SELECTED HYDROLOGIC DATA FOR FARMLAND TREATED WITH SEWAGE SLUDGE NEAR PLATTEVILLE, COLORADO, 1985-91

by David A. Johncox and Neville G. Gaggiani

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CONVERSION FACTORS AND RELATED INFORMATION

Multiply	*By*	*To obtain*
foot	0.3048	meter
inch	25.4	millimeter
mile	1.609	kilometer
square mile	2.590	square kilometer

The following terms and abbreviations also are used in this report:

colonies per 100 milliliters (col./100 mL)
microgram per gram (µg/g)
microgram per liter (µg/L)
microsiemens per centimeter (µS/cm)
milligram per kilogram (mg/kg)
milligram per liter (mg/L)

Temperature in degree Celsius (°C) may be converted to degree Fahrenheit (°F) by using the following equation:

$$°F = 9/5(°C) + 32 .$$

National Geodetic Vertical Datum of 1929 (NGVD of 1929): A Geodetic datum derived from a general adjustment of the first-order level nets of both the United States and Canada, formerly called "Sea Level Datum of 1929."

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ABSTRACT

The U.S. Geological Survey, in cooperation with the Metro Wastewater Reclamation District, studied the ground-water-quality effects of the application of anaerobic digested municipal sewage sludge at agronomic rates to farmland near Platteville. Beginning in the fall of 1985, the sludge was injected annually into the sandy farmland in a 1-square-mile area. Generally, water-quality samples were collected from observation wells two or three times during each irrigation season from 1985 through 1990 and once each winter or late spring from 1987 through early 1991.

Water levels were measured, and water-quality, soil and soil-moisture samples, and precipitation data were collected at selected sites throughout the study area. This report presents the data collected during 1985-91 from observation wells, irrigation wells, domestic wells, and other selected sites in the study area.

INTRODUCTION

In 1985, the Metro Wastewater Reclamation District (MWRD) began a program of low-rate, near-surface application of anaerobic digested activated sludge to farmland. Although the sludge was to be applied at agronomic rates, the potential existed for leaching of organic and inorganic compounds into the shallow ground water. Leaching may be enhanced on irrigated farmland.

The U.S. Geological Survey (USGS), in cooperation with the MWRD, began a study in 1985 to evaluate the ground-water quality effects of applying treated municipal sewage sludge to 1 square mile of partially irrigated sandy farmland. The study area in the South Platte River Valley is about 35 miles northeast of Denver and about 2 miles east of Platteville (fig. 1). Beginning in the fall of 1985 and ending in the spring of 1990, sewage sludge was applied as fertilizer on section 16 (fig. 1) during the fall and spring of each year. To assess the effects of soil application of sewage sludge on the ground-water quality, data needed to be collected to determine the quality and the approximate flow rate of the water in the saturated and unsaturated zones.

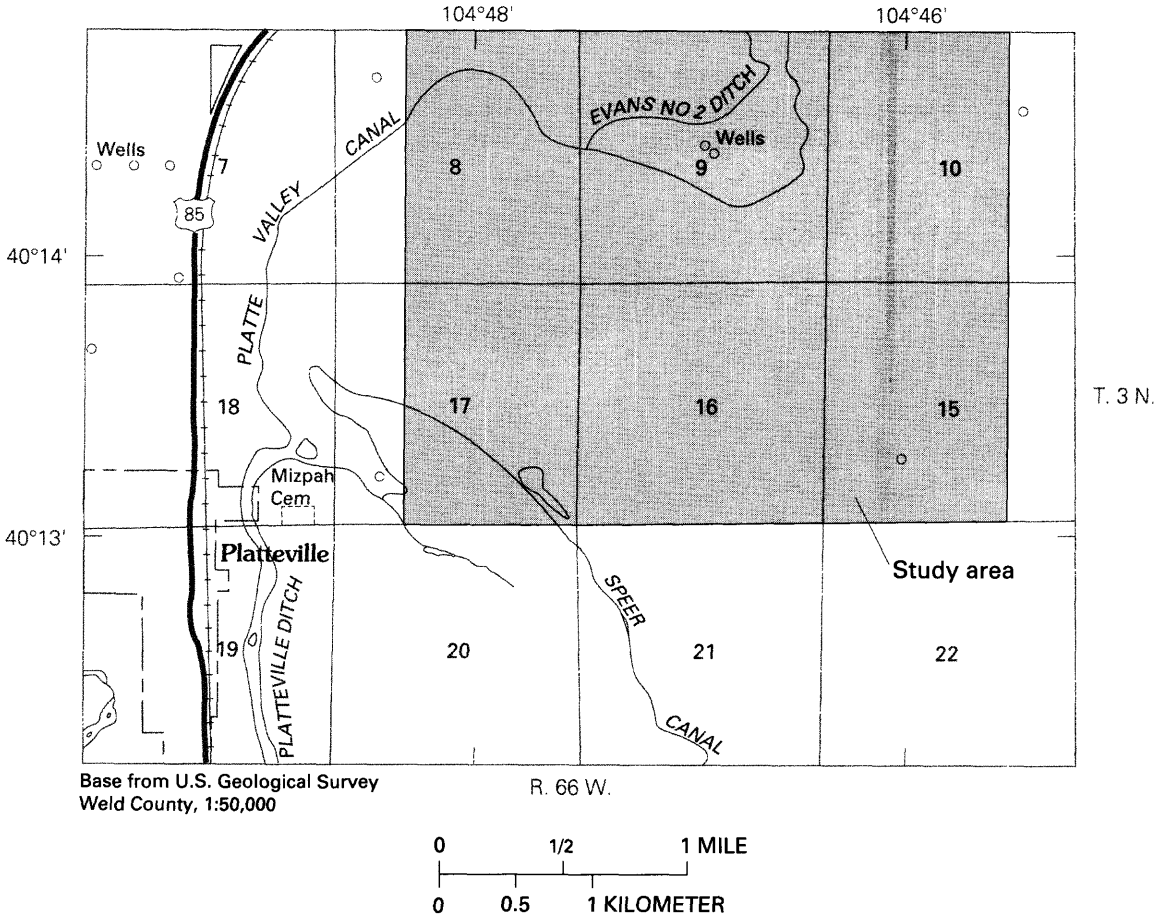

Figure 1.--Location of study area.

This report describes sampling-site locations, types of data, and methods of collection and analysis in the 1-square-mile study area. Presented are water-level data and chemical and bacteriological analyses from 19 observation wells, chemical analyses from 5 multilevel ground-water sampling devices (MLGWSD), chemical analyses of soil samples collected from 5 sites in the unsaturated zone, volumetric soil-water content at 3 soil-moisture-tube sites, and quarterly precipitation data from a precipitation station in the study area.

LOCATION AND DESCRIPTION OF SAMPLING SITES

Nineteen observation wells (table 1; fig. 2) and five multilevel ground-water sampling devices (table 2; fig. 2) were established at sites used to determine the ground-water quality from the saturated zone (fig. 2). Three soil-moisture tubes were installed to monitor the movement of ground water in the unsaturated zone (table 3; fig. 2). Soil samples from the unsaturated zone were obtained from several depths at five sites for chemical analysis (table 3; fig. 3). A schematic diagram (fig. 6) and an explanation of the system of designating local well number is presented in the "System of Numbering Wells" subsection in the "Hydrologic Data" section at the back of this report.

In the ground-water sampling network, 15 observation wells are USGS wells completed in eolian deposits, 3 are privately owned domestic-use wells completed in bedrock, and 1 is an irrigation well completed in the alluvium. The 15 USGS eolian wells were drilled in April 1985 and range in depth from 6 to 45 feet below land surface. The eolian wells are constructed of 2-inch diameter polyvinyl chloride (PVC) casing that extends to the bottom of the well. The lower 3 to 10 feet of the well is constructed of perforated or slotted PVC casing that is capped on the bottom. A gravel pack was placed around the well casing from the bottom of the well to about 4 feet below the land surface. Sand and soil were filled in from about 4 feet to as much as 2 feet below land surface. The upper 2 feet of the well then was sealed with concrete and an 8-in.-diameter steel surface casing was installed to protect the PVC well casing (fig. 4).

Multilevel ground-water sampling devices (MLGWSD) were installed in August 1987 with sampling depths ranging from 5 to 36 feet in the saturated zone (table 2). The MLGWSD is comprised of a 1.25-inch diameter PVC casing with four lengths of slotted 2-inch diameter PVC sections attached to the 1.25-inch PVC casing at different depths (fig. 5). A 0.25-inch diameter hole was drilled diagonally into the 1.25-inch PVC casing at the midpoint of each 2-inch diameter slotted section, and a 0.25-inch (O.D.) polyethylene tube was attached so the end of the tubing fit snugly through the 1.25-inch PVC. This allowed sampling at different depths of the aquifer. Four depths thus can be sampled by each MLGWSD. Each sampling depth has an identified polyethylene tube that leads to the land surface for sampling access. The drill holes surrounding the MLGWSD's were filled with sand and soil to approximately 3 feet below land surface. Bentonite pellets and water were used to fill the void from approximately 3 to 2 feet below land surface, and an 8-inch diameter PVC surface casing was installed in concrete to protect each of the devices.

Table 1.--*Observation wells used for sampling in the study area*

[NGVD, National Geodetic Vertical Datum; --, surface elevation unknown; all wells are U.S. Geological Survey wells unless noted]

Site designation (see fig. 2)	Local well number (see fig. 6)	Well depth (feet)	Surface elevation (in feet above NGVD of 1929)	Aquifer sampled
1	SB0306616CDD	6	4,941	Eolian
2	SB0306616DCC	9	4,902	Eolian
[1]3	SB0306616DAC	20	4,878	Eolian
4	SB0306616CAC	18	4,909	Eolian
5	SB0306616DAA2	24	4,890	Eolian
6	SB0306616DAB	45	4,875	Eolian
7	SB0306616CAA	25	4,889	Eolian
8	SB0306616BDC	19	4,878	Eolian
9	SB0306616BCC	14	4,900	Eolian
10	SB0306616AAC	30	4,864	Eolian
11	SB0306616BBD	27	4,889	Eolian
12	SB0306616AAA	30	4,849	Eolian
13	SB0306616AAB	39	4,860	Eolian
14	SB0306616BAA	20	4,859	Eolian
15	SB0306616BBA	14	4,871	Eolian
[2]16	SB030669DDD	52	4,845	Alluvial
[3]17	SB030669AAA	346	--	Bedrock
[3]18	SB030668ABA	330	--	Bedrock
[3]19	SB0306617CDD	331	--	Bedrock

[1]No water-quality samples collected because well was destroyed.
[2]Irrigation well.
[3]Domestic well.

Table 2.--*Multilevel ground-water sampling devices used in the study area*

[MLGWSD, multilevel ground-water sampling device]

Site designation (see fig. 2)	Local well number (see fig. 6)	Sampling depths (feet below land surface)	Aquifer sampled
MLGWSD-1	SB0306616DAB2	20, 25, 30, 34	Eolian
MLGWSD-2	SB0306616BBD2	11, 16, 21, 25	Eolian
MLGWSD-3	SB0306616AAC2	11, 16, 21, 25	Eolian
MLGWSD-4	SB0306616AAB2	22, 27, 32, 36	Eolian
MLGWSD-5	WB0306616BAA2	5, 10, 15, 19	Eolian

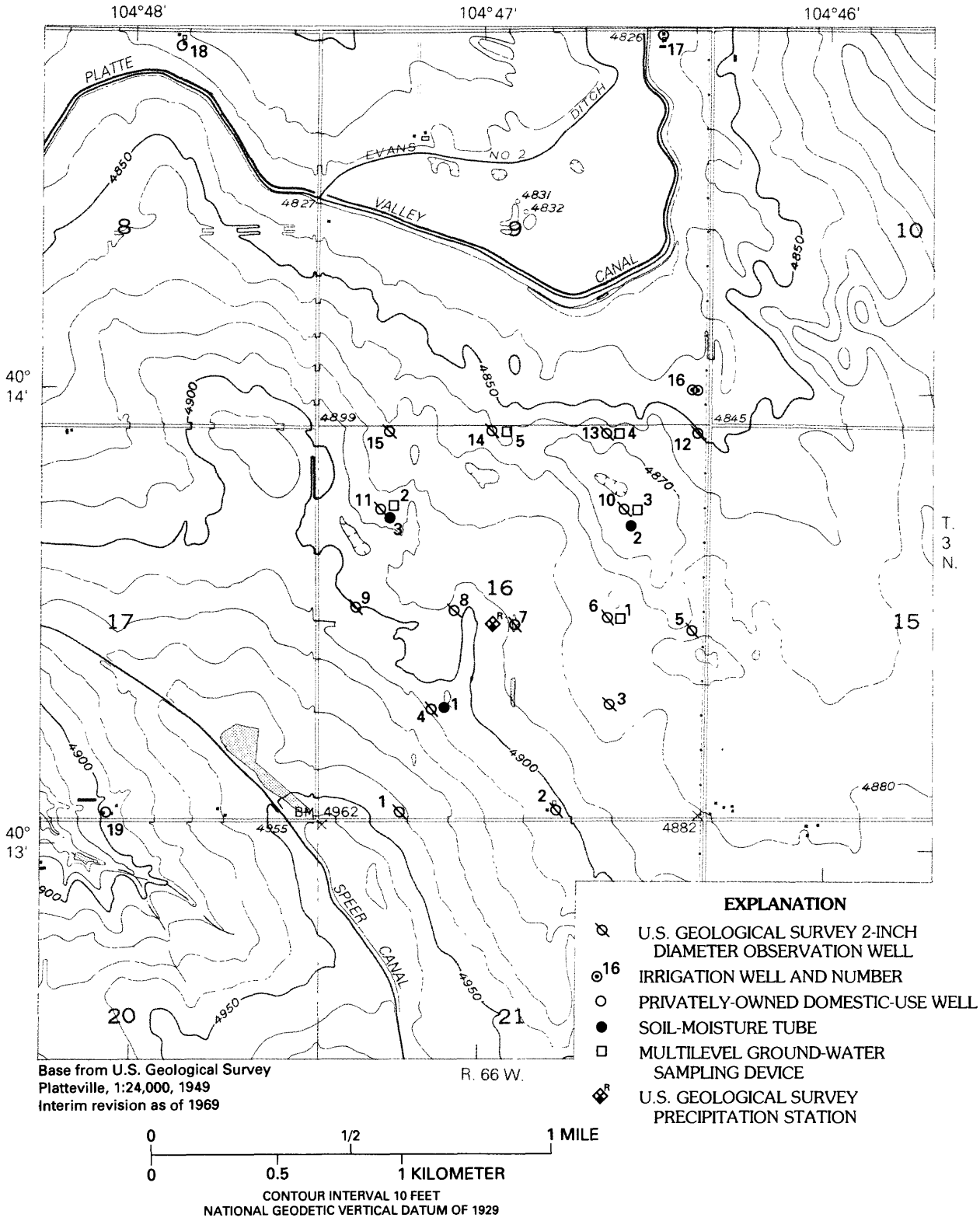

Figure 2.--Location of hydrologic-data-collection sites.

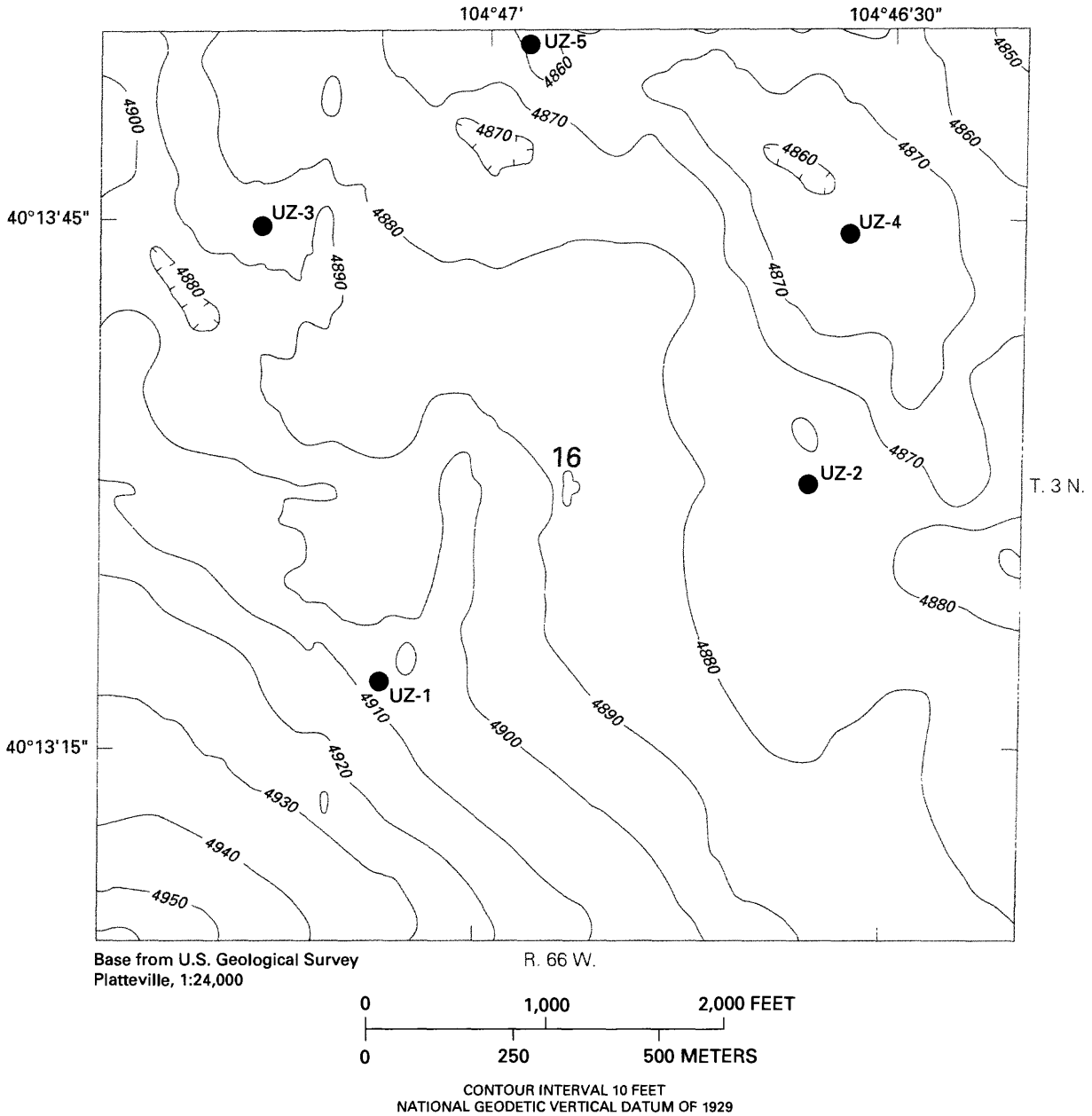

Figure 3.--Location of soil-sampling sites in the unsaturated zone.

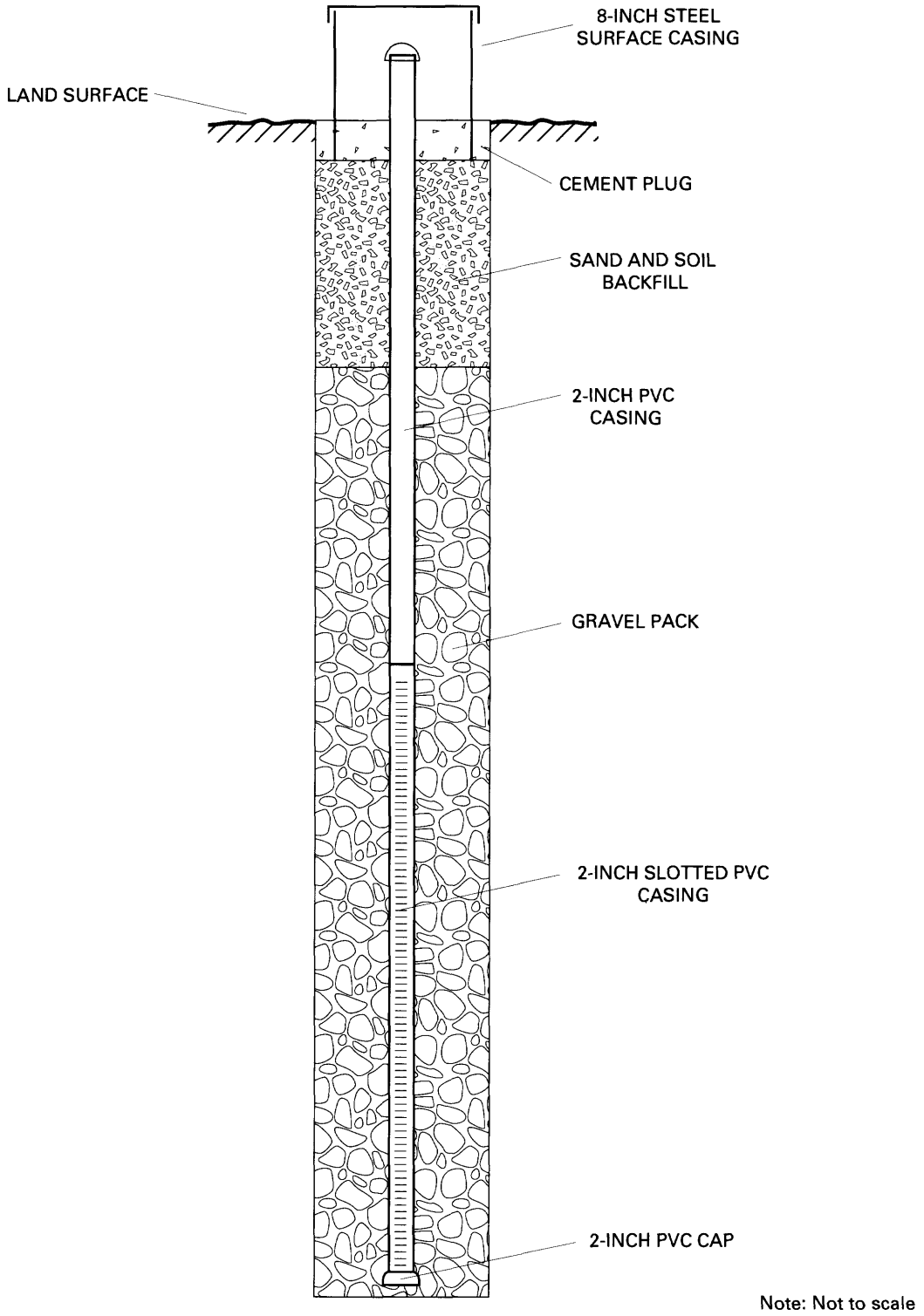

Figure 4.--Diagram of a typical observation well.

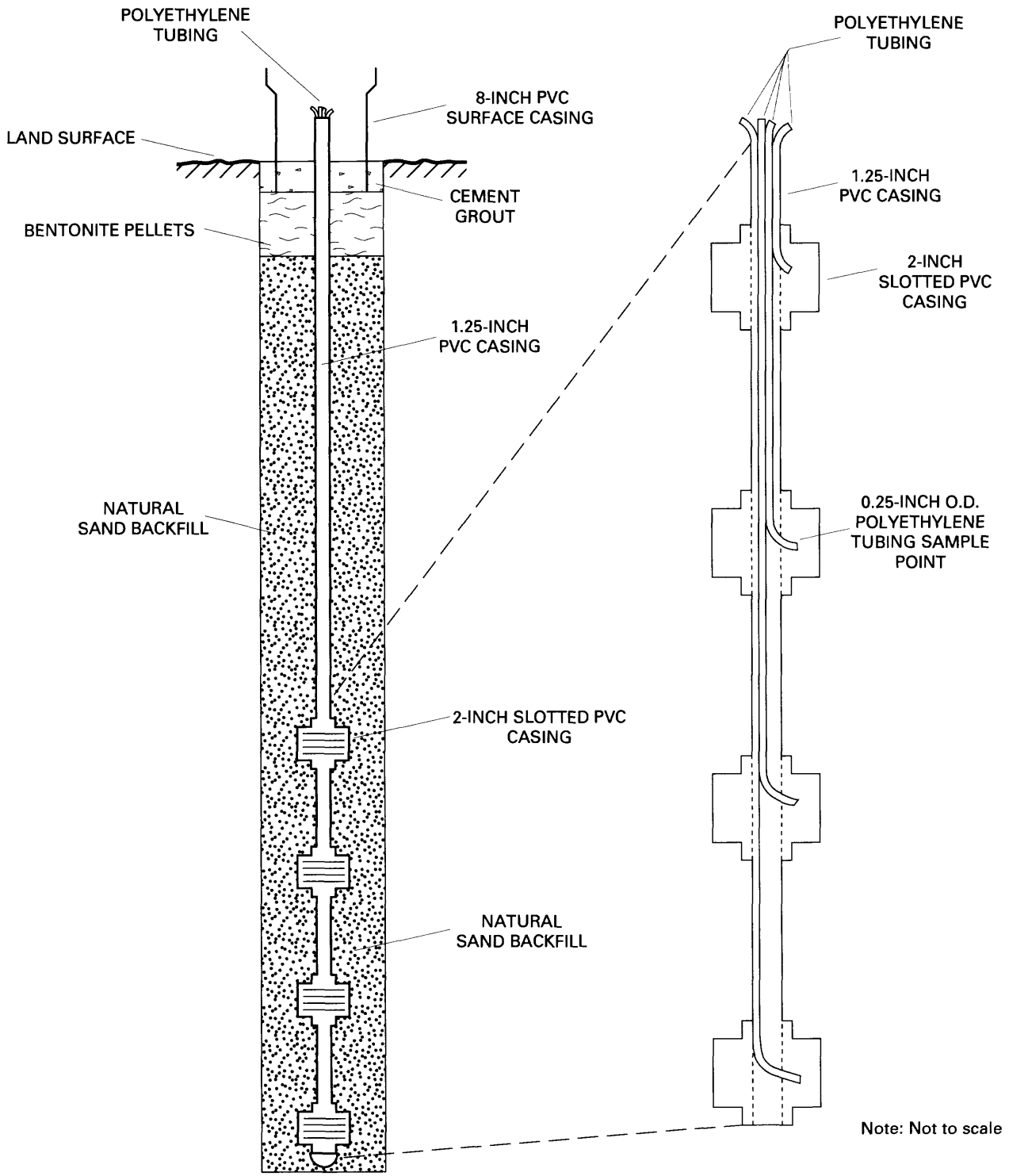

Figure 5.--Diagram of a multilevel ground-water sampling device.

Table 3.--*Sampling sites in the unsaturated zone in the study area*

[UZ, unsaturated zone; --, no sample collected]

Site designation (see fig. 3)	Depth of samples collected from UZ (feet below land surface)
UZ-1	0, 1.5, 3.5, 5.5
UZ-2	0, 1.5, 3.5, 5.5
UZ-3	0, 1.5, 3.5, 5.5
UZ-4	0, 1.5, 3.5, --
UZ-5	0, 1.5, 3.5, 5.5

Soil-moisture tubes were installed at three selected locations in the study area to measure the volumetric soil-water content in the unsaturated zone. Ten-foot sections of 2-inch-diameter aluminum tubing were sealed at the bottom with a rubber stopper and were inserted into the ground through 2-inch drill holes.

Five soil-sampling sites were located in the study area to collect soil samples for chemical analysis from the unsaturated zone at depths ranging from the surface to 5.5 feet below land surface (table 3). A small backhoe was used to dig a 6-foot deep trench so that samples could be collected at each site.

A precipitation station is located near the center of the study area (fig. 2). Precipitation was collected and recorded beginning in the third quarter of 1985.

TYPES OF DATA AND METHODS OF COLLECTION AND ANALYSIS

Data in this report include water-level measurements (fig. 7; table 4) and chemical and bacteriological analyses from 19 observation wells (table 5), chemical conditions of the ground water at several depths from the MLGWSD's (table 6), chemical conditions of the unsaturated zone from soil samples (table 7), volumetric soil-water content (fig. 8), and quarterly accumulative precipitation quantities in the study area from 1985 through the spring of 1991 (fig. 9). Figures 7-9 and tables 4-7 are in the "Hydrologic Data" section at the back of this report.

Water levels for the USGS observation wells were measured approximately monthly and prior to water-quality sampling (fig. 7; table 4). Water levels were measured at well 3 on three separate occasions before the well was destroyed by farming equipment. There are no water-quality samples for well 3 as a result of its being destroyed. Two water-level measurements were made at well 16, an irrigation well. No water-level measurements were made at the three domestic wells (wells 17-19), but historical water-level measurements are presented.

Specific conductance and pH were measured at each well site. Generally, water-quality samples were collected from the observation wells two or three times during each irrigation season from 1985 through 1990 and once each winter or late spring from 1987 through early 1991. Water samples were collected for analyses of dissolved inorganic constituents and bacteria at all wells, and samples for analyses of volatile organic constituents were collected at selected wells. The analyses for the dissolved inorganic constituents included nitrogen compounds, phosphorus, major cations and anions, and the following trace elements: cadmium, chromium, copper, iron, lead, manganese, nickel, and zinc. On September 2, 1988, water-quality samples were collected for a variety of total volatile organic analyses at wells 2, 4, 5, 7-9, 13, and 15 (fig. 2 and table 5). Fecal-coliform and fecal-streptococcus bacteria also were analyzed (table 5).

Temperature, specific conductance, and pH were measured for each depth of four MLGWSDs. At the deeper MLGWSD site 4, there was not enough water to measure water-quality properties or to collect samples for inorganic analyses. Except for site 4, the MLGWSDs were sampled periodically from September 1987 through September 1988. The analyses for the dissolved inorganic constituents included nitrogen compounds, major cations and anions, and the following trace elements: cadmium, iron, lead, and manganese. On September 1, 1988, samples for total volatile organic analyses were collected at all five MLGWSDs (table 6).

Soil samples were collected from five soil-sampling sites within the study area for total inorganic analyses of the soil in the unsaturated zone at selected depths (table 7). The analyses for the total inorganic constituents included nitrogen compounds, phosphorus, and the following trace elements: arsenic, cadmium, chromium, cobalt, copper, iron, lead, manganese, mercury, and zinc.

Volumetric soil-water content was recorded periodically from October 1987 through November 1988 at three sites with the use of a neutron soil-moisture probe (fig. 8). Precipitation data were recorded at the USGS precipitation station during the study period. The incremental precipitation data were compiled and reported as quarterly accumulative precipitation (fig. 9).

Water levels were measured using a steel tape that measures depth below land surface. Bailers made from 1.5-inch-diameter PVC pipe were used to evacuate the wells. The wells were bailed dry and allowed to recover 24 to 48 hours before the water-quality samples were collected.

The samples for inorganic chemical analyses at the USGS observation wells were collected using the 1.5-inch-diameter PVC bailer. Water samples from the privately owned domestic and irrigation wells were collected from surface taps. A stainless steel bailer was used for sampling volatile organic constituents. The stainless steel bailer was flushed with deionized water after each sample was collected. The samples for inorganic and volatile organic analyses at the MLGWSDs were collected by connecting a Teflon tube from the intake end of a peristaltic pump to the polyethylene tube located at the surface of the MLGWSD for each of the four depths at every MLGWSD. The Teflon tubing from the peristaltic pump was flushed with deionized water after each

sample was collected. A brass sampler on a steel cable was used to collect samples for bacteriological analyses. The enclosed chamber of the sampler was sterilized by igniting methanol added to the chamber after each sample.

All inorganic samples were filtered onsite through a 0.45-micron membrane filter and were preserved and chilled according to Ward and Harr (1990). The organic samples were unfiltered and put into glass bottles prior to delivery to the laboratory for analyses. The bacteriological samples were put into individual autoclaved sample bottles and chilled while awaiting delivery to the laboratory. All samples were delivered to the laboratory within 24 hours after collection.

Inorganic and bacteriological analyses of water samples from the observation wells in the study area were done by the MWRD laboratory. The MWRD laboratory uses standard U.S. Environmental Protection Agency laboratory methods for the analyses of water-quality constituents (American Public Health Association and others, 1985). Split samples occasionally were collected and taken to the USGS National Water Quality Laboratory in Arvada, Colorado; the results were used for verification purposes only and are not included in this report. The organic samples were analyzed by the USGS laboratory.

Soil samples for inorganic chemical analyses were taken at the surface and at depths of 1.5, 3.5, and 5.5 feet below land surface along the soil profile. A 6-foot trench was dug at each sampling site with a small backhoe, and similar volumes of soil were removed from the trench wall at the designated depth and placed into plastic sample jars. All inorganic soil analyses were done by the USGS laboratory.

The volumetric soil-water content was determined by using a neutron soil-moisture probe. The neutron probe was inserted into 2-inch-diameter aluminum soil-moisture tubes, and measurements were taken at 1-foot intervals to a depth of 10 feet below land surface. The precipitation quantities were recorded by using a tipping-bucket raingage and weighing-bucket snowgage near well 7.

REFERENCES

American Public Health Association, American Water Works Association, Water Pollution Control Federation, 1985, Standard methods for the examination of water and wastewater (16th ed.): Washington, D.C., American Public Health Association, 1,268 p.

Ward, J.R., and Harr, C.A., editors, 1990, Methods for collection and processing of surface-water and bed-material samples for physical and chemical analyses: U.S. Geological Survey Open-File Report 90-140, 71 p.

HYDROLOGIC DATA

System of Numbering Wells

The well locations (local well number) in tables 1, 5, and 7 are based on the U.S. Bureau of Land Management system of land subdivision and show the location of the well by quadrant, township, range, section, and position within the section. A graphic illustration of this method of well location is shown in figure 6. The first letter "S" preceding the location number means that the well is located on the area governed by the sixth principal meridian. The second letter indicates the quadrant in which the well is located. Four quadrants are formed by the intersection of the base line and the principal meridian--A indicates the northeast quadrant, B the northwest, C the southwest, and D the southeast. The first numeral indicates the township, the second the range, and the third the section in which the well is located. The letters following the section number locate the well within the section. The first letter denotes the quarter section, the second the quarter-quarter section. The letters are assigned within the section in a counter-clockwise direction, beginning with (A) in the northeast quarter. Letters are assigned within each quarter section and within each quarter-quarter section in the same manner. Where two or more locations are within the smallest subdivision, consecutive numbers beginning with 1 are added in the order in which the wells were inventoried. For example, SC00304921CCB indicates a well in the northwest quarter of the southwest quarter of the southwest quarter of sec. 21, T. 3 S., R. 49 W. The "S" refers to the sixth principal meridian. The "C" indicates the township is south of the base line and that the range is west of the principal meridian.

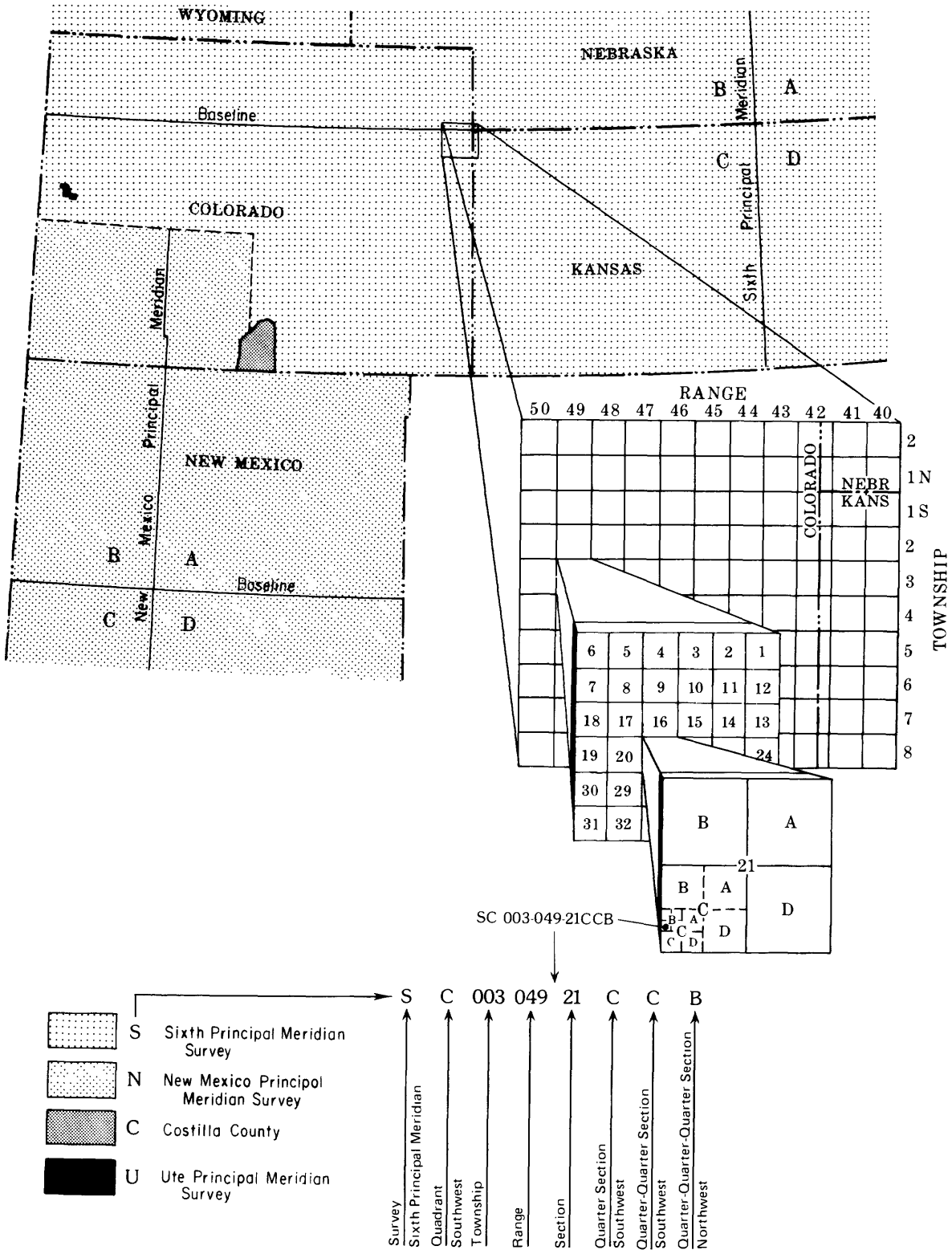

Figure 6.--System of numbering wells to obtain local well number.

