/A	N/A	96.5	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A	22.8	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A	103	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A	138	N/A	N/A	N/A
Nonparametric										
Median	0.0816	< 0.03	0.0062	N/A	< 0.001	< 0.005	N/A	< 0.02	< 0.01	< 0.01
95% UCL	0.138	< 0.031	0.015	N/A	0.0017	< 0.005	N/A	0.02	< 0.01	< 0.01
95th Percentile	0.175	< 0.031	0.254	N/A	0.0023	0.007	N/A	0.0415	< 0.02	0.017

Table H-8 (Continued)
Summary Statistics of Filtered Inorganic Constituents for Background Monitoring Wells in the Shandon Section, Great Miami Aquifer

Statistics	Cyanide	Iron	Lead	Magnesium	Manganese	Mercury	Molybdenum	Nickel	Potassium
No. of analyses	6	42	32	42	37	35	27	42	33
No. of detections	0	40	8	42	37	3	5	7	29
Detection frequency (%)	0	95	25	100	100	9	19	17	88
Minimum Detection	N/A	0.06	0.0026	15.8	0.014	0.0003	0.01	0.02	0.664
Maximum Detection	N/A	5.42	0.029	46	0.78	0.001	0.03	0.0279	4.03
Minimum Nondetect	< 0.01	< 0.005	< 0.001	N/A	N/A	< 0.0002	< 0.01	< 0.011	< 0.777
Maximum Nondetect	< 0.02	< 0.04	< 0.005	N/A	N/A	< 0.0003	< 0.02	< 0.04	< 3
Distribution	U	N	U	L*	L	U	U	U	LQ
Normal									
Mean	N/A	2.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	1.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	0.59	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	2.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	4.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lognormal									
Mean	N/A	N/A	N/A	29.1	0.12	N/A	N/A	N/A	1.38
Standard deviation	N/A	N/A	N/A	6.02	0.14	N/A	N/A	N/A	0.686
95% UCL	N/A	N/A	N/A	30.8	0.17	N/A	N/A	N/A	1.62
95th Percentile	N/A	N/A	N/A	40.0	0.36	N/A	N/A	N/A	2.68
Nonparametric									
Median	< 0.02	N/A	< 0.002	N/A	N/A	< 0.0002	< 0.02	< 0.02	N/A
95% UCL	< 0.02	N/A	< 0.005	N/A	N/A	< 0.0002	< 0.02	< 0.03	N/A
95th Percentile	< 0.02	N/A	0.028	N/A	N/A	0.0005	0.02	0.0231	N/A

Table H-8 (Continued)
Summary Statistics of Filtered Inorganic Constituents for Background Monitoring Wells in the Shandon Section, Great Miami Aquifer

Statistics	Selenium	Silicon	Silver	Sodium	Thallium	TDS	Vanadium	Zinc
No. of analyses	28	0	43	37	10	10	17	17
No. of detections	2	0	8	37	0	10	9	9
Detection frequency (%)	7	0	19	100	0	100	53	53
Minimum Detection	0.00105	N/A	0.0031	7.6	N/A	360	0.0116	0.0202
Maximum Detection	0.006	N/A	0.014	101	N/A	673	0.0244	0.133
Minimum Nondetect	< 0.001	N/A	< 0.0005	N/A	< 0.001	N/A	< 0.003	< 0.002
Maximum Nondetect	< 0.005	N/A	< 0.02	N/A	< 0.003	N/A	< 0.01	< 0.024
Distribution	U	N/A	U	LQ	U	N*	LQ	U
Normal								
Mean	N/A	N/A	N/A	N/A	N/A	511	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	89.1	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A	0.174	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	563	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	658	N/A	N/A
Lognormal								
Mean	N/A	N/A	N/A	33.8	N/A	N/A	0.0130	N/A
Standard deviation	N/A	N/A	N/A	21.9	N/A	N/A	0.0182	N/A
95% UCL	N/A	N/A	N/A	41.1	N/A	N/A	0.0244	N/A
95th Percentile	N/A	N/A	N/A	75.0	N/A	N/A	0.0244	N/A
Nonparametric								
Median	< 0.002	N/A	< 0.01	N/A	< 0.002	N/A	N/A	0.0202
95% UCL	< 0.005	N/A	< 0.01	N/A	< 0.003	N/A	N/A	0.0371
95th Percentile	0.00105	N/A	0.0138	N/A	< 0.003	N/A	N/A	0.133

Note:
(1) Concentrations are reported in mg/L.
(2) N/A = Not applicable.
(3) Distribution types: N = Normal, L = Lognormal, N* = Normal (but also passed Lognormal test), L* = Lognormal (but also passed Normal test), NQ = Qualified Normal, LQ = Qualified Lognormal, U = Undefined.
(4) Mean types: Normal = arithmetic mean, Lognormal = estimated mean of a lognormal distribution.
(5) Standard deviation types: Normal = arithmetic standard deviation, Lognormal = estimated standard deviation of a lognormal distribution.

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Table H-9
Summary Statistics of Filtered Inorganic Constituents for Background Monitoring Wells in the Dry Fork Section, Great Miami Aquifer

Statistics	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper
No. of analyses	7	1	32	35	4	35	35	35	4	34
No. of detections	2	0	5	28	0	4	35	10	0	9
Detection frequency (%)	29	0	16	80	0	11	100	29	0	26
Minimum Detection	0.062	N/A	0.00225	0.021	N/A	0.002	77.2	0.008	N/A	0.011
Maximum Detection	0.083	N/A	0.3	0.105	N/A	0.0055	181	0.03	N/A	0.033
Minimum Nondetect	< 0.014	N/A	< 0.001	< 0.0231	< 0.001	< 0.002	N/A	< 0.004	< 0.005	< 0.003
Maximum Nondetect	< 0.06	< 0.0292	< 0.005	< 0.0714	< 0.001	< 0.006	N/A	< 0.0207	< 0.006	< 0.014
Distribution	U	U	U	L	U	U	U	U	U	U
Normal										
Mean	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lognormal										
Mean	N/A	N/A	N/A	0.0433	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	0.0208	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	0.0501	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	0.0825	N/A	N/A	N/A	N/A	N/A	N/A
Nonparametric										
Median	< 0.024	< 0.0292	< 0.002	N/A	< 0.001	< 0.003	91.4	< 0.02	< 0.006	< 0.01
95% UCL	0.083	< 0.0292	< 0.003	N/A	< 0.001	< 0.005	102	< 0.02	< 0.006	< 0.012
95th Percentile	0.083	< 0.0292	0.25	N/A	< 0.001	0.0042	153	0.026	< 0.006	0.027

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Table H-9 (Continued)
Summary Statistics of Filtered Inorganic Constituents for Background Monitoring Wells in the Dry Fork Section, Great Miami Aquifer

Statistics	Cyanide	Iron	Lead	Magnesium	Manganese	Mercury	Molybdenum	Nickel	Potassium
No. of analyses	4	35	24	35	35	35	31	35	34
No. of detections	0	25	4	35	29	3	7	5	31
Detection frequency (%)	0	71	17	100	83	9	23	14	91
Minimum Detection	N/A	0.009	0.0016	19.9	0.002	0.0002	0.004	0.012	0.801
Maximum Detection	N/A	3.57	0.004	42.4	0.916	0.0004	0.02	0.02	2.76
Minimum Nondetect	< 0.01	< 0.005	< 0.001	N/A	< 0.001	< 0.0002	< 0.01	< 0.011	< 1.28
Maximum Nondetect	< 0.02	< 0.05	< 0.003	N/A	< 0.02	< 0.0002	< 0.02	< 0.03	< 1.74
Distribution	U	U	U	LQ	U	U	U	U	L*
Normal									
Mean	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lognormal									
Mean	N/A	N/A	N/A	25.7	N/A	N/A	N/A	N/A	1.47
Standard deviation	N/A	N/A	N/A	4.65	N/A	N/A	N/A	N/A	0.525
95% UCL	N/A	N/A	N/A	27.1	N/A	N/A	N/A	N/A	1.64
95th Percentile	N/A	N/A	N/A	33.9	N/A	N/A	N/A	N/A	2.44
Nonparametric									
Median	< 0.01	0.4	< 0.002	N/A	0.277	< 0.0002	< 0.02	< 0.02	N/A
95% UCL	< 0.02	1.38	< 0.002	N/A	0.409	< 0.0002	< 0.02	< 0.02	N/A
95th Percentile	< 0.02	3.55	0.0035	N/A	0.895	0.0003	0.01	0.02	N/A

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Table H-9 (Continued)
Summary Statistics of Filtered Inorganic Constituents for Background Monitoring Wells in the Dry Fork Section, Great Miami Aquifer