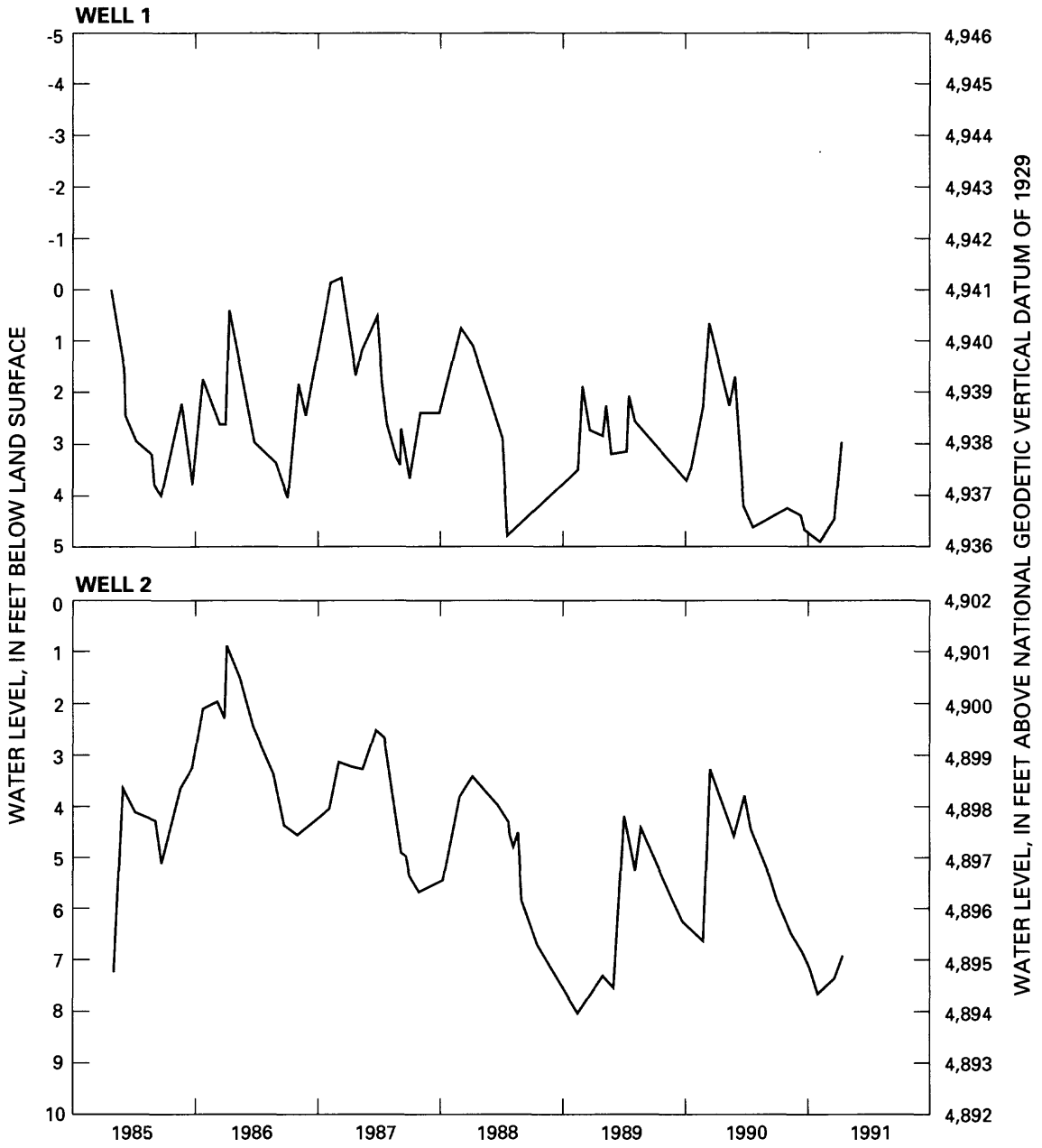

Figure 7.--Water-level measurements at selected observation wells, 1985-91.

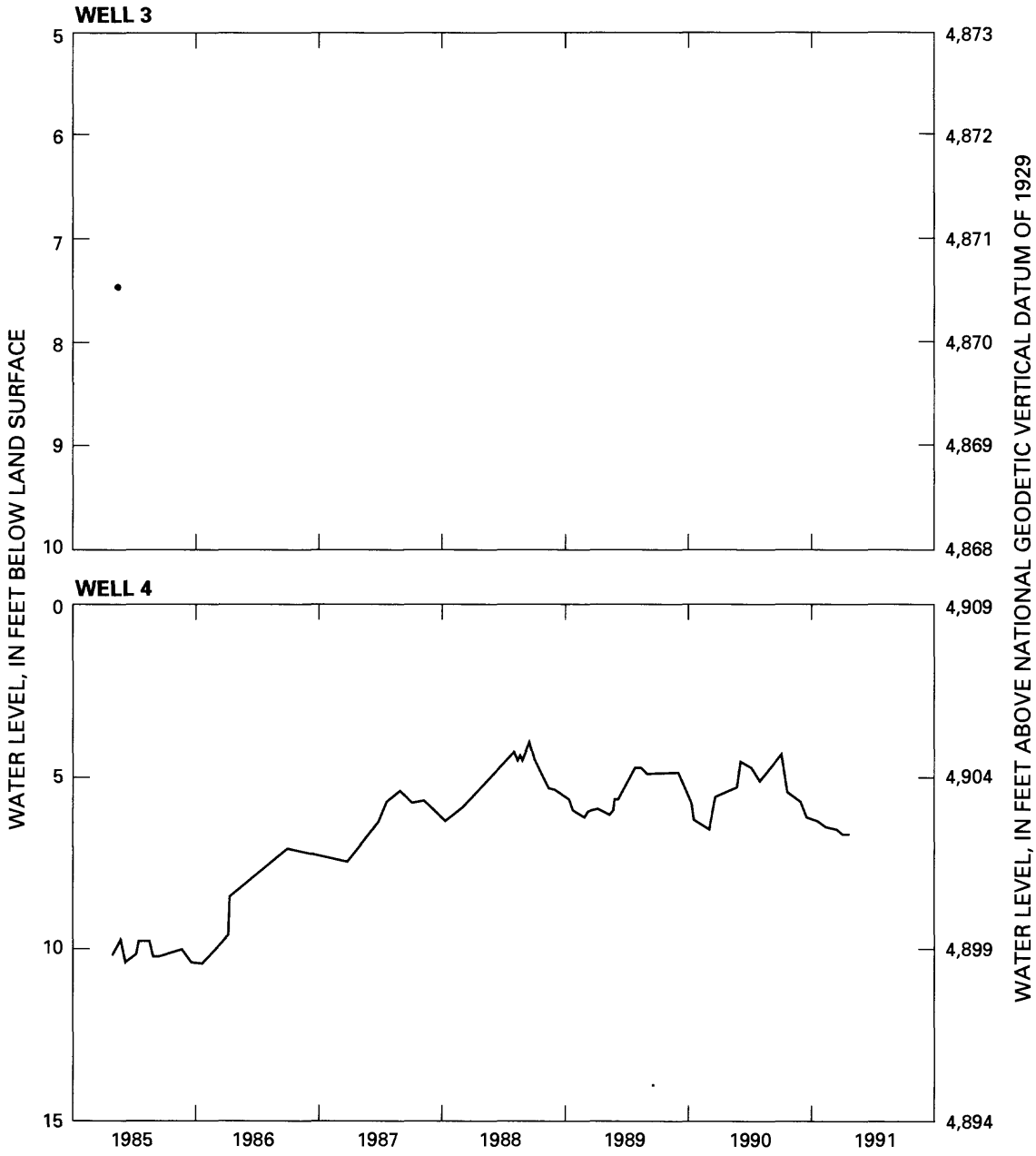

Figure 7.--Water-level measurements at selected observation wells, 1985-91--Continued.

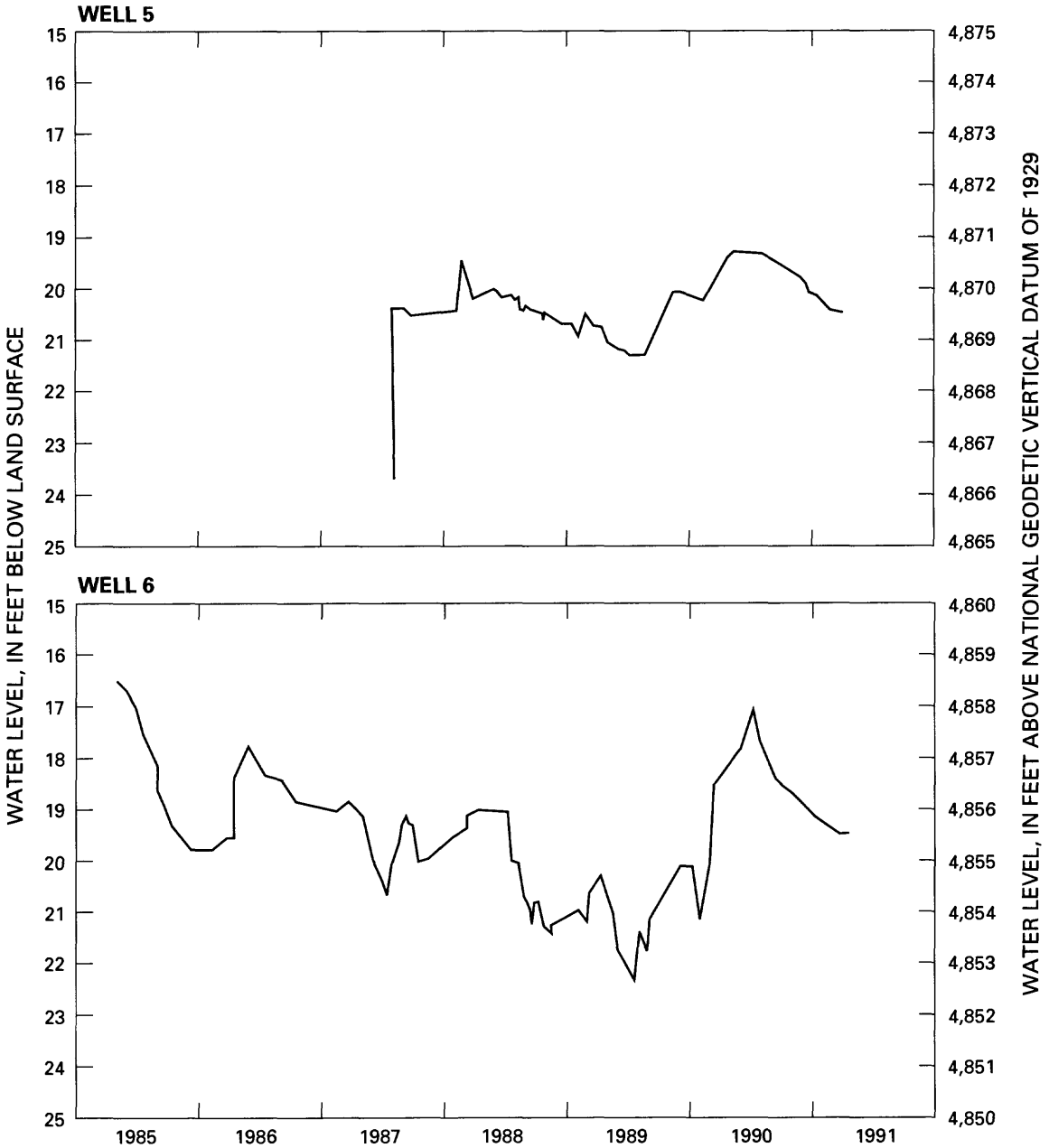

Figure 7.--Water-level measurements at selected observation wells, 1985-91--Continued.

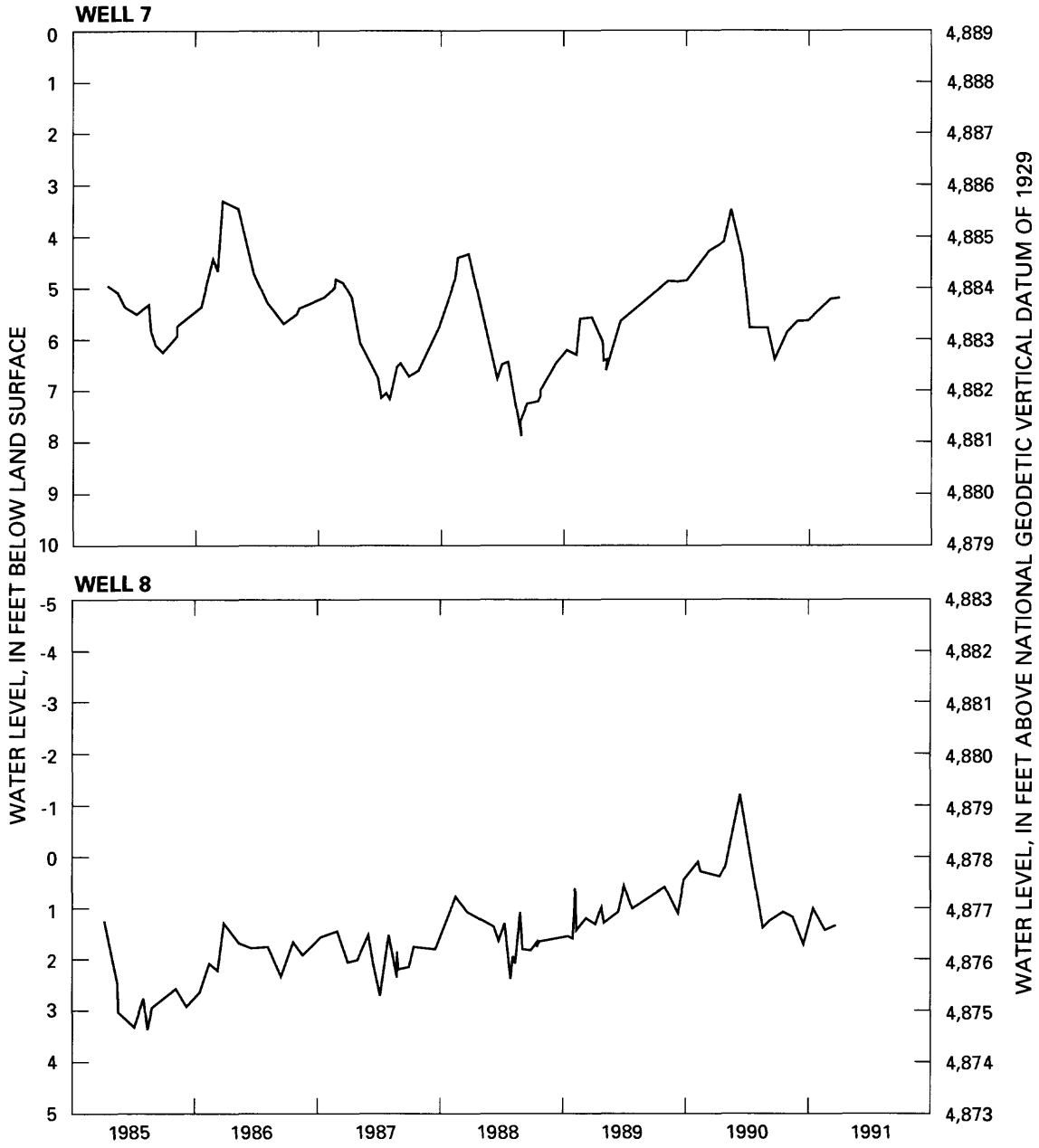

Figure 7.--Water-level measurements at selected observation wells, 1985-91--Continued.

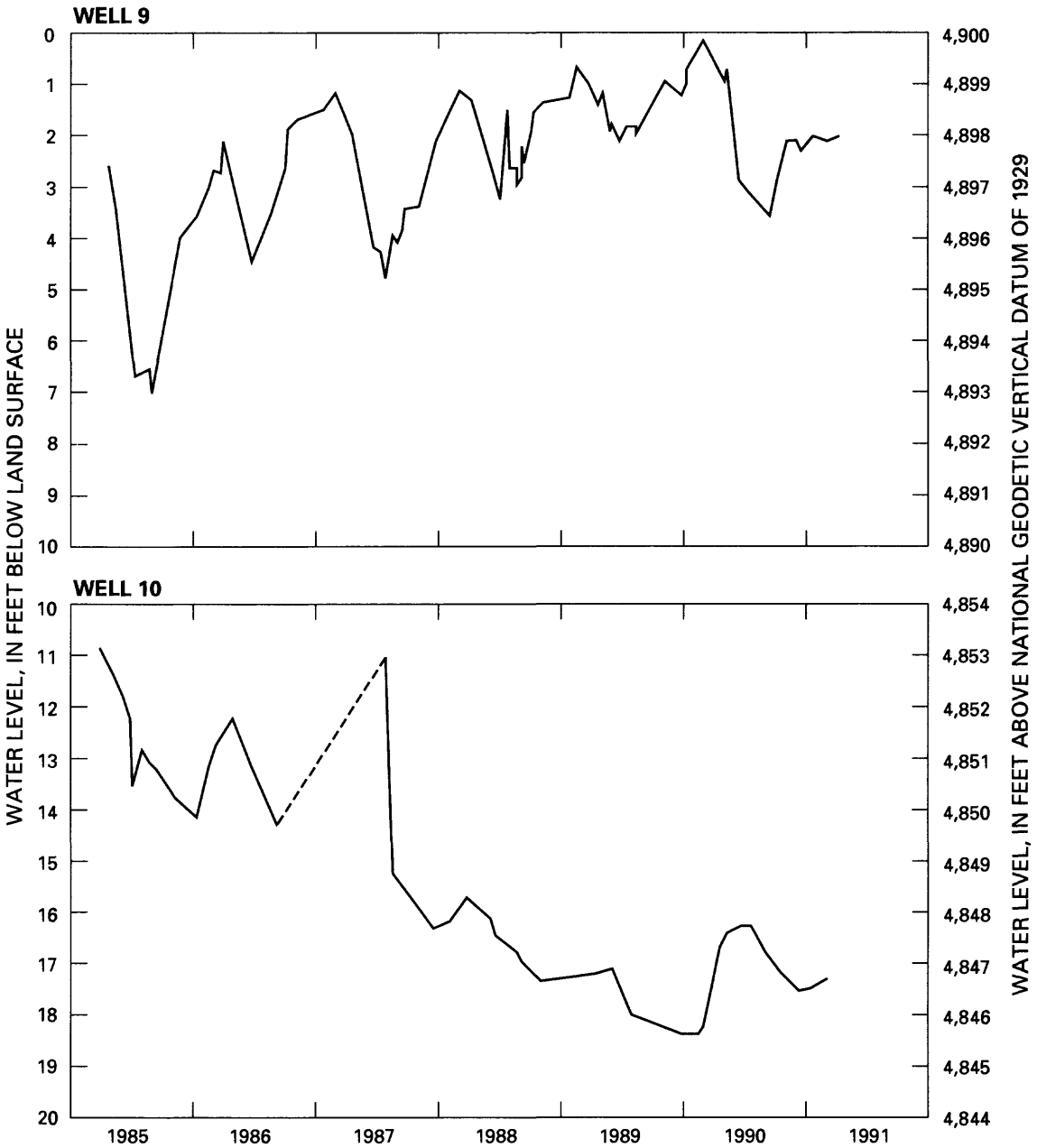

Figure 7.--Water-level measurements at selected observation wells, 1985-91--Continued.

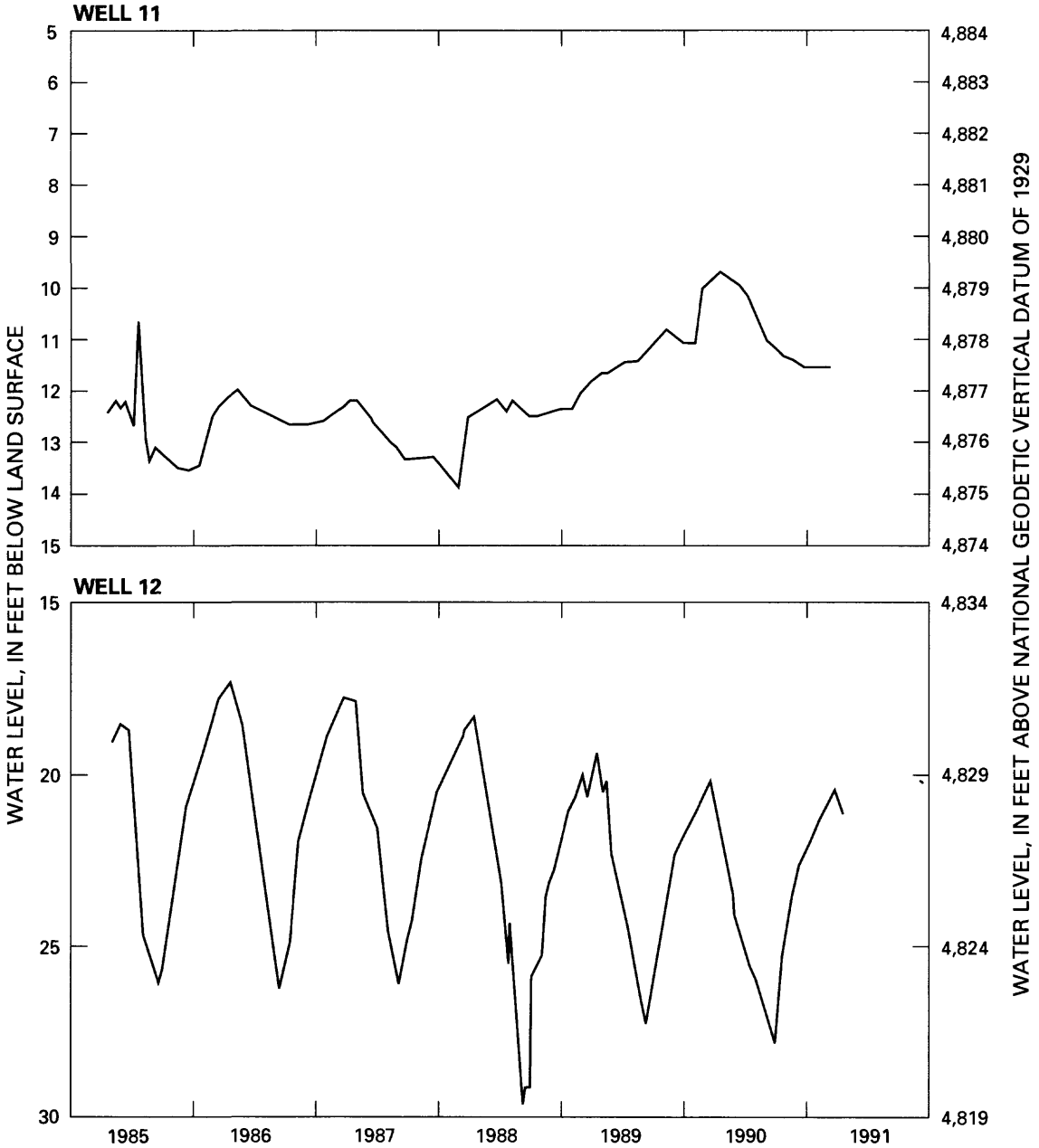

Figure 7.--Water-level measurements at selected observation wells, 1985-91--Continued.

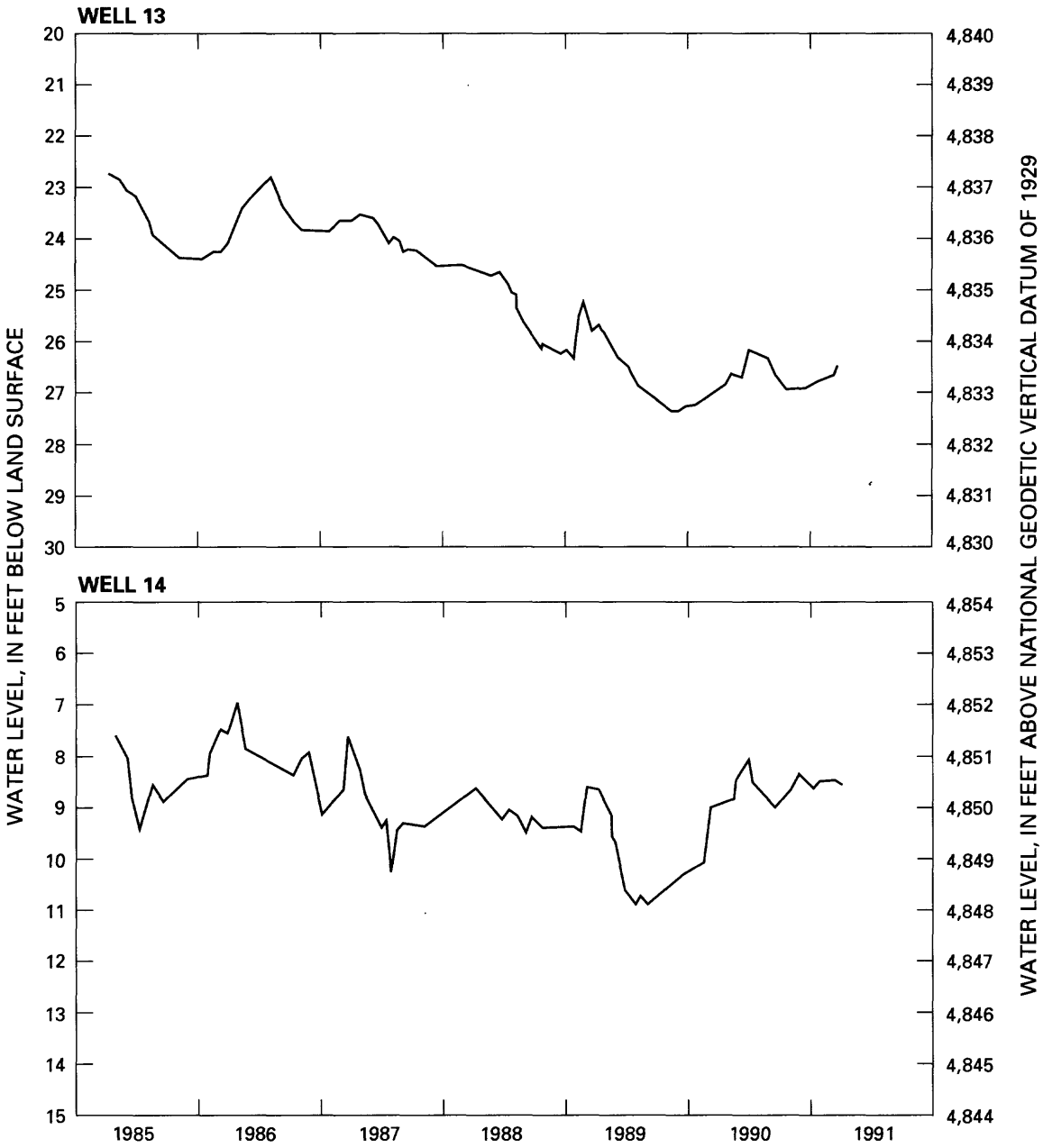

Figure 7.--Water-level measurements at selected observation wells, 1985-91--Continued.

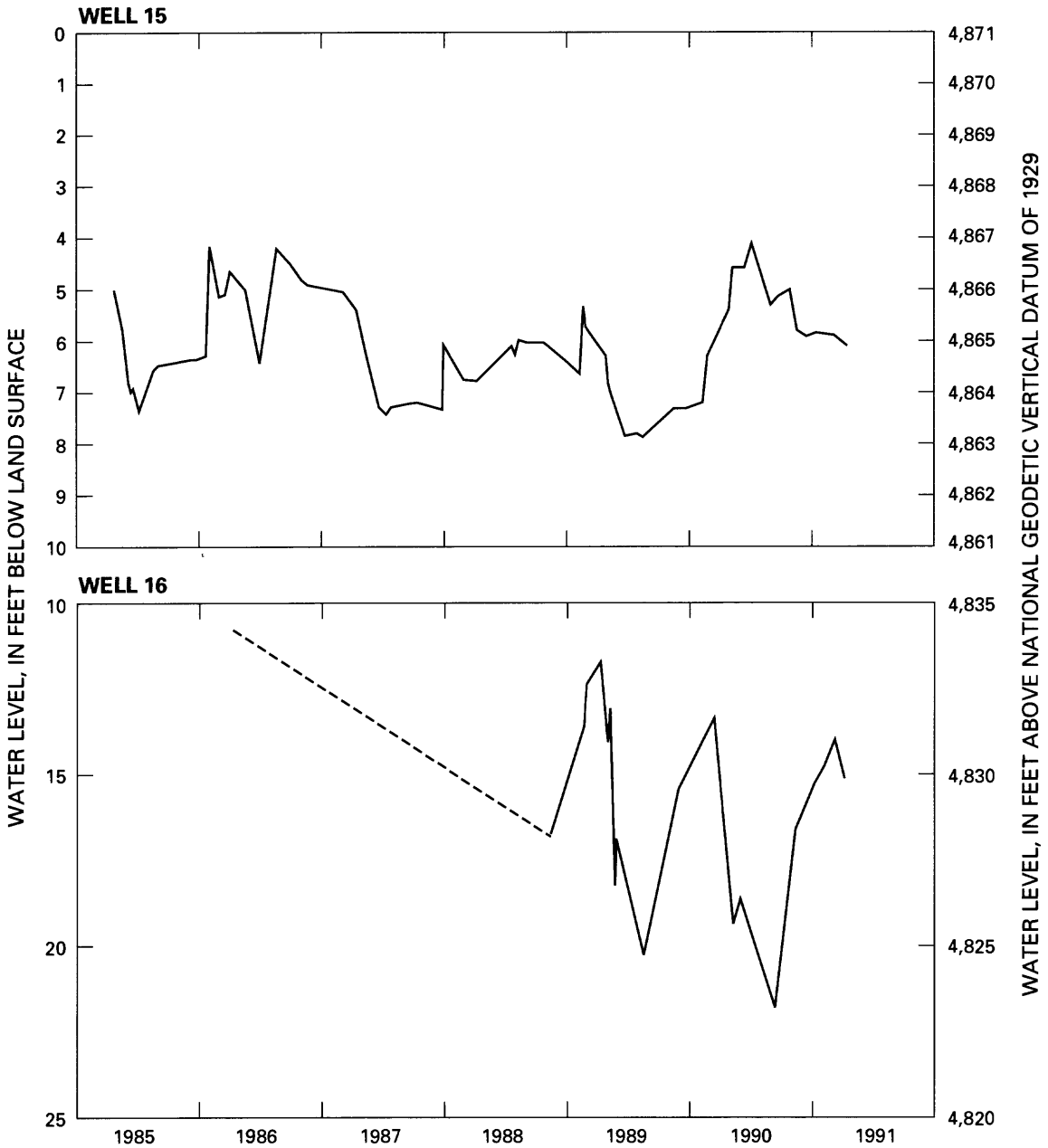

Figure 7.--Water-level measurements at selected observation wells, 1985-91--Continued.

Table 4.--*Water levels in wells where water samples were obtained, 1985-91*

[Water levels, in feet above or below land surface; S, status of site (blank in this column means that there was no condition adversely affecting the accurate measurement of the water level); d, dry-water level was below bottom of well; o, obstruction in well; v, foreign matter on water; r, well was recently pumped or bailed; x, affected by surface water site; +0.16, the water level was 0.16 foot above land surface; --, no data available; wells shown in figure 2]

Date	Water level	S	Date	Water level	S	Date	Water level	S	Date	Water level	S
					WELL 1						
1985			1987			1988			1989		
APR 26	0.02	x	FEB 06	+.16	x	AUG 16	--	d	JULY 31	2.12	
MAY 24	1.24		MAR 19	+.28		26	--	d	AUG 17	2.61	
JUNE 07	2.47		APR 27	1.71		SEPT 01	--	d	28	2.68	
JULY 09	2.93		MAY 19	1.20		12	--	d	DEC 06	3.48	
AUG 15	3.17	x	JUNE 30	.50		15	--	d	1990		
28	3.8		JULY 13	1.82		20	--	d	JAN 05	3.73	
SEPT 13	3.97		24	2.47		23	--	d	24	3.56	
NOV 21	2.19		AUG 26	3.32		OCT 19	--	d	FEB 27	2.59	
DEC 20	3.75		SEPT 10	3.44		NOV 02	--	d	MAR 22	.65	
1986			15	2.74		10	--	d	MAY 21	2.34	
JAN 23	1.69		22	3.13		1989			JUNE 04	1.68	
MAR 07	2.58		OCT 07	3.66		FEB 22	3.60		JULY 10	4.16	
27	2.59		NOV 06	2.44		MAR 08	1.89		30	4.67	
APR 14	0.36	x	1988			13	1.96		SEPT 24		d
MAY 22	1.81		JAN 08	2.45		APR 10	2.80		OCT 16		d
JULY 03	2.98	x	MAR 11	.71		MAY 11	2.90		NOV 20	4.27	
AUG 26	3.35		APR 13	1.13		17	2.29		DEC 14	4.43	
OCT 01	4.03		JULY 01	2.86		26	3.05		1991		
NOV 06	1.81		19	4.85	r	JUNE 01	3.27		JAN 14	4.74	
28	2.44		AUG 05	--	d	JULY 11	3.20		FEB 15	4.92	
									MAR 28	4.51	
									APR 22	2.95	
					WELL 2						
1985			1986			1987			1988		
APR 26	7.11		MAR 27	2.16		MAY 19	3.20		MAR 10	3.85	
MAY 24	3.54		APR 14	0.78		JUNE 30	2.40		APR 13	3.33	
JUNE 07	3.60		MAY 22	1.54		JULY 13	2.51		JULY 01	4.00	
JULY 09	4.05		JULY 03	2.34	x	24	2.60		19	4.20	
AUG 15	4.20	x	AUG 26	3.27		AUG 26	3.81		AUG 05	4.53	
28	4.21		OCT 01	4.33		SEPT 10	4.47		16	4.79	
SEPT 13	5.10		NOV 06	4.49		15	4.90		26	4.50	
NOV 21	3.55		28	4.38		22	4.93		SEPT 01	5.25	
DEC 20	3.20		1987			OCT 07	5.33		12	5.85	
1986			FEB 06	4.03		NOV 06	5.67		15	5.92	
JAN 23	2.03		MAR 19	3.11		1988			20	6.05	
MAR 07	1.87		APR 27	3.18		JAN 08	5.47		OCT 19	6.75	

Table 4.--*Water levels in wells where water samples were obtained, 1985-91*--Continued

Date	Water level	S	Date	Water level	S	Date	Water level	S	Date	Water level	S
						WELL 2--Continued					
1988			1989			1990			1990		
NOV 02	6.90		MAY 17	7.40		JAN 05	6.28		OCT 16	5.93	
10	7.02		26	7.47		24	6.44		NOV 20	6.44	
14	7.03		JUNE 01	7.56		FEB 27	6.65		DEC 14	6.72	
1989			JULY 11	4.19		MAR 22	3.20		1991		
FEB 22	8.05		31	4.56		MAY 21	4.31		JAN 14	7.08	
MAR 08	7.97		AUG 17	5.31		JUNE 04	4.55		FEB 15	7.67	
13	7.88		28	4.40		JULY 10	3.78		MAR 28	7.41	
APR 10	7.70		DEC 06	5.95		30	4.42		APR 22	6.94	
MAY 11	7.35					SEPT 24	5.39				
						WELL 3					
1985			1985			1985					
APR 26	7.13		MAY 24	7.49		JUNE 07	7.81				
						WELL 4					
1985			1987			1988			1989		
APR 26	10.08		APR 06	7.27		SEPT 20	3.95		AUG 17	4.65	
MAY 24	9.63		07	7.23		22	3.99		28	4.87	
JUNE 07	10.20		MAY 19	6.70		30	4.41		DEC 06	4.78	
JULY 09	10.06		JUNE 30	6.12		OCT 19	4.77		1990		
25	9.65		JULY 14	5.87		NOV 02	5.09		JAN 05	5.66	
AUG 15	9.63		24	5.67		08	5.18		24	6.20	
29	10.06		AUG 26	5.38		10	5.21		FEB 27	6.39	
SEPT 13	10.08		SEPT 10	5.45		14	5.25		MAR 22	5.52	
NOV 21	9.89		16	5.51		1989			MAY 21	5.23	
DEC 20	10.20		22	5.60		JAN 10	5.67		JUNE 04	4.49	
1986			OCT 07	5.74		31	5.94		JULY 10	4.70	
JAN 23	10.26		NOV 06	5.57		FEB 22	6.12		30	4.95	
APR 02	9.45		1988			MAR 08	6.00		SEPT 24	4.27	
14	8.28		JAN 08	6.15		15	5.98		OCT 16	5.41	
MAY 22	7.92		MAR 10	5.82		APR 10	5.92		NOV 20	5.61	
OCT 08	6.90		JULY 01	4.50		MAY 11	6.03		DEC 14	6.08	
NOV 06	6.99		AUG 05	4.21		17	5.93		1991		
28	7.08		16	4.48		26	5.60		JAN 14	6.20	
1987			26	4.40		JUNE 01	5.64		FEB 15	6.38	
FEB 06	7.23		SEPT 01	4.50		JULY 11	4.95		MAR 28	6.53	
MAR 19	7.32		12	4.32		31	4.67		APR 22	6.58	
			15	4.22							

Table 4.--*Water levels in wells where water samples were obtained, 1985-91*--Continued

Date	Water level	S	Date	Water level	S	Date	Water level	S	Date	Water level	S
						WELL 5					
1987			1988			1989			1990		
AUG 21	23.67		AUG 05	20.18		FEB 22	20.95		FEB 27	20.25	
25	20.41		16	20.27		MAR 08	20.74		MAR 22	20.08	
26	20.47		26	20.28		13	20.58		MAY 21	19.40	
SEPT 09	20.39		SEPT 01	20.44		APR 10	20.80		JUNE 04	19.31	
15	20.40		12	20.50		MAY 11	20.82		JULY 10	19.35	
22	20.43		15	20.40		17	20.95		30	19.34	
OCT 08	20.53		20	20.37		26	21.11		SEPT 24	19.48	
NOV 06	20.54		22	20.41		JUNE 01	21.18		OCT 16	19.55	
1988			OCT 19	20.49		JULY 11	21.27		NOV 20	19.69	
JAN 08	20.53		NOV 02	20.54		31	21.32		DEC 14	19.81	
MAR 01	20.48		10	20.65		AUG 17	21.29		1991		
10	19.32		14	20.55		28	21.31		JAN 14	20.08	
APR 13	20.27		1989			DEC 06	20.10		FEB 15	20.23	
JUNE 28	20.06		JAN 10	20.75		1990			MAR 28	20.48	
JULY 01	20.09		31	20.75		JAN 05	20.14		APR 22	20.53	
19	20.23					24	20.16				
						WELL 6					
1985			1987			1988			1989		
APR 26	16.53		APR 27	19.25		AUG 26	20.84		AUG 17	21.86	
MAY 24	16.76		MAY 19	19.88		30	20.97		28	21.24	
JUNE 07	16.98		JUNE 30	20.41		SEPT 12	21.33		DEC 06	20.20	
JULY 09	17.50		JULY 08	20.65		15	21.03		1990		
AUG 15	18.12		13	20.52		20	20.88		JAN 05	20.20	
28	18.65		24	20.06		22	20.90		24	21.21	
SEPT 13	18.95		AUG 20	19.65		30	20.86		FEB 27	20.20	
OCT 02	19.32		25	19.33		OCT 19	21.36		MAR 22	18.60	
NOV 21	19.74		SEPT 09	19.23		NOV 02	21.46		MAY 21	18.01	
1986			15	19.37		10	21.53		JUNE 04	17.91	
JAN 23	19.77		21	19.36		14	21.37		JULY 10	17.14	
MAR 07	19.58		OCT 02	19.90		1989			30	17.71	
27	19.50		08	20.07		JAN 10	21.15		SEPT 24	18.53	
APR 14	18.27		NOV 06	19.99		31	21.06		OCT 16	18.67	
MAY 22	17.74		1988			FEB 22	21.24		NOV 20	18.85	
JULY 03	18.30		JAN 08	19.67		MAR 08	20.72		DEC 14	19.01	
AUG 26	18.40		MAR 01	19.43		13	20.59		1991		
OCT 01	18.80		10	19.16		APR 10	20.37		JAN 14	19.28	
NOV 06	18.89		APR 13	19.09		MAY 17	21.09		FEB 15	19.39	
28	18.93		JULY 01	19.14		26	21.66		MAR 28	19.57	
1987			19	20.10		JUNE 01	21.86		APR 22	19.57	
FEB 06	19.07		AUG 05	20.16		JULY 11	22.39				
MAR 19	18.93		16	20.65		31	21.53				

Table 4.--*Water levels in wells where water samples were obtained, 1985-91*--Continued

Date	Water level	S	Date	Water level	S	Date	Water level	S	Date	Water level	S
						WELL 7					
1985			1987			1988			1989		
APR 26	5.12		FEB 06	5.30		JULY 01	6.97		MAY 17	6.16	
MAY 24	5.22		MAR 06	5.10		19	6.66		26	6.58	
JUNE 07	5.48		19	4.95		AUG 05	6.62		JUNE 01	6.70	
JULY 09	5.54		APR 06	5.04		16	7.10		JULY 11	5.74	
AUG 15	5.42		27	5.41		26	7.32		DEC 06	4.96	
28	5.99		MAY 19	6.21		30	7.46		1990		
SEPT 13	6.22		JUNE 30	6.88		SEPT 12	8.04		JAN 05	5.02	
30	6.29		JULY 08	7.03		15	7.73		24	4.98	
OCT 02	6.26		13	7.14		20	7.58		FEB 27	4.70	
NOV 06	6.02		24	7.29		22	7.58		MAR 22	4.49	
15	5.96		AUG 05	7.25		30	7.39		MAY 21	4.22	
21	5.84		19	7.30		OCT 19	7.41		JUNE 04	3.62	
DEC 20	5.70		25	7.05		28	7.44		JULY 10	4.65	
1986			SEPT 10	6.64		NOV 02	7.30		30	5.92	
JAN 23	5.50		21	6.60		10	7.34		SEPT 24	5.92	
MAR 07	4.45		OCT 02	6.80		14	7.15		OCT 16	6.56	
27	4.67		08	6.86		1989			NOV 20	6.02	
APR 14	3.32		NOV 06	6.78		JAN 10	6.55		DEC 14	5.80	
MAY 22	3.51		1988			31	6.38		1991		
JULY 03	4.76		JAN 08	5.99		FEB 22	6.50		JAN 14	5.74	
AUG 26	5.47		MAR 01	5.00		MAR 08	6.03		FEB 15	5.61	
OCT 01	5.73		10	4.57		13	5.77		MAR 28	5.39	
NOV 06	5.65		APR 04	4.48		APR 10	5.75		APR 22	5.35	
28	5.52		10	4.47		MAY 11	6.04				
						WELL 8					
1985			1986			1988			1989		
APR 26	1.47		NOV 06	1.90		MAR 10	1.00		JAN 31	1.82	
MAY 24	2.58		28	2.19		APR 13	1.38		FEB 22	1.85	
JUNE 07	3.28		1987			JULY 01	1.67		MAR 08	.86	
JULY 09	3.52		FEB 06	1.79		19	1.83		08	1.76	
AUG 15	2.96		MAR 19	1.67		AUG 05	1.56		APR 10	1.45	
28	3.56		APR 27	2.33		16	2.64		MAY 11	1.58	
SEPT 13	3.19		MAY 19	2.30		26	2.23		16	1.39	
NOV 21	2.75		JUNE 30	1.71		SEPT 01	2.36		26	1.27	
DEC 20	3.09		JULY 13	2.37		12	1.70		JUNE 01	1.54	
1986			24	2.98		15	1.35		JULY 11	1.42	
JAN 23	2.88		AUG 26	1.82		20	2.08		31	.81	
MAR 07	2.30		SEPT 10	2.53		22	2.11		AUG 17	1.20	
27	2.39		15	2.09		OCT 19	2.10		28	1.32	
APR 14	1.45		22	2.43		NOV 02	1.96		DEC 06	.81	
MAY 22	1.86		OCT 18	2.43		10	1.99		1990		
JULY 03	1.95		NOV 06	2.03		14	1.92		JAN 05	1.40	
AUG 26	1.98	x	1988						24	.72	
OCT 01	2.56		JAN 08	2.08					FEB 27	.36	

Table 4.--*Water levels in wells where water samples were obtained, 1985-91*--Continued

Date	Water level	S	Date	Water level	S	Date	Water level	S	Date	Water level	S
						WELL 8--Continued					
1990			1990			1990			1991		
MAR 22	.55		JULY 10	+.90		NOV 20	1.37		JAN 14	1.97	
MAY 21	.61		SEPT 24	1.71		DEC 14	1.46		FEB 15	1.33	
JUNE 04	.39		OCT 16	1.51					MAR 28	1.70	
									APR 22	1.58	
						WELL 9					
1985			1987			1988			1989		
APR 26	2.63		FEB 06	1.48		AUG 26	2.74		JULY 31	1.93	
MAY 24	3.52		MAR 19	1.24		SEPT 01	3.02		AUG 17	1.97	
JUNE 07	4.57		APR 27	2.03		12	2.86		28	2.07	
JULY 09	6.72		MAY 19	2.83		15	2.13		DEC 06	.97	
AUG 15	6.54		JUNE 30	4.16		20	2.63		1990		
29	7.00		JULY 13	4.32		22	2.58		JAN 05	1.27	
SEPT 13	6.44		24	4.79		OCT 19	1.98		24	.99	
NOV 21	4.08		AUG 26	4.00		NOV 02	1.58		27	.77	
DEC 20	3.74		SEPT 10	4.10		10	1.50		MAR 22	.16	
1986			15	3.98		14	1.41		MAY 21	1.19	
JAN 23	3.24		22	3.91		1989			JUNE 04	.79	
MAR 07	2.64		OCT 08	3.55		JAN 31	1.38		JULY 10	2.98	
27	2.68		NOV 06	3.44		FEB 22	1.41		30	3.17	
APR 14	2.06		1988			MAR 08	.84		SEPT 24	3.61	
MAY 22	3.23		JAN 08	1.95		13	.69		OCT 16	2.99	
JULY 03	4.43		MAR 10	1.21		APR 10	1.08		NOV 20	2.18	
AUG 26	3.32		APR 13	1.32		MAY 11	1.46		DEC 14	2.16	
OCT 01	2.62		JULY 01	2.90		17	1.30		1991		
NOV 06	1.77		19	3.30	r	26	2.04		JAN 14	2.27	
28	1.67		AUG 05	1.42		JUNE 01	1.97		FEB 15	2.08	
			16	2.76		JULY 11	2.18		MAR 28	2.18	
									APR 22	2.05	
						WELL 10					
1985			1986			1987			1988		
APR 26	10.89		MAR 07	12.96		NOV 06	15.76		SEPT 20	16.88	
MAY 24	11.29		27	12.62		1988			OCT 19	17.15	
JUNE 07	11.48		APR 14	12.45		JAN 08	16.26		NOV 02	17.26	
14	11.60		MAY 22	12.02		MAR 10	16.12		11	17.36	
JULY 09	12.05		JULY 03	12.82		APR 13	15.77		14	17.39	
25	13.32		OCT 01	14.19		JUNE 28	16.12		1989		
AUG 15	12.59		1987			JULY 19	16.48		MAY 11	17.17	
29	12.77		AUG 25	10.92		AUG 05	16.55		17	17.17	
SEPT 23	12.95		SEPT 09	15.02		16	16.60		26	17.19	
NOV 21	13.60		15	15.27		26	16.65		JUNE 01	17.20	
			22	15.34		SEPT 01	16.72		JULY 11	17.47	
1986			OCT 02	15.41		12	16.77		31	17.73	
JAN 23	13.92		08	15.47		15	16.82		AUG 17	17.96	

Table 4.--*Water levels in wells where water samples were obtained, 1985-91*--Continued

Date	Water level	S	Date	Water level	S	Date	Water level	S	Date	Water level	S
					WELL 10--Continued						
1989			1990			1990			1991		
AUG 28	18.03		FEB 27	18.41		JULY 30	16.32		JAN 14	17.49	
DEC 06	18.32		MAR 22	18.28		SEPT 24	16.74		FEB 15	17.52	
1990			MAY 21	16.68		OCT 16	16.95		MAR 28	17.45	
JAN 05	18.38		JUNE 04	16.50		NOV 20	17.17		APR 22	17.33	
24	18.37		JULY 10	16.32		DEC 14	17.30				
					WELL 11						
1985			1987			1988			1989		
APR 26	12.50		FEB 06	12.70		AUG 26	12.42		AUG 17	11.63	
MAY 24	12.31		MAR 19	12.53		SEPT 01	12.47		28	11.63	
JUNE 07	12.40		APR 27	12.39		12	12.53		DEC 06	10.98	
14	12.28		MAY 19	12.37		15	12.53		1990		
JULY 09	12.73		JUNE 30	12.74		20	12.58		JAN 05	11.12	
25	10.71		JULY 13	12.88		22	12.60		24	11.20	
AUG 15	12.98		24	12.95		OCT 19	12.71		FEB 27	11.22	
28	13.41		AUG 20	13.14		NOV 02	12.70		MAR 22	10.27	
SEPT 13	13.22		26	13.18		11	12.72		MAY 21	9.85	
NOV 21	13.62		SEPT 10	13.31		14	12.68		JUNE 04	9.93	
DEC 20	13.67		15	13.29		1989			JULY 10	10.12	
1986			22	13.39		JAN 10	12.58		30	10.31	
JAN 23	13.56		OCT 02	13.44		31	12.54		SEPT 24	11.03	
MAR 07	12.61		07	13.44		FEB 22	12.56		OCT 16	11.28	
27	12.44		NOV 06	13.55		MAR 08	12.39		NOV 20	11.51	
APR 14	12.29		1988			13	12.29		DEC 14	11.61	
MAY 22	12.10		JAN 08	13.45		APR 10	12.07		1991		
JULY 03	12.44		MAR 10	14.04		MAY 11	11.89		JAN 14	11.73	
SEPT 05	12.45		APR 13	12.72		17	11.91		FEB 15	11.75	
OCT 01	12.73		JULY 01	12.37		26	11.87		MAR 28	11.74	
08	12.76		19	12.46		JUNE 01	11.87		APR 22	11.76	
NOV 06	12.81		AUG 05	12.57		JULY 11	11.75				
28	12.82		16	12.50		31	11.65				
					WELL 12						
1985			1986			1987			1987		
APR 26	19.16		JAN 23	19.12		FEB 06	18.91		SEPT 22	24.99	
MAY 24	18.72		MAR 07	18.01		MAR 19	17.92		OCT 08	24.27	
JUNE 07	18.83		27	17.76		APR 27	18.09		NOV 06	22.57	
JULY 09	24.49		APR 14	17.44		MAY 19	20.83		1988		
AUG 15	25.98		MAY 22	18.92		JUNE 30	22.01		JAN 08	20.46	
28	26.25		JULY 03	22.00		JULY 13	23.27		MAR 01	19.29	
SEPT 13	25.99		AUG 26	26.53		24	24.57		10	19.04	
NOV 06	22.15		OCT 01	24.77		AUG 25	26.43		APR 13	18.56	
21	21.31		NOV 06	22.07		SEPT 09	25.40		JUNE 28	23.42	
DEC 20	20.20		28	21.01		16	25.19		JULY 19	25.76	

Table 4.--*Water levels in wells where water samples were obtained, 1985-91*--Continued

Date	Water level	S	Date	Water level	S	Date	Water level	S	Date	Water level	S
						WELL 12--Continued					
1988			1988			1989			1990		
JULY 24	24.57		NOV 10	24.05		JUNE 01	22.64		JUNE 04	24.68	
AUG 05	26.97		14	23.82		JULY 11	24.78		JULY 10	25.93	
16	29.16		1989			31		d	30	26.36	
26	29.79		JAN 10	21.73		AUG 17	26.90		SEPT 24	28.13	
SEPT 01	29.54		31	21.14		28	27.75		OCT 16	25.58	
10	29.54		FEB 22	20.83		DEC 06	22.69		NOV 20	23.78	
12	28.81		MAR 08	20.34		1990			DEC 14	22.98	
15	27.14		13	20.94		JAN 05	21.99		1991		
20	26.45		APR 10	19.70		24	21.59		JAN 14	22.21	
21	26.34		MAY 11	20.86		FEB 27	20.98		FEB 15	21.50	
OCT 19	25.76		17	20.58		MAR 22	20.41		MAR 28	20.79	
NOV 02	24.51		26	22.41		MAY 21	23.73		APR 22	21.39	
						WELL 13					
1985			1987			1988			1989		
APR 26	22.84		APR 27	23.72		SEPT 01	25.52		AUG 28	26.97	
MAY 24	22.92		MAY 19	23.60		15	25.65		DEC 06	27.52	
JUNE 07	23.06		JUNE 30	23.68		20	25.75		1990		
JULY 09	23.22		JULY 13	23.78		22	25.80		JAN 05	27.50	
AUG 15	23.56		24	23.87		OCT 19	26.07		24	27.39	
29	23.73		AUG 18	24.18		NOV 02	26.17		FEB 27	27.35	
SEPT 13	23.99		25	24.14		10	26.27		MAR 22	27.23	
NOV 21	24.46		SEPT 09	24.18		14	26.22		MAY 21	26.95	
1986			16	24.24		1989			JUNE 04	26.78	
JAN 23	24.44		22	24.30		JAN 10	26.38		JULY 10	26.85	
MAR 07	24.30		OCT 02	24.33		31	26.32		30	26.30	
27	24.29		08	24.30		FEB 22	26.50		SEPT 24	26.48	
APR 14	24.13		NOV 06	24.35		MAR 08	25.61		OCT 16	26.79	
MAY 22	23.53		1988			13	25.37		NOV 20	27.04	
JULY 03	23.23		JAN 08	24.61		APR 10	25.91		DEC 14	27.04	
AUG 26	22.88		MAR 10	24.59		MAY 11	25.84		1991		
OCT 01	23.43		APR 13	24.63		17	25.91		JAN 14	27.06	
NOV 06	23.79		JUNE 28	24.82		26	26.02		FEB 15	26.94	
28	23.90		JULY 19	24.79		JUNE 01	26.05		MAR 28	26.81	
1987			AUG 05	25.00		JULY 01	26.48		APR 22	26.67	
FEB 06	23.92		16	25.22		31	26.65				
MAR 19	23.75		26	25.29		AUG 17	26.84				

Table 4.--*Water levels in wells where water samples were obtained, 1985-91*--Continued

Date	Water level	S	Date	Water level	S	Date	Water level	S	Date	Water level	S
						WELL 14					
1985			1987			1988			1989		
APR 26	7.59		MAR 10	8.65		SEPT 01	9.36		AUG 17	10.89	
MAY 24	8.00		19	7.61		12	9.45		28	11.04	
JUNE 07	8.53		APR 27	8.20		15	9.40		DEC 06	10.43	
JULY 09	9.27		MAY 19	8.79		20	9.30		1990		
AUG 15	8.50		JUNE 30	9.37		22	9.29		JAN 05	10.33	
29	.75		JULY 13	9.31		OCT 19	9.40		24	10.27	
SEPT 13	8.82		24	10.29		NOV 02	9.44		FEB 27	10.14	
NOV 21	8.41		AUG 19	9.39		10	9.45		MAR 22	9.08	
1986			25	9.40		14	9.45		MAY 21	8.88	
JAN 23	8.25		SEPT 09	9.34		1989			JUNE 04	8.55	
FEB 06	7.86		16	9.35		JAN 10	9.44		JULY 10	8.14	
MAR 07	7.45		22	9.32		31	9.41		30	8.51	
27	7.53		OCT 02	9.35		FEB 22	9.48		SEPT 24	9.07	
APR 14	6.91		08	9.36		MAR 08	8.94		OCT 16	8.92	
MAY 22	7.88		NOV 06	9.37		13	8.72		NOV 20	8.68	
JULY 03	8.02		1988			APR 10	8.78		DEC 14	8.39	
AUG 26	8.20		APR 13	8.72		MAY 11	9.18		1991		
OCT 01	8.33		JUNE 28	9.29		17	9.27		JAN 14	8.70	
NOV 06	8.03		JULY 19	9.13	r	26	9.60		FEB 15	8.52	
28	7.92		AUG 05	9.16		JUNE 01	9.77		MAR 28	8.52	
1987			16	9.23		JULY 11	10.70		APR 22	8.65	
JAN 08	9.18		26	9.31		31	10.98				
						WELL 15					
1985			1986			1988			1989		
APR 26	5.05		NOV 28	4.90		AUG 16	6.32		JULY 31	7.94	
MAY 24	5.79		1987			26	6.09		AUG 17	7.92	
JUNE 07	6.52		MAR 19	5.13		SEPT 01	6.11		28	7.98	
14	6.97	r	APR 27	5.46		12	6.12		DEC 06	7.40	
14	6.88	r	MAY 19	6.22		15	6.10		1990		
JULY 09	7.38		JUNE 30	7.41		20	6.10		JAN 05	7.43	
AUG 15	6.62		JULY 13	7.49		22	6.11		24	7.36	
29	6.53		24	7.42		NOV 02	6.11		FEB 27	7.26	
SEPT 13	6.50		AUG 25	7.32		10	6.16		MAR 22	6.37	
NOV 21	6.38		SEPT 09	7.31		14	6.17		MAY 21	5.49	
DEC 20	6.36		16	7.30		1989			JUNE 04	4.63	
1986			22	7.32		JAN 10	6.47		JULY 10	4.66	
JAN 23	6.28		OCT 08	7.30		31	6.53		30	4.22	
FEB 06	4.16		NOV 06	7.32		FEB 22	6.67		SEPT 24	5.39	
MAR 07	5.19		1988			MAR 08	5.40		OCT 16	5.26	
27	5.13		JAN 08	7.40		13	5.83		NOV 20	5.15	
APR 14	4.65		19	6.08		APR 10	6.04		DEC 14	5.87	
MAY 22	4.98		MAR 10	6.81		MAY 11	6.40		1991		
JULY 03	6.40		APR 13	6.84		17	6.45		JAN 14	6.01	
AUG 26	4.22		JUNE 28	6.46		26	6.88		FEB 15	5.95	
OCT 01	4.52		JULY 19	6.29		JUNE 01	7.09		MAR 28	5.98	
NOV 06	4.79		AUG 05	6.16		JULY 11	7.96		APR 22	6.11	

Table 4.--*Water levels in wells where water samples were obtained, 1985-91*--Continued

Date	Water level	S	Date	Water level	S	Date	Water level	S	Date	Water level	S
						WELL 16					
1986			1989			1990			1991		
APR 14	10.80		MAY 11	14.05		FEB 27	14.26		JAN 14	15.52	
1988			17	13.28		MAR 22	13.65		FEB 15	14.90	
NOV 10	16.94		26	18.53		MAY 21	19.54		MAR 28	14.20	
1989			JUNE 01	17.15		JUNE 04	18.96		APR 22	15.38	
FEB 22	13.85		AUG 17	20.56		SEPT 24	22.10				
MAR 08	12.54		DEC 06	15.74		NOV 20	16.79				
APR 10	11.92					DEC 14	16.25				
						WELL 17					
1968											
DEC 23	68	r									
						WELL 18					
1964											
DEC 06	50	r									
						WELL 19					
1959											
MAR 17	110	r									
1989											
JULY 11	135.23	r									

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*

[µS/cm, microsiemens per centimeter; mg/L, milligrams per liter; °C, degrees Celsius; NO_2+NO_3, nitrite plus nitrate; --, no data available; µg/L, micrograms per liter; cols./100mL, colonies per 100 milliliters; tot rec, total recoverable; <, less than the detection limit for analytical method and sample dilution used; >, greater than]

Sample date	Specific conductance (µS/cm)	pH (units)	Residue at 105 °C, dissolved (mg/L)	Nitrogen, ammonia, dissolved (mg/L as N)	Nitrogen, nitrite, dissolved (mg/L as N)	Nitrogen, ammonia, +organic, dissolved (mg/L as N)	Nitrogen, NO_2+NO_3 dissolved (mg/L as N)	Phosphorus, ortho, dissolved (mg/L as P)	Hardness, total (mg/L as $CaCO_3$)
				WELL 1					
JUNE 1985									
13	3,900	7.8	4,270	0.660	0.060	6.1	0.360	<0.020	2,300
17	--	--	--	--	--	--	--	--	--
MAY 1986									
27	4,200	7.6	3,980	.200	.010	5.7	2.12	<.020	2,200
AUG									
29	6,500	7.5	4,660	.200	<.010	2.0	.390	<.020	2,400
APR 1987									
28	--	--	--	--	--	--	--	--	--
29	4,500	7.5	4,080	.200	.020	1.3	.040	<.020	2,200
JULY									
14	4,800	7.4	4,090	.200	<.010	1.8	.290	.030	2,400
SEPT									
15	3,800	7.2	3,720	<.100	<.010	1.8	.500	.050	2,200
16	--	--	--	--	--	--	--	--	--
MAR 1988									
15	2,430	7.8	2,020	<.100	.080	1.1	2.80	.080	1,200
JULY									
13	4,180	7.0	3,850	.200	<.010	2.2	.350	.020	2,300
MAR 1989									
15	--	--	--	--	--	--	--	--	--
16	1,780	7.5	1,520	<.100	<.020	1.0	3.83	<.020	890
JUNE									
02	3,520	7.5	3,380	<.200	.020	1.0	.580	.060	1,900
JULY									
18	3,600	7.4	3,280	<.100	<.020	1.4	.780	.080	1,900
AUG									
29	3,280	7.4	2,950	<.100	<.020	1.7	2.80	.070	1,800
JAN 1990									
25	--	--	--	--	--	--	--	--	--
26	4,020	7.5	4,140	<.100	<.020	1.4	.400	<.020	2,400
MAY									
22	3,000	7.5	2,620	<.100	<.020	1.6	.200	.110	1,500
JULY									
31	3,960	--	3,620	<.100	.020	5.2	1.20	.040	--

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	Calcium dissolved (mg/L as Ca)	Magnesium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)	Potassium, dissolved (mg/L as K)	Chloride, dissolved (mg/L as Cl)	Sulfate, dissolved (mg/L as SO_4)	Cadmium, dissolved (µg/L as Cd)	Chromium, dissolved (µg/L as Cr)
				WELL 1--Continued				
JUNE 1985								
13	380	330	360	30	91	2,400	--	--
17	--	--	--	--	--	--	--	--
MAY 1986								
27	430	280	330	11	60	2,300	0.3	<20
AUG								
29	420	320	400	8.0	73	2,300	.9	250
APR 1987								
28	--	--	--	--	--	--	--	--
29	400	290	300	11	87	2,300	1.2	<20
JULY								
14	420	340	350	10	80	2,300	1.5	<60
SEPT								
15	400	280	280	9.9	82	2,200	<.2	<20
16	--	--	--	--	--	--	--	--
MAR 1988								
15	250	130	150	25	67	920	.8	<20
JULY								
13	420	310	320	10	72	2,100	.7	<20
MAR 1989								
15	--	--	--	--	--	--	--	--
16	200	97	100	13	21	800	1.0	<20
JUNE								
02	400	220	150	8.0	67	1,700	<.2	<20
JULY								
18	390	220	220	12	60	1,800	.9	280
AUG								
29	360	210	240	11	85	1,500	.9	<20
JAN 1990								
26	--	--	--	--	97	2,400	--	--
MAY								
22	280	190	210	8.4	57	--	.1	<20
JULY								
31	--	--	--	--	63	5,200	--	--

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	Copper, dissolved (µg/L as Cu)	Iron, dissolved (µg/L as Fe)	Lead, dissolved (µg/L as Pb)	Manganese, dissolved (µg/L as Mn)	Nickel, dissolved (µg/L as Ni)	Zinc, dissolved (µg/L as Zn)	Coliform, fecal (col./100 mL)	Streptococci, fecal (col./100 mL)
				WELL 1--Continued				
JUNE 1985								
13	--	30	--	--	--	30	--	--
17	--	--	--	--	--	--	<10	13
MAY 1986								
27	<20	<50	<10	<530	<60	20	--	--
AUG								
29	<100	1,800	<250	800	250	550	--	--
APR 1987								
28	--	--	--	--	--	--	<1	2
29	<20	290	<50	420	50	<20	--	--
JULY								
14	<60	<200	<10	430	60	<60	<2	30
SEPT								
15	<20	350	<10	380	90	20	--	--
16	--	--	--	--	--	--	--	<2
MAR 1988								
15	<20	<50	<10	150	<20	40	--	--
JULY								
13	<20	<50	<10	<20	<20	20	<10	<10
MAR 1989								
15	--	--	--	--	--	--	<2	50
16	<20	<50	<10	<20	<20	90	--	--
JUNE								
02	<20	<100	<10	<40	<20	<20	<2	190
JULY								
18	80	450	<10	90	100	980	<30	90
AUG								
29	<20	<50	<10	100	60	50	4	11
JAN 1990								
25	--	--	--	--	--	--	<20	24
26	--	--	--	--	--	--	--	--
MAY								
22	<20	<50	<10	100	<20	<20	<20	1
JULY								
31	--	--	--	--	--	--	--	--

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	Specific conductance (µS/cm)	pH (units)	Residue at 105 °C, dissolved (mg/L)	Nitrogen, ammonia, dissolved (mg/L as N)	Nitrogen, nitrite, dissolved (mg/L as N)	Nitrogen, ammonia, +organic, dissolved (mg/L as N)	Nitrogen, NO_2+NO_3 dissolved (mg/L as N)	Phosphorus, ortho, dissolved (mg/L as P)	Hardness, total (mg/L as $CaCO_3$)	Calcium, dissolved (mg/L as Ca)
					WELL 2					
JUNE 1985										
13	5,500	7.8	6,200	0.720	1.72	8.3	4.45	0.040	2,200	380
17	--	--	--	--	--	--	--	--	--	--
AUG										
29	--	--	--	--	--	--	--	--	--	--
30	7,100	6.9	7,300	1.40	.020	6.0	.350	.200	3,200	490
MAY 1986										
27	3,900	7.6	3,420	3.80	2.48	6.0	10.5	<.020	1,900	330
AUG										
28	--	--	--	--	--	--	--	--	--	--
29	6,500	7.3	5,640	1.20	.330	3.8	13.8	<.020	2,500	370
APR 1987										
28	--	--	--	--	--	--	--	--	--	--
29	3,400	7.7	3,130	.200	.020	1.1	14.0	<.020	1,900	320
JULY										
14	3,100	7.4	2,960	<.100	.040	1.8	27.0	.050	1,700	270
SEPT										
15	3,900	7.3	4,310	.300	<.010	1.3	11.7	.030	2,200	380
16	--	--	--	--	--	--	--	--	--	--
MAR 1988										
15	3,050	7.4	2,950	<.100	<.020	.90	6.10	.020	1,600	260
17	--	--	--	--	--	--	--	--	--	--
JULY										
13	3,780	7.3	3,380	.100	.010	1.5	21.5	<.020	1,800	270
SEPT										
02	--	--	--	--	--	--	--	--	--	--
23	4,480	7.3	4,330	<.100	.060	.60	4.80	<.020	2,000	340
MAR 1989										
15	--	--	--	--	--	--	--	--	--	--
JUNE										
02	6,440	7.6	--	<.200	.060	1.5	.610	<.020	2,800	400
JULY										
18	4,350	7.5	3,080	<.100	<.020	.50	7.30	.030	1,500	280
AUG										
29	3,450	7.5	3,580	<.100	<.020	1.6	6.20	.020	1,700	270
JAN 1990										
25	--	--	--	--	--	--	--	--	--	--
26	4,110	7.5	3,730	<.100	<.020	.70	5.20	<.020	1,900	--
JULY										
31	3,470	7.5	2,890	<.100	<.020	5.8	12.2	<.020	1,400	230
SEPT										
25	4,610	7.5	3,410	<.100	.050	.50	23.3	<.020	1,300	210
JAN 1991										
24	--	--	--	--	--	--	--	--	--	--
25	4,430	7.5	4,100	<.100	.030	1.2	1.10	.190	1,600	270

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	Magnesium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)	Potassium, dissolved (mg/L as K)	Chloride, dissolved (mg/L as Cl)	Sulfate, dissolved (mg/L as SO_4)	Cadmium, dissolved (µg/L as Cd)	Chromium, dissolved (µg/L as Cr)	Copper, dissolved (µg/L as Cu)	Iron, dissolved (µg/L as Fe)	Lead, dissolved (µg/L as Pb)	Manganese, dissolved (µg/L as Mn)
					WELL 2--Continued						
JUNE 1985											
13	310	740	29	190	3,000	--	--	--	2,100	--	--
17	--	--	--	--	--	--	--	--	--	--	--
AUG											
29	--	--	--	--	--	--	--	--	--	--	--
30	480	1,200	18	300	3,800	<0.1	<20	<20	5,700	<10	3,900
MAY 1986											
27	260	320	10	110	1,800	.3	<20	<20	<50	<10	<560
AUG											
28	--	--	--	--	--	--	--	--	--	--	--
29	380	660	10	150	3,000	.9	100	<100	1,900	<250	830
APR 1987											
28	--	--	--	--	--	--	--	--	--	--	--
29	260	270	5.0	83	1,700	.7	<20	<20	<50	50	60
JULY											
14	240	270	6.3	76	1,500	.5	--	<40	<100	<10	90
SEPT											
15	300	500	8.8	100	2,500	.4	--	<20	430	<10	400
16	--	--	--	--	--	--	--	--	--	--	--
MAR 1988											
15	220	310	5.3	68	1,600	.2	--	<20	<50	<10	90
17	--	--	--	--	--	--	--	--	--	--	--
JULY											
13	270	390	6.9	75	1,900	--	<20	<20	100	<10	160
SEPT											
02	--	--	--	--	--	--	--	--	--	--	--
23	270	490	9.0	95	2,500	.6	<20	<20	<50	<10	--
MAR 1989											
15	--	--	--	--	--	--	--	--	--	--	--
JUNE											
02	430	850	9.0	150	2,800	<.2	<20	<20	50	<10	350
JULY											
18	200	340	6.0	76	1,600	.6	60	<20	180	<10	70
AUG											
29	240	250	7.0	64	1,700	.7	<20	<20	<50	<10	110
JAN 1990											
25	--	--	--	--	--	--	--	--	--	--	--
26	--	--	--	98	2,300	--	--	--	--	--	--
JULY											
31	200	360	6.8	120	1,500	.2	<40	<40	<100	<10	50
SEPT											
25	190	350	6.6	110	1,700	.5	<40	<40	340	<10	60
JAN 1991											
24	--	--	--	--	--	--	--	--	--	--	--
25	220	490	5.8	110	2,200	.3	<20	<20	430	<10	160

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	Nickel, dissolved (µg/L as Ni)	Zinc, dissolved (µg/L as Zn)	Coliform, fecal (col./100 mL)	Streptococci, fecal (col./100 mL)	Dichlorobromomethane, total (µg/L)	Carbon tetrachloride, total (µg/L)	1,2-dichloroethane, total (µg/L)	Bromoform, total (µg/L)	Chlorodibromomethane, total (µg/L)	Chloroform, total (µg/L)
				WELL 2--Continued						
JUNE 1985										
13	--	10	--	--	--	--	--	--	--	--
17	--	--	<1	<1	--	--	--	--	--	--
AUG										
29	--	--	<20	230	--	--	--	--	--	--
30	260	20	--	--	--	--	--	--	--	--
MAY 1986										
27	<70	80	<1	<1	--	--	--	--	--	--
AUG										
28	--	--	3	760	--	--	--	--	--	--
29	150	150	--	--	--	--	--	--	--	--
APR 1987										
28	--	--	<1	9	--	--	--	--	--	--
29	50	50	--	--	--	--	--	--	--	--
JULY										
14	40	40	<2	<2	--	--	--	--	--	--
SEPT										
15	90	<20	--	--	--	--	--	--	--	--
16	--	--	<2	2,800	--	--	--	--	--	--
MAR 1988										
15	40	<20	--	--	--	--	--	--	--	--
17	--	--	<2	23	--	--	--	--	--	--
JULY										
13	50	40	<2	<2	--	--	--	--	--	--
SEPT										
02	--	--	--	--	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
23	40	30	<2	<12	--	--	--	--	--	--
MAR 1989										
15	--	--	--	--	--	--	--	--	--	--
JUNE										
02	30	50	--	--	--	--	--	--	--	--
JULY										
18	60	150	<30	40	--	--	--	--	--	--
AUG										
29	40	40	<2	<2	--	--	--	--	--	--
JAN 1990										
25	--	--	<20	18	--	--	--	--	--	--
26	--	--	--	--	--	--	--	--	--	--
JULY										
31	40	<40	<20	<20	--	--	--	--	--	--
SEPT										
25	<40	<40	<20	4	--	--	--	--	--	--
JAN 1991										
24	--	--	<20	10	--	--	--	--	--	--
25	50	<20	--	--	--	--	--	--	--	--