Statistics	Selenium	Silicon	Silver	Sodium	Thallium	TDS	Vanadium	Zinc
No. of analyses	27	3	35	35	4	8	7	4
No. of detections	1	3	2	35	0	8	2	1
Detection frequency (%)	4	100	6	100	0	100	29	25
Minimum Detection	N/A	2.6	0.0085	1.96	N/A	320	0.01	N/A
Maximum Detection	0.002	3.3	0.034	11.9	N/A	630	0.014	0.0068
Minimum Nondetect	< 0.001	N/A	< 0.0005	N/A	< 0.001	N/A	< 0.004	< 0.0051
Maximum Nondetect	< 0.005	N/A	< 0.02	N/A	< 0.003	N/A	< 0.01	< 0.0128
Distribution	U	U	U	LQ	U	NQ	U	U
Normal								
Mean	N/A	N/A	N/A	N/A	N/A	452	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	134	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A	0.297	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	542	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	673	N/A	N/A
Lognormal								
Mean	N/A	N/A	N/A	5.37	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	2.89	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	6.34	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	10.8	N/A	N/A	N/A	N/A
Nonparametric								
Median	< 0.002	2.9	< 0.01	N/A	< 0.001	N/A	< 0.004	< 0.0094
95% UCL	< 0.002	3.3	< 0.01	N/A	< 0.003	N/A	0.014	0.0068
95th Percentile	< 0.005	3.3	0.0085	N/A	< 0.003	N/A	0.014	0.0068

Note:
(1) Concentrations are reported in mg/L.
(2) N/A = Not applicable.
(3) Distribution types: N = Normal, L = Lognormal, N* = Normal (but also passed Lognormal test), L* = Lognormal (but also passed Normal test), NQ = Qualified Normal, LQ= Qualified Lognormal, U = Undefined.
(4) Mean types: Normal = arithmetic mean, Lognormal = estimated mean of a lognormal distribution.
(5) Standard deviation types: Normal = arithmetic standard deviation, Lognormal = estimated standard deviation of a lognormal distribution.

Table H-10
Summary Statistics of Unfiltered Inorganic Constituents for Background Monitoring Wells in the Ross Section, Great Miami Aquifer

Statistics	Alkalinity as CaCO3	Aluminum	Ammonia	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chloride
No. of analyses	2	2	34	2	2	2	2	2	2	34
No. of detections	2	1	4	0	1	2	0	0	2	29
Detection frequency (%)	100	50	12	0	50	100	0	0	100	85
Minimum Detection	270	N/A	0.075	N/A	N/A	0.0368	N/A	N/A	99.6	0.02
Maximum Detection	340	0.225	0.331	N/A	0.0021	0.0587	N/A	N/A	123	120
Minimum Nondetect	N/A	N/A	< 0.05	< 0.027	N/A	N/A	< 0.001	< 0.002	N/A	< 1.5
Maximum Nondetect	N/A	< 0.024	< 0.2	< 0.027	< 0.002	N/A	< 0.001	< 0.002	N/A	< 35
Distribution	U	U	U	U	U	U	U	U	U	U
Normal										
Mean	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lognormal										
Mean	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nonparametric										
Median	305	0.119	< 0.1	< 0.027	0.00155	0.0478	< 0.001	< 0.002	111	20.4
95% UCL	340	0.225	< 0.1	< 0.027	0.0021	0.0587	< 0.001	< 0.002	123	25
95th Percentile	340	0.225	0.15	< 0.027	0.0021	0.0587	< 0.001	< 0.002	123	45.2

Table H-10 (Continued)
Summary Statistics of Unfiltered Inorganic Constituents for Background Monitoring Wells in the Ross Section, Great Miami Aquifer