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	Toluene, total (µg/L)	Benzene, total (µg/L)	Chloro-benzene, total (µg/L)	Chloro-ethane, total (µg/L)	Ethyl-benzene, total (µg/L)	Methyl-bromide, total (µg/L)	Methyl-chloride, total (µg/L)	Methyl-ene chlo-ride, total (µg/L)	Tetra-chloro-ethyl-ene, total (µg/L)	Tri-chloro-fluoro-methane, total (µg/L)
					WELL 2--Continued					
JUNE 1985										
13	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--
AUG										
29	--	--	--	--	--	--	--	--	--	--
30	--	--	--	--	--	--	--	--	--	--
MAY 1986										
27	--	--	--	--	--	--	--	--	--	--
AUG										
28	--	--	--	--	--	--	--	--	--	--
29	--	--	--	--	--	--	--	--	--	--
APR 1987										
28	--	--	--	--	--	--	--	--	--	--
29	--	--	--	--	--	--	--	--	--	--
JULY										
14	--	--	--	--	--	--	--	--	--	--
SEPT										
15	--	--	--	--	--	--	--	--	--	--
16	--	--	--	--	--	--	--	--	--	--
MAR 1988										
15	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--
JULY										
13	--	--	--	--	--	--	--	--	--	--
SEPT										
02	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
23	--	--	--	--	--	--	--	--	--	--

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	1,1-dichloroethane, total (µg/L)	1,1-dichloroethylene, total (µg/L)	1,1,1-trichloroethane, total (µg/L)	1,1,2-trichloroethane, total (µg/L)	1,1,2,2 tetrachloroethane, total (µg/L)	1,2-dichlorobenzene, total (µg/L)	1,2-dichloropropane, total (µg/L)	Trans-1,2-dichloroethane, total (µg/L)	1,3-dichloropropene, total (µg/L)	1,3-dichlorobenzene, total (µg/L)
					WELL 2--Continued					
JUNE 1985										
13	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--
AUG										
29	--	--	--	--	--	--	--	--	--	--
30	--	--	--	--	--	--	--	--	--	--
MAY 1986										
27	--	--	--	--	--	--	--	--	--	--
AUG										
28	--	--	--	--	--	--	--	--	--	--
29	--	--	--	--	--	--	--	--	--	--
APR 1987										
28	--	--	--	--	--	--	--	--	--	--
29	--	--	--	--	--	--	--	--	--	--
JULY										
14	--	--	--	--	--	--	--	--	--	--
SEPT										
15	--	--	--	--	--	--	--	--	--	--
16	--	--	--	--	--	--	--	--	--	--
MAR 1988										
15	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--
JULY										
13	--	--	--	--	--	--	--	--	--	--
SEPT										
02	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
23	--	--	--	--	--	--	--	--	--	--

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	1,4,-dichlorobenzene, total (µg/L)	2-chloroethylvinylether, total (µg/L)	Dichlorodifluoromethane, total (µg/L)	Trans-1,3-dichloropropene, total (µg/L)	Cis-1,3-dichloropropene, total (µg/L)	Vinyl chloride, total (µg/L)	Trichloroethylene, total (µg/L)	Styrene, total (µg/L)	1,2-dibromoethane, total (µg/L)	Xylene, total tot rec (µg/L)
					WELL 2--Continued					
JUNE 1985										
13	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--
AUG										
29	--	--	--	--	--	--	--	--	--	--
30	--	--	--	--	--	--	--	--	--	--
MAY 1986										
27	--	--	--	--	--	--	--	--	--	--
AUG										
28	--	--	--	--	--	--	--	--	--	--
29	--	--	--	--	--	--	--	--	--	--
APR 1987										
28	--	--	--	--	--	--	--	--	--	--
29	--	--	--	--	--	--	--	--	--	--
JULY										
14	--	--	--	--	--	--	--	--	--	--
SEPT										
15	--	--	--	--	--	--	--	--	--	--
16	--	--	--	--	--	--	--	--	--	--
MAR 1988										
15	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--
JULY										
13	--	--	--	--	--	--	--	--	--	--
SEPT										
02	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
23	--	--	--	--	--	--	--	--	--	--
23	--	--	--	--	--	--	--	--	--	--

WELL 3 destroyed before sampling could be initiated

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	Specific conductance (µS/cm)	pH (units)	Residue at 105 °C, dissolved (mg/L)	Nitrogen, ammonia, dissolved (mg/L as N)	Nitrogen, nitrite, dissolved (mg/L as N)	Nitrogen, ammonia, +organic, dissolved (mg/L as N)	Nitrogen, NO_2+NO_3 dissolved (mg/L as N)	Phosphorus, ortho, dissolved (mg/L as P)	Hardness, total (mg/L as $CaCO_3$)	Calcium, dissolved (mg/L as Ca)
					WELL 4					
JUNE 1985										
14	--	--	986	0.330	0.040	7.8	18.3	0.020	560	110
20	--	--	--	--	--	--	--	--	--	--
AUG										
30	1,650	7.4	1,110	.100	<.010	.90	22.2	.020	600	130
MAY 1986										
27	1,200	7.7	796	<.100	<.010	.60	7.15	<.020	410	86
APR 1987										
28	--	--	--	--	--	--	--	--	--	--
29	1,400	7.6	980	<.100	<.010	.70	4.50	<.20	450	96
JULY										
15	2,100	7.3	1,500	<.100	<.020	.90	30.0	.060	720	150
SEPT										
16	2,850	7.2	1,790	<.100	<.010	.80	29.0	.080	950	200
MAR 1988										
15	2,850	7.3	1,960	<.100	<.020	1.4	54.0	.040	1,100	230
17	--	--	--	--	--	--	--	--	--	--
JULY										
13	--	--	--	--	--	--	--	--	--	--
15	2,940	6.8	2,240	<.100	<.010	2.3	4.00	.030	1,200	250
SEPT										
02	--	--	--	--	--	--	--	--	--	--
22	3,170	7.2	2,210	.100	.020	1.4	92.0	.060	1,100	250
23	--	--	--	--	--	--	--	--	--	--
MAR 1989										
16	3,470	7.1	2,390	<.100	<.020	1.0	56.0	<.020	1,300	270
JUNE										
01	--	--	--	--	--	--	--	--	--	--
02	3,470	7.3	2,610	<.200	<.020	.60	53.2	.060	1,300	270
JULY										
18	3,600	7.4	2,610	<.100	<.020	1.1	64.2	.030	1,300	270
AUG										
29	3,500	7.3	2,570	<.100	<.020	1.8	53.5	.080	1,300	290
JAN 1990										
26	3,540	--	2,560	<.100	<.020	1.3	28.8	<.020	1,200	260
MAY										
22	3,700	7.2	2,720	<.100	<.020	1.3	85.3	.060	1,300	290
JULY										
31	3,860	7.2	2,640	<.100	<.020	6.0	144	.020	1,400	300
AUG										
03	--	--	--	--	--	--	--	--	--	--
SEPT										
25	3,780	7.3	3,170	<.100	.030	1.5	178	<.020	1,400	300
NOV										
16	--	--	--	--	--	--	150	--	--	--
JAN 1991										
24	--	--	--	--	--	--	--	--	--	--
25	3,800	7.3	2,700	<.100	<.020	1.7	119	<.020	1,200	270

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	Magnesium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)	Potassium, dissolved (mg/L as K)	Chloride, dissolved (mg/L as Cl)	Sulfate, dissolved (mg/L as SO_4)	Cadmium, dissolved (µg/L as Cd)	Chromium, dissolved (µg/L as Cr)	Copper, dissolved (µg/L as Cu)	Iron, dissolved (µg/L as Fe)	Lead, dissolved (µg/L as Pb)	Manganese, dissolved (µg/L as Mn)
					WELL 4--Continued						
JUNE 1985											
14	68	130	4.6	180	180	--	--	--	<50	--	--
20	--	--	--	--	--	--	--	--	--	--	--
AUG											
30	67	140	2.8	200	220	0.4	<20	10	50	<10	10
MAY 1986											
27	47	110	2.0	99	200	.3	<20	<20	<50	<10	<20
APR 1987											
28	--	--	--	--	--	--	--	--	--	--	--
29	51	120	1.8	100	250	.4	<20	<20	<50	<50	<20
JULY											
15	82	170	2.6	290	320	.5	<20	<20	<50	<10	<20
SEPT											
16	110	180	3.0	350	400	.7	--	<20	<50	<10	<20
MAR 1988											
15	120	200	3.3	360	550	.3	<20	<20	<50	<10	<20
17	--	--	--	--	--	--	--	--	--	--	--
JULY											
13	--	--	--	--	--	--	--	--	--	--	--
15	130	240	3.6	450	620	.3	20	<20	50	<10	<20
SEPT											
02	--	--	--	--	--	--	--	--	--	--	--
22	120	250	2.8	400	520	3.9	<20	<20	<50	<10	--
23	--	--	--	--	--	--	--	--	--	--	--
MAR 1989											
16	140	270	3.2	470	680	.5	<20	<20	<50	<10	<20
JUNE											
01	--	--	--	--	--	--	--	--	--	--	--
02	150	300	3.6	550	670	<.2	<40	<40	<100	<10	<40
JULY											
18	150	280	2.6	490	660	.9	60	<20	160	<10	<20
AUG											
29	150	350	3.6	480	690	.8	<20	<20	<50	<10	<20
JAN 1990											
26	140	290	3.3	410	660	.4	<200	<200	<500	<10	<200
MAY											
22	150	260	3.3	260	--	.3	<20	<20	<50	<10	<20
JULY											
31	160	310	4.0	430	730	.4	<40	<40	<100	<10	<40
AUG											
03	--	--	--	--	--	--	--	--	--	--	--
SEPT											
25	160	340	1.4	310	570	.6	<40	<40	<100	<10	<40
NOV											
16	--	--	--	--	--	--	--	--	--	--	--
JAN 1991											
24	--	--	--	--	--	--	--	--	--	--	--
25	140	300	2.6	360	490	.3	<20	<20	<50	<10	<20

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	Nickel, dissolved (µg/L as Ni)	Zinc, dissolved (µg/L as Zn)	Coliform, fecal (col./100 mL)	Streptococci, fecal (col./100 mL)	Dichlorobromomethane, total (µg/L)	Carbon tetrachloride, total (µg/L)	1,2-dichloroethane, total (µg/L)	Bromoform, total (µg/L)	Chlorodibromomethane, total (µg/L)	Chloroform, total (µg/L)
				WELL 4--Continued						
JUNE 1985										
14	--	20	--	--	--	--	--	--	--	--
20	--	--	<1	27	--	--	--	--	--	--
AUG										
30	30	90	<1	5	--	--	--	--	--	--
MAY 1986										
27	<20	<20	<1	<1	--	--	--	--	--	--
APR 1987										
28	--	--	3	<6	--	--	--	--	--	--
29	<20	20	--	--	--	--	--	--	--	--
JULY										
15	20	<20	<2	170	--	--	--	--	--	--
SEPT										
16	40	<20	--	<2	--	--	--	--	--	--
MAR 1988										
15	<20	<20	--	--	--	--	--	--	--	--
17	--	--	<2	<2	--	--	--	--	--	--
JULY										
13	--	--	<2	<2	--	--	--	--	--	--
15	20	<40	--	--	--	--	--	--	--	--
SEPT										
02	--	--	--	--	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
22	20	<20	--	--	--	--	--	--	--	--
23	--	--	<2	<2	--	--	--	--	--	--
MAR 1989										
16	20	30	--	--	--	--	--	--	--	--
JUNE										
01	--	--	<2	50	--	--	--	--	--	--
02	<20	<20	--	--	--	--	--	--	--	--
JULY										
18	40	270	<2	<2	--	--	--	--	--	--
AUG										
29	40	120	<2	9	--	--	--	--	--	--
JAN 1990										
26	<200	1,000	<20	<20	--	--	--	--	--	--
MAY										
22	<20	<20	<20	1	--	--	--	--	--	--
JULY										
31	30	<40	<20	<20	--	--	--	--	--	--
AUG										
03	--	--	--	--	--	--	--	--	--	--
SEPT										
25	<40	<40	<20	5	--	--	--	--	--	--
NOV										
16	--	--	--	--	--	--	--	--	--	--
JAN 1991										
24	--	--	<20	5	--	--	--	--	--	--
25	30	<20	--	--	--	--	--	--	--	--

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	Toluene, total (µg/L)	Benzene, total (µg/L)	Chloro-benzene, total (µg/L)	Chloro-ethane, total (µg/L)	Ethyl-benzene, total (µg/L)	Methyl-bromide, total (µg/L)	Methyl-chloride, total (µg/L)	Methyl-ene chlo-ride, total (µg/L)	Tetra-chloro-ethyl-ene, total (µg/L)	Tri-chloro-fluoro-methane, total (µg/L)
					WELL 4--Continued					
JUNE 1985										
14	--	--	--	--	--	--	--	--	--	--
20	--	--	--	--	--	--	--	--	--	--
AUG										
30	--	--	--	--	--	--	--	--	--	--
MAY 1986										
27	--	--	--	--	--	--	--	--	--	--
APR 1987										
28	--	--	--	--	--	--	--	--	--	--
29	--	--	--	--	--	--	--	--	--	--
JULY										
15	--	--	--	--	--	--	--	--	--	--
SEPT										
16	--	--	--	--	--	--	--	--	--	--
MAR 1988										
15	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--
JULY										
13	--	--	--	--	--	--	--	--	--	--
15	--	--	--	--	--	--	--	--	--	--
SEPT										
02	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
22	--	--	--	--	--	--	--	--	--	--
23	--	--	--	--	--	--	--	--	--	--

Sample date	1,1-di-chloro-ethane, total (µg/L)	1,1-di-chloro-ethyl-ene, total (µg/L)	1,1,1-tri-chloro-ethane, total (µg/L)	1,1,2-tri-chloro-ethane, total (µg/L)	1,1,2,2 tetra-chloro-ethane, total (µg/L)	1,2-di-chloro-benzene, total (µg/L)	1,2-di-chloro-propane, total (µg/L)	Trans-1,2-di-chloro-ethane, total (µg/L)	1,3-di-chloro-propene, total (µg/L)	1,3-di-chloro-benzene, total (µg/L)
JUNE 1985										
14	--	--	--	--	--	--	--	--	--	--
20	--	--	--	--	--	--	--	--	--	--
AUG										
30	--	--	--	--	--	--	--	--	--	--
MAY 1986										
27	--	--	--	--	--	--	--	--	--	--
APR 1987										
28	--	--	--	--	--	--	--	--	--	--
29	--	--	--	--	--	--	--	--	--	--
JULY										
15	--	--	--	--	--	--	--	--	--	--
SEPT										
16	--	--	--	--	--	--	--	--	--	--
MAR 1988										
15	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--
JULY										
13	--	--	--	--	--	--	--	--	--	--
15	--	--	--	--	--	--	--	--	--	--
SEPT										
02	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
22	--	--	--	--	--	--	--	--	--	--
23	--	--	--	--	--	--	--	--	--	--

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	1,4,-di-chloro-benzene, total (µg/L)	2-chloro-ethyl-vinyl-ether, total (µg/L)	Dichloro-difluoro-methane, total (µg/L)	Trans-1,3-di-chloro-propene, total (µg/L)	Cis-1,3-di-chloro-propene, total (µg/L)	Vinyl chloride, total (µg/L)	Tri-chloro-ethylene, total (µg/L)	Styrene, total (µg/L)	Xylene, total tot rec (µg/L)
				WELL 4--Continued					
JUNE 1985									
14	--	--	--	--	--	--	--	--	--
20	--	--	--	--	--	--	--	--	--
AUG									
30	--	--	--	--	--	--	--	--	--
MAY 1986									
27	--	--	--	--	--	--	--	--	--
APR 1987									
28	--	--	--	--	--	--	--	--	--
29	--	--	--	--	--	--	--	--	--
JULY									
15	--	--	--	--	--	--	--	--	--
SEPT									
16	--	--	--	--	--	--	--	--	--
MAR 1988									
15	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--
JULY									
13	--	--	--	--	--	--	--	--	--
15	--	--	--	--	--	--	--	--	--
SEPT									
02	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
22	--	--	--	--	--	--	--	--	--
23	--	--	--	--	--	--	--	--	--

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	Specific conductance (µS/cm)	pH (units)	Residue at 105 °C, dissolved (mg/L)	Nitrogen, ammonia, dissolved (mg/L as N)	Nitrogen, nitrite, dissolved (mg/L as N)	Nitrogen, ammonia, +organic, dissolved (mg/L as N)	Nitrogen, NO_2+NO_3 dissolved (mg/L as N)	Phosphorus, ortho, dissolved (mg/L as P)	Hardness, total (mg/L as $CaCO_3$)	Calcium, dissolved (mg/L as Ca)
					WELL 5					
SEPT 1987										
15	2,500	7.5	2,040	0.200	3.20	1.0	4.20	<0.020	1,000	250
16	--	--	--	--	--	--	--	--	--	--
MAR 1988										
15	2,450	7.3	2,120	<.100	.110	.70	7.50	.100	960	220
17	--	--	--	--	--	--	--	--	--	--
JULY										
22	2,600	7.5	2,170	.200	.250	1.2	6.80	.080	1,000	230
SEPT										
02	--	--	--	--	--	--	--	--	--	--
23	2,550	7.6	1,910	<.100	.190	<.30	12.4	<.020	1,000	230
MAR 1989										
15	--	--	--	--	--	--	--	--	--	--
16	2,870	7.4	--	--	--	--	--	--	950	220
JUNE										
02	2,430	7.6	2,190	<.200	.030	<.30	12.0	.070	1,000	240
JULY										
18	2,820	7.6	2,260	<.100	.060	<.30	11.7	<.020	1,100	260
AUG										
29	2,900	7.6	--	<.100	.020	1.2	13.3	.020	1,000	240
JAN 1990										
25	2,860	7.2	2,220	<.100	.030	1.0	12.6	.050	1,100	220
26	--	--	--	--	--	--	--	--	--	--
MAY										
22	3,100	7.5	2,450	<.100	<.020	.90	14.0	.080	1,100	250
JULY										
31	3,160	7.5	2,490	<.100	<.020	.80	17.3	<.020	1,200	260
SEPT										
25	3,130	7.4	2,600	<.100	<.020	1.1	16.0	<.020	1,200	270
JAN 1991										
24	3,300	7.6	2,700	<.100	<.020	.80	19.0	.170	1,200	260

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	Magnesium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)	Potassium, dissolved (mg/L as K)	Chloride, dissolved (mg/L as Cl)	Sulfate, dissolved (mg/L as SO_4)	Cadmium, dissolved (µg/L as Cd)	Chromium, dissolved (µg/L as Cr)	Copper, dissolved (µg/L as Cu)	Iron, dissolved (µg/L as Fe)	Lead, dissolved (µg/L as Pb)	Manganese, dissolved (µg/L as Mn)
					WELL 5--Continued						
SEPT 1987											
15	97	240	11	170	890	0.4	<20	<20	<50	<10	1,500
16	--	--	--	--	--	--	--	--	--	--	--
MAR 1988											
15	100	230	7.4	180	1,000	--	<20	<20	<50	10	2,700
17	--	--	--	--	--	--	--	--	--	--	--
JULY											
22	100	250	5.8	180	1,100	.4	<20	<20	<50	<10	1,300
SEPT											
02	--	--	--	--	--	--	--	--	--	--	--
23	100	240	5.1	160	930	.3	<20	<20	<50	<10	--
MAR 1989											
15	--	--	--	--	--	--	--	--	--	--	--
16	98	220	4.0	--	--	.6	<20	<20	<50	<10	910
JUNE											
02	100	260	4.5	180	1,100	<.2	<20	<20	<50	<10	1,200
JULY											
18	110	260	4.6	180	1,000	.4	50	<20	<50	<10	710
AUG											
29	110	230	4.0	180	1,100	<.2	<20	<20	<50	<10	750
JAN 1990											
25	120	270	3.8	200	1,100	.3	<200	<200	<500	<10	40
26	--	--	--	--	--	--	--	--	--	--	--
MAY											
22	120	270	3.5	200	--	.2	<20	<20	<50	<10	180
JULY											
31	130	300	3.6	210	1,200	.3	<40	<40	<100	<10	50
SEPT											
25	130	310	4.2	200	1,100	.3	<40	<40	<100	<10	<40
JAN 1991											
24	130	300	3.6	210	1,100	.4	<20	<20	60	<10	<20

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	Nickel, dissolved (µg/L as Ni)	Zinc, dissolved (µg/L as Zn)	Coliform, fecal (col./100 mL)	Streptococci, fecal (col./100 mL)	Dichlorobromomethane, total (µg/L)	Carbon tetrachloride, total (µg/L)	1,2-dichloroethane, total (µg/L)	Bromoform, total (µg/L)	Chlorodibromomethane, total (µg/L)	Chloroform, total (µg/L)
				WELL 5--Continued						
SEPT 1987										
15	40	<20	--	--	--	--	--	--	--	--
16	--	--	--	<2	--	--	--	--	--	--
MAR 1988										
15	30	<20	--	--	--	--	--	--	--	--
17	--	--	<2	<2	--	--	--	--	--	--
JULY										
22	30	<20	--	--	--	--	--	--	--	--
SEPT										
02	--	--	--	--	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
23	<20	40	<2	<2	--	--	--	--	--	--
MAR 1989										
15	--	--	<2	9	--	--	--	--	--	--
16	<20	40	--	--	--	--	--	--	--	--
JUNE										
02	<20	<20	<2	2	--	--	--	--	--	--
JULY										
18	60	80	<30	40	--	--	--	--	--	--
AUG										
29	<20	<20	<20	230	--	--	--	--	--	--
JAN 1990										
25	<200	500	--	--	--	--	--	--	--	--
26	--	--	<20	<20	--	--	--	--	--	--
MAY										
22	<20	<20	<20	<20	--	--	--	--	--	--
JULY										
31	30	30	<20	<20	--	--	--	--	--	--
SEPT										
25	<40	<40	<20	<20	--	--	--	--	--	--
JAN 1991										
24	20	<20	<20	<20	--	--	--	--	--	--

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	Toluene, total (µg/L)	Benzene, total (µg/L)	Chloro-benzene, total (µg/L)	Chloro-ethane, total (µg/L)	Ethyl-benzene, total (µg/L)	Methyl-bromide, total (µg/L)	Methyl-chloride, total (µg/L)	Methyl-ene chlo-ride, total (µg/L)	Tetra-chloro-ethyl-ene, total (µg/L)	Tri-chloro-fluoro-methane, total (µg/L)
				WELL 5--Continued						
SEPT 1987										
15	--	--	--	--	--	--	--	--	--	--
16	--	--	--	--	--	--	--	--	--	--
MAR 1988										
15	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--
JULY										
22	--	--	--	--	--	--	--	--	--	--
SEPT										
02	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
23	--	--	--	--	--	--	--	--	--	--

Sample date	1,1-di-chloro-ethane, total (µg/L)	1,1-di-chloro-ethyl-ene, total (µg/L)	1,1,1-tri-chloro-ethane, total (µg/L)	1,1,2-tri-chloro-ethane, total (µg/L)	1,1,2,2 tetra-chloro-ethane, total (µg/L)	1,2-di-chloro-benzene, total (µg/L)	1,2-di-chloro-propane, total (µg/L)	Trans-1,2-di-chloro-ethane, total (µg/L)	1,3-di-chloro-propene, total (µg/L)	1,3-di-chloro-benzene, total (µg/L)
SEPT 1987										
15	--	--	--	--	--	--	--	--	--	--
16	--	--	--	--	--	--	--	--	--	--
MAR 1988										
15	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--
JULY										
22	--	--	--	--	--	--	--	--	--	--
SEPT										
02	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
23	--	--	--	--	--	--	--	--	--	--

Sample date	1,4,-di-chloro-benzene, total (µg/L)	2-chloro-ethyl-vinyl-ether, total (µg/L)	Dichloro-difluoro-methane, total (µg/L)	Trans-1,3-di-chloro-propene, total (µg/L)	Cis-1,3-di-chloro-propene, total (µg/L)	Vinyl chloride, total (µg/L)	Tri-chloro-ethylene, total (µg/L)	Styrene, total (µg/L)	Xylene, total tot rec (µg/L)
SEPT 1987									
15	--	--	--	--	--	--	--	--	--
16	--	--	--	--	--	--	--	--	--
MAR 1988									
15	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--
JULY									
22	--	--	--	--	--	--	--	--	--
SEPT									
02	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
23	--	--	--	--	--	--	--	--	--

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	Specific conductance (µS/cm)	pH (units)	Residue at 105 °C, dissolved (mg/L)	Nitrogen, ammonia, dissolved (mg/L as N)	Nitrogen, nitrite, dissolved (mg/L as N)	Nitrogen, ammonia, +organic, dissolved (mg/L as N)	Nitrogen, NO_2+NO_3 dissolved (mg/L as N)	Phosphorus, ortho, dissolved (mg/L as P)	Hardness, total (mg/L as $CaCO_3$)
				WELL 6					
JUNE 1985									
13	2,400	8.7	1,860	0.110	3.25	1.8	26.6	<0.020	510
17	--	--	--	--	--	--	--	--	--
AUG									
29	--	--	--	--	--	--	--	--	--
30	1,710	8.5	1,210	.200	.190	.80	33.0	<.020	260
MAY 1986									
27	6,500	8.1	5,420	<.100	<.010	.60	7.73	<.020	1,800
AUG									
28	--	--	--	--	--	--	--	--	--
29	7,000	7.3	5,790	<.100	<.010	.90	5.18	<.020	1,500
APR 1987									
28	--	--	--	--	--	--	--	--	--
29	6,000	7.6	5,160	<.100	<.010	.80	4.50	<.020	1,800
JULY									
14	4,990	7.4	5,150	<.100	<.010	1.3	4.59	<.020	1,800
SEPT									
15	5,200	7.5	4,530	.200	<.010	1.0	5.20	<.020	1,500
16	--	--	--	--	--	--	--	--	--
MAR 1988									
15	5,600	7.3	4,700	<.100	<.020	.40	4.40	.020	1,500
17	--	--	--	--	--	--	--	--	--
JULY									
13	--	--	--	--	--	--	--	--	--
14	5,410	7.4	4,450	<.100	<.010	.70	4.20	<.020	1,600
SEPT									
23	5,180	7.4	4,220	<.100	<.020	.40	.760	<.020	1,500
MAR 1989									
15	--	--	--	--	--	--	--	--	--
16	5,880	7.3	4,740	<.100	<.020	.50	1.97	<.020	1,700
AUG									
29	5,200	7.5	4,360	<.100	<.020	.80	4.40	.030	1,500
JAN 1990									
25	5,490	--	4,360	<.100	.120	1.2	.500	.040	1,600
MAY									
22	5,600	7.4	4,730	<.100	<.020	.70	.900	.070	1,500
JULY									
31	5,800	7.4	4,800	<.100	<.020	1.9	5.20	<.020	1,600
SEPT									
25	5,760	7.4	4,910	<.100	<.020	.80	4.40	<.020	1,600
JAN 1991									
24	--	--	--	--	--	--	--	--	--
24	5,760	7.5	4,690	<.100	<.020	1.1	.900	.160	1,500

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	Calcium dissolved (mg/L as Ca)	Magnesium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)	Potassium, dissolved (mg/L as K)	Chloride, dissolved (mg/L as Cl)	Sulfate, dissolved (mg/L as SO_4)	Cadmium, dissolved (µg/L as Cd)	Chromium, dissolved (µg/L as Cr)
				WELL 6--Continued				
JUNE 1985								
13	120	52	470	9.9	140	1,100	--	--
17	--	--	--	--	--	--	--	--
AUG								
29	--	--	--	--	--	--	--	--
30	57	29	300	4.4	73	450	0.2	<10
MAY 1986								
27	320	230	1,000	9.0	460	2,700	<.1	<20
AUG								
28	--	--	--	--	--	--	--	--
29	280	200	1,000	8.0	510	2,800	1.0	150
APR 1987								
28	--	--	--	--	--	--	--	--
29	310	240	950	7.8	500	2,700	.4	<20
JULY								
14	290	250	970	8.2	470	2,700	<.2	<60
SEPT								
15	260	200	860	7.1	470	2,300	.4	<20
16	--	--	--	--	--	--	--	--
MAR 1988								
15	250	210	820	7.4	460	2,400	.5	<20
17	--	--	--	--	--	--	--	--
JULY								
13	--	--	--	--	--	--	--	--
14	260	230	840	7.6	440	2,200	.3	<20
SEPT								
23	240	210	770	7.2	450	2,100	.5	<20
MAR 1989								
15	--	--	--	--	--	--	--	--
16	290	230	800	7.6	490	2,500	.6	<20
AUG								
29	240	220	700	6.9	420	2,000	.5	<20
JAN 1990								
25	260	220	750	4.0	500	2,300	.3	<200
MAY								
22	280	190	650	7.5	340	--	.5	<20
JULY								
31	260	230	850	7.2	470	2,500	.2	<60
SEPT								
25	270	220	820	7.8	430	2,100	.8	<80
JAN 1991								
24	250	200	780	6.8	440	2,400	.7	<20

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	Copper, dissolved (µg/L as Cu)	Iron, dissolved (µg/L as Fe)	Lead, dissolved (µg/L as Pb)	Manganese, dissolved (µg/L as Mn)	Nickel, dissolved (µg/L as Ni)	Zinc, dissolved (µg/L as Zn)	Coliform, fecal (col./100 mL)	Streptococci, fecal (col./100 mL)
				WELL 6--Continued				
JUNE 1985								
13	--	50	--	--	--	50	--	--
17	--	--	--	--	--	--	<1	<1
AUG								
29	--	--	--	--	--	--	<1	<1
30	<10	<50	<10	<10	110	<10	--	--
MAY 1986								
27	<10	<50	<10	<20	<60	30	<1	<1
AUG								
28	--	--	--	--	--	--	<1	<1
29	<100	900	<250	100	100	200	--	--
APR 1987								
28	--	--	--	--	--	--	<1	4
29	<10	<50	<50	<20	60	30	--	--
JULY								
14	<60	<200	<10	<60	<60	<60	<2	<2
SEPT								
15	<20	<50	<10	<20	60	<20	--	--
16	--	--	--	--	--	--	<2	<2
MAR 1988								
15	<20	<50	<10	<20	<40	<20	--	--
17	--	--	--	--	--	--	<2	3
JULY								
13	--	--	--	--	--	--	<2	<2
14	<20	<50	<10	<20	<20	<20	--	--
SEPT								
23	<20	<50	<10	--	<20	<20	<2	8
MAR 1989								
15	--	--	--	--	--	--	<2	11
16	<20	<50	<10	<20	<20	40	--	--
AUG								
29	<20	<50	<10	<20	50	50	<2	<2
JAN 1990								
25	<200	<500	<10	<200	<200	500	<20	2
MAY								
22	<20	<50	<10	<20	100	<20	<20	1
JULY								
31	<60	<150	<10	<60	50	20	<20	<20
SEPT								
25	<80	<200	<10	<80	<80	<80	<20	11
JAN 1991								
24	<20	90	<10	<20	<50	20	<20	10

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	Specific conductance (µS/cm)	pH (units)	Residue at 105 °C, dissolved (mg/L)	Nitrogen, ammonia, dissolved (mg/L as N)	Nitrogen, nitrite, dissolved (mg/L as N)	Nitrogen, ammonia, +organic, dissolved (mg/L as N)	Nitrogen, NO_2+NO_3 dissolved (mg/L as N)	Phosphorus, ortho, dissolved (mg/L as P)	Hardness, total (mg/L as $CaCO_3$)	Calcium, dissolved (mg/L as Ca)
					WELL 7					
JUNE 1985										
13	1,770	10.0	1,130	0.950	2.46	5.8	4.70	<0.020	420	93
17	--	--	--	--	--	--	--	--	--	--
AUG										
29	--	--	--	--	--	--	--	--	--	--
30	1,670	8.4	1,060	.400	.280	2.2	7.00	.200	350	62
MAY 1986										
27	2,150	8.6	1,330	<.100	<.010	.80	10.9	<.020	570	78
AUG										
28	--	--	--	--	--	--	--	--	--	--
29	1,950	7.8	1,150	<.100	<.010	.40	10.2	--	440	64
APR 1987										
28	--	--	--	--	--	--	--	--	--	--
29	2,300	8.0	1,430	<.10	<.010	1.6	15.0	<.020	650	90
JULY										
14	1,900	7.9	1,230	<.100	.030	1.5	13.0	.040	510	70
SEPT										
15	1,710	7.8	1,130	.600	<.010	1.1	10.1	.060	430	66
16	--	--	--	--	--	--	--	--	--	--
MAR 1988										
15	2,220	7.8	1,420	<.100	<.020	.60	12.3	.050	640	88
17	--	--	--	--	--	--	--	--	--	--
JULY										
13	--	--	--	--	--	--	--	--	--	--
14	2,000	7.4	1,280	.100	<.010	1.2	11.0	<.020	560	76
SEPT										
02	--	--	--	--	--	--	--	--	--	--
23	1,840	7.9	1,100	<.100	.020	<.30	11.4	.020	420	64
MAR 1989										
15	--	--	--	--	--	--	--	--	--	--
16	2,170	7.8	1,400	<.100	<.020	.40	21.3	<.020	590	86
JUNE										
02	2,190	7.7	1,490	<.200	.090	.30	21.8	.090	610	82
JULY										
18	1,900	7.9	1,160	<.100	<.020	.30	9.10	<.020	440	68
AUG										
29	1,870	8.0	1,140	<.100	<.020	.70	10.0	.030	430	66
JAN 1990										
25	2,140	--	1,350	<.100	.050	.70	30.0	.050	650	87
MAY										
22	2,510	7.8	1,710	<.100	.030	1.2	50.4	.120	820	99
JULY										
31	2,090	7.8	1,320	<.100	.040	1.3	18.3	.030	550	76
SEPT										
25	1,940	7.8	1,200	<.100	.020	.90	8.30	<.020	450	60
JAN 1991										
24	2,360	7.8	1,500	<.100	<.020	1.2	29.5	<.020	640	89

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	Magnesium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)	Potassium, dissolved (mg/L as K)	Chloride, dissolved (mg/L as Cl)	Sulfate, dissolved (mg/L as SO_4)	Cadmium, dissolved (µg/L as Cd)	Chromium, dissolved (µg/L as Cr)	Copper, dissolved (µg/L as Cu)	Iron, dissolved (µg/L as Fe)	Lead, dissolved (µg/L as Pb)	Manganese, dissolved (µg/L as Mn)
					WELL 7--Continued						
JUNE 1985											
13	46	270	16	350	320	--	--	--	<50	--	--
17	--	--	--	--	--	--	--	--	--	--	--
AUG											
29	--	--	--	--	--	--	--	--	--	--	--
30	48	250	6.9	230	270	0.1	<10	20	<50	<10	10
MAY 1986											
27	91	260	5.0	310	300	<.1	<20	<20	<50	<10	<110
AUG											
28	--	--	--	--	--	--	--	--	--	--	--
29	67	230	4.0	250	190	.7	<20	<20	<50	<50	40
APR 1987											
28	--	--	--	--	--	--	--	--	--	--	--
29	100	250	4.2	320	320	.5	<20	<20	<50	<50	40
JULY											
14	82	240	4.0	260	270	.3	<20	<20	<50	<10	50
SEPT											
15	64	230	3.5	250	280	.4	<20	<20	<50	<10	<20
16	--	--	--	--	--	--	--	--	--	--	--
MAR 1988											
15	100	220	4.1	330	320	.6	<20	<20	<50	<10	<20
17	--	--	--	--	--	--	--	--	--	--	--
JULY											
13	--	--	--	--	--	--	--	--	--	--	--
14	89	240	4.0	290	300	.2	<20	<20	<50	<10	<20
SEPT											
02	--	--	--	--	--	--	--	--	--	--	--
23	64	220	3.2	250	260	.2	<20	<20	<50	<10	--
MAR 1989											
15	--	--	--	--	--	--	--	--	--	--	--
16	90	250	3.6	290	340	.2	<20	<20	80	<10	<20
JUNE											
02	99	250	3.8	310	350	<.2	<20	<20	<50	<10	<40
JULY											
18	66	230	3.3	240	250	.4	<20	<20	<50	<10	<20
AUG											
29	65	220	3.4	270	190	.5	<20	<20	<50	<10	<20
JAN 1990											
25	100	260	3.8	290	350	.2	<200	<200	<500	<10	<200
MAY											
22	140	220	4.2	200	--	.2	<20	<20	<50	<10	20
JULY											
31	88	240	4.0	270	270	.3	<20	<20	<50	<10	<20
SEPT											
25	74	250	3.6	270	270	.4	<40	<40	<100	<10	<40
JAN 1991											
24	100	250	3.5	290	210	<.3	<20	<20	110	<10	<20