Statistics	Chromium	Cobalt	Copper	Cyanide	Fluoride	Iron	Lead	Magnesium	Manganese
No. of analyses	2	2	2	2	34	2	2	2	2
No. of detections	1	0	0	0	32	1	0	2	2
Detection frequency (%)	50	0	0	0	94	50	0	100	100
Minimum Detection	N/A	N/A	N/A	N/A	0.12	N/A	N/A	25.9	0.0043
Maximum Detection	0.0067	N/A	N/A	N/A	0.365	0.782	N/A	34.3	0.0268
Minimum Nondetect	N/A	< 0.005	< 0.003	< 0.02	< 0.1	N/A	< 0.002	N/A	N/A
Maximum Nondetect	< 0.004	< 0.005	< 0.003	< 0.02	< 0.15	< 0.0481	< 0.002	N/A	N/A
Distribution	U	U	U	U	N	U	U	U	U
Normal									
Mean	N/A	N/A	N/A	N/A	0.23	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	0.072	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	0.31	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	0.25	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	0.35	N/A	N/A	N/A	N/A
Lognormal									
Mean	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nonparametric									
Median	0.00435	< 0.005	< 0.003	< 0.02	N/A	0.403	< 0.002	30.1	0.0156
95% UCL	0.0067	< 0.005	< 0.003	< 0.02	N/A	0.782	< 0.002	34.3	0.0268
95th Percentile	0.0067	< 0.005	< 0.003	< 0.02	N/A	0.782	< 0.002	34.3	0.0268

Table H-10 (Continued)
Summary Statistics of Unfiltered Inorganic Constituents for Background Monitoring Wells in the Ross Section, Great Miami Aquifer

Statistics	Mercury	Molybdenum	Nickel	Nitrate	Nitrate/ Nitrite	Phosphorus	Potassium	Selenium	Silicon
No. of analyses	2	2	2	29	2	33	2	2	0
No. of detections	0	0	0	28	2	18	2	0	0
Detection frequency (%)	0	0	0	97	100	55	100	0	0
Minimum Detection	N/A	N/A	N/A	0.4	0.4	0.01	1.69	N/A	N/A
Maximum Detection	N/A	N/A	N/A	24.9	4.1	3.08	1.96	N/A	N/A
Minimum Nondetect	< 0.0002	< 0.011	< 0.011	N/A	N/A	< 0.01	N/A	< 0.001	N/A
Maximum Nondetect	< 0.0002	< 0.011	< 0.011	< 0.1	N/A	< 0.05	N/A	< 0.001	N/A
Distribution	U	U	U	L	U	LQ	U	U	N/A
Normal									
Mean	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lognormal									
Mean	N/A	N/A	N/A	6.3	N/A	0.093	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	13	N/A	0.23	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	13	N/A	0.19	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	23	N/A	0.35	N/A	N/A	N/A
Nonparametric									
Median	< 0.0002	< 0.011	< 0.011	N/A	2.25	N/A	1.83	< 0.001	N/A
95% UCL	< 0.0002	< 0.011	< 0.011	N/A	4.1	N/A	1.96	< 0.001	N/A
95th Percentile	< 0.0002	< 0.011	< 0.011	N/A	4.1	N/A	1.96	< 0.001	N/A

Table H-10 (Continued)
Summary Statistics of Unfiltered Inorganic Constituents for Background Monitoring Wells in the Ross Section, Great Miami Aquifer

Statistics	Silver	Sodium	Sulfate	Sulfide	Thallium	TKN	Total Solids	Vanadium	Zinc
No. of analyses	2	2	34	0	2	18	2	2	2
No. of detections	0	2	34	0	0	11	2	1	0
Detection frequency (%)	0	100	100	0	0	61	100	50	0
Minimum Detection	N/A	11.3	3.08	N/A	N/A	0.138	410	N/A	N/A
Maximum Detection	N/A	19.5	202	N/A	N/A	1.37	450	0.0076	N/A
Minimum Nondetect	< 0.004	N/A	N/A	N/A	< 0.003	< 0.1	N/A	N/A	< 0.0139
Maximum Nondetect	< 0.004	N/A	N/A	N/A	< 0.003	< 0.3	N/A	< 0.004	< 0.0144
Distribution	U	U	U	N/A	U	L	U	U	U
Normal									
Mean	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lognormal									
Mean	N/A	N/A	N/A	N/A	N/A	0.281	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	0.271	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	0.448	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	0.767	N/A	N/A	N/A
Nonparametric									
Median	< 0.004	15.4	56.5	N/A	< 0.003	N/A	430	0.0048	< 0.0142
95% UCL	< 0.004	19.5	65	N/A	< 0.003	N/A	450	0.0076	< 0.0144
95th Percentile	< 0.004	19.5	132	N/A	< 0.003	N/A	450	0.0076	< 0.0144

Note:
(1) Concentrations are reported in mg/L.
(2) N/A = Not applicable.
(3) Distribution types: N = Normal, L = Lognormal, N* = Normal (but also passed Lognormal test), L* = Lognormal (but also passed Normal test), NQ = Qualified Normal, LQ = Qualified Lognormal, U = Undefined.
(4) Mean types: Normal = arithmetic mean, Lognormal = estimated mean of a lognormal distribution.
(5) Standard deviation types: Normal = arithmetic standard deviation, Lognormal = estimated standard deviation of a lognormal distribution.

Table H-11
Summary Statistics of Unfiltered Inorganic Constituents for Background Monitoring Wells in the Shandon Section, Great Miami Aquifer

Statistics	Alkalinity as CaCO3	Aluminum	Ammonia	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chloride
No. of analyses	11	9	33	8	10	10	10	10	10	41
No. of detections	11	3	28	0	4	10	0	3	10	41
Detection frequency (%)	100	33	85	0	40	100	0	30	100	100
Minimum Detection	316	0.06	0.65	N/A	0.0058	0.161	N/A	0.0022	78	2.75
Maximum Detection	430	0.0825	12.6	N/A	0.0294	0.768	N/A	0.0135	162	100
Minimum Nondetect	N/A	< 0.024	< 0.1	< 0.005	< 0.002	N/A	< 0.001	< 0.002	N/A	N/A
Maximum Nondetect	N/A	< 0.0985	< 0.3	< 0.031	< 0.002	N/A	< 0.002	< 0.005	N/A	N/A
Distribution	L*	U	U	U	U	L*	U	U	L*	N
Normal										
Mean	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	43.0
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	26.2
Coefficient of variation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.610
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	49.9
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	86.1
Lognormal										
Mean	371	N/A	N/A	N/A	N/A	0.390	N/A	N/A	114	N/A
Standard deviation	31.9	N/A	N/A	N/A	N/A	0.201	N/A	N/A	24.2	N/A
95% UCL	389	N/A	N/A	N/A	N/A	0.557	N/A	N/A	130	N/A
95th Percentile	426	N/A	N/A	N/A	N/A	0.768	N/A	N/A	158	N/A
Nonparametric										
Median	N/A	< 0.0761	2.73	< 0.0305	< 0.002	N/A	< 0.001	< 0.004	N/A	N/A
95% UCL	N/A	0.0712	3.24	< 0.031	0.0141	N/A	< 0.002	0.0052	N/A	N/A
95th Percentile	N/A	0.0825	8	< 0.031	0.0294	N/A	< 0.002	0.0135	N/A	N/A

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Table H-11 (Continued)
Summary Statistics of Unfiltered Inorganic Constituents for Background Monitoring Wells in the Shandon Section, Great Miami Aquifer

Statistics	Chromium	Cobalt	Copper	Cyanide	Fluoride	Iron	Lead	Magnesium	Manganese
No. of analyses	10	9	10	10	44	9	9	10	10
No. of detections	1	1	2	0	43	9	1	10	10
Detection frequency (%)	10	11	20	0	98	100	11	100	100
Minimum Detection	N/A	N/A	0.0113	N/A	0.14	1.28	N/A	25.8	0.0272
Maximum Detection	0.0211	0.0086	0.0354	N/A	1.9	5.5	0.002	39	0.269
Minimum Nondetect	< 0.003	< 0.005	< 0.003	< 0.00002	N/A	N/A	< 0.001	N/A	N/A
Maximum Nondetect	< 0.01	< 0.01	< 0.01	< 0.02	< 0.5	N/A	< 0.003	N/A	N/A
Distribution	U	U	U	U	L	N*	U	L*	N*
Normal									
Mean	N/A	N/A	N/A	N/A	N/A	3.36	N/A	N/A	0.141
Standard deviation	N/A	N/A	N/A	N/A	N/A	1.25	N/A	N/A	0.0668
Coefficient of variation	N/A	N/A	N/A	N/A	N/A	0.373	N/A	N/A	0.472
95% UCL	N/A	N/A	N/A	N/A	N/A	4.13	N/A	N/A	0.180
95th Percentile	N/A	N/A	N/A	N/A	N/A	5.41	N/A	N/A	0.251
Lognormal									
Mean	N/A	N/A	N/A	N/A	0.64	N/A	N/A	31.0	N/A
Standard deviation	N/A	N/A	N/A	N/A	0.37	N/A	N/A	4.07	N/A
95% UCL	N/A	N/A	N/A	N/A	0.75	N/A	N/A	33.6	N/A
95th Percentile	N/A	N/A	N/A	N/A	1.3	N/A	N/A	38.1	N/A
Nonparametric									
Median	< 0.0045	< 0.009	< 0.005	< 0.0035	N/A	N/A	< 0.002	N/A	N/A
95% UCL	< 0.01	< 0.01	0.0113	< 0.01	N/A	N/A	< 0.003	N/A	N/A
95th Percentile	0.0211	0.0086	0.0354	< 0.02	N/A	N/A	0.002	N/A	N/A