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	Nickel, dissolved (µg/L as Ni)	Zinc, dissolved (µg/L as Zn)	Coliform, fecal (col./100 mL)	Streptococci, fecal (col./100 mL)	Dichlorobromomethane, total (µg/L)	Carbon tetrachloride, total (µg/L)	1,2-dichloroethane, total (µg/L)	Bromoform, total (µg/L)	Chlorodibromomethane, total (µg/L)	Chloroform, total (µg/L)
				WELL 7--Continued						
JUNE 1985										
13	--	10	--	--	--	--	--	--	--	--
17	--	--	<1	250	--	--	--	--	--	--
AUG										
29	--	--	<1	30	--	--	--	--	--	--
30	190	<10	--	--	--	--	--	--	--	--
MAY 1986										
27	<30	<20	<1	<1	--	--	--	--	--	--
AUG										
28	--	--	<1	240	--	--	--	--	--	--
29	<20	<20	--	--	--	--	--	--	--	--
APR 1987										
28	--	--	<1	<1	--	--	--	--	--	--
29	30	<20	--	--	--	--	--	--	--	--
JULY										
14	30	<20	<2	<2	--	--	--	--	--	--
SEPT										
15	20	<20	--	--	--	--	--	--	--	--
16	--	--	<2	<2	--	--	--	--	--	--
MAR 1988										
15	<20	<20	--	--	--	--	--	--	--	--
17	--	--	<2	<2	--	--	--	--	--	--
JULY										
13	--	--	<2	<2	--	--	--	--	--	--
14	<20	<20	<2	<2	--	--	--	--	--	--
SEPT										
02	--	--	--	--	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
23	<20	<20	<2	<2	--	--	--	--	--	--
MAR 1989										
15	--	--	<2	22	--	--	--	--	--	--
16	<20	<20	--	--	--	--	--	--	--	--
JUNE										
02	<20	<20	<2	24	--	--	--	--	--	--
JULY										
18	<20	20	<2	<2	--	--	--	--	--	--
AUG										
29	<20	<20	<2	<2	--	--	--	--	--	--
JAN 1990										
25	<200	400	<20	<20	--	--	--	--	--	--
MAY										
22	<20	<20	<20	<20	--	--	--	--	--	--
JULY										
31	<20	<20	<20	<20	--	--	--	--	--	--
SEPT										
25	<40	<40	<20	<20	--	--	--	--	--	--
JAN 1991										
24	<20	<20	<20	<20	--	--	--	--	--	--

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	Toluene, total (µg/L)	Benzene, total (µg/L)	Chloro-benzene, total (µg/L)	Chloro-ethane, total (µg/L)	Ethyl-benzene, total (µg/L)	Methyl-bromide, total (µg/L)	Methyl-chloride, total (µg/L)	Methyl-ene chlo-ride, total (µg/L)	Tetra-chloro-ethyl-ene, total (µg/L)	Tri-chloro-fluoro-methane, total (µg/L)
					WELL 7--Continued					
JUNE 1985										
13	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--
AUG										
29	--	--	--	--	--	--	--	--	--	--
30	--	--	--	--	--	--	--	--	--	--
MAY 1986										
27	--	--	--	--	--	--	--	--	--	--
AUG										
28	--	--	--	--	--	--	--	--	--	--
29	--	--	--	--	--	--	--	--	--	--
APR 1987										
28	--	--	--	--	--	--	--	--	--	--
29	--	--	--	--	--	--	--	--	--	--
JULY										
14	--	--	--	--	--	--	--	--	--	--
SEPT										
15	--	--	--	--	--	--	--	--	--	--
16	--	--	--	--	--	--	--	--	--	--
MAR 1988										
15	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--
JULY										
13	--	--	--	--	--	--	--	--	--	--
14	--	--	--	--	--	--	--	--	--	--
SEPT										
02	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
23	--	--	--	--	--	--	--	--	--	--

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	1,1-dichloroethane, total (µg/L)	1,1-dichloroethylene, total (µg/L)	1,1,1-trichloroethane, total (µg/L)	1,1,2-trichloroethane, total (µg/L)	1,1,2,2 tetrachloroethane, total (µg/L)	1,2-dichlorobenzene, total (µg/L)	1,2-dichloropropane, total (µg/L)	Trans-1,2-dichloroethane, total (µg/L)	1,3-dichloropropene, total (µg/L)	1,3-dichlorobenzene, total (µg/L)
					WELL 7--Continued					
JUNE 1985										
13	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--
AUG										
29	--	--	--	--	--	--	--	--	--	--
30	--	--	--	--	--	--	--	--	--	--
MAY 1986										
27	--	--	--	--	--	--	--	--	--	--
AUG										
28	--	--	--	--	--	--	--	--	--	--
29	--	--	--	--	--	--	--	--	--	--
APR 1987										
28	--	--	--	--	--	--	--	--	--	--
29	--	--	--	--	--	--	--	--	--	--
JULY										
14	--	--	--	--	--	--	--	--	--	--
SEPT										
15	--	--	--	--	--	--	--	--	--	--
16	--	--	--	--	--	--	--	--	--	--
MAR 1988										
15	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--
JULY										
13	--	--	--	--	--	--	--	--	--	--
14	--	--	--	--	--	--	--	--	--	--
SEPT										
02	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
23	--	--	--	--	--	--	--	--	--	--

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	1,4,-dichlorobenzene, total (µg/L)	2-chloroethylvinylether, total (µg/L)	Dichlorodifluoromethane, total (µg/L)	Trans-1,3-dichloropropene, total (µg/L)	Cis-1,3-dichloropropene, total (µg/L)	Vinyl chloride, total (µg/L)	Trichloroethylene, total (µg/L)	Styrene, total (µg/L)	Xylene, total tot rec (µg/L)
				WELL 7--Continued					
JUNE 1985									
13	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--
AUG									
29	--	--	--	--	--	--	--	--	--
30	--	--	--	--	--	--	--	--	--
MAY 1986									
27	--	--	--	--	--	--	--	--	--
AUG									
28	--	--	--	--	--	--	--	--	--
29	--	--	--	--	--	--	--	--	--
APR 1987									
28	--	--	--	--	--	--	--	--	--
29	--	--	--	--	--	--	--	--	--
JULY									
14	--	--	--	--	--	--	--	--	--
SEPT									
15	--	--	--	--	--	--	--	--	--
16	--	--	--	--	--	--	--	--	--
MAR 1988									
15	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--
JULY									
13	--	--	--	--	--	--	--	--	--
14	--	--	--	--	--	--	--	--	--
SEPT									
02	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
23	--	--	--	--	--	--	--	--	--

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	Specific conductance (µS/cm)	pH (units)	Residue at 105 °C, dissolved (mg/L)	Nitrogen, ammonia, dissolved (mg/L as N)	Nitrogen, nitrite, dissolved (mg/L as N)	Nitrogen, ammonia, +organic, dissolved (mg/L as N)	Nitrogen, NO_2+NO_3 dissolved (mg/L as N)	Phosphorus, ortho, dissolved (mg/L as P)	Hardness, total (mg/L as $CaCO_3$)	Calcium, dissolved (mg/L as Ca)
					WELL 8					
JUNE 1985										
13	3,000	9.2	2,300	0.310	0.210	2.5	30.4	<0.020	1,200	150
17	--	--	--	--	--	--	--	--	--	--
AUG										
29	--	--	--	--	--	--	--	--	--	--
30	3,000	7.6	2,320	.200	.090	2.1	28.0	.100	1,200	130
MAY 1986										
27	3,400	8.1	2,390	<.100	<.010	1.2	30.7	<.020	1,200	120
AUG										
28	--	--	--	--	--	--	--	--	--	--
29	3,600	7.6	2,220	<.100	.030	2.1	45.5	<.020	1,100	110
APR 1987										
28	--	--	--	--	--	--	--	--	--	--
29	2,700	7.7	2,070	<.100	<.010	1.4	44.0	<.020	1,100	110
JULY										
14	3,000	7.5	2,150	<.100	<.010	1.9	39.0	.050	1,100	110
SEPT										
15	2,900	7.5	2,250	<.100	.030	1.5	28.0	.020	1,100	130
16	--	--	--	--	--	--	--	--	--	--
MAR 1988										
15	3,750	6.0	2,590	<.100	<.020	3.0	25.0	<.020	1,300	120
17	--	--	--	--	--	--	--	--	--	--
JULY										
13	--	--	--	--	--	--	--	--	--	--
14	4,610	7.2	3,490	<.100	.020	5.8	20.0	.090	1,900	200
SEPT										
02	--	--	--	--	--	--	--	--	--	--
23	3,790	7.4	2,780	<.100	.020	1.2	26.2	.050	1,400	150
MAR 1989										
15	--	--	--	--	--	--	--	--	--	--
16	4,160	7.5	3,050	<.100	.020	1.4	41.2	<.020	1,600	170
JUNE										
02	4,210	7.5	3,100	<.200	<.020	.90	47.5	.080	1,500	160
JULY										
18	4,210	7.5	3,240	<.100	<.020	1.8	58.0	.020	1,900	300
AUG										
29	4,100	7.5	3,190	<.100	<.020	2.1	70.0	.060	1,600	170
JAN 1990										
25	3,970	--	2,860	<.100	<.020	1.6	67.9	<.020	1,600	200
MAY										
22	3,950	7.5	2,940	<.100	<.020	1.5	58.5	.100	1,400	160
JULY										
31	3,890	7.5	2,940	<.100	<.020	.90	66.1	.030	1,500	170
SEPT										
25	3,780	7.4	3,110	<.100	.030	1.9	69.4	<.020	1,400	180
JAN 1991										
24	--	--	--	--	--	--	--	--	--	--
25	3,940	7.6	2,930	.500	<.020	1.9	48.1	.240	1,400	160

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	Magnesium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)	Potassium, dissolved (mg/L as K)	Chloride, dissolved (mg/L as Cl)	Sulfate, dissolved (mg/L as SO_4)	Cadmium, dissolved (µg/L as Cd)	Chromium, dissolved (µg/L as Cr)	Copper, dissolved (µg/L as Cu)	Iron, dissolved (µg/L as Fe)	Lead, dissolved (µg/L as Pb)	Manganese, dissolved (µg/L as Mn)
					WELL 8--Continued						
JUNE 1985											
13	190	330	12	390	730	--	--	--	<50	--	--
17	--	--	--	--	--	--	--	--	--	--	--
AUG											
29	--	--	--	--	--	--	--	--	--	--	--
30	200	310	5.2	370	710	0.2	<10	<10	<50	<10	<10
MAY 1986											
27	210	330	5.0	380	790	.2	<20	<20	<50	<20	<130
AUG											
28	--	--	--	--	--	--	--	--	--	--	--
29	200	290	4.0	290	770	.9	100	<40	460	<100	240
APR 1987											
28	--	--	--	--	--	--	--	--	--	--	--
29	210	280	2.9	310	650	.7	<20	<20	<50	<50	<20
JULY											
14	210	290	3.7	360	610	.3	<40	<40	<100	<10	70
SEPT											
15	200	290	4.5	360	650	<.2	<20	<20	<50	<10	60
16	--	--	--	--	--	--	--	--	--	--	--
MAR 1988											
15	250	330	3.3	490	830	.3	<20	<20	<50	<10	60
17	--	--	--	--	--	--	--	--	--	--	--
JULY											
13	--	--	--	--	--	--	--	--	--	--	--
14	340	460	10	660	1,100	.4	<20	<20	<50	<10	90
SEPT											
02	--	--	--	--	--	--	--	--	--	--	--
23	260	340	4.1	510	950	.5	<20	<20	460	<10	--
MAR 1989											
15	--	--	--	--	--	--	--	--	--	--	--
16	290	350	3.5	530	1,100	.3	<20	<20	120	<10	200
JUNE											
02	280	350	4.4	590	970	<.2	<40	<40	<100	<10	260
JULY											
18	270	230	2.4	470	1,000	.7	70	<20	180	<10	100
AUG											
29	290	350	4.8	490	930	<.2	<20	<20	<50	<10	170
JAN 1990											
25	270	350	2.6	500	1,000	.1	<200	<200	<500	<10	<200
MAY											
22	240	310	3.7	260	--	.2	<20	<20	<50	<10	180
JULY											
31	250	380	4.4	460	930	.3	<40	<40	<100	<10	100
SEPT											
25	240	370	4.6	390	820	.5	<40	<40	520	<10	180
JAN 1991											
24	--	--	--	--	--	--	--	--	--	--	--
25	240	370	3.2	430	790	.4	<20	<20	90	<10	60

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	Nickel, dissolved (µg/L as Ni)	Zinc, dissolved (µg/L as Zn)	Coliform, fecal (col./100 mL)	Streptococci, fecal (col./100 mL)	Dichlorobromomethane, total (µg/L)	Carbon tetrachloride, total (µg/L)	1,2-dichloroethane, total (µg/L)	Bromoform, total (µg/L)	Chlorodibromomethane, total (µg/L)	Chloroform, total (µg/L)
					WELL 8--Continued					
JUNE 1985										
13	--	10	--	--	--	--	--	--	--	--
17	--	--	<1	4	--	--	--	--	--	--
AUG										
29	--	--	<1	<1	--	--	--	--	--	--
30	<10	10	--	--	--	--	--	--	--	--
MAY 1986										
27	<50	10	<1	2	--	--	--	--	--	--
AUG										
28	--	--	<1	32	--	--	--	--	--	--
29	100	60	--	--	--	--	--	--	--	--
APR 1987										
28	--	--	<1	<1	--	--	--	--	--	--
29	40	<20	--	--	--	--	--	--	--	--
JULY										
14	50	<40	--	--	--	--	--	--	--	--
SEPT										
15	60	<20	--	--	--	--	--	--	--	--
16	--	--	<2	<2	--	--	--	--	--	--
MAR 1988										
15	40	<20	--	--	--	--	--	--	--	--
17	--	--	<2	18	--	--	--	--	--	--
JULY										
13	--	--	82	170	--	--	--	--	--	--
14	40	<20	--	--	--	--	--	--	--	--
SEPT										
02	--	--	--	--	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
23	<20	<20	4	24	--	--	--	--	--	--
MAR 1989										
15	--	--	<2	13	--	--	--	--	--	--
16	20	40	--	--	--	--	--	--	--	--
JUNE										
02	<20	<20	<2	13	--	--	--	--	--	--
JULY										
18	40	120	<2	<2	--	--	--	--	--	--
AUG										
29	50	70	<2	<2	--	--	--	--	--	--
JAN 1990										
25	<200	400	<20	<20	--	--	--	--	--	--
MAY										
22	<20	<20	<20	13	--	--	--	--	--	--
JULY										
31	50	<40	<20	<20	--	--	--	--	--	--
SEPT										
25	<40	<40	<20	<20	--	--	--	--	--	--
JAN 1991										
24	--	--	<20	18	--	--	--	--	--	--
25	30	<20	--	--	--	--	--	--	--	--

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	Toluene, total (µg/L)	Benzene, total (µg/L)	Chloro-benzene, total (µg/L)	Chloro-ethane, total (µg/L)	Ethyl-benzene, total (µg/L)	Methyl-bromide, total (µg/L)	Methyl-chloride, total (µg/L)	Methyl-ene chlo-ride, total (µg/L)	Tetra-chloro-ethyl-ene, total (µg/L)	Tri-chloro-fluoro-methane, total (µg/L)
					WELL 8--Continued					
JUNE 1985										
13	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--
AUG										
29	--	--	--	--	--	--	--	--	--	--
30	--	--	--	--	--	--	--	--	--	--
MAY 1986										
27	--	--	--	--	--	--	--	--	--	--
AUG										
28	--	--	--	--	--	--	--	--	--	--
29	--	--	--	--	--	--	--	--	--	--
APR 1987										
28	--	--	--	--	--	--	--	--	--	--
29	--	--	--	--	--	--	--	--	--	--
JULY										
14	--	--	--	--	--	--	--	--	--	--
SEPT										
15	--	--	--	--	--	--	--	--	--	--
16	--	--	--	--	--	--	--	--	--	--
MAR 1988										
15	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--
JULY										
13	--	--	--	--	--	--	--	--	--	--
14	--	--	--	--	--	--	--	--	--	--
SEPT										
02	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
23	--	--	--	--	--	--	--	--	--	--

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	1,1-dichloroethane, total (µg/L)	1,1-dichloroethylene, total (µg/L)	1,1,1-trichloroethane, total (µg/L)	1,1,2-trichloroethane, total (µg/L)	1,1,2,2 tetrachloroethane, total (µg/L)	1,2-dichlorobenzene, total (µg/L)	1,2-dichloropropane, total (µg/L)	Trans-1,2-dichloroethane, total (µg/L)	1,3-dichloropropene, total (µg/L)	1,3-dichlorobenzene, total (µg/L)
					WELL 8--Continued					
JUNE 1985										
13	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--
AUG										
29	--	--	--	--	--	--	--	--	--	--
30	--	--	--	--	--	--	--	--	--	--
MAY 1986										
27	--	--	--	--	--	--	--	--	--	--
AUG										
28	--	--	--	--	--	--	--	--	--	--
29	--	--	--	--	--	--	--	--	--	--
APR 1987										
28	--	--	--	--	--	--	--	--	--	--
29	--	--	--	--	--	--	--	--	--	--
JULY										
14	--	--	--	--	--	--	--	--	--	--
SEPT										
15	--	--	--	--	--	--	--	--	--	--
16	--	--	--	--	--	--	--	--	--	--
MAR 1988										
15	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--
JULY										
13	--	--	--	--	--	--	--	--	--	--
14	--	--	--	--	--	--	--	--	--	--
SEPT										
02	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
23	--	--	--	--	--	--	--	--	--	--

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	1,4,-dichlorobenzene, total (µg/L)	2-chloroethylvinylether, total (µg/L)	Dichlorodifluoromethane, total (µg/L)	Trans-1,3-dichloropropene, total (µg/L)	Cis-1,3-dichloropropene, total (µg/L)	Vinyl chloride, total (µg/L)	Trichloroethylene, total (µg/L)	Styrene, total (µg/L)	1,2-dibromoethane, total (µg/L)	Xylene, total tot rec (µg/L)
					WELL 8--Continued					
JUNE 1985										
13	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--
AUG										
29	--	--	--	--	--	--	--	--	--	--
30	--	--	--	--	--	--	--	--	--	--
MAY 1986										
27	--	--	--	--	--	--	--	--	--	--
AUG										
28	--	--	--	--	--	--	--	--	--	--
29	--	--	--	--	--	--	--	--	--	--
APR 1987										
28	--	--	--	--	--	--	--	--	--	--
29	--	--	--	--	--	--	--	--	--	--
JULY										
14	--	--	--	--	--	--	--	--	--	--
SEPT										
15	--	--	--	--	--	--	--	--	--	--
16	--	--	--	--	--	--	--	--	--	--
MAR 1988										
15	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--
JULY										
13	--	--	--	--	--	--	--	--	--	--
14	--	--	--	--	--	--	--	--	--	--
SEPT										
02	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
23	--	--	--	--	--	--	--	--	--	--

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	Specific conductance (µS/cm)	pH (units)	Residue at 105 °C, dissolved (mg/L)	Nitrogen, ammonia, dissolved (mg/L as N)	Nitrogen, nitrite, dissolved (mg/L as N)	Nitrogen, ammonia, +organic, dissolved (mg/L as N)	Nitrogen, NO_2+NO_3 dissolved (mg/L as N)	Phosphorus, ortho, dissolved (mg/L as P)	Hardness, total (mg/L as $CaCO_3$)	Calcium, dissolved (mg/L as Ca)
					WELL 9					
JUNE 1985										
13	1,500	--	1,070	0.100	0.240	2.6	15.2	<0.020	540	120
17	--	--	--	--	--	--	--	--	--	--
AUG										
30	1,590	7.4	1,060	.100	.100	1.2	25.0	<.020	470	110
MAY 1986										
27	--	--	--	--	--	--	--	--	--	--
28	2,550	7.3	1,600	<.100	.360	1.2	56.7	<.020	740	180
AUG										
28	--	--	--	--	--	--	--	--	--	--
29	3,800	7.3	1,950	<.100	.020	1.4	65.7	<.020	900	210
APR 1987										
28	--	--	--	--	--	--	--	--	--	--
29	1,950	7.5	1,350	<.100	<.010	.60	47.0	<.020	640	150
JULY										
14	2,000	7.3	1,290	<.100	<.010	.80	43.0	<.020	650	150
SEPT										
15	1,850	7.4	1,270	<.100	.020	1.5	36.0	<.020	640	150
16	--	--	--	--	--	--	--	--	--	--
MAR 1988										
15	2,000	7.5	1,320	<.100	<.020	.40	26.0	.030	660	150
17	--	--	--	--	--	--	--	--	--	--
JULY										
13	--	--	--	--	--	--	--	--	--	--
14	1,850	7.4	1,270	.100	.080	4.4	27.0	<.020	600	140
SEPT										
02	--	--	--	--	--	--	--	--	--	--
23	2,050	7.4	1,350	<.100	.110	.60	41.0	<.020	700	160
MAR 1989										
15	--	--	--	--	--	--	--	--	--	--
16	2,050	7.3	1,400	<.100	.020	.60	38.2	<.020	760	180
JUNE										
02	1,980	7.4	1,370	<.200	.040	<.30	41.6	.050	680	150
JULY										
18	2,000	7.5	1,420	<.100	.050	.40	49.1	<.020	710	160
AUG										
29	1,980	7.4	1,350	<.100	.110	1.0	41.5	<.020	700	150
JAN 1990										
25	2,060	--	1,270	<.100	.080	.80	62.2	<.020	820	190
MAY										
22	2,360	7.4	1,390	<.100	.030	.80	56.4	.030	710	160
JULY										
31	2,110	7.4	1,110	<.100	.020	<.30	68.8	<.020	710	160
SEPT										
25	2,110	7.3	1,500	<.100	.050	.80	70.6	<.020	790	170
JAN 1991										
24	--	--	--	--	--	--	--	--	--	--
25	2,140	7.4	1,430	.300	<.020	1.1	47.1	.240	760	180

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	Magnesium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)	Potassium, dissolved (mg/L as K)	Chloride, dissolved (mg/L as Cl)	Sulfate, dissolved (mg/L as SO_4)	Cadmium, dissolved (µg/L as Cd)	Chromium, dissolved (µg/L as Cr)	Copper, dissolved (µg/L as Cu)	Iron, dissolved (µg/L as Fe)	Lead, dissolved (µg/L as Pb)	Manganese, dissolved (µg/L as Mn)
					WELL 9--Continued						
JUNE 1985											
13	56	210	5.1	130	500	--	--	--	30	--	--
17	--	--	--	--	--	--	--	--	--	--	--
AUG											
30	48	160	3.1	140	250	0.6	<10	10	<50	<10	630
MAY 1986											
27	--	--	--	--	--	--	--	--	--	--	--
28	71	240	2.0	230	310	.3	<20	<20	<50	<30	<40
AUG											
28	--	--	--	--	--	--	--	--	--	--	--
29	89	260	3.0	300	290	.9	<40	<40	120	<100	230
APR 1987											
28	--	--	--	--	--	--	--	--	--	--	--
29	63	180	2.2	220	280	<.2	<20	<20	<50	<50	<20
JULY											
14	69	170	2.8	200	260	.5	<20	<20	90	<10	270
SEPT											
15	66	160	2.7	190	300	2.3	<20	<20	<50	<10	650
16	--	--	--	--	--	--	--	--	--	--	--
MAR 1988											
15	67	180	2.1	220	280	.8	<20	<20	<50	<10	--
17	--	--	--	--	--	--	--	--	--	--	--
JULY											
13	--	--	--	--	--	--	--	--	--	--	--
14	63	170	3.0	200	270	.3	<20	<20	<50	<10	180
SEPT											
02	--	--	--	--	--	--	--	--	--	--	--
23	75	180	3.0	220	300	.4	<20	<20	<50	<10	--
MAR 1989											
15	--	--	--	--	--	--	--	--	--	--	--
16	75	160	2.7	200	320	.1	<20	<20	<50	<10	290
JUNE											
02	73	160	2.8	210	290	<.2	<20	<20	<50	<10	620
JULY											
18	75	160	2.8	190	270	.9	<20	<20	<50	<10	790
AUG											
29	76	160	3.1	200	210	<.2	<20	<20	<50	<10	710
JAN 1990											
25	82	160	3.3	180	280	.3	<200	200	<500	<10	800
MAY											
22	73	150	2.7	180	--	.1	<20	<20	<50	<10	650
JULY											
31	77	160	3.3	180	250	.2	<20	<20	<50	<10	790
SEPT											
25	86	170	3.2	180	200	.6	<40	<40	220	<10	860
JAN 1991											
24	--	--	--	--	--	--	--	--	--	--	--
25	74	170	2.2	170	280	.3	<20	<20	<50	<10	440

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	Nickel, dissolved (µg/L as Ni)	Zinc, dissolved (µg/L as Zn)	Coliform, fecal (col./100 mL)	Streptococci, fecal (col./100 mL)	Dichlorobromomethane, total (µg/L)	Carbon tetrachloride, total (µg/L)	1,2-dichloroethane, total (µg/L)	Bromoform, total (µg/L)	Chlorodibromomethane, total (µg/L)	Chloroform, total (µg/L)
					WELL 9--Continued					
JUNE 1985										
13	--	<20	--	--	--	--	--	--	--	--
17	--	--	<1	4	--	--	--	--	--	--
AUG										
30	210	20	<1	2	--	--	--	--	--	--
MAY 1986										
27	--	--	<1	<1	--	--	--	--	--	--
28	<20	20	--	--	--	--	--	--	--	--
AUG										
28	--	--	<1	21	--	--	--	--	--	--
29	60	60	--	--	--	--	--	--	--	--
APR 1987										
28	--	--	<1	<1	--	--	--	--	--	--
29	20	<20	--	--	--	--	--	--	--	--
JULY										
14	20	40	<2	<2	--	--	--	--	--	--
SEPT										
15	20	<20	--	--	--	--	--	--	--	--
16	--	--	<2	<2	--	--	--	--	--	--
MAR 1988										
15	<20	<20	--	--	--	--	--	--	--	--
17	--	--	<2	<2	--	--	--	--	--	--
JULY										
13	--	--	<2	<2	--	--	--	--	--	--
14	<20	<20	--	--	--	--	--	--	--	--
SEPT										
02	--	--	--	--	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
23	<20	<20	<2	<2	--	--	--	--	--	--
MAR 1989										
15	--	--	<2	<2	--	--	--	--	--	--
16	<20	<20	--	--	--	--	--	--	--	--
JUNE										
02	<20	<20	<2	7	--	--	--	--	--	--
JULY										
18	<20	20	<2	<2	--	--	--	--	--	--
AUG										
29	<20	20	<2	<2	--	--	--	--	--	--
JAN 1990										
25	<200	20	<20	<20	--	--	--	--	--	--
MAY										
22	<20	<20	<20	<20	--	--	--	--	--	--
JULY										
31	<20	<20	<20	<20	--	--	--	--	--	--
SEPT										
25	<40	<40	<20	19	--	--	--	--	--	--
JAN 1991										
24	--	--	<20	15	--	--	--	--	--	--
25	<20	<20	--	--	--	--	--	--	--	--

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	Toluene, total (µg/L)	Benzene, total (µg/L)	Chloro-benzene, total (µg/L)	Chloro-ethane, total (µg/L)	Ethyl-benzene, total (µg/L)	Methyl-bromide, total (µg/L)	Methyl-chloride, total (µg/L)	Methyl-ene chlo-ride, total (µg/L)	Tetra-chloro-ethyl-ene, total (µg/L)	Tri-chloro-fluoro-methane, total (µg/L)
					WELL 9--Continued					
JUNE 1985										
13	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--
AUG										
30	--	--	--	--	--	--	--	--	--	--
MAY 1986										
27	--	--	--	--	--	--	--	--	--	--
28	--	--	--	--	--	--	--	--	--	--
AUG										
28	--	--	--	--	--	--	--	--	--	--
29	--	--	--	--	--	--	--	--	--	--
APR 1987										
28	--	--	--	--	--	--	--	--	--	--
29	--	--	--	--	--	--	--	--	--	--
JULY										
14	--	--	--	--	--	--	--	--	--	--
SEPT										
15	--	--	--	--	--	--	--	--	--	--
16	--	--	--	--	--	--	--	--	--	--
MAR 1988										
15	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--
JULY										
13	--	--	--	--	--	--	--	--	--	--
14	--	--	--	--	--	--	--	--	--	--
SEPT										
02	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
23	--	--	--	--	--	--	--	--	--	--

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	1,4,-dichlorobenzene, total (µg/L)	2-chloroethylvinylether, total (µg/L)	Dichlorodifluoromethane, total (µg/L)	Trans-1,3-dichloropropene, total (µg/L)	Cis-1,3-dichloropropene, total (µg/L)	Vinyl chloride, total (µg/L)	Trichloroethylene, total (µg/L)	Styrene, total (µg/L)	1,2-dibromoethane, total (µg/L)	Xylene, total tot rec (µg/L)
					WELL 9--Continued					
JUNE 1985										
13	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--
AUG										
30	--	--	--	--	--	--	--	--	--	--
MAY 1986										
27	--	--	--	--	--	--	--	--	--	--
28	--	--	--	--	--	--	--	--	--	--
AUG										
28	--	--	--	--	--	--	--	--	--	--
29	--	--	--	--	--	--	--	--	--	--
APR 1987										
28	--	--	--	--	--	--	--	--	--	--
29	--	--	--	--	--	--	--	--	--	--
JULY										
14	--	--	--	--	--	--	--	--	--	--
SEPT										
15	--	--	--	--	--	--	--	--	--	--
16	--	--	--	--	--	--	--	--	--	--
MAR 1988										
15	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--
JULY										
13	--	--	--	--	--	--	--	--	--	--
14	--	--	--	--	--	--	--	--	--	--
SEPT										
02	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
23	--	--	--	--	--	--	--	--	--	--

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	1,1-dichloroethane, total (µg/L)	1,1-dichloroethylene, total (µg/L)	1,1,1-trichloroethane, total (µg/L)	1,1,2-trichloroethane, total (µg/L)	1,1,2,2 tetrachloroethane, total (µg/L)	1,2-dichlorobenzene, total (µg/L)	1,2-dichloropropane, total (µg/L)	Trans-1,2-dichloroethane, total (µg/L)	1,3-dichloropropene, total (µg/L)	1,3-dichlorobenzene, total (µg/L)
					WELL 9--Continued					
JUNE 1985										
13	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--
AUG										
30	--	--	--	--	--	--	--	--	--	--
MAY 1986										
27	--	--	--	--	--	--	--	--	--	--
28	--	--	--	--	--	--	--	--	--	--
AUG										
28	--	--	--	--	--	--	--	--	--	--
29	--	--	--	--	--	--	--	--	--	--
APR 1987										
28	--	--	--	--	--	--	--	--	--	--
29	--	--	--	--	--	--	--	--	--	--
JULY										
14	--	--	--	--	--	--	--	--	--	--
SEPT										
15	--	--	--	--	--	--	--	--	--	--
16	--	--	--	--	--	--	--	--	--	--
MAR 1988										
15	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--
JULY										
13	--	--	--	--	--	--	--	--	--	--
14	--	--	--	--	--	--	--	--	--	--
SEPT										
02	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
23	--	--	--	--	--	--	--	--	--	--

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	Specific conductance (µS/cm)	pH (units)	Residue at 105 °C, dissolved (mg/L)	Nitrogen, ammonia, dissolved (mg/L as N)	Nitrogen, nitrite, dissolved (mg/L as N)	Nitrogen, ammonia, +organic, dissolved (mg/L as N)	Nitrogen, NO_2+NO_3 dissolved (mg/L as N)	Phosphorus, ortho, dissolved (mg/L as P)	Hardness, total (mg/L as $CaCO_3$)
				WELL 10					
JUNE 1985									
14	>8,000	8.8	12,100	0.090	1.60	12	11.5	<0.020	3,900
17	--	--	--	--	--	--	--	--	--
AUG									
30	--	--	--	--	--	--	--	--	--
31	14,000	7.6	11,400	.100	.030	2.0	13.8	<.020	3,800
MAY 1986									
27	--	--	--	--	--	--	--	--	--
28	>8,000	8.1	11,300	<.100	<.010	1.8	13.7	<.020	2,600
SEPT 1987									
15	15,000	7.6	11,600	.100	<.010	2.0	12.2	<.020	4,100
16	--	--	--	--	--	--	--	--	--
MAR 1988									
15	15,000	7.5	12,300	<.100	.040	1.8	12.6	<.020	4,300
17	--	--	--	--	--	--	--	--	--
JULY									
13	--	--	--	--	--	--	--	--	--
14	12,160	7.5	12,000	<.100	<.010	2.0	15.0	<.020	4,200
SEPT									
23	12,200	--	--	.100	<20.0	1.5	9.00	.040	4,100
MAR 1989									
15	--	--	--	--	--	--	--	--	--
16	12,500	7.4	10,700	<.100	<.020	1.0	12.8	<.020	3,700
JUNE									
02	11,700	7.7	12,100	<.200	<.020	.70	.700	.040	3,900
JULY									
18	10,100	7.7	12,200	<.100	<.020	1.5	8.50	<.020	4,200
AUG									
29	12,300	7.7	12,100	<.100	<.020	1.7	15.0	.050	4,100
JAN 1990									
25	--	--	--	--	--	--	--	--	--
26	12,500	7.3	11,500	<.100	<.020	1.0	13.0	<.020	3,900
MAY									
22	10,000	7.6	11,900	.600	<.020	1.9	9.50	.090	3,900
JULY									
31	12,400	7.6	11,800	<.100	<.020	1.8	13.6	<.020	3,500
SEPT									
25	12,400	7.5	12,300	<.100	<.020	1.3	17.2	<.020	3,700
JAN 1991									
24	12,900	7.6	12,200	<.100	<.020	1.8	.600	.230	4,200

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	Calcium dissolved (mg/L as Ca)	Magnesium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)	Potassium, dissolved (mg/L as K)	Chloride, dissolved (mg/L as Cl)	Sulfate, dissolved (mg/L as SO_4)	Cadmium, dissolved (µg/L as Cd)	Chromium, dissolved (µg/L as Cr)
				WELL 10--Continued				
JUNE 1985								
14	350	740	2,500	42	1,100	7,000	--	--
17	--	--	--	--	--	--	--	--
AUG								
30	--	--	--	--	--	--	--	--
31	330	720	2,300	22	910	6,800	0.2	<10
MAY 1986								
27	--	--	--	--	--	--	--	--
28	300	450	2,000	20	800	5,900	<.1	<20
SEPT 1987								
15	380	760	2,000	17	870	6,300	.4	<20
16	--	--	--	--	--	--	--	--
MAR 1988								
15	410	800	2,200	19	890	7,000	2.6	<20
17	--	--	--	--	--	--	--	--
JULY								
13	--	--	--	--	--	--	--	--
14	420	760	2,000	17	460	7,200	.6	<20
SEPT								
23	410	750	2,200	19	990	6,900	.2	<20
MAR 1989								
15	--	--	--	--	--	--	--	--
16	420	650	2,000	13	1,000	6,800	.2	<20
JUNE								
02	410	710	2,200	14	980	6,400	<.2	<40
JULY								
18	850	500	1,600	10	1,100	6,300	1.2	<20
AUG								
29	420	730	1,900	12	970	5,800	.5	<20
JAN 1990								
25	--	--	--	--	--	--	--	--
26	420	690	1,900	10	1,000	6,200	.4	<2,000
MAY								
22	430	680	1,900	16	940	--	.3	200
JULY								
31	410	600	1,700	15	1,100	5,500	.4	<60
SEPT								
25	410	650	1,900	14	890	6,400	1.2	<200
JAN 1991								
24	430	760	2,200	13	970	6,100	.7	<20

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	Copper, dissolved (µg/L as Cu)	Iron, dissolved (µg/L as Fe)	Lead, dissolved (µg/L as Pb)	Manganese, dissolved (µg/L as Mn)	Nickel, dissolved (µg/L as Ni)	Zinc, dissolved (µg/L as Zn)	Coliform, fecal (col./100 mL)	Streptococci, fecal (col./100 mL)
				WELL 10--Continued				
JUNE 1985								
14	--	10	--	--	--	110	--	--
17	--	--	--	--	--	--	<1	8
AUG								
30	--	--	--	--	--	--	<1	20
31	10	<50	<10	<20	150	80	--	--
MAY 1986								
27	--	--	--	--	--	--	--	350
28	<20	<50	<40	<20	<130	30	--	--
SEPT 1987								
15	<20	<50	<10	<20	140	20	--	--
16	--	--	--	--	--	--	--	84
MAR 1988								
15	<20	50	<10	<20	90	<20	--	--
17	--	--	--	--	--	--	<2	2
JULY								
13	--	--	--	--	--	--	<2	<2
14	<20	50	<10	<20	70	20	--	--
SEPT								
23	<20	<50	<10	--	40	<20	<2	2
MAR 1989								
15	--	--	--	--	--	--	<2	50
16	<20	60	<10	<20	30	40	--	--
JUNE								
02	<40	<100	<10	<20	<30	40	<2	7
JULY								
18	<20	<50	<10	<20	<20	<20	<2	<2
AUG								
29	<20	<50	12	<20	<20	1,500	<2	<2
JAN 1990								
25	--	--	--	--	--	--	<20	<20
26	<2,000	<5,000	<10	<2,000	<2,000	4	--	--
MAY								
22	<20	<50	<10	<20	200	<20	<20	<20
JULY								
31	<60	<150	<10	<60	100	20	<20	<20
SEPT								
25	<200	<500	<10	<200	<200	200	<20	<20
JAN 1991								
24	<20	250	<10	<20	60	20	<20	<20