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Table H-11 (Continued)
Summary Statistics of Unfiltered Inorganic Constituents for Background Monitoring Wells in the Shandon Section, Great Miami Aquifer

Statistics	Mercury	Molybdenum	Nickel	Nitrate	Nitrate/ Nitrite	Phosphorus	Potassium	Selenium	Silicon
No. of analyses	9	5	10	18	6	34	10	9	1
No. of detections	0	0	1	9	2	30	10	0	1
Detection frequency (%)	0	0	10	50	33	88	100	0	100
Minimum Detection	N/A	N/A	N/A	0.016	0.02	0.01	0.648	N/A	N/A
Maximum Detection	N/A	N/A	0.0514	0.869	0.051	1.27	1.51	N/A	5.81
Minimum Nondetect	< 0.0002	< 0.01	< 0.02	< 0.02	< 0.05	< 0.02	N/A	< 0.001	N/A
Maximum Nondetect	< 0.0002	< 0.02	< 0.031	< 0.1	< 0.05	< 0.05	N/A	< 0.002	N/A
Distribution	U	U	U	L	U	L	N*	U	U
Normal									
Mean	N/A	N/A	N/A	N/A	N/A	N/A	1.08	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A	0.289	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A	N/A	0.268	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A	1.24	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A	1.51	N/A	N/A
Lognormal									
Mean	N/A	N/A	N/A	0.18	N/A	0.25	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	0.32	N/A	0.52	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	0.43	N/A	0.46	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	0.63	N/A	0.90	N/A	N/A	N/A
Nonparametric									
Median	< 0.0002	< 0.011	< 0.0255	N/A	< 0.05	N/A	N/A	< 0.002	5.81
95% UCL	< 0.0002	< 0.02	< 0.031	N/A	0.051	N/A	N/A	< 0.002	5.81
95th Percentile	< 0.0002	< 0.02	0.0514	N/A	0.051	N/A	N/A	< 0.002	5.81

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Table H-11 (Continued)
Summary Statistics of Unfiltered Inorganic Constituents for Background Monitoring Wells in the Shandon Section, Great Miami Aquifer

Statistics	Silver	Sodium	Sulfate	Sulfide	Thallium	TKN	Total Solids	Vanadium	Zinc
No. of analyses	10	10	41	3	9	15	8	10	8
No. of detections	1	10	32	0	0	15	8	1	1
Detection frequency (%)	10	100	78	0	0	100	100	10	13
Minimum Detection	N/A	10.9	2.79	N/A	N/A	0.6	370	N/A	N/A
Maximum Detection	0.0117	50.4	218	N/A	N/A	4.74	773	0.0117	0.0087
Minimum Nondetect	< 0.003	N/A	< 2	< 0.5	< 0.002	N/A	N/A	< 0.003	< 0.0034
Maximum Nondetect	< 0.01	N/A	< 2	< 0.5	< 0.003	N/A	N/A	< 0.01	< 0.0378
Distribution	U	N*	U	U	U	N	L*	U	U
Normal									
Mean	N/A	30.4	N/A	N/A	N/A	2.50	N/A	N/A	N/A
Standard deviation	N/A	12.9	N/A	N/A	N/A	1.45	N/A	N/A	N/A
Coefficient of variation	N/A	0.426	N/A	N/A	N/A	0.582	N/A	N/A	N/A
95% UCL	N/A	37.9	N/A	N/A	N/A	3.16	N/A	N/A	N/A
95th Percentile	N/A	50.4	N/A	N/A	N/A	4.74	N/A	N/A	N/A
Lognormal									
Mean	N/A	N/A	N/A	N/A	N/A	N/A	523	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A	122	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A	621	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A	744	N/A	N/A
Nonparametric									
Median	< 0.0045	N/A	13.4	< 0.5	< 0.002	N/A	N/A	< 0.007	< 0.00618
95% UCL	< 0.01	N/A	54.4	< 0.5	< 0.003	N/A	N/A	< 0.01	< 0.0378
95th Percentile	0.0117	N/A	182	< 0.5	< 0.003	N/A	N/A	0.0117	0.0087

Note:
(1) Concentrations are reported in mg/L.
(2) N/A = Not applicable.
(3) Distribution types: N = Normal, L = Lognormal, N* = Normal (but also passed Lognormal test), L* = Lognormal (but also passed Normal test), NQ = Qualified Normal, LQ = Qualified Lognormal, U = Undefined.
(4) Mean types: Normal = arithmetic mean, Lognormal = estimated mean of a lognormal distribution.
(5) Standard deviation types: Normal = arithmetic standard deviation, Lognormal = estimated standard deviation of a lognormal distribution.

Table H-12
Summary Statistics of Unfiltered Inorganic Constituents for Background Monitoring Wells in the Dry Fork Section, Great Miami Aquifer

Statistics	Alkalinity as CaCO3	Aluminum	Ammonia	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chloride
No. of analyses	8	4	34	1	4	4	4	4	4	35
No. of detections	8	0	8	0	2	2	0	0	4	28
Detection frequency (%)	100	0	24	0	50	50	0	0	100	80
Minimum Detection	210	N/A	0.045	N/A	0.0011	0.042	N/A	N/A	85.4	1.5
Maximum Detection	320	N/A	0.2	N/A	0.0012	0.0676	N/A	N/A	152	27
Minimum Nondetect	N/A	< 0.014	< 0.05	N/A	< 0.001	< 0.0231	< 0.001	< 0.002	N/A	< 0.75
Maximum Nondetect	N/A	< 0.024	< 0.4	< 0.027	< 0.002	< 0.0737	< 0.001	< 0.0033	N/A	< 13
Distribution	N*	U	U	U	U	U	U	U	U	L
Normal										
Mean	273	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	35.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	0.128	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	296	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	320	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lognormal										
Mean	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	9.7
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	15
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	16
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	27
Nonparametric										
Median	N/A	< 0.014	< 0.1	< 0.027	0.00105	0.0394	< 0.001	< 0.003	115	N/A
95% UCL	N/A	< 0.024	< 0.1	< 0.027	0.0012	0.0676	< 0.001	< 0.0033	152	N/A
95th Percentile	N/A	< 0.024	0.12	< 0.027	0.0012	0.0676	< 0.001	< 0.0033	152	N/A

Table H-12 (Continued)
Summary Statistics of Unfiltered Inorganic Constituents for Background Monitoring Wells in the Dry Fork Section, Great Miami Aquifer

Statistics	Chromium	Cobalt	Copper	Cyanide	Fluoride	Iron	Lead	Magnesium	Manganese
No. of analyses	4	4	4	4	35	4	4	4	4
No. of detections	0	0	0	0	35	4	0	4	4
Detection frequency (%)	0	0	0	0	100	100	0	100	100
Minimum Detection	N/A	N/A	N/A	N/A	0.1	0.312	N/A	20.1	0.0621
Maximum Detection	N/A	N/A	N/A	N/A	0.52	5.48	N/A	36.5	0.904
Minimum Nondetect	< 0.004	< 0.005	< 0.00325	< 0.01	N/A	N/A	< 0.001	N/A	N/A
Maximum Nondetect	< 0.0214	< 0.006	< 0.0058	< 0.02	N/A	N/A	< 0.002	N/A	N/A
Distribution	U	U	U	U	L	U	U	U	U
Normal									
Mean	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lognormal									
Mean	N/A	N/A	N/A	N/A	0.23	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	0.078	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	0.25	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	0.37	N/A	N/A	N/A	N/A
Nonparametric									
Median	< 0.004	< 0.006	< 0.004	< 0.01	N/A	2.11	< 0.001	26.9	0.472
95% UCL	< 0.0214	< 0.006	< 0.0058	< 0.02	N/A	5.48	< 0.002	36.5	0.904
95th Percentile	< 0.0214	< 0.006	< 0.0058	< 0.02	N/A	5.48	< 0.002	36.5	0.904

Table H-12 (Continued)
Summary Statistics of Unfiltered Inorganic Constituents for Background Monitoring Wells in the Dry Fork Section, Great Miami Aquifer