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	Specific conductance (µS/cm)	pH (units)	Residue at 105 °C, dissolved (mg/L)	Nitrogen, ammonia, dissolved (mg/L as N)	Nitrogen, nitrite, dissolved (mg/L as N)	Nitrogen, ammonia, +organic, dissolved (mg/L as N)	Nitrogen, NO_2+NO_3 dissolved (mg/L as N)	Phosphorus, ortho, dissolved (mg/L as P)	Hardness, total (mg/L as $CaCO_3$)
				WELL 11					
JUNE 1985									
14	1,740	8.5	1,240	0.080	4.10	35	11.3	<0.020	720
17	--	--	--	--	--	--	--	--	--
AUG									
29	--	--	--	--	--	--	--	--	--
31	1,700	7.4	1,190	.100	.080	2.1	20.0	.100	660
MAY 1986									
27	--	--	--	--	--	--	--	--	--
28	2,350	7.5	1,250	<.100	.010	.90	19.0	<.020	660
JULY 1987									
15	1,900	7.1	1,310	6.80	.210	7.8	7.77	.030	640
SEPT									
15	2,300	7.3	1,280	.100	.040	1.3	18.4	<.020	690
16	--	--	--	--	--	--	--	--	--
MAR 1988									
15	1,830	7.5	1,240	<.100	.020	<.30	17.6	<.020	670
17	--	--	--	--	--	--	--	--	--
JULY									
13	--	--	--	--	--	--	--	--	--
14	1,880	7.1	1,280	<.100	<.010	1.1	15.0	<.020	690
SEPT									
22	1,970	7.4	1,300	<.100	<.020	.30	16.3	.040	690
23	--	--	--	--	--	--	--	--	--
MAR 1989									
15	--	--	--	--	--	--	--	--	--
16	2,030	7.3	1,320	<.100	<.020	<.30	15.7	<.020	720
JUNE									
02	1,900	7.5	1,340	<.200	<.020	<.30	13.2	.040	670
JULY									
18	1,960	7.5	1,360	<.100	<.020	<.30	12.9	<.020	690
AUG									
29	2,030	7.5	1,350	<.100	<.020	1.0	18.0	.040	720
JAN 1990									
25	1,890	--	1,140	<.100	<.020	.80	15.7	<.020	740
MAY									
22	2,100	7.4	1,380	<.100	<.020	.90	13.6	.040	<710
23	--	--	--	--	--	--	17.0	--	700
JULY									
31	2,140	7.4	1,370	<.100	<.020	4.5	18.8	<.020	720
SEPT									
25	2,150	7.4	1,510	<.100	.020	1.1	16.5	<.020	720
JAN 1991									
24	--	--	--	--	--	--	--	--	--
25	2,230	7.4	1,410	<.100	<.020	.90	16.3	.260	730

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	Calcium dissolved (mg/L as Ca)	Magnesium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)	Potassium, dissolved (mg/L as K)	Chloride, dissolved (mg/L as Cl)	Sulfate, dissolved (mg/L as SO_4)	Cadmium, dissolved (µg/L as Cd)	Chromium, dissolved (µg/L as Cr)
				WELL 11--Continued				
JUNE 1985								
14	180	66	170	9.6	160	460	--	--
17	--	--	--	--	--	--	--	--
AUG								
29	--	--	--	--	--	--	--	--
31	170	55	140	5.4	150	380	0.4	<10
MAY 1986								
27	--	--	--	--	--	--	--	--
28	170	54	150	4.0	180	330	.2	<20
JULY 1987								
15	170	52	150	9.0	200	360	.6	<20
SEPT								
15	180	58	140	5.4	200	370	.6	<20
16	--	--	--	--	--	--	--	--
MAR 1988								
15	170	57	140	4.8	220	330	.3	<20
17	--	--	--	--	--	--	--	--
JULY								
13	--	--	--	--	--	--	--	--
14	180	58	150	5.6	230	340	.3	<20
SEPT								
22	180	58	140	4.8	270	350	.4	<20
23	--	--	--	--	--	--	--	--
MAR 1989								
15	--	--	--	--	--	--	--	--
16	190	59	140	5.2	280	350	.2	<20
JUNE								
02	170	58	150	5.5	250	370	<.2	<20
JULY								
18	180	58	160	5.7	220	370	.9	<20
AUG								
29	190	62	150	5.8	280	330	<.2	<20
JAN 1990								
25	190	64	170	6.0	260	360	.3	<200
MAY								
22	180	61	150	5.4	270	--	.1	<20
23	180	62	160	5.9	250	330	<1.0	--
JULY								
31	190	61	160	6.1	330	330	.2	<20
SEPT								
25	180	63	170	6.2	290	360	.9	<40
JAN 1991								
24	--	--	--	--	--	--	--	--
25	190	63	160	5.4	330	210	.3	<20

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	Copper, dissolved (µg/L as Cu)	Iron, dissolved (µg/L as Fe)	Lead, dissolved (µg/L as Pb)	Manganese, dissolved (µg/L as Mn)	Nickel, dissolved (µg/L as Ni)	Zinc, dissolved (µg/L as Zn)	Coliform, fecal (col./100 mL)	Streptococci, fecal (col./100 mL)
				WELL 11--Continued				
JUNE 1985								
14	--	30	--	--	--	60	--	--
17	--	--	--	--	--	--	<1	20
AUG								
29	--	--	--	--	--	--	<1	<1
31	<10	<50	<10	<10	360	50	--	--
MAY 1986								
27	--	--	--	--	--	--	<1	7
28	<20	<50	<80	<20	<20	20	--	--
JULY 1987								
15	<20	--	<10	--	20	50	<2	<2
SEPT								
15	<20	<50	<10	<20	<20	<20	--	--
16	--	--	--	--	--	--	--	8
MAR 1988								
15	<20	<20	<10	<20	<20	<20	--	--
17	--	--	--	--	--	--	<2	<2
JULY								
13	--	--	--	--	--	--	<2	<2
14	<20	<50	<10	<20	<20	<20	<2	<2
SEPT								
22	<20	<50	<10	--	<20	<20	--	--
23	--	--	--	--	--	--	<2	<2
MAR 1989								
15	--	--	--	--	--	--	<2	13
16	<20	60	<10	<20	<20	20	--	--
JUNE								
02	<20	<50	<10	<20	<20	<20	<2	<2
JULY								
18	<20	<50	<10	<20	<20	20	<2	4
AUG								
29	<20	<50	<10	<20	<20	30	<2	<2
JAN 1990								
25	<200	<500	<10	<200	<200	--	<20	<20
MAY								
22	<20	<50	<10	<20	<20	<20	<20	1
23	--	<3	<1	2	--	--	--	--
JULY								
31	<20	<50	<10	<20	<20	<20	<20	<20
SEPT								
25	<40	<100	<10	<40	<40	<40	<20	<20
JAN 1991								
24	--	--	--	--	--	--	<20	3
25	<20	<50	<10	<20	<20	<20	--	--

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	Specific conductance (µS/cm)	pH (units)	Residue at 105 °C, dissolved (mg/L)	Nitrogen, ammonia, dissolved (mg/L as N)	Nitrogen, nitrite, dissolved (mg/L as N)	Nitrogen, ammonia, +organic, dissolved (mg/L as N)	Nitrogen, NO_2+NO_3 dissolved (mg/L as N)	Phosphorus, ortho, dissolved (mg/L as P)	Hardness, total (mg/L as $CaCO_3$)
				WELL 12					
JUNE 1985									
14	1,810	8.7	1,530	0.660	1.52	7.1	19.6	<0.020	800
17	--	--	--	--	--	--	--	--	--
AUG									
30	--	--	--	--	--	--	--	--	--
31	1,900	7.7	1,520	.200	.100	1.9	28.0	<.020	700
MAY 1986									
27	--	--	--	--	--	--	--	--	--
28	2,000	8.0	1,540	<.100	<.010	.90	23.3	<.020	750
AUG									
28	1,900	7.9	1,350	<.100	.040	.90	41.4	<.020	600
APR 1987									
28	--	--	--	--	--	--	--	--	--
29	1,850	7.8	1,410	<.100	<.010	.40	31.0	<.020	720
JULY									
15	1,800	7.7	1,370	<.100	<.010	1.0	33.0	<.020	640
SEPT									
16	2,190	7.6	1,430	<.100	.020	.20	29.0	.060	680
MAR 1988									
15	2,100	7.5	1,570	<.100	<.020	1.0	22.0	<.020	810
17	--	--	--	--	--	--	--	--	--
JULY									
13	--	--	--	--	--	--	--	--	--
14	1,440	7.5	1,260	<.100	.010	2.1	54.0	.060	450
SEPT									
23	1,830	7.6	1,380	<.100	<.020	<.30	46.0	<.020	650
MAR 1989									
15	--	--	--	--	--	--	--	--	--
16	2,180	7.5	2,190	<.100	<.020	<.30	23.2	<.020	840
JUNE									
02	1,600	7.9	1,190	<.200	<.020	<.30	48.2	<.020	500
JULY									
18	1,560	7.8	--	--	--	--	--	--	--
AUG									
29	1,770	7.8	1,410	<.100	<.020	.90	47.0	<.020	570
JAN 1990									
25	--	--	--	--	--	--	--	--	--
26	2,190	7.4	1,920	<.100	<.020	<.30	22.1	<.020	930
MAY									
22	1,690	7.7	1,260	.700	<.020	.90	51.5	.100	510
JULY									
31	1,880	--	--	<.100	<.020	<.30	42.0	.030	--
JAN 1991									
24	2,370	7.7	1,840	<.100	<.020	.90	19.9	.190	810

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	Calcium dissolved (mg/L as Ca)	Magnesium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)	Potassium, dissolved (mg/L as K)	Chloride, dissolved (mg/L as Cl)	Sulfate, dissolved (mg/L as SO_4)	Cadmium, dissolved (µg/L as Cd)	Chromium, dissolved (µg/L as Cr)
				WELL 12--Continued				
JUNE 1985								
14	170	90	220	9.6	120	690	--	--
17	--	--	--	--	--	--	--	--
AUG								
30	--	--	--	--	--	--	--	--
31	140	84	180	5.2	84	570	0.4	<10
MAY 1986								
27	--	--	--	--	--	--	--	--
28	160	88	200	4.0	110	640	.3	<20
AUG								
28	120	73	180	4.0	66	470	1.2	<20
APR 1987								
28	--	--	--	--	--	--	--	--
29	150	85	180	4.5	83	550	.3	<20
JULY								
15	130	75	170	4.8	74	550	.8	<20
SEPT								
16	140	80	170	4.5	79	510	.6	<20
MAR 1988								
15	160	97	200	4.8	110	680	.6	<20
17	--	--	--	--	--	--	--	--
JULY								
13	--	--	--	--	--	--	--	--
14	88	56	140	3.9	36	340	.2	<20
SEPT								
23	130	76	160	4.3	73	510	.2	<20
MAR 1989								
15	--	--	--	--	--	--	--	--
16	170	99	190	4.9	110	770	.5	<20
JUNE								
02	100	60	170	4.4	48	350	<.2	<20
JULY								
18	--	--	--	--	--	--	--	--
AUG								
29	120	66	160	4.7	100	290	.5	<20
JAN 1990								
25	--	--	--	--	--	--	--	--
26	190	110	210	5.3	150	990	.2	<200
MAY								
22	100	61	170	4.1	44	--	<.2	<20
JULY								
31	--	--	--	--	70	510	--	--
JAN 1991								
24	170	96	190	4.6	120	730	.5	<20

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	Copper, dissolved (µg/L as Cu)	Iron, dissolved (µg/L as Fe)	Lead, dissolved (µg/L as Pb)	Manganese, dissolved (µg/L as Mn)	Nickel, dissolved (µg/L as Ni)	Zinc, dissolved (µg/L as Zn)	Coliform, fecal (col./100 mL)	Streptococci, fecal (col./100 mL)
				WELL 12--Continued				
JUNE 1985								
14	--	<50	--	--	--	60	--	--
17	--	--	--	--	--	--	<1	1
AUG								
30	--	--	--	--	--	--	<1	3
31	10	<50	<10	130	240	20	--	--
MAY 1986								
27	--	--	--	--	--	--	--	46
28	<20	<50	<40	<20	<20	20	--	--
AUG								
28	<20	<50	<50	<20	<20	<20	<1	200
APR 1987								
28	--	--	--	--	--	--	<1	<1
29	<20	<50	<50	<20	20	<20	--	--
JULY								
15	<20	130	<10	<20	20	<20	<2	<2
SEPT								
16	<20	<50	<10	<20	30	100	--	<2
MAR 1988								
15	<20	<50	<10	<20	<20	<20	--	--
17	--	--	--	--	--	--	<2	3
JULY								
13	--	--	--	--	--	--	<10	<2
14	<20	<50	<10	<20	<20	<20	--	--
SEPT								
23	<20	<50	<10	--	<20	30	<2	<2
MAR 1989								
15	--	--	--	--	--	--	<2	18
16	<20	<50	<10	<20	<20	30	--	--
JUNE								
02	<20	<50	<10	<20	<20	<20	<2	4
JULY								
18	--	--	--	--	--	--	<20	230
AUG								
29	<20	<50	<10	<20	<20	<50	<20	230
JAN 1990								
25	--	--	--	--	--	--	<20	<20
26	<200	<500	<10	<200	<200	400	--	--
MAY								
22	<20	<50	<10	<20	<20	<20	<20	10
JULY								
31	--	--	--	--	--	--	<20	<20
JAN 1991								
24	<20	<50	<10	<20	<20	<20	<20	<20

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	Specific conductance (µS/cm)	pH (units)	Residue at 105 °C, dissolved (mg/L)	Nitrogen, ammonia, dissolved (mg/L as N)	Nitrogen, nitrite, dissolved (mg/L as N)	Nitrogen, ammonia, +organic, dissolved (mg/L as N)	Nitrogen, NO_2+NO_3 dissolved (mg/L as N)	Phosphorus, ortho, dissolved (mg/L as P)	Hardness, total (mg/L as $CaCO_3$)	Calcium, dissolved (mg/L as Ca)
					WELL 13					
JUNE 1985										
14	1,210	8.7	862	0.730	0.440	6.1	19.8	<0.020	360	65
17	--	--	--	--	--	--	--	--	--	--
AUG										
30	--	--	--	--	--	--	--	--	--	--
31	1,220	7.6	802	.300	.330	.80	19.4	<.020	280	56
MAY 1986										
27	--	--	--	--	--	--	--	--	--	--
28	1,400	8.0	869	<.100	<.010	.30	16.5	<.020	330	68
AUG										
28	1,400	7.5	857	<.100	<.010	.40	17.0	<.020	300	61
APR 1987										
28	--	--	--	--	--	--	--	--	--	--
29	1,280	7.9	854	<.100	<.010	.50	16.5	<.020	340	68
JULY										
15	1,280	7.6	486	<.100	<.010	.50	18.6	<.020	310	62
SEPT										
16	1,500	7.5	856	<.100	<.020	<.30	19.3	.020	330	65
MAR 1988										
15	1,260	8.0	818	<.100	<.020	1.0	20.2	.070	320	62
17	--	--	--	--	--	--	--	--	--	--
JULY										
13	--	--	--	--	--	--	--	--	--	--
14	1,230	7.6	877	<.100	<.010	1.0	23.0	<.020	310	60
SEPT										
02	--	--	--	--	--	--	--	--	--	--
23	1,250	7.7	840	<.100	.020	.40	20.4	<.020	340	65
MAR 1989										
15	--	--	--	--	--	--	--	--	--	--
16	1,200	7.5	728	<.100	<.020	.40	24.8	<.020	270	54
JUNE										
02	1,100	7.8	766	<.200	<.020	.80	23.8	<.020	270	52
JULY										
18	1,150	7.8	753	<.100	<.020	.30	21.1	<.020	280	56
AUG										
29	1,170	7.8	765	<.100	<.020	.40	22.6	<.020	280	56
JAN 1990										
25	--	--	--	--	--	--	--	--	--	--
26	1,120	7.5	767	<.100	.050	<.30	20.1	<.020	290	58
MAY										
22	1,160	7.8	757	.400	<.020	1.2	18.4	.080	270	52
JULY										
31	1,180	7.7	759	<.100	<.020	1.3	20.0	<.020	280	54
SEPT										
25	1,190	7.5	753	.300	<.020	<.30	19.4	<.020	290	58
JAN 1991										
24	1,190	7.7	757	<.100	<.020	.60	18.2	.120	270	52

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	Magnesium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)	Potassium, dissolved (mg/L as K)	Chloride, dissolved (mg/L as Cl)	Sulfate, dissolved (mg/L as SO_4)	Cadmium, dissolved (µg/L as Cd)	Chromium, dissolved (µg/L as Cr)	Copper, dissolved (µg/L as Cu)	Iron, dissolved (µg/L as Fe)	Lead, dissolved (µg/L as Pb)	Manganese, dissolved (µg/L as Mn)
					WELL 13--Continued						
JUNE 1985											
14	48	210	6.4	53	330	--	--	--	10	--	--
17	--	--	--	--	--	--	--	--	--	--	--
AUG											
30	--	--	--	--	--	--	--	--	--	--	--
31	34	160	3.5	56	270	0.2	<10	<10	<50	<10	<10
MAY 1986											
27	--	--	--	--	--	--	--	--	--	--	--
28	39	180	3.0	68	260	<.1	<20	<20	<50	<80	<20
AUG											
28	36	170	4.0	66	260	.8	<20	<20	<50	<50	<20
APR 1987											
28	--	--	--	--	--	--	--	--	--	--	--
29	42	170	3.8	65	270	.6	<20	<20	<50	<50	<20
JULY											
15	38	160	3.6	61	270	.4	<20	<20	210	<10	50
SEPT											
16	40	170	3.7	62	260	.3	<20	<20	<50	<10	<20
MAR 1988											
15	39	160	3.5	60	220	.3	<20	<20	<50	<10	<20
17	--	--	--	--	--	--	--	--	--	--	--
JULY											
13	--	--	--	--	--	--	--	--	--	--	--
14	38	160	3.9	57	220	.3	<20	<20	<50	<10	<20
SEPT											
02	--	--	--	--	--	--	--	--	--	--	--
23	44	180	3.9	64	250	.2	<20	<20	<50	<10	--
MAR 1989											
15	--	--	--	--	--	--	--	--	--	--	--
16	34	150	3.6	59	200	.1	<20	<20	<50	<10	<20
JUNE											
02	33	140	3.3	69	170	.2	<20	<20	<50	<10	<20
JULY											
18	34	160	3.7	60	170	.8	<20	<20	<50	<10	<20
AUG											
29	35	140	3.3	60	140	<.2	<20	<20	<50	<10	<20
JAN 1990											
25	--	--	--	--	--	--	--	--	--	--	--
26	36	150	3.7	70	190	.3	<20	<20	130	<10	<20
MAY											
22	33	140	3.1	68	--	.1	<20	<20	<50	<10	<20
JULY											
31	35	150	3.4	68	160	.2	<20	<20	<50	<10	<20
SEPT											
25	36	160	3.4	70	220	.5	<40	<40	<100	<10	<40
JAN 1991											
24	34	140	3.0	75	100	.4	<20	<20	60	<10	<20

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	Nickel, dissolved (µg/L as Ni)	Zinc, dissolved (µg/L as Zn)	Coliform, fecal (col./100 mL)	Streptococci, fecal (col./100 mL)	Dichlorobromomethane, total (µg/L)	Carbon tetrachloride, total (µg/L)	1,2-dichloroethane, total (µg/L)	Bromoform, total (µg/L)	Chlorodibromomethane, total (µg/L)	Chloroform, total (µg/L)
				WELL 13--Continued						
JUNE 1985										
14	--	60	--	--	--	--	--	--	--	--
17	--	--	<1	8	--	--	--	--	--	--
AUG										
30	--	--	<1	<1	--	--	--	--	--	--
31	180	<10	--	--	--	--	--	--	--	--
MAY 1986										
27	--	--	--	16	--	--	--	--	--	--
28	<20	<20	--	--	--	--	--	--	--	--
AUG										
28	<20	<20	<1	8	--	--	--	--	--	--
APR 1987										
28	--	--	<1	<1	--	--	--	--	--	--
29	<20	<20	--	--	--	--	--	--	--	--
JULY										
15	<20	50	<2	<2	--	--	--	--	--	--
SEPT										
16	20	20	<2	<2	--	--	--	--	--	--
MAR 1988										
15	<20	<20	--	--	--	--	--	--	--	--
17	--	--	<2	<2	--	--	--	--	--	--
JULY										
13	--	--	<2	<2	--	--	--	--	--	--
14	<20	<20	--	--	--	--	--	--	--	--
SEPT										
02	--	--	--	--	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
23	<20	20	<2	<2	--	--	--	--	--	--
MAR 1989										
15	--	--	<2	24	--	--	--	--	--	--
16	<20	<20	--	--	--	--	--	--	--	--
JUNE										
02	<20	<20	<2	5	--	--	--	--	--	--
JULY										
18	<20	<20	<2	<2	--	--	--	--	--	--
AUG										
29	<20	<30	<2	<2	--	--	--	--	--	--
JAN 1990										
25	--	--	<20	<20	--	--	--	--	--	--
26	<20	20	--	--	--	--	--	--	--	--
MAY										
22	30	<20	<20	<20	--	--	--	--	--	--
JULY										
31	<20	<20	<20	<20	--	--	--	--	--	--
SEPT										
25	<40	<40	<20	<20	--	--	--	--	--	--
JAN 1991										
24	<20	<20	<20	<20	--	--	--	--	--	--

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	Toluene, total (µg/L)	Benzene, total (µg/L)	Chlorobenzene, total (µg/L)	Chloroethane, total (µg/L)	Ethylbenzene, total (µg/L)	Methylbromide, total (µg/L)	Methylchloride, total (µg/L)	Methylene chloride, total (µg/L)	Tetrachloroethylene, total (µg/L)	Trichlorofluoromethane, total (µg/L)
					WELL 13--Continued					
JUNE 1985										
14	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--
AUG										
30	--	--	--	--	--	--	--	--	--	--
31	--	--	--	--	--	--	--	--	--	--
MAY 1986										
27	--	--	--	--	--	--	--	--	--	--
28	--	--	--	--	--	--	--	--	--	--
AUG										
28	--	--	--	--	--	--	--	--	--	--
APR 1987										
28	--	--	--	--	--	--	--	--	--	--
29	--	--	--	--	--	--	--	--	--	--
JULY										
15	--	--	--	--	--	--	--	--	--	--
SEPT										
16	--	--	--	--	--	--	--	--	--	--
MAR 1988										
15	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--
JULY										
13	--	--	--	--	--	--	--	--	--	--
14	--	--	--	--	--	--	--	--	--	--
SEPT										
02	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
23	--	--	--	--	--	--	--	--	--	--

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	1,1-dichloroethane, total (µg/L)	1,1-dichloroethylene, total (µg/L)	1,1,1-trichloroethane, total (µg/L)	1,1,2-trichloroethane, total (µg/L)	1,1,2,2 tetrachloroethane, total (µg/L)	1,2-dichlorobenzene, total (µg/L)	1,2-dichloropropane, total (µg/L)	Trans-1,2-dichloroethane, total (µg/L)	1,3-dichloropropene, total (µg/L)	1,3-dichlorobenzene, total (µg/L)
					WELL 13--Continued					
JUNE 1985										
14	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--
AUG										
30	--	--	--	--	--	--	--	--	--	--
31	--	--	--	--	--	--	--	--	--	--
MAY 1986										
27	--	--	--	--	--	--	--	--	--	--
28	--	--	--	--	--	--	--	--	--	--
AUG										
28	--	--	--	--	--	--	--	--	--	--
APR 1987										
28	--	--	--	--	--	--	--	--	--	--
29	--	--	--	--	--	--	--	--	--	--
JULY										
15	--	--	--	--	--	--	--	--	--	--
SEPT										
16	--	--	--	--	--	--	--	--	--	--
MAR 1988										
15	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--
JULY										
13	--	--	--	--	--	--	--	--	--	--
14	--	--	--	--	--	--	--	--	--	--
SEPT										
02	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
23	--	--	--	--	--	--	--	--	--	--

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	1,4,-di-chloro-benzene, total (µg/L)	2-chloro-ethyl-vinyl-ether, total (µg/L)	Dichloro-difluoro-methane, total (µg/L)	Trans-1,3-di-chloro-propene, total (µg/L)	Cis-1,3-di-chloro-propene, total (µg/L)	Vinyl chloride, total (µg/L)	Tri-chloro-ethylene, total (µg/L)	Styrene, total (µg/L)	Xylene, total tot rec (µg/L)
				WELL 13--Continued					
JUNE 1985									
14	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--
AUG									
30	--	--	--	--	--	--	--	--	--
31	--	--	--	--	--	--	--	--	--
MAY 1986									
27	--	--	--	--	--	--	--	--	--
28	--	--	--	--	--	--	--	--	--
AUG									
28	--	--	--	--	--	--	--	--	--
APR 1987									
28	--	--	--	--	--	--	--	--	--
29	--	--	--	--	--	--	--	--	--
JULY									
15	--	--	--	--	--	--	--	--	--
SEPT									
16	--	--	--	--	--	--	--	--	--
MAR 1988									
15	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--
JULY									
13	--	--	--	--	--	--	--	--	--
14	--	--	--	--	--	--	--	--	--
SEPT									
02	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
23	--	--	--	--	--	--	--	--	--

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	Specific conductance (µS/cm)	pH (units)	Residue at 105 °C, dissolved (mg/L)	Nitrogen, ammonia, dissolved (mg/L as N)	Nitrogen, nitrite, dissolved (mg/L as N)	Nitrogen, ammonia, +organic, dissolved (mg/L as N)	Nitrogen, NO_2+NO_3 dissolved (mg/L as N)	Phosphorus, ortho, dissolved (mg/L as P)	Hardness, total (mg/L as $CaCO_3$)
				WELL 14					
JUNE 1985									
14	1,000	8.9	703	0.030	0.030	0.81	6.90	<0.020	410
17	--	--	--	--	--	--	--	--	--
AUG									
30	--	--	--	--	--	--	--	--	--
31	1,090	7.8	701	.200	.070	.50	7.30	<.020	410
MAY 1986									
27	--	--	--	--	--	--	--	--	--
28	1,120	8.2	714	<.100	<.010	.50	6.38	<.020	420
AUG									
28	1,280	7.6	718	<.100	<.010	<.30	6.19	<.020	410
APR 1987									
29	1,190	8.0	730	<.100	<.010	.50	5.00	<.020	450
MAY									
28	--	--	--	--	--	--	--	--	--
JULY									
14	1,200	7.8	748	<.100	<.010	.40	7.65	.030	420
SEPT									
16	1,300	7.8	752	<.100	<.020	<.30	8.10	.020	420
MAR 1988									
15	1,120	8.0	728	<.100	<.020	.30	8.30	.020	410
17	--	--	--	--	--	--	--	--	--
JULY									
13	--	--	--	--	--	--	--	--	--
14	1,110	7.5	840	<.100	<.010	<.30	9.00	<.020	420
SEPT									
23	1,170	7.8	750	<.100	<.020	<.30	7.90	.030	460
MAR 1989									
15	--	--	--	--	--	--	--	--	--
16	1,140	7.7	734	<.100	<.020	<.30	8.43	<.020	430
JUNE									
02	1,100	7.9	741	<.200	<.020	<.30	9.60	<.020	390
JULY									
18	1,150	8.0	716	<.100	<.020	.30	8.70	<.020	420
AUG									
29	1,140	7.9	744	<.100	<.020	.50	11.0	.030	430
JAN 1990									
25	--	--	--	--	--	--	--	--	--
26	1,040	7.7	788	<.100	<.020	<.30	8.50	<.020	420
MAY									
22	1,160	7.8	728	<.100	<.020	1.1	9.90	.090	390
JULY									
31	1,180	7.8	763	<.100	<.020	1.0	11.0	<.020	430
AUG									
03	--	--	--	--	--	--	--	--	--
SEPT									
25	1,190	8.0	782	<.100	<.020	.90	9.90	<.020	450
JAN 1991									
24	1,190	7.8	755	<.100	<.020	.60	12.1	.190	440

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	Calcium dissolved (mg/L as Ca)	Magnesium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)	Potassium, dissolved (mg/L as K)	Chloride, dissolved (mg/L as Cl)	Sulfate, dissolved (mg/L as SO_4)	Cadmium, dissolved (µg/L as Cd)	Chromium, dissolved (µg/L as Cr)
				WELL 14--Continued				
JUNE 1985								
14	68	59	100	4.6	75	240	--	--
17	--	--	--	--	--	--	--	--
AUG								
30	--	--	--	--	--	--	--	--
31	67	60	89	3.2	70	240	0.3	<10
MAY 1986								
27	--	--	--	--	--	--	--	--
28	70	60	94	2.0	76	220	.2	<20
AUG								
28	65	61	92	3.0	78	190	2.0	<20
APR 1987								
29	71	66	88	2.9	83	250	.8	<20
MAY								
28	--	--	--	--	--	--	--	--
JULY								
14	66	61	82	3.0	76	240	.5	<20
SEPT								
16	70	60	86	3.1	77	230	.4	<20
MAR 1988								
15	66	60	90	2.8	73	220	.3	<20
17	--	--	--	--	--	--	--	--
JULY								
13	--	--	--	--	--	--	--	--
14	66	62	84	3.1	75	250	.2	<20
SEPT								
23	74	67	100	3.4	80	240	--	<20
MAR 1989								
15	--	--	--	--	--	--	--	--
16	67	63	83	2.9	75	230	<.1	<20
JUNE								
02	61	58	84	2.8	85	210	<.2	<20
JULY								
18	67	61	89	2.9	75	230	.7	<20
AUG								
29	68	63	85	3.1	70	180	<.2	<20
JAN 1990								
25	--	--	--	--	--	--	--	--
26	68	61	88	4.1	80	230	.2	<20
MAY								
22	62	57	82	2.6	76	--	.1	<20
JULY								
31	68	64	92	3.1	80	190	.2	<20
AUG								
03	--	--	--	--	--	--	--	--
SEPT								
25	72	66	94	3.6	80	240	.6	<40
JAN 1991								
24	70	64	92	2.2	76	180	.4	<20

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	Copper, dissolved (µg/L as Cu)	Iron, dissolved (µg/L as Fe)	Lead, dissolved (µg/L as Pb)	Manganese, dissolved (µg/L as Mn)	Nickel, dissolved (µg/L as Ni)	Zinc, dissolved (µg/L as Zn)	Coliform, fecal (col./100 mL)	Streptococci, fecal (col./100 mL)
				WELL 14--Continued				
JUNE 1985								
14	--	<50	--	--	--	<20	--	--
17	--	--	--	--	--	--	<1	<1
AUG								
30	--	--	--	--	--	--	<1	<1
31	10	<50	10	<20	310	10	--	--
MAY 1986								
27	--	--	--	--	--	--	<1	<1
28	<20	<50	<20	<20	<20	<20	--	--
AUG								
28	20	<50	<50	<20	<20	<20	<1	13
APR 1987								
29	<20	<50	<50	<20	<20	<20	--	--
MAY								
28	--	--	--	--	--	--	<1	<1
JULY								
14	<20	130	<10	<20	20	280	<2	<2
SEPT								
16	<20	<50	<10	<20	<20	<20	--	<2
MAR 1988								
15	<20	<50	<10	<20	<20	<20	--	--
17	--	--	--	--	--	--	<2	<2
JULY								
13	--	--	--	--	--	--	<2	<2
14	<20	<50	<10	<20	<20	<20	--	--
SEPT								
23	<20	<50	<10	--	<20	<20	<2	6
MAR 1989								
15	--	--	--	--	--	--	<2	33
16	<20	<50	<10	<20	<20	<20	--	--
JUNE								
02	<20	<50	<10	<20	<20	<20	<2	4
JULY								
18	<20	<50	<10	<20	<20	<20	<2	<2
AUG								
29	<20	<50	<10	<20	<20	<30	<2	<2
JAN 1990								
25	--	--	--	--	--	--	<20	<20
26	<20	--	<10	70	<20	<20	--	--
MAY								
22	<20	<50	<10	<20	40	<20	<20	<20
JULY								
31	<20	<50	<10	<20	<20	80	<20	<20
AUG								
03	--	--	--	--	--	--	--	--
SEPT								
25	<40	<100	<10	<40	<40	<40	<20	<20
JAN 1991								
24	<20	<50	<10	<20	<20	<20	<20	<20

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	Specific conductance (µS/cm)	pH (units)	Residue at 105 °C, dissolved (mg/L)	Nitrogen, ammonia, dissolved (mg/L as N)	Nitrogen, nitrite, dissolved (mg/L as N)	Nitrogen, ammonia, +organic, dissolved (mg/L as N)	Nitrogen, NO_2+NO_3 dissolved (mg/L as N)	Phosphorus, ortho, dissolved (mg/L as P)	Hardness, total (mg/L as $CaCO_3$)	Calcium, dissolved (mg/L as Ca)
					WELL 15					
JUNE 1985										
14	--	--	3,110	0.040	0.090	1.1	6.20	<0.020	1,700	130
17	--	--	--	--	--	--	--	--	--	--
AUG										
30	--	--	--	--	--	--	--	--	--	--
31	3,500	7.6	3,090	.100	.030	.90	7.70	<.020	1,700	160
MAY 1986										
27	--	--	--	--	--	--	--	--	--	--
28	4,000	8.0	2,700	<.100	<.010	.80	8.10	<.020	1,400	130
AUG										
28	3,400	7.5	2,870	<.100	<.010	.90	8.13	<.020	1,400	120
APR 1987										
28	--	--	--	--	--	--	--	--	--	--
29	3,400	7.8	3,110	<.100	<.010	.90	6.00	<.020	1,800	160
JULY										
14	4,000	7.7	3,050	<.100	<.010	.70	8.06	<.020	1,600	150
SEPT										
16	4,000	7.5	3,100	<.100	<.020	<.30	8.30	<.020	1,700	170
MAR 1988										
15	3,150	7.7	3,040	.200	.030	.60	7.80	.040	1,500	140
17	--	--	--	--	--	--	--	--	--	--
JULY										
13	--	--	--	--	--	--	--	--	--	--
14	3,250	7.4	2,830	<.100	.150	.30	3.60	<.020	1,400	130
SEPT										
02	--	--	--	--	--	--	--	--	--	--
23	2,930	7.7	2,560	<.100	.020	<.30	1.54	.020	1,400	120
MAR 1989										
15	--	--	--	--	--	--	--	--	--	--
16	2,760	7.7	2,260	<.100	<.020	.40	4.88	<.020	1,200	120
JUNE										
02	2,750	7.7	2,430	<.200	<.020	.60	8.20	<.020	1,300	120
JULY										
18	3,000	7.7	2,490	<.100	.050	<.30	7.40	<.020	1,200	170
AUG										
29	2,770	7.7	2,250	<.100	.040	1.3	10.0	<.020	1,100	120
JAN 1990										
25	--	--	--	--	--	--	--	--	--	--
26	2,400	7.9	1,970	<.100	<.020	.80	11.2	<.020	990	95
MAY										
22	--	--	1,680	.300	<.020	1.2	8.10	.070	780	72
JULY										
31	2,160	7.6	1,600	.300	<.020	<.30	10.5	.020	820	74
SEPT										
25	2,160	7.6	1,680	<.100	<.020	1.4	9.60	.050	850	80
JAN 1991										
24	2,240	7.9	1,690	<.100	<.020	.70	12.0	.090	790	69

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	Magnesium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)	Potassium, dissolved (mg/L as K)	Chloride, dissolved (mg/L as Cl)	Sulfate, dissolved (mg/L as SO_4)	Cadmium, dissolved (µg/L as Cd)	Chromium, dissolved (µg/L as Cr)	Copper, dissolved (µg/L as Cu)	Iron, dissolved (µg/L as Fe)	Lead, dissolved (µg/L as Pb)	Manganese, dissolved (µg/L as Mn)
					WELL 15--Continued						
JUNE 1985											
14	330	360	15	57	2,000	--	--	--	<50	--	--
17	--	--	--	--	--	--	--	--	--	--	--
AUG											
30	--	--	--	--	--	--	--	--	--	--	--
31	310	320	7.9	45	1,900	0.6	<20	10	30	10	20
MAY 1986											
27	--	--	--	--	--	--	--	--	--	--	--
28	270	310	6.0	40	1,500	<.1	<20	<20	<50	<40	<20
AUG											
28	270	290	8.0	54	1,700	.7	80	<40	420	<80	<40
APR 1987											
28	--	--	--	--	--	--	--	--	--	--	--
29	350	300	6.4	53	1,800	<.2	<20	<20	<50	<50	<20
JULY											
14	310	300	7.0	47	1,800	.5	<40	<40	220	<10	<20
SEPT											
16	310	350	7.5	50	2,000	<.2	<20	<20	<50	<10	<20
MAR 1988											
15	280	360	6.1	43	1,700	2.4	<20	<20	<50	<10	<20
17	--	--	--	--	--	--	--	--	--	--	--
JULY											
13	--	--	--	--	--	--	--	--	--	--	--
14	270	310	6.8	42	1,500	.4	<20	<20	70	<10	20
SEPT											
02	--	--	--	--	--	--	--	--	--	--	--
23	250	300	7.6	38	1,500	.2	<20	<20	<50	<10	--
MAR 1989											
15	--	--	--	--	--	--	--	--	--	--	--
16	220	230	5.2	31	1,400	1.9	<20	<20	80	<10	<20
JUNE											
02	240	290	5.8	43	1,300	<.2	<20	<40	<100	<10	<40
JULY											
18	180	280	3.4	38	1,200	2.4	<20	<20	<50	<10	<20
AUG											
29	210	270	6.6	35	1,200	<.2	<20	<20	<50	<10	<20
JAN 1990											
25	--	--	--	--	--	--	--	--	--	--	--
26	180	230	5.5	50	1,000	.1	<200	<200	<500	<10	<200
MAY											
22	150	210	5.3	46	850	.1	<20	<20	<50	<10	<20
JULY											
31	150	210	6.0	49	710	.2	<40	<40	<100	<10	<40
SEPT											
25	160	140	6.8	72	640	.1	<40	<40	<100	<10	<40
JAN 1991											
24	150	200	4.7	89	700	1.0	<20	<20	<50	<10	<20

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	Nickel, dissolved (µg/L as Ni)	Zinc, dissolved (µg/L as Zn)	Coliform, fecal (col./100 mL)	Streptococci, fecal (col./100 mL)	Dichlorobromomethane, total (µg/L)	Carbon tetrachloride, total (µg/L)	1,2-dichloroethane, total (µg/L)	Bromoform, total (µg/L)	Chlorodibromomethane, total (µg/L)	Chloroform, total (µg/L)
				WELL 15--Continued						
JUNE 1985										
14	--	10	--	--	--	--	--	--	--	--
17	--	--	<1	1	--	--	--	--	--	--
AUG										
30	--	--	<1	<1	--	--	--	--	--	--
31	160	30	--	--	--	--	--	--	--	--
MAY 1986										
27	--	--	--	1	--	--	--	--	--	--
28	<60	<20	--	--	--	--	--	--	--	--
AUG										
28	120	60	<1	48	--	--	--	--	--	--
APR 1987										
28	--	--	<1	<1	--	--	--	--	--	--
29	<20	<20	--	--	--	--	--	--	--	--
JULY										
14	100	<40	<2	<2	--	--	--	--	--	--
SEPT										
16	90	60	--	<2	--	--	--	--	--	--
MAR 1988										
15	30	<20	--	--	--	--	--	--	--	--
17	--	--	<2	<2	--	--	--	--	--	--
JULY										
13	--	--	<2	<2	--	--	--	--	--	--
14	40	<20	--	--	--	--	--	--	--	--
SEPT										
02	--	--	--	--	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
23	20	<20	<2	2	--	--	--	--	--	--
MAR 1989										
15	--	--	<2	40	--	--	--	--	--	--
16	<20	<20	--	--	--	--	--	--	--	--
JUNE										
02	<20	<20	<2	27	--	--	--	--	--	--
JULY										
18	<20	<20	<2	33	--	--	--	--	--	--
AUG										
29	<20	<20	<2	<2	--	--	--	--	--	--
JAN 1990										
25	--	--	<20	<20	--	--	--	--	--	--
26	<200	--	--	--	--	--	--	--	--	--
MAY										
22	30	<20	<20	<20	--	--	--	--	--	--
JULY										
31	20	20	<20	110	--	--	--	--	--	--
SEPT										
25	<40	<40	<20	<20	--	--	--	--	--	--
JAN 1991										
24	20	<20	<20	<20	--	--	--	--	--	--

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	Toluene, total (µg/L)	Benzene, total (µg/L)	Chloro-benzene, total (µg/L)	Chloro-ethane, total (µg/L)	Ethyl-benzene, total (µg/L)	Methyl-bromide, total (µg/L)	Methyl-chloride, total (µg/L)	Methyl-ene chlo-ride, total (µg/L)	Tetra-chloro-ethyl-ene, total (µg/L)	Tri-chloro-fluoro-methane, total (µg/L)
					WELL 15--Continued					
JUNE 1985										
14	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--
AUG										
30	--	--	--	--	--	--	--	--	--	--
31	--	--	--	--	--	--	--	--	--	--
MAY 1986										
27	--	--	--	--	--	--	--	--	--	--
28	--	--	--	--	--	--	--	--	--	--
AUG										
28	--	--	--	--	--	--	--	--	--	--
APR 1987										
28	--	--	--	--	--	--	--	--	--	--
29	--	--	--	--	--	--	--	--	--	--
JULY										
14	--	--	--	--	--	--	--	--	--	--
SEPT										
16	--	--	--	--	--	--	--	--	--	--
MAR 1988										
15	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--
JULY										
13	--	--	--	--	--	--	--	--	--	--
14	--	--	--	--	--	--	--	--	--	--
SEPT										
02	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
23	--	--	--	--	--	--	--	--	--	--

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	1,1-dichloroethane, total (µg/L)	1,1-dichloroethylene, total (µg/L)	1,1,1-trichloroethane, total (µg/L)	1,1,2-trichloroethane, total (µg/L)	1,1,2,2 tetrachloroethane, total (µg/L)	1,2-dichlorobenzene, total (µg/L)	1,2-dichloropropane, total (µg/L)	Trans-1,2-dichloroethane, total (µg/L)	1,3-dichloropropene, total (µg/L)	1,3-dichlorobenzene, total (µg/L)
					WELL 15--Continued					
JUNE 1985										
14	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--
AUG										
30	--	--	--	--	--	--	--	--	--	--
31	--	--	--	--	--	--	--	--	--	--
MAY 1986										
27	--	--	--	--	--	--	--	--	--	--
28	--	--	--	--	--	--	--	--	--	--
AUG										
28	--	--	--	--	--	--	--	--	--	--
APR 1987										
28	--	--	--	--	--	--	--	--	--	--
29	--	--	--	--	--	--	--	--	--	--
JULY										
14	--	--	--	--	--	--	--	--	--	--
SEPT										
16	--	--	--	--	--	--	--	--	--	--
MAR 1988										
15	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--
JULY										
13	--	--	--	--	--	--	--	--	--	--
14	--	--	--	--	--	--	--	--	--	--
SEPT										
02	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
23	--	--	--	--	--	--	--	--	--	--

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	1,4,-dichlorobenzene, total (µg/L)	2-chloroethylvinylether, total (µg/L)	Dichlorodifluoromethane, total (µg/L)	Trans-1,3-dichloropropene, total (µg/L)	Cis-1,3-dichloropropene, total (µg/L)	Vinyl chloride, total (µg/L)	Trichloroethylene, total (µg/L)	Styrene, total (µg/L)	Xylene, total tot rec (µg/L)
				WELL 15--Continued					
JUNE 1985									
14	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--
AUG									
30	--	--	--	--	--	--	--	--	--
31	--	--	--	--	--	--	--	--	--
MAY 1986									
27	--	--	--	--	--	--	--	--	--
28	--	--	--	--	--	--	--	--	--
AUG									
28	--	--	--	--	--	--	--	--	--
APR 1987									
28	--	--	--	--	--	--	--	--	--
29	--	--	--	--	--	--	--	--	--
JULY									
14	--	--	--	--	--	--	--	--	--
SEPT									
16	--	--	--	--	--	--	--	--	--
MAR 1988									
15	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--
JULY									
13	--	--	--	--	--	--	--	--	--
14	--	--	--	--	--	--	--	--	--
SEPT									
02	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
23	--	--	--	--	--	--	--	--	--

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	Specific conductance (µS/cm)	pH (units)	Residue at 105 °C, dissolved (mg/L)	Nitrogen, ammonia, dissolved (mg/L as N)	Nitrogen, nitrite, dissolved (mg/L as N)	Nitrogen, ammonia, +organic, dissolved (mg/L as N)	Nitrogen, NO_2+NO_3 dissolved (mg/L as N)	Phosphorus, ortho, dissolved (mg/L as P)	Hardness, total (mg/L as $CaCO_3$)
					WELL 16				
AUG 1985									
31	2,210	7.7	1,900	0.100	<0.010	0.70	14.8	<0.020	890
MAY 1986									
27	1,450	8.0	1,180	<.100	<.010	<.30	23.5	<.020	530
AUG									
28	2,450	7.7	1,860	<.100	<.010	<.30	14.3	<.020	810
APR 1987									
28	2,050	7.8	1,560	<.100	<.010	.80	22.0	<.020	790
JULY 1988									
13	--	--	--	--	--	--	--	--	--
15	2,180	7.4	1,770	<.100	<.010	3.1	23.4	<.020	840
JULY 1989									
18	2,300	7.8	1,720	<.100	<.020	<.30	21.7	<.020	820
AUG									
29	2,000	7.7	1,500	<.100	<.020	.80	24.0	<.020	690
MAY 1990									
22	2,440	7.7	1,680	.200	<.020	2.4	19.1	.090	790
JULY									
31	2,330	7.7	1,740	<.100	<.020	<.30	20.3	<.020	800

Sample date	Calcium dissolved (mg/L as Ca)	Magnesium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)	Potassium, dissolved (mg/L as K)	Chloride, dissolved (mg/L as Cl)	Sulfate, dissolved (mg/L as SO_4)	Cadmium, dissolved (µg/L as Cd)	Chromium, dissolved (µg/L as Cr)
AUG 1985								
31	180	110	240	4.5	120	930	0.3	<10
MAY 1986								
27	100	66	200	4.0	62	440	.3	<20
AUG								
28	160	100	260	4.0	110	890	.6	90
APR 1987								
28	160	96	200	4.3	110	680	.6	<20
JULY 1988								
13	--	--	--	--	--	--	--	--
15	170	100	220	4.5	120	820	.1	<20
JULY 1989								
18	170	93	240	4.4	130	750	.2	<20
AUG								
29	130	87	180	4.3	72	630	<.2	<20
MAY 1990								
22	160	93	210	4.1	140	--	.1	<20
JULY								
31	170	94	220	4.5	140	740	.1	<20

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	Copper, dissolved (µg/L as Cu)	Iron, dissolved (µg/L as Fe)	Lead, dissolved (µg/L as Pb)	Manganese, dissolved (µg/L as Mn)	Nickel, dissolved (µg/L as Ni)	Zinc, dissolved (µg/L as Zn)	Coliform, fecal (col./100 mL)	Streptococci, fecal (col./100 mL)
				WELL 16--Continued				
AUG 1985								
31	<10	<50	<10	<10	270	80	<1	400
MAY 1986								
27	<20	<50	<10	<20	<20	<20	--	--
AUG								
28	<40	520	<100	30	140	60	<1	<1
APR 1987								
28	<20	<50	50	<20	30	20	<1	<1
JULY 1988								
13	--	--	--	--	--	--	<2	<2
15	<20	<50	<10	<20	<20	<20	--	--
JULY 1989								
18	<20	<50	<10	<20	<20	<20	<2	<2
AUG								
29	<20	<50	<10	<20	<20	<20	<2	7
MAY 1990								
22	<20	150	<10	<20	<20	<20	1	<20
JULY								
31	20	<50	<10	<20	20	<20	<20	<20

Sample date	Specific conductance (µS/cm)	pH (units)	Residue at 105 °C, dissolved (mg/L)	Nitrogen, ammonia, dissolved (mg/L as N)	Nitrogen, nitrite, dissolved (mg/L as N)	Nitrogen, ammonia, +organic, dissolved (mg/L as N)	Nitrogen, NO_2+NO_3 dissolved (mg/L as N)	Phosphorus, ortho, dissolved (mg/L as P)	Hardness, total (mg/L as $CaCO_3$)
				WELL 17					
AUG 1985									
31	1,000	8.3	572	0.700	0.010	0.80	0.070	<0.020	10
MAY 1986									
27	960	8.7	599	.600	<.010	.50	.160	<.020	10
AUG									
28	--	--	--	--	--	--	--	--	--
29	1,000	8.2	556	.600	<.010	.50	.030	<.020	14
APR 1987									
28	960	8.5	557	.600	<.010	1.0	.080	<.020	14
JULY									
14	1,110	8.4	581	.600	<.020	1.5	<.020	<.020	13
SEPT									
16	930	8.4	574	.700	<.020	.40	<.020	<.020	10
JULY 1988									
13	--	--	--	--	--	--	--	--	--
15	956	8.4	588	.700	<.010	.90	.140	<.020	14
SEPT									
22	995	8.5	588	.500	<.020	.50	<.020	.020	18
23	--	--	--	--	--	--	--	--	--
JUNE 1989									
01	890	8.6	580	.500	<.020	1.5	<.020	.110	10
JULY									
18	970	8.6	571	<.100	<.020	.50	<.020	<.020	20
AUG									
29	960	8.4	571	.800	<.020	1.3	.080	<.020	28
JAN 1990									
26	932	8.2	593	.500	<.020	1.1	.600	<.020	15
MAY									
22	1,020	8.5	570	.300	<.020	1.5	<.010	.030	12
JULY									
31	979	8.6	520	.500	<.020	<.30	.100	<.020	20
SEPT									
25	954	8.4	553	.300	<.020	.90	<.020	<.020	14

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	Calcium dissolved (mg/L as Ca)	Magnesium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)	Potassium, dissolved (mg/L as K)	Chloride, dissolved (mg/L as Cl)	Sulfate, dissolved (mg/L as SO_4)	Cadmium, dissolved (µg/L as Cd)	Chromium, dissolved (µg/L as Cr)
				WELL 17--Continued				
AUG 1985								
31	4.0	<1.0	220	1.1	71	6.0	0.1	<10
MAY 1986								
27	4.0	<1.0	250	2.0	76	5.0	<.1	<20
AUG								
28	--	--	--	--	--	--	--	--
29	4.0	1.0	220	1.0	75	<3.0	.5	<20
APR 1987								
28	4.0	.90	220	1.4	79	10	1.1	<20
JULY								
14	4.0	.80	220	1.4	70	20	<.2	<20
SEPT								
16	4.0	<1.0	220	1.3	77	14	<.2	<20
JULY 1988								
13	--	--	--	--	--	--	--	--
15	4.0	<1.0	230	1.5	70	<3.0	.2	<20
SEPT								
22	4.0	<1.0	220	1.3	71	<3.0	<.2	<20
23	--	--	--	--	--	--	--	--
JUNE 1989								
01	3.0	<1.0	220	1.3	84	<10	<.2	<20
JULY								
18	3.0	<1.0	240	1.5	73	11	.3	<20
AUG								
29	4.0	<1.0	210	1.4	75	<10	<.2	<20
JAN 1990								
26	4.0	<1.0	210	1.4	80	31	<.2	<20
MAY								
22	4.0	<1.0	210	1.3	75	--	.2	<20
JULY								
31	4.0	<1.0	230	1.5	76	22	<.2	<20
SEPT								
25	4.0	1.0	210	1.4	75	20	.3	<40

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	Copper, dissolved (µg/L as Cu)	Iron, dissolved (µg/L as Fe)	Lead, dissolved (µg/L as Pb)	Manganese, dissolved (µg/L as Mn)	Nickel, dissolved (µg/L as Ni)	Zinc, dissolved (µg/L as Zn)	Coliform, fecal (col./100 mL)	Streptococci, fecal (col./100 mL)
				WELL 17--Continued				
AUG 1985								
31	<10	<50	<10	<10	80	<10	<1	<1
MAY 1986								
27	<20	<50	<10	<20	<20	<20	63	<1
AUG								
28	--	--	--	--	--	--	<1	<1
29	<20	<50	<50	<20	<20	<20	--	--
APR 1987								
28	<20	<50	<50	<20	<20	<20	<1	<1
JULY								
14	<20	110	<10	<20	<20	20	<2	<2
SEPT								
16	<20	<50	<10	<20	20	<20	<2	<2
JULY 1988								
13	--	--	--	--	--	--	<2	<2
15	<20	<50	<10	<20	<20	<20	--	--
SEPT								
22	<20	<50	<10	--	<20	<20	--	--
23	--	--	--	--	--	--	<2	<2
JUNE 1989								
01	<20	<50	<10	<20	<20	20	<2	<2
JULY								
18	<20	<50	<10	<20	<20	<20	<2	<2
AUG								
29	<20	<50	<10	<20	<20	<20	<2	<2
JAN 1990								
26	<20	<50	<10	<20	<20	<20	--	--
MAY								
22	<20	<50	<10	<20	<20	<20	<20	<20
JULY								
31	<20	<50	<10	<20	<20	<20	<20	<20
SEPT								
25	<40	<100	<10	<40	<40	<40	<20	<20

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	Specific conductance (µS/cm)	pH (units)	Residue at 105 °C, dissolved (mg/L)	Nitrogen, ammonia, dissolved (mg/L as N)	Nitrogen, nitrite, dissolved (mg/L as N)	Nitrogen, ammonia, +organic, dissolved (mg/L as N)	Nitrogen, NO_2+NO_3 dissolved (mg/L as N)	Phosphorus, ortho, dissolved (mg/L as P)	Hardness, total (mg/L as $CaCO_3$)
				WELL 18					
SEPT 1985									
06	1,500	8.2	782	0.500	<0.010	1.4	0.040	0.040	42
MAY 1986									
27	1,310	8.5	840	.400	.010	.50	.090	<.020	54
AUG									
28	--	--	--	--	--	--	--	--	--
29	820	8.0	818	.400	<.010	.60	.030	<.020	40
APR 1987									
28	1,250	8.5	770	.500	<.010	.80	<.010	<.020	45
JULY									
14	1,250	8.3	.765	.500	<.020	1.1	.040	<.020	40
SEPT									
16	1,400	8.2	810	.500	<.020	<.30	<.020	<.020	46
MAR 1988									
18	1,350	--	812	.500	<.020	.40	.020	.080	51
JULY									
13	--	--	--	--	--	--	--	--	--
15	1,280	8.0	852	.600	<.010	1.2	.010	<.020	40
SEPT									
22	1,330	8.2	806	.300	<.020	<.30	<.020	<.020	40
MAR 1989									
15	--	--	--	--	--	--	--	--	--
16	1,280	8.2	746	<.100	<.020	<.30	.050	<.020	44
JUNE									
01	1,070	8.5	738	.400	<.020	.70	.060	.090	32
JULY									
18	1,300	8.3	797	<.100	<.020	.40	.020	<.020	42
AUG									
29	1,280	8.2	779	.600	<.020	.70	.120	<.020	40
MAY									
22	1,470	8.3	819	<.100	<.020	1.0	<.010	<.020	42
JULY									
31	1,330	8.3	785	<.100	<.020	.40	.200	<.020	46
SEPT									
25	1,310	8.4	807	<.100	<.020	.50	<.020	<.020	37

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	Calcium dissolved (mg/L as Ca)	Magnesium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)	Potassium, dissolved (mg/L as K)	Chloride, dissolved (mg/L as Cl)	Sulfate, dissolved (mg/L as SO_4)	Cadmium, dissolved (µg/L as Cd)	Chromium, dissolved (µg/L as Cr)
				WELL 18--Continued				
SEPT 1985								
06	12	3.0	310	2.1	77	240	0.2	<10
MAY 1986								
27	15	4.0	310	2.0	80	240	.5	<20
AUG								
28	--	--	--	--	--	--	--	--
29	11	3.0	270	2.0	76	230	.5	<20
APR 1987								
28	12	3.7	280	1.8	73	180	<.2	<20
JULY								
14	11	3.1	270	1.6	66	200	<.2	<20
SEPT								
16	12	4.0	270	1.8	76	220	<.2	<20
MAR 1988								
18	14	4.0	280	1.8	73	220	.2	<20
JULY								
13	--	--	--	--	--	--	--	--
15	11	3.0	280	1.9	77	240	<.1	<20
SEPT								
22	11	3.0	260	1.7	78	220	<.2	<20
MAR 1989								
15	--	--	--	--	--	--	--	--
16	11	4.0	270	1.7	72	190	.2	<20
JUNE								
01	8.0	3.0	280	1.6	78	150	<.2	<20
JULY								
18	12	3.0	290	2.0	75	210	.7	<20
AUG								
29	11	3.0	270	1.8	120	130	<.2	<20
MAY								
22	12	3.0	270	1.8	76	--	<.2	20
JULY								
31	12	4.0	270	2.0	76	220	.1	<20
SEPT								
25	10	3.0	270	2.0	76	230	.3	<40

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	Copper, dissolved (µg/L as Cu)	Iron, dissolved (µg/L as Fe)	Lead, dissolved (µg/L as Pb)	Manganese, dissolved (µg/L as Mn)	Nickel, dissolved (µg/L as Ni)	Zinc, dissolved (µg/L as Zn)	Coliform, fecal (col./100 mL)	Streptococci, fecal (col./100 mL)
				WELL 18--Continued				
SEPT 1985								
06	<10	40	20	30	100	120	<1	<1
MAY 1986								
27	<50	<50	<10	<40	<20	170	<1	<1
AUG								
28	--	--	--	--	--	--	<1	<1
29	<20	<50	<50	30	<20	90	--	--
APR 1987								
28	<20	<20	<50	20	<20	70	<1	<1
JULY								
14	<20	<50	<10	<20	<20	60	<2	<2
SEPT								
16	<20	<50	<10	30	20	60	<2	3
MAR 1988								
18	<20	<50	<10	30	<20	80	<2	<2
JULY								
13	--	--	--	--	--	--	<2	<2
15	<20	<50	<10	30	<20	40	--	--
SEPT								
22	<20	<50	<10	--	<20	<20	--	--
MAR 1989								
15	--	--	--	--	--	--	<2	<2
16	<20	60	<10	20	20	20	--	--
JUNE								
01	<20	<50	<10	20	<20	30	<2	4
JULY								
18	<20	<50	<10	30	<20	40	<2	<2
AUG								
29	<20	<50	<10	<20	<20	40	<2	<2
MAY 1990								
22	<20	<50	<10	20	<20	<20	--	--
JULY								
31	<20	<50	<10	30	<20	60	<20	<20
SEPT								
25	<40	<100	<10	<40	<40	<40	<20	3

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	Specific conductance (µS/cm)	pH (units)	Residue at 105 °C, dissolved (mg/L)	Nitrogen, ammonia, dissolved (mg/L as N)	Nitrogen, nitrite, dissolved (mg/L as N)	Nitrogen, ammonia, +organic, dissolved (mg/L as N)	Nitrogen, NO_2+NO_3 dissolved (mg/L as N)	Phosphorus, ortho, dissolved (mg/L as P)	Hardness, total (mg/L as $CaCO_3$)
				WELL 19					
JUNE 1985									
14	--	--	492	<0.100	0.030	0.05	0.500	<0.020	--
20	--	--	--	--	--	--	--	--	--
AUG									
29	--	--	--	--	--	--	--	--	--
30	800	8.6	567	.600	<.010	.80	.110	<.020	7
MAY 1986									
27	810	8.6	513	.500	<.010	.30	.150	<.020	7
AUG									
28	--	--	--	--	--	--	--	--	--
29	820	8.0	497	.400	<.010	.70	.240	<.020	--
SEPT 1987									
16	980	8.5	500	<.100	.060	<.30	.770	<.020	7
MAR 1988									
18	840	8.6	502	.300	<.020	<.30	.070	.040	--
JULY									
13	820	7.8	472	1.00	<.010	--	--	--	12
SEPT									
22	838	8.8	476	.300	<.020	.30	<.020	<.020	12
23	--	--	--	--	--	--	--	--	--
MAR 1989									
15	832	8.6	496	--	<.020	<.10	.020	.040	7
JUNE									
01	722	8.9	506	.400	<.020	.30	.050	.090	7
JULY									
18	810	8.9	509	<.100	<.020	<.30	.370	<.020	<20
AUG									
29	820	8.8	504	.500	<.020	.60	.200	<.020	20
JAN 1990									
26	777	8.5	356	.600	<.020	.80	.200	<.020	13
MAY									
22	830	8.7	506	.300	<.020	1.2	<.010	.030	10
JULY									
31	825	8.7	494	.500	<.020	.80	.100	<.020	12
SEPT									
25	827	8.6	507	<.100	<.020	.50	.200	<.020	8

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	Calcium dissolved (mg/L as Ca)	Magnesium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)	Potassium, dissolved (mg/L as K)	Chloride, dissolved (mg/L as Cl)	Sulfate, dissolved (mg/L as SO_4)	Cadmium, dissolved (µg/L as Cd)	Chromium, dissolved (µg/L as Cr)
				WELL 19--Continued				
JUNE 1985								
14	<5.0	<5.0	200	1.3	16	190	--	--
20	--	--	--	--	--	--	--	--
AUG								
29	--	--	--	--	--	--	--	--
30	3.0	<1.0	200	1.3	22	230	0.2	<10
MAY 1986								
27	3.0	<1.0	200	1.0	18	170	.3	<20
AUG								
28	--	--	--	--	--	--	--	--
29	3.0	<1.0	190	1.0	19	160	.7	<20
SEPT 1987								
16	3.0	<1.0	170	1.1	17	170	<.2	<20
MAR 1988								
18	4.0	<1.0	180	.90	18	160	.2	<20
JULY								
13	4.0	<1.0	180	1.3	19	150	--	<20
SEPT								
22	3.0	<1.0	170	1.0	19	170	.2	<20
23	--	--	--	--	--	--	--	--
MAR 1989								
15	3.0	<1.0	170	1.0	21	180	--	<20
JUNE								
01	3.0	<1.0	170	1.1	20	170	<.2	<20
JULY								
18	3.0	<1.0	170	1.8	18	160	<.3	<20
AUG								
29	4.0	<1.0	180	1.2	19	140	<.2	<20
JAN 1990								
26	4.0	<1.0	170	1.1	25	160	.1	<20
MAY								
22	3.0	<1.0	160	1.0	19	--	<.2	<20
JULY								
31	3.0	<1.0	170	1.2	18	170	<.2	<20
SEPT								
25	2.0	<2.0	170	1.2	21	190	<.2	<40

Table 5.--*Chemical and bacteriological analyses of water from the observation wells*--Continued

Sample date	Copper, dissolved (µg/L as Cu)	Iron, dissolved (µg/L as Fe)	Lead, dissolved (µg/L as Pb)	Manganese, dissolved (µg/L as Mn)	Nickel, dissolved (µg/L as Ni)	Zinc, dissolved (µg/L as Zn)	Coliform, fecal (col./100 mL)	Streptococci, fecal (col./100 mL)
				WELL 19--Continued				
JUNE 1985								
14	--	20	--	--	--	60	--	--
20	--	--	--	--	--	--	<1	160
AUG								
29	--	--	--	--	--	--	8	460
30	<10	100	<50	10	80	30	--	--
MAY 1986								
27	<20	<50	<20	--	<20	50	<1	<1
AUG								
28	--	--	--	--	--	--	<1	<1
29	<20	130	<50	<20	<20	390	--	--
SEPT 1987								
16	<20	<50	<10	<20	<20	90	<2	<2
MAR 1988								
18	<20	<50	<10	<20	<20	30	23	3
JULY								
13	<20	<50	<10	<20	<20	<20	6	4
SEPT								
22	<20	<50	<10	--	<20	20	--	--
23	--	--	--	--	--	--	<2	<2
MAR 1989								
15	<20	<50	<10	<20	<20	30	<2	<2
JUNE								
01	<20	<50	<10	<20	<20	<20	<2	7
JULY								
18	<20	70	<10	<20	<20	40	<2	1,500
AUG								
29	<20	<50	<10	<20	<20	330	<2	<2
JAN 1990								
26	<20	50	<10	<20	<20	100	--	--
MAY								
22	<20	<50	<10	<20	<20	60	<20	1
JULY								
31	<20	<50	<10	<20	<20	50	<20	<20
SEPT								
25	<40	100	<10	<40	<40	80	<20	3

Table 6.--*Chemical analyses of water from the multilevel ground-water sampling devices*

[MLGWSD, multilevel ground-water sampling device; ft, feet; °C, degrees Celsius; µS/cm, microsiemens per centimeter; tot rec, total recoverable; mg/L, milligrams per liter; µg/L, micrograms per liter; NO_2+NO_3, nitrite plus nitrate; --, no data; <, less than the detection limit for analytical method and sample dilution used]

Sample date	Depth to top of sample interval (ft)	Depth to bottom of sample interval (ft)	Temperature, water (°C)	Specific conductance (µS/cm)	pH (units)	Nitrogen ammonia, dissolved (mg/L as N)	Nitrogen nitrite, dissolved (mg/L as N)	Nitrogen ammonia, +organic, dissolved (mg/L as N)	Nitrogen NO_2+NO_3, dissolved (mg/L as N)	Hardness, total (mg/L as $CaCO_3$)	Calcium, dissolved (mg/L as Ca)
					MLGWSD-1						
SEPT 1987											
09	19	20	14.0	2,650	7.5	--	--	--	14.0	980	210
09	24	25	13.5	3,400	7.5	--	--	--	24.0	670	140
09	29	30	13.5	3,900	7.5	--	--	--	9.60	1,200	230
22	19	20	14.0	2,550	7.5	--	--	1.2	--	--	--
22	24	25	14.0	3,300	7.4	--	--	.70	--	--	--
22	29	30	15.0	3,900	7.5	--	--	.50	--	--	--
MAR 1988											
22	19	20	13.0	2,580	7.4	0.020	--	.50	22.0	--	--
22	24	25	13.0	4,050	7.4	.050	--	.50	13.0	--	--
22	29	30	13.0	4,300	7.5	.070	--	.70	11.0	--	--
AUG											
17	24	25	--	4,400	7.4	--	--	--	--	--	--
17	29	30	--	3,940	7.7	--	--	--	--	--	--
SEPT											
01	24	25	--	--	--	--	--	--	--	--	--
01	29	30	--	--	--	--	--	--	--	--	--
20	24	25	18.5	4,390	7.6	.030	<0.010	1.0	15.0	1,200	240
20	29	30	17.5	4,790	7.7	.090	.021	.30	15.0	1,300	240

Sample date	Magnesium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)	Potassium, dissolved (mg/L as K)	Chloride, dissolved (mg/L as Cl)	Sulfate, dissolved (mg/L as SO_4)	Cadmium-dissolved (µg/L as Cd)	Iron, dissolved (µg/L as Fe)	Lead, dissolved (µg/L as Pb)	Manganese, dissolved (µg/L as Mn)	Dichlorobromomethane, total (µg/L)	Carbon tetrachloride, total (µg/L)
SEPT 1987											
09	110	510	7.0	200	1,500	--	30	--	30	--	--
09	77	380	6.4	130	970	--	20	--	30	--	--
09	140	620	10	250	1,900	--	40	--	90	--	--
22	--	--	--	130	--	--	--	--	--	--	--
22	--	--	--	200	--	--	--	--	--	--	--
22	--	--	--	240	--	--	--	--	--	--	--
MAR 1988											
22	--	--	--	140	--	--	--	--	--	--	--
22	--	--	--	210	--	--	--	--	--	--	--
22	--	--	--	240	--	--	--	--	--	--	--
AUG											
17	--	--	--	260	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--	--
SEPT											
01	--	--	--	--	--	--	--	--	--	<3.0	<3.0
01	--	--	--	--	--	--	--	--	--	<3.0	--
20	150	630	8.1	260	2,000	<1	20	<5	20	--	--
20	160	640	9.7	290	2,100	<1	10	<5	<10	--	--

Table 6.--*Chemical analyses of water from the multilevel ground-water sampling devices*--Continued

Sample date	1,2-dichloroethane, total (µg/L)	Bromoform, total (µg/L)	Chlorodibromomethane, total (µg/L)	Chloroform, total (µg/L)	Toluene, total (µg/L)	Benzene, total (µg/L)	Chlorobenzene, total (µg/L)	Chloroethane, total (µg/L)	Ethylbenzene, total (µg/L)	Methylbromide, total (µg/L)	Methylchloride, total (µg/L)
					MLGWSD-1--Continued						
SEPT 1987											
09	--	--	--	--	--	--	--	--	--	--	--
09	--	--	--	--	--	--	--	--	--	--	--
09	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--
MAR 1988											
22	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--
AUG											
17	--	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--	--
SEPT											
01	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	3.0	<3.0	<3.0	<3.0
01	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	3.0	<3.0	<3.0	<3.0
20	--	--	--	--	--	--	--	--	--	--	--
20	--	--	--	--	--	--	--	--	--	--	--

Sample date	Methylene chloride, total (µg/L)	Tetrachloroethylene, total (µg/L)	Trichlorofluoromethane, total (µg/L)	1,1-dichloroethane, total (µg/L)	1,1-dichloroethylene, total (µg/L)	1,1,1-trichloroethane, total (µg/L)	1,1,2-trichloroethane, total (µg/L)	1,1,2,2 tetrachloroethane, total (µg/L)	1,2-dichlorobenzene, total (µg/L)	1,2-dichloropropane, total (µg/L)	Trans-1,2-dichloroethene, total (µg/L)
SEPT 1987											
09	--	--	--	--	--	--	--	--	--	--	--
09	--	--	--	--	--	--	--	--	--	--	--
09	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--
MAR 1988											
22	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--
AUG											
17	--	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--	--
SEPT											
01	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
01	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
20	--	--	--	--	--	--	--	--	--	--	--
20	--	--	--	--	--	--	--	--	--	--	--

Table 6.--*Chemical analyses of water from the multilevel ground-water sampling devices*--Continued

Sample date	1,3-dichloropropene, total (µg/L)	1,3-dichlorobenzene, total (µg/L)	1,4-dichlorobenzene, total (µg/L)	2-chloroethylvinylether, total (µg/L)	Dichlorodifluoromethane, total (µg/L)	Trans-1,3-dichloropropene, total (µg/L)	Cis-1,3-dichloropropene, total (µg/L)	Vinyl chloride, total (µg/L)	Trichloroethylene, total (µg/L)	Styrene, total (µg/L)	Xylene, tot rec (µg/L)
					MLGWSD-1--Continued						
SEPT 1987											
09	--	--	--	--	--	--	--	--	--	--	--
09	--	--	--	--	--	--	--	--	--	--	--
09	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--
MAR 1988											
22	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--
AUG											
17	--	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--	--
SEPT											
01	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
01	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
20	--	--	--	--	--	--	--	--	--	--	--
20	--	--	--	--	--	--	--	--	--	--	--

Sample date	Depth to top of sample interval (ft)	Depth to bottom of sample interval (ft)	Temperature, water (°C)	Specific conductance (µS/cm)	pH (units)	Nitrogen ammonia, dissolved (mg/L as N)	Nitrogen nitrite, dissolved (mg/L as N)	Nitrogen ammonia, +organic, dissolved (mg/L as N)	Nitrogen NO_2+NO_3, dissolved (mg/L as N)	Hardness, total (mg/L as $CaCO_3$)	Calcium, dissolved (mg/L as Ca)
					MLGWSD-2						
SEPT 1987											
08	15	17	20.0	1,700	7.3	--	--	--	4.10	640	160
08	20	22	21.0	1,950	7.3	--	--	--	5.60	660	170
08	25	26	20.0	1,900	7.3	--	--	--	11.0	630	160
22	15	17	--	2,150	7.2	--	--	1.0	--	--	--
22	20	22	--	2,300	7.3	--	--	<.20	--	--	--
22	25	26	--	2,000	7.3	--	--	1.6	--	--	--
MAR 1988											
22	15	17	15.0	1,760	7.5	--	--	.90	--	--	--
22	20	22	13.0	1,900	7.3	0.030	--	.60	8.30	--	--
22	25	26	12.0	1,870	7.3	.020	--	.60	5.60	--	--
AUG											
17	15	17	--	1,850	7.2	.050	--	1.1	23.0	--	--
17	20	22	--	1,900	7.2	.030	--	.80	13.0	--	--
17	25	26	--	1,860	7.3	.070	--	.60	4.20	--	--
SEPT											
01	15	17	--	--	--	--	--	--	--	--	--
01	20	22	--	--	--	--	--	--	--	--	--
01	25	26	--	--	--	--	--	--	--	--	--
20	15	17	21.5	1,960	7.5	--	--	1.1	--	710	180
20	20	22	19.5	1,950	7.5	.040	0.110	.60	13.0	700	180
20	25	26	15.5	1,900	7.4	.040	.050	1.2	6.90	630	150

Table 6.--*Chemical analyses of water from the multilevel ground-water sampling devices*--Continued