Statistics	Mercury	Molybdenum	Nickel	Nitrate	Nitrate/ Nitrite	Phosphorus	Potassium	Selenium	Silicon
No. of analyses	4	1	4	17	4	35	4	4	0
No. of detections	0	0	0	15	0	27	1	1	0
Detection frequency (%)	0	0	0	88	0	77	25	25	0
Minimum Detection	N/A	N/A	N/A	0.014	N/A	0.02	N/A	N/A	N/A
Maximum Detection	N/A	N/A	N/A	14.4	N/A	1.74	1.95	0.00075	N/A
Minimum Nondetect	< 0.0002	N/A	< 0.011	< 0.1	< 0.05	< 0.01	< 1.44	< 0.001	N/A
Maximum Nondetect	< 0.0002	< 0.011	< 0.019	< 0.1	< 0.05	< 0.05	< 2.09	< 0.002	N/A
Distribution	U	U	U	U	U	LQ	U	U	N/A
Normal									
Mean	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lognormal									
Mean	N/A	N/A	N/A	N/A	N/A	0.16	N/A	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	0.38	N/A	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	0.31	N/A	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	0.60	N/A	N/A	N/A
Nonparametric									
Median	< 0.0002	< 0.011	< 0.019	0.35	< 0.05	N/A	< 1.83	< 0.0015	N/A
95% UCL	< 0.0002	< 0.011	< 0.019	6.2	< 0.05	N/A	1.95	0.00075	N/A
95th Percentile	< 0.0002	< 0.011	< 0.019	14.4	< 0.05	N/A	1.95	0.00075	N/A

Table H-12 (Continued)
Summary Statistics of Unfiltered Inorganic Constituents for Background Monitoring Wells in the Dry Fork Section, Great Miami Aquifer

Statistics	Silver	Sodium	Sulfate	Sulfide	Thallium	TKN	Total Solids	Vanadium	Zinc
No. of analyses	4	4	35	3	4	20	8	4	4
No. of detections	0	4	35	0	0	12	8	0	1
Detection frequency (%)	0	100	100	0	0	60	100	0	25
Minimum Detection	N/A	3.08	3.24	N/A	N/A	0.1	330	N/A	N/A
Maximum Detection	N/A	12.8	321	N/A	N/A	0.77	650	N/A	0.021
Minimum Nondetect	< 0.003	N/A	N/A	< 0.5	< 0.001	< 0.1	N/A	< 0.004	< 0.00625
Maximum Nondetect	< 0.004	N/A	N/A	< 0.5	< 0.003	< 0.4	N/A	< 0.004	< 0.0229
Distribution	U	U	L	U	U	L	N*	U	U
Normal									
Mean	N/A	N/A	N/A	N/A	N/A	N/A	474	N/A	N/A
Standard deviation	N/A	N/A	N/A	N/A	N/A	N/A	131	N/A	N/A
Coefficient of variation	N/A	N/A	N/A	N/A	N/A	N/A	0.277	N/A	N/A
95% UCL	N/A	N/A	N/A	N/A	N/A	N/A	562	N/A	N/A
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A	650	N/A	N/A
Lognormal									
Mean	N/A	N/A	74.1	N/A	N/A	0.23	N/A	N/A	N/A
Standard deviation	N/A	N/A	84.8	N/A	N/A	0.23	N/A	N/A	N/A
95% UCL	N/A	N/A	106	N/A	N/A	0.36	N/A	N/A	N/A
95th Percentile	N/A	N/A	220	N/A	N/A	0.64	N/A	N/A	N/A
Nonparametric									
Median	< 0.003	4.95	N/A	< 0.5	< 0.001	N/A	N/A	< 0.004	< 0.0219
95% UCL	< 0.004	12.8	N/A	< 0.5	< 0.003	N/A	N/A	< 0.004	0.021
95th Percentile	< 0.004	12.8	N/A	< 0.5	< 0.003	N/A	N/A	< 0.004	0.021

Note:
(1) Concentrations are reported in mg/L.
(2) N/A = Not applicable.
(3) Distribution types: N = Normal, L = Lognormal, N* = Normal (but also passed Lognormal test), L* = Lognormal (but also passed Normal test), NQ = Qualified Normal, LQ = Qualified Lognormal, U = Undefined.
(4) Mean types: Normal = arithmetic mean, Lognormal = estimated mean of a lognormal distribution.
(5) Standard deviation types: Normal = arithmetic standard deviation, Lognormal = estimated standard deviation of a lognormal distribution.

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