Sample date	Magnesium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)	Potassium, dissolved (mg/L as K)	Chloride, dissolved (mg/L as Cl)	Sulfate, dissolved (mg/L as SO_4)	Cadmium-dissolved (µg/L as Cd)	Iron, dissolved (µg/L as Fe)	Lead, dissolved (µg/L as Pb)	Manganese, dissolved (µg/L as Mn)	Dichlorobromomethane, total (µg/L)	Carbon tetrachloride, total (µg/L)
					MLGWSD-2--Continued						
SEPT 1987											
08	58	180	7.6	200	450	--	4	--	160	--	--
08	58	160	7.9	210	430	--	7	--	250	--	--
08	55	140	7.1	200	350	--	8	--	66	--	--
22	--	--	--	190	--	--	--	--	--	--	--
22	--	--	--	200	--	--	--	--	--	--	--
22	--	--	--	190	--	--	--	--	--	--	--
MAR 1988											
22	--	--	--	210	--	--	--	--	--	--	--
22	--	--	--	210	--	--	--	--	--	--	--
22	--	--	--	190	--	--	--	--	--	--	--
AUG											
17	--	--	--	240	--	--	--	--	--	--	--
17	--	--	--	200	--	--	--	--	--	--	--
17	--	--	--	180	--	--	--	--	--	--	--
SEPT											
01	--	--	--	--	--	--	--	--	--	<3.0	<3.0
01	--	--	--	--	--	--	--	--	--	<3.0	<3.0
01	--	--	--	--	--	--	--	--	--	<3.0	<3.0
20	63	140	12	270	280	4	24	<5	230	--	--
20	61	160	8.4	210	400	4	23	<5	230	--	--
20	62	180	3.1	190	410	5	160	<5	190	--	--

Sample date	1,2-dichloroethane, total (µg/L)	Bromoform, total (µg/L)	Chlorodibromomethane, total (µg/L)	Chloroform, total (µg/L)	Toluene, total (µg/L)	Benzene, total (µg/L)	Chlorobenzene, total (µg/L)	Chloroethane, total (µg/L)	Ethylbenzene, total (µg/L)	Methylbromide, total (µg/L)	Methylchloride, total (µg/L)
SEPT 1987											
08	--	--	--	--	--	--	--	--	--	--	--
08	--	--	--	--	--	--	--	--	--	--	--
08	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--
MAR 1988											
22	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--
AUG											
17	--	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--	--
SEPT											
01	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
01	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
01	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
20	--	--	--	--	--	--	--	--	--	--	--
20	--	--	--	--	--	--	--	--	--	--	--
20	--	--	--	--	--	--	--	--	--	--	--

Table 6.--*Chemical analyses of water from the multilevel ground-water sampling devices*--Continued

Sample date	Methylene chloride, total (µg/L)	Tetrachloroethylene, total (µg/L)	Trichlorofluoromethane, total (µg/L)	1,1-dichloroethane, total (µg/L)	1,1-dichloroethylene, total (µg/L)	1,1,1-trichloroethane, total (µg/L)	1,1,2-trichloroethane, total (µg/L)	1,1,2,2 tetrachloroethane, total (µg/L)	1,2-dichlorobenzene, total (µg/L)	1,2-dichloropropane, total (µg/L)	Trans-1,2-dichloroethene, total (µg/L)
					MLGWSD-2--Continued						
SEPT 1987											
08	--	--	--	--	--	--	--	--	--	--	--
08	--	--	--	--	--	--	--	--	--	--	--
08	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--
MAR 1988											
22	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--
AUG											
17	--	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--	--
SEPT											
01	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
01	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
01	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
20	--	--	--	--	--	--	--	--	--	--	--
20	--	--	--	--	--	--	--	--	--	--	--
20	--	--	--	--	--	--	--	--	--	--	--

Sample date	1,3-dichloropropene, total (µg/L)	1,3-dichlorobenzene, total (µg/L)	1,4-dichlorobenzene, total (µg/L)	2-chloroethylvinylether, total (µg/L)	Dichlorodifluoromethane, total (µg/L)	Trans-1,3-dichloropropene, total (µg/L)	Cis-1,3-dichloropropene, total (µg/L)	Vinyl chloride, total (µg/L)	Trichloroethylene, total (µg/L)	Styrene, total (µg/L)	Xylene, tot rec (µg/L)
SEPT 1987											
08	--	--	--	--	--	--	--	--	--	--	--
08	--	--	--	--	--	--	--	--	--	--	--
08	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--
MAR 1988											
22	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--
AUG											
17	--	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--	--
SEPT											
01	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
01	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
01	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
20	--	--	--	--	--	--	--	--	--	--	--
20	--	--	--	--	--	--	--	--	--	--	--
20	--	--	--	--	--	--	--	--	--	--	--

Table 6.--*Chemical analyses of water from the multilevel ground-water sampling devices*--Continued

Sample date	Depth to top of sample interval (ft)	Depth to bottom of sample interval (ft)	Temperature, water (°C)	Specific conductance (µS/cm)	pH (units)	Nitrogen ammonia, dissolved (mg/L as N)	Nitrogen nitrite, dissolved (mg/L as N)	Nitrogen ammonia, +organic, dissolved (mg/L as N)	Nitrogen NO_2+NO_3, dissolved (mg/L as N)	Hardness, total (mg/L as $CaCO_3$)	Calcium, dissolved (mg/L as Ca)
					MLGWSD-3						
SEPT 1987											
09	16	17	13.5	14,900	7.5	--	--	--	15.0	4,200	360
09	21	22	13.0	14,600	7.5	--	--	--	15.0	4,100	390
22	16	17	--	14,100	7.5	--	--	2.0	--	--	--
22	21	22	--	13,900	7.5	--	--	2.3	--	--	--
MAR 1988											
22	16	17	12.0	15,000	7.4	--	--	1.8	--	--	--
22	21	22	12.0	15,000	7.4	--	--	1.9	--	--	--
SEPT											
01	16	17	--	--	--	--	--	--	--	--	--
01	21	22	--	--	--	--	--	--	--	--	--
20	16	17	--	15,000	7.7	0.110	0.010	1.3	16.0	4,000	320
20	21	22	--	14,300	7.7	.100	.020	.50	19.0	3,900	320

Sample date	Magnesium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)	Potassium, dissolved (mg/L as K)	Chloride, dissolved (mg/L as Cl)	Sulfate, dissolved (mg/L as SO_4)	Cadmium dissolved (µg/L as Cd)	Iron, dissolved (µg/L as Fe)	Lead, dissolved (µg/L as Pb)	Manganese, dissolved (µg/L as Mn)	Dichlorobromomethane, total (µg/L)	Carbon tetrachloride, total (µg/L)
SEPT 1987											
09	790	2,100	15	1,100	7,700	--	60	--	40	--	--
09	770	2,100	14	1,200	7,600	--	60	--	30	--	--
22	--	--	--	1,000	--	--	--	--	--	--	--
22	--	--	--	1,100	--	--	--	--	--	--	--
MAR 1988											
22	--	--	--	890	--	--	--	--	--	--	--
22	--	--	--	1,100	--	--	--	--	--	--	--
SEPT											
01	--	--	--	--	--	--	--	--	--	<3.0	<3.0
01	--	--	--	--	--	--	--	--	--	<3.0	<3.0
20	770	2,200	16	820	7,500	<1	50	<5	30	--	--
20	750	2,100	15	1,100	7,000	<1	50	<5	20	--	--

Sample date	1,2-dichloroethane, total (µg/L)	Bromoform, total (µg/L)	Chlorodibromomethane, total (µg/L)	Chloroform, total (µg/L)	Toluene, total (µg/L)	Benzene, total (µg/L)	Chlorobenzene, total (µg/L)	Chloroethane, total (µg/L)	Ethylbenzene, total (µg/L)	Methylbromide, total (µg/L)	Methylchloride, total (µg/L)
SEPT 1987											
09	--	--	--	--	--	--	--	--	--	--	--
09	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--
MAR 1988											
22	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--
SEPT											
01	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
01	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
20	--	--	--	--	--	--	--	--	--	--	--
20	--	--	--	--	--	--	--	--	--	--	--

Table 6.--*Chemical analyses of water from the multilevel ground-water sampling devices*--Continued

Sample date	Methylene chloride, total (µg/L)	Tetrachloroethylene, total (µg/L)	Trichlorofluoromethane, total (µg/L)	1,1-dichloroethane, total (µg/L)	1,1-dichloroethylene, total (µg/L)	1,1,1-trichloroethane, total (µg/L)	1,1,2-trichloroethane, total (µg/L)	1,1,2,2 tetrachloroethane, total (µg/L)	1,2-dichlorobenzene, total (µg/L)	1,2-dichloropropane, total (µg/L)	Trans-1,2-dichloroethene, total (µg/L)
					MLGWSD-3--Continued						
SEPT 1987											
09	--	--	--	--	--	--	--	--	--	--	--
09	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--
MAR 1988											
22	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--
SEPT											
01	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
01	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
20	--	--	--	--	--	--	--	--	--	--	--
20	--	--	--	--	--	--	--	--	--	--	--

Sample date	1,3-dichloropropene, total (µg/L)	1,3-dichlorobenzene, total (µg/L)	1,4-dichlorobenzene, total (µg/L)	2-chloroethylvinylether, total (µg/L)	Dichlorodifluoromethane, total (µg/L)	Trans-1,3-dichloropropene, total (µg/L)	Cis-1,3-dichloropropene, total (µg/L)	Vinyl chloride, total (µg/L)	Trichloroethylene, total (µg/L)	Styrene, total (µg/L)	Xylene, tot rec (µg/L)
SEPT 1987											
09	--	--	--	--	--	--	--	--	--	--	--
09	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--
MAR 1988											
22	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--
SEPT											
01	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
01	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
20	--	--	--	--	--	--	--	--	--	--	--
20	--	--	--	--	--	--	--	--	--	--	--

Sample date	Depth to top of sample interval (ft)	Depth to bottom of sample interval (ft)	Dichlorobromomethane, total (µg/L)	Carbon tetrachloride, total (µg/L)	1,2-dichloroethane, total (µg/L)	Bromoform, total (µg/L)	Chlorodibromomethane, total (µg/L)	Chloroform, total (µg/L)	Toluene, total (µg/L)	Benzene, total (µg/L)
					MLGWSD-4					
SEPT 1988										
01	27	28	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0

Sample date	Chlorobenzene, total (µg/L)	Chloroethane, total (µg/L)	Ethylbenzene, total (µg/L)	Methylbromide, total (µg/L)	Methylchloride, total (µg/L)	Methylene chloride, total (µg/L)	Tetrachloroethylene, total (µg/L)	Trichlorofluoromethane, total (µg/L)	1,1-dichloroethane, total (µg/L)
SEPT 1988									
01	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0

Table 6.--*Chemical analyses of water from the multilevel ground-water sampling devices*--Continued

Sample date	1,1-Dichloroethylene, total (µg/L)	1,1,1-trichloroethane, total (µg/L)	1,1,2-trichloroethane, total (µg/L)	1,1,2,2 tetrachloroethane, total (µg/L)	1,2-dichlorobenzene, total (µg/L)	1,2-dichloropropane, total (µg/L)	Trans-1,2-dichloroethene, total (µg/L)	1,3-dichloropropene, total (µg/L)	1,3-dichlorobenzene, total (µg/L)
				MLGWSD-4--Continued					
SEPT 1988									
01	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0

Sample date	1,4-dichlorobenzene, total (µg/L)	2-chloroethylvinylether, total (µg/L)	Dichlorodifluoromethane, total (µg/L)	Trans-1,3-dichloropropene, total (µg/L)	Cis-1,3-dichloropropene, total (µg/L)	Vinyl chloride, total (µg/L)	Trichloroethylene, total (µg/L)	Styrene, total (µg/L)	Xylene, tot rec (µg/L)
SEPT 1988									
01	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0

Sample date	Depth to top of sample interval (ft)	Depth to bottom of sample interval (ft)	Temperature, water (°C)	Specific conductance (µS/cm)	pH (units)	Nitrogen ammonia, dissolved (mg/L as N)	Nitrogen nitrite, dissolved (mg/L as N)	Nitrogen ammonia, +organic, dissolved (mg/L as N)	Nitrogen NO_2+NO_3, dissolved (mg/L as N)	Hardness, total (mg/L as $CaCO_3$)	Calcium, dissolved (mg/L as Ca)
					MLGWSD-5						
SEPT 1987											
09	9.6	11	15.5	1,180	7.7	--	--	--	3.90	410	62
09	15	16	13.0	1,180	7.6	--	--	--	3.00	410	76
09	19	20	13.0	1,220	7.6	--	--	--	5.20	400	68
22	9.6	11	--	1,150	7.6	--	--	0.60	--	--	--
22	15	16	13.5	1,150	7.6	--	--	<.20	--	--	--
22	19	20	13.5	1,150	7.6	--	--	.50	--	--	--
MAR 1988											
22	9.6	11	13.0	1,180	7.5	<0.010	--	.60	6.80	--	--
22	15	16	14.0	1,280	7.7	.020	--	.50	5.80	--	--
22	19	20	12.0	1,280	7.4	.010	--	.30	3.40	--	--
AUG											
17	9.6	11	20.0	1,140	7.9	--	--	--	--	--	--
17	15	16	18.0	1,200	7.9	--	--	--	--	--	--
17	19	20	19.0	1,220	7.7	--	--	--	--	--	--
SEPT											
01	9.6	11	--	--	--	--	--	--	--	--	--
01	15	16	--	--	--	--	--	--	--	--	--
01	19	20	--	--	--	--	--	--	--	--	--
20	9.6	11	17.5	1,210	7.8	--	0.070	--	7.30	460	63
20	15	16	15.0	1,280	7.8	.060	.050	.60	7.30	420	66
20	19	20	14.5	1,250	7.8	.010	.050	.60	5.10	440	78

Table 6.--*Chemical analyses of water from the multilevel ground-water sampling devices*--Continued

Sample date	Magnesium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)	Potassium, dissolved (mg/L as K)	Chloride, dissolved (mg/L as Cl)	Sulfate, dissolved (mg/L as SO_4)	Cadmium-dissolved (µg/L as Cd)	Iron, dissolved (µg/L as Fe)	Lead, dissolved (µg/L as Pb)	Manganese, dissolved (µg/L as Mn)	Dichlorobromomethane, total (µg/L)	Carbon tetrachloride, total (µg/L)
				MLGWSD-5--Continued							
SEPT 1987											
09	63	90	7.2	83	240	--	18	--	810	--	--
09	53	110	6.0	90	300	--	13	--	100	--	--
09	56	100	6.0	88	270	--	19	--	37	--	--
22	--	--	--	80	--	--	--	--	--	--	--
22	--	--	--	86	--	--	--	--	--	--	--
22	--	--	--	87	--	--	--	--	--	--	--
MAR 1988											
22	--	--	--	82	--	--	--	--	--	--	--
22	--	--	--	92	--	--	--	--	--	--	--
22	--	--	--	91	--	--	--	--	--	--	--
AUG											
17	--	--	--	79	--	--	--	--	--	--	--
17	--	--	--	89	--	--	--	--	--	--	--
17	--	--	--	91	--	--	--	--	--	--	--
SEPT											
01	--	--	--	--	--	--	--	--	--	<3.0	<3.0
01	--	--	--	--	--	--	--	--	--	<3.0	<3.0
01	--	--	--	--	--	--	--	--	--	<3.0	<3.0
20	74	94	3.7	82	230	2	--	5	76	--	--
20	62	100	4.8	91	270	2	8	<5	47	--	--
20	59	110	5.2	95	280	3	11	<5	130	--	--

Sample date	1,2-dichloroethane, total (µg/L)	Bromoform, total (µg/L)	Chlorodibromomethane, total (µg/L)	Chloroform, total (µg/L)	Toluene, total (µg/L)	Benzene, total (µg/L)	Chlorobenzene, total (µg/L)	Chloroethane, total (µg/L)	Ethylbenzene, total (µg/L)	Methylbromide, total (µg/L)	Methylchloride, total (µg/L)
SEPT 1987											
09	--	--	--	--	--	--	--	--	--	--	--
09	--	--	--	--	--	--	--	--	--	--	--
09	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--
MAR 1988											
22	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--
AUG											
17	--	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--	--
SEPT											
01	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
01	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
01	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
20	--	--	--	--	--	--	--	--	--	--	--
20	--	--	--	--	--	--	--	--	--	--	--
20	--	--	--	--	--	--	--	--	--	--	--

Table 6.--*Chemical analyses of water from the multilevel ground-water sampling devices*--Continued

Sample date	Methylene chloride, total (µg/L)	Tetrachloroethylene, total (µg/L)	Trichlorofluoromethane, total (µg/L)	1,1-dichloroethane, total (µg/L)	1,1-dichloroethylene, total (µg/L)	1,1,1-trichloroethane, total (µg/L)	1,1,2-trichloroethane, total (µg/L)	1,1,2,2 tetrachloroethane, total (µg/L)	1,2-dichlorobenzene, total (µg/L)	1,2-dichloropropane, total (µg/L)	Trans-1,2-dichloroethene, total (µg/L)
					MLGWSD-5--Continued						
SEPT 1987											
09	--	--	--	--	--	--	--	--	--	--	--
09	--	--	--	--	--	--	--	--	--	--	--
09	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--
MAR 1988											
22	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--
AUG											
17	--	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--	--
SEPT											
01	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
01	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
01	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
20	--	--	--	--	--	--	--	--	--	--	--
20	--	--	--	--	--	--	--	--	--	--	--
20	--	--	--	--	--	--	--	--	--	--	--

Sample date	1,3-dichloropropene, total (µg/L)	1,3-dichlorobenzene, total (µg/L)	1,4-dichlorobenzene, total (µg/L)	2-chloroethylvinylether, total (µg/L)	Dichlorodifluoromethane, total (µg/L)	Trans-1,3-dichloropropene, total (µg/L)	Cis-1,3-dichloropropene, total (µg/L)	Vinyl chloride, total (µg/L)	Trichloroethylene, total (µg/L)	Styrene, total (µg/L)	Xylene, tot rec (µg/L)
SEPT 1987											
09	--	--	--	--	--	--	--	--	--	--	--
09	--	--	--	--	--	--	--	--	--	--	--
09	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--
MAR 1988											
22	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--
AUG											
17	--	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--	--
SEPT											
01	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
01	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
01	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
20	--	--	--	--	--	--	--	--	--	--	--
20	--	--	--	--	--	--	--	--	--	--	--
20	--	--	--	--	--	--	--	--	--	--	--

Table 7.--*Chemical analyses of soil at selected depths in the unsaturated zone*

[ft, feet; mg/kg, milligrams per kilogram; µg/g, micrograms per gram; NH_4, ammonia; NO_2+NO_3, nitrite plus nitrate; <, less than the detection limit for analytical method and sample dilution used; sites are shown in figure 3]

Site number	Date of sample	Depth of sample (ft)	Nitrogen, NH_4 total (mg/kg as N)	Nitrogen, NH_4 plus organic total (mg/kg as N)	Nitrogen, NO_2+NO_3 total (mg/kg as N)	Phosphorus, total (mg/kg as P)	Arsenic, total (µg/g as As)	Cadmium, total recoverable (µg/g as cd)	Chromium, total recoverable (µg/g)
UZ-1	04-25-85	1.5	3.5	340	12	400	1	<1	170
	04-25-85	3.5	2.1	130	4.0	110	1	<1	140
	04-25-85	5.5	2.8	<20	4.0	62	2	1	150
	11-16-88	.0	5.4	370	8.0	120	3	<10	2
	11-16-88	1.5	3.5	420	5.0	130	3	<10	3
	11-16-88	3.5	9.9	90	4.0	<40	2	<10	3
	11-16-88	5.5	8.3	80	26	57	1	<10	2
UZ-2	11-16-88	.0	9.3	170	40	130	2	<10	8
	11-16-88	1.5	7.2	80	4.0	140	2	<10	<1
	11-16-88	3.5	3.9	190	5.0	50	1	<10	2
	11-16-88	5.5	4.3	210	7.0	63	1	<10	2
UZ-3	11-16-88	.0	9.5	80	5.0	<40	2	<10	2
	11-16-88	1.5	2.8	170	4.0	220	2	<10	1
	11-16-88	3.5	1.2	210	3.0	<40	1	<10	3
	11-16-88	5.5	.8	80	<2.0	<40	1	<10	2
UZ-4	11-16-88	.0	8.8	370	5.0	170	3	<1	20
	11-16-88	1.5	3.5	40	3.0	100	3	<1	8
	11-16-88	3.5	8.7	40	<2.0	75	3	<10	10
UZ-5	11-16-88	.0	6.4	330	34	91	1	<10	5
	11-16-88	1.5	2.4	170	8.0	46	2	<10	3
	11-16-88	3.5	1.9	130	31	<40	2	<10	5
	11-16-88	5.5	4.0	120	21	130	2	<10	10

Site number	Date of sample	Cobalt, total recoverable (µg/g as Co)	Copper, total recoverable (µg/g as Cu)	Iron, total recoverable (µg/g as Fe)	Lead, total recoverable (µg/g as Pb)	Manganese, total recoverable (µg/g)	Mercury, total recoverable (µg/g as Hg)	Zinc, total recoverable (µg/g as Zn)
UZ-1	04-25-85	<10	<1	4,700	<10	110	0.01	20
	04-25-85	<10	<1	4,000	<10	81	<.01	10
	04-25-85	<10	<1	3,300	<10	70	<.01	10
	11-16-88	<50	10	3,400	<100	69	.03	30
	11-16-88	<50	5	4,300	<100	100	<.01	20
	11-16-88	<50	4	4,300	<100	83	<.01	10
	11-16-88	<50	4	3,300	<100	70	<.01	10
UZ-2	11-16-88	<10	6	6,700	<100	130	.02	20
	11-16-88	<50	<1	1,600	<100	59	<.01	<10
	11-16-88	<50	3	2,400	<100	38	<.01	<10
	11-16-88	<50	4	3,600	<100	57	<.01	10
UZ-3	11-16-88	<50	4	2,800	<100	50	<.01	20
	11-16-88	50	4	3,000	<100	49	<.01	10
	11-16-88	<50	3	4,000	<100	56	<.01	10
	11-16-88	<50	4	3,200	<100	55	<.01	10
UZ-4	11-16-88	10	10	9,700	10	210	.01	40
	11-16-88	10	6	6,700	<100	100	<.01	20
	11-16-88	10	10	9,000	<100	12	<.01	30
UZ-5	11-16-88	10	10	3,100	<100	94	.04	30
	11-16-88	<50	6	4,500	<100	93	<.01	20
	11-16-88	<50	5	6,100	<100	91	<.01	20
	11-16-88	10	6	6,300	<100	160	<.01	20

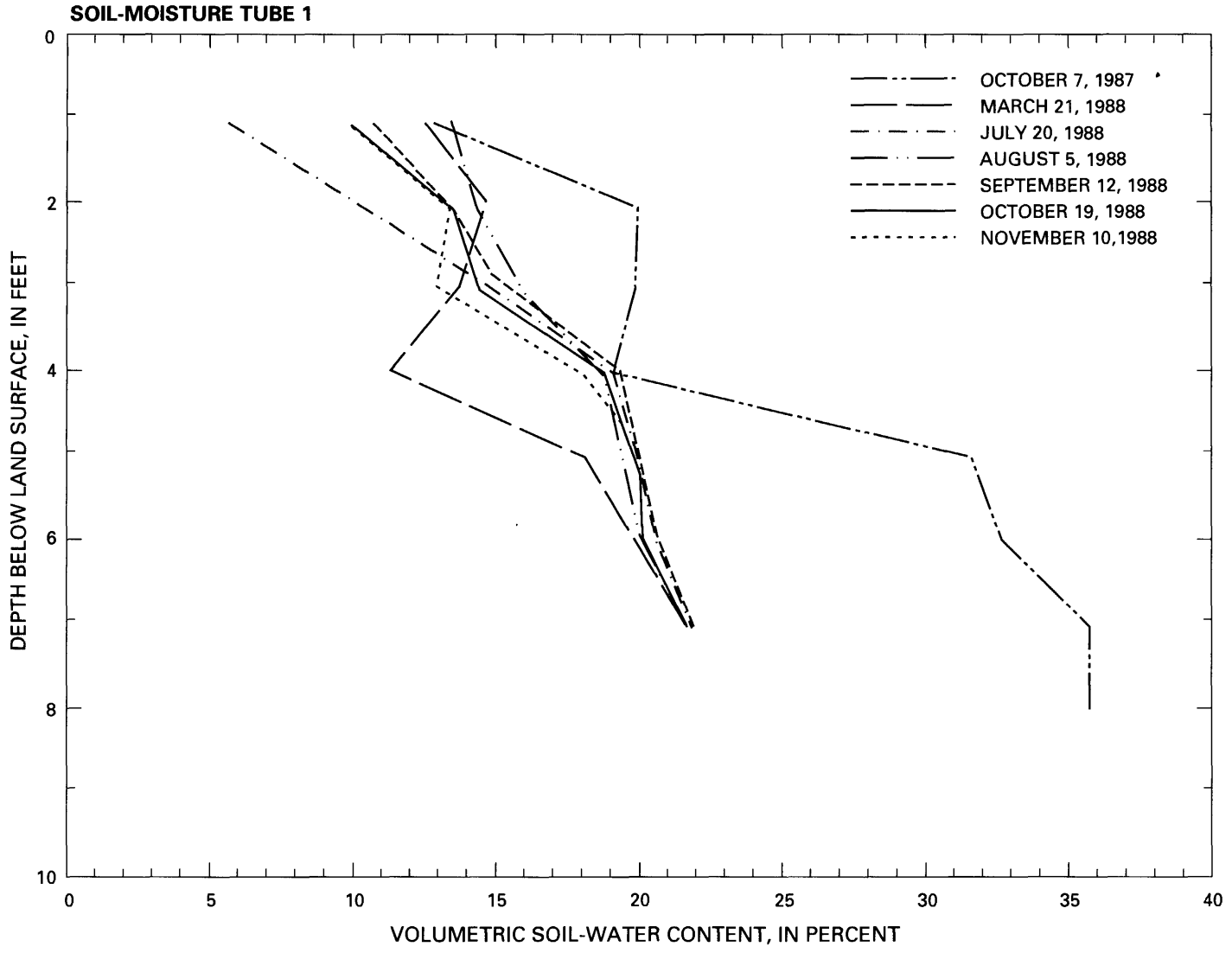

Figure 8.--Volumetric soil-water content at the soil-moisture-tube sites.

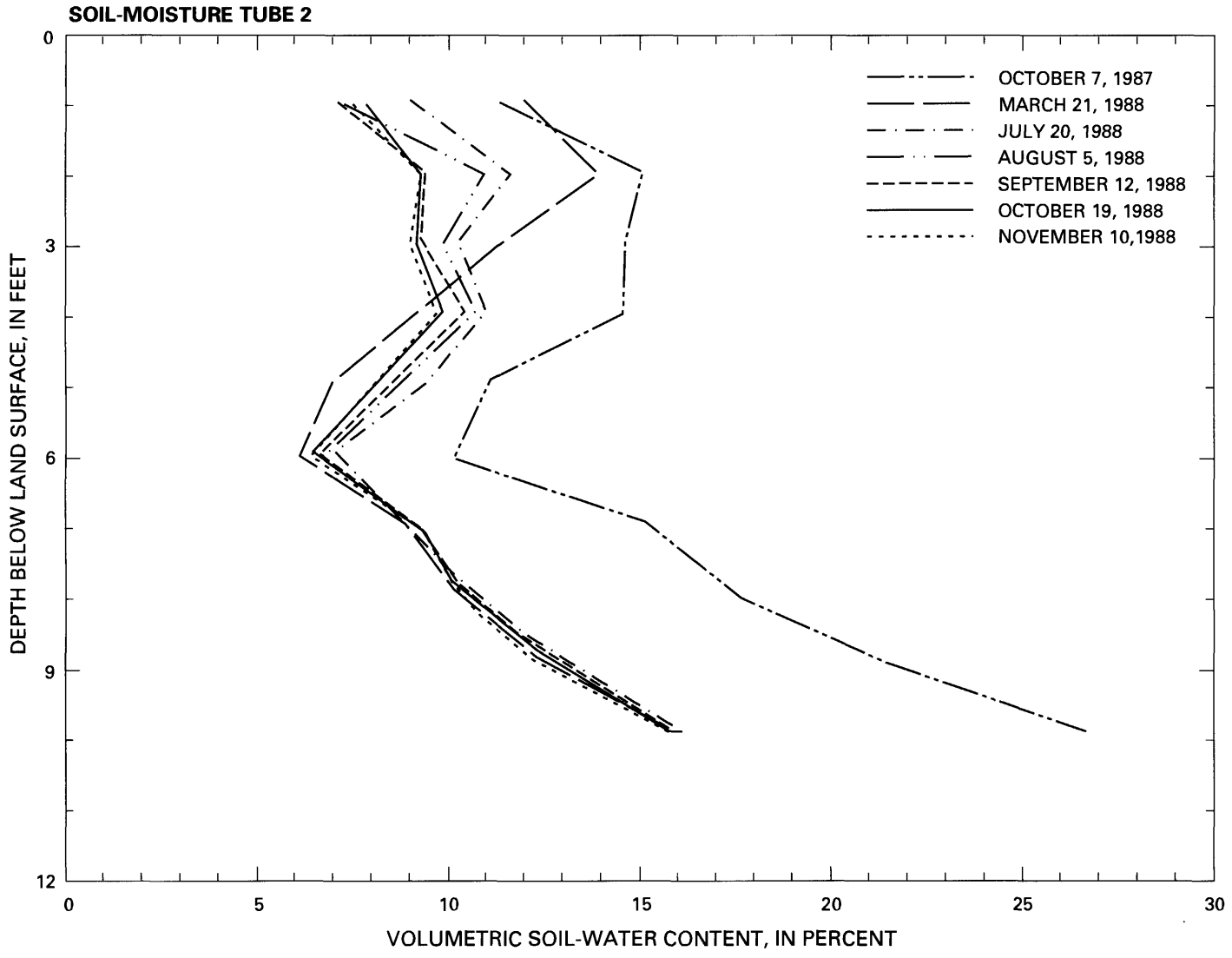

Figure 8.--Volumetric soil-water content at the soil-moisture-tube sites--Continued.

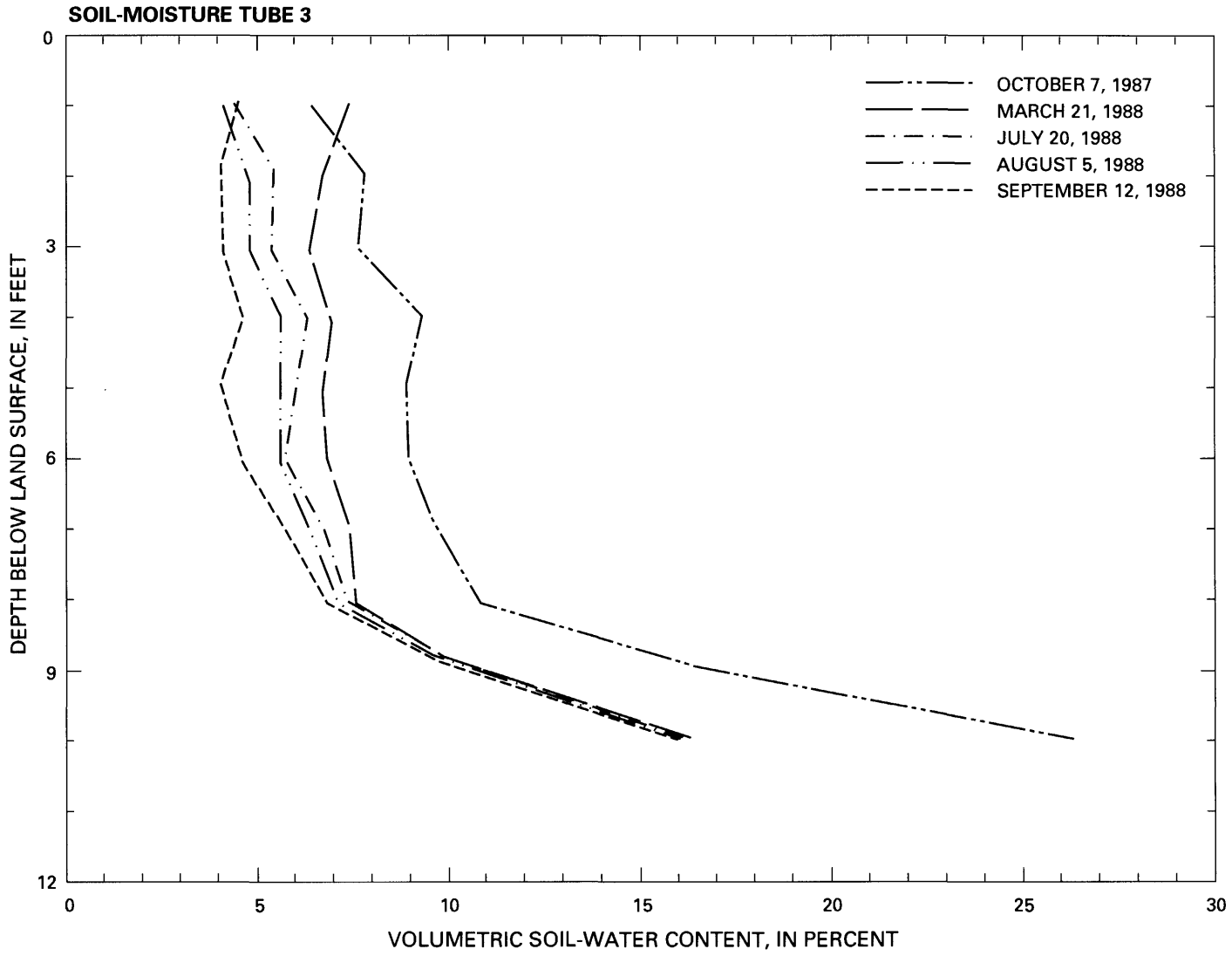

Figure 8.--Volumetric soil-water content at the soil-moisture-tube sites--Continued.

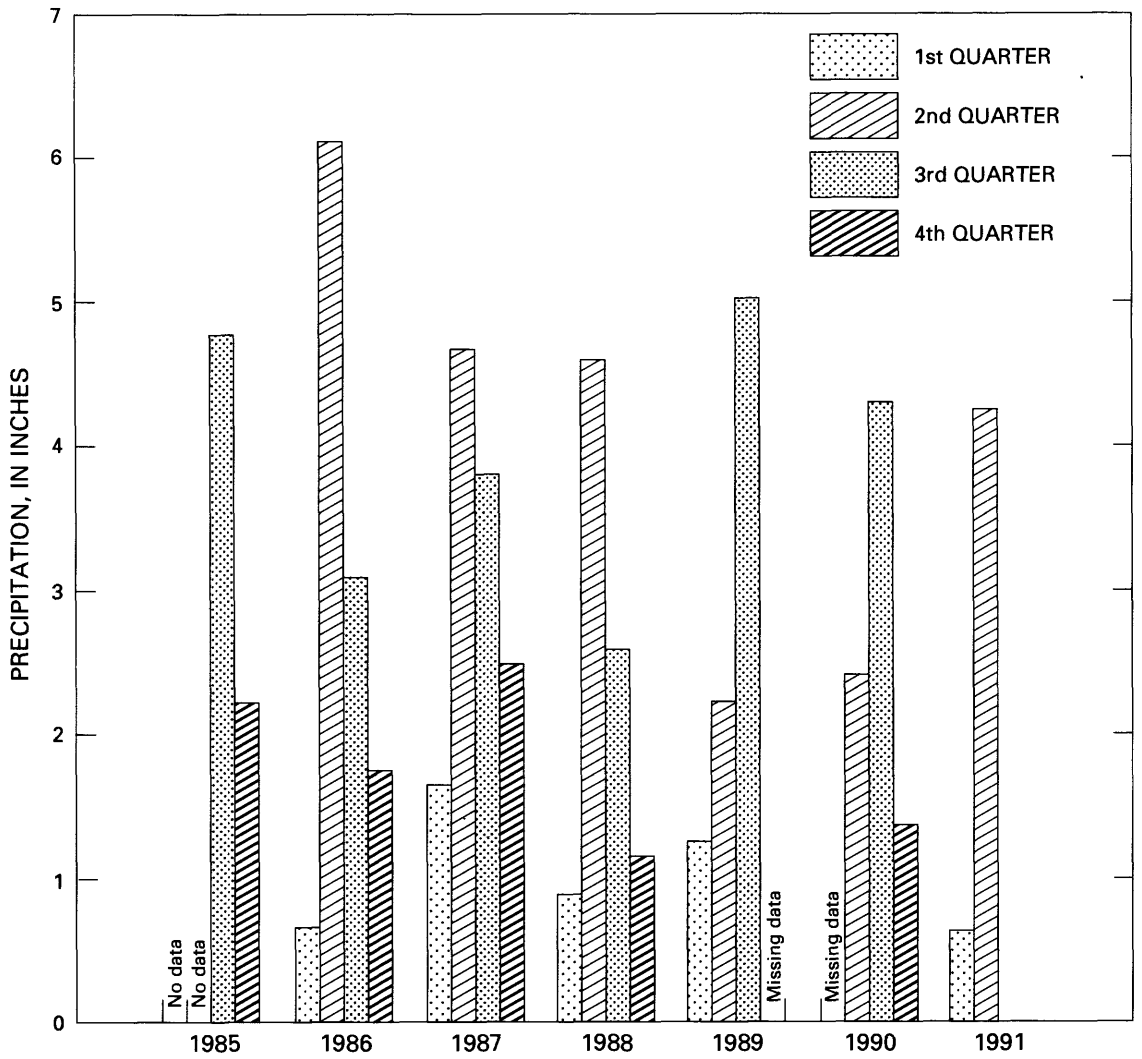

Figure 9.--Quarterly accumulative precipitation recorded at precipitation station in the study area, 1985-91.

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