HYDROLOGIC DATA FOR A STUDY OF PRE-ILLINOIAN GLACIAL TILL IN LINN COUNTY, IOWA, WATER YEAR 1990

By Phillip R. Bowman

U.S. GEOLOGICAL SURVEY
Open-File Report 91-459

Prepared in cooperation with the
IOWA DEPARTMENT OF NATURAL RESOURCES,
GEOLOGICAL SURVEY BUREAU

Iowa City, Iowa

1991

U.S. DEPARTMENT OF THE INTERIOR
MANUEL LUJAN, JR., Secretary

U.S. GEOLOGICAL SURVEY
Dallas L. Peck, Director

For additional information write to:

U.S. Geological Survey
Water Resources Division
Rm. 269, Federal Building
400 South Clinton Street
Iowa City, Iowa 52244

Copies of this report can be purchased from:

U.S. Geological Survey
Books and Open-File Reports
Denver Federal Center
Box 25425
Denver, Colorado 80225

CONTENTS

ILLUSTRATIONS

TABLES

CONVERSION FACTORS AND VERTICAL DATUM

Multiply	*By*	*To obtain*
foot	0.3048	meter
inch	2.54	centimeter
mile	1.609	kilometer
degree Fahreinheit	(1)	degree Celsius

[1] Temperature in degrees Celsius (°C) can be converted to degrees Fahreinheit (°F) as follows:

$$^{o}F = (9/5)(^{o}C) + 32.$$

Sea level: In this report, "sea level" refers to the National Geodetic Vertical Datum 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."

Water Year: A water year is a 12-month period, from October through September, designated by the calendar year in which it ends. Years are water years in this report unless otherwise stated.

HYDROLOGIC DATA FOR A STUDY OF PRE-ILLINOIAN GLACIAL TILL IN LINN COUNTY, IOWA, WATER YEAR 1990

By Phillip R. Bowman

ABSTRACT

Hydrologic data for a study of pre-Illinoian glacial till were collected during the 1990 water year at a site in Linn County, Iowa. A hydrologic-data-collection network, consisting of 22 observation wells and a meteorological station, was installed at the site to describe the hydraulic properties of the till. Recorders were installed on 12 of the wells to continuously monitor water levels.

Rainfall at the study site from April to October 1990, totaled 35.49 inches. The greatest monthly rainfall (13.15 inches) occurred in June. The greatest daily rainfall (6.00 inches) occurred on June 16.

For the 16 wells less than 50 feet in depth, the highest water levels were recorded during the 4 months of greatest rainfall (May-August 1990). Water levels in the four deepest wells, completed in unconsolidated material, rose throughout the data-collection period. One well had water levels greater than the top of the well casing for most of the period from mid-May to mid-September 1990.

A water-quality minimonitor was installed on one observation well near the top of the water table to monitor temporal changes in ground-water quality. For April through September 1990, the daily mean specific conductance ranged from 705 to 864 microsiemens per centimeter at 25 degrees Celsius, the daily mean water temperature ranged from 5.2 to 15.6 degrees Celsius, and the daily median pH remained nearly constant at 7.0 to 7.2 standard units.

Ten unvented, vibrating-wire, pressure transducers with internal thermistors were buried in two boreholes at upgradient and downgradient locations to record hydraulic pressure and water temperature at selected depths.

INTRODUCTION

Continental glaciation during the Pleistocene Epoch is responsible for many of the present-day landforms in the northern United States and Canada. Glacial drift was deposited during the advance and retreat of the glaciers and, thus, is the parent material for most of the soils and very permeable aquifers in these areas. The number of studies of the hydrogeologic properties of glacial till in the Interior Plains Region of North America, particularly in Canada, has increased since the 1970's. Studies that delineate the physical and chemical aspects of ground-water movement in till are of interest to many groups. A great deal of research on Wisconsin till has been done during the last two decades; however, little or no research has been done on the hydrology of pre-Illinoian till. It is unknown, therefore, whether the hydrology of Wisconsin and pre-Illinoian till differs.

A 2-year study to describe the hydrology of pre-Illinoian till was begun in 1989. For this report, pre-Illinoian till is defined as glacial deposits older than 500,000 years before the present (1991) (T.J. Kemmis, Iowa Department of Natural Resources, Geological Survey Bureau, oral commun., 1991). In the midwest United States, Wisconsin till ranges in age from about 40,000 years to 10,000 years before the present (T.J. Kemmis, Iowa Department of Natural Resources, Geological Survey Bureau, oral commun., 1991). Pre-Illinoian till is exposed at the land surface in eastern Iowa; thus, a location representative of pre-Illinoian till was selected for study in Linn County, Iowa, south of Cedar Rapids (fig. 1).

Purpose and Scope

The overall objective of the till hydrology study was to describe the hydrology of ground-water movement and water chemistry in a pre-Illinoian till. The hydrologic data that were collected may be useful in the development of methods to describe the hydrogeological properties of fine-grained sediments in Iowa. The data also may be useful in the development of techniques necessary for the hydrogeologic assessment of current landfill and waste-disposal problems.

This report is the first in a series of reports that will present hydrologic data collected by the U.S. Geological Survey at the glacial-till study site in Linn County, Iowa. The data that are presented were collected during the 1990 water year, October 1989 through September 1990.

Hydrologic data from four sources are in this report: 1 meteorological station, 22 observation wells, 1 water-quality minimonitor, and 10 pressure transducers and thermistors. The meteorological data includes rainfall, barometric-pressure, and air-temperature measurements. The observation-well data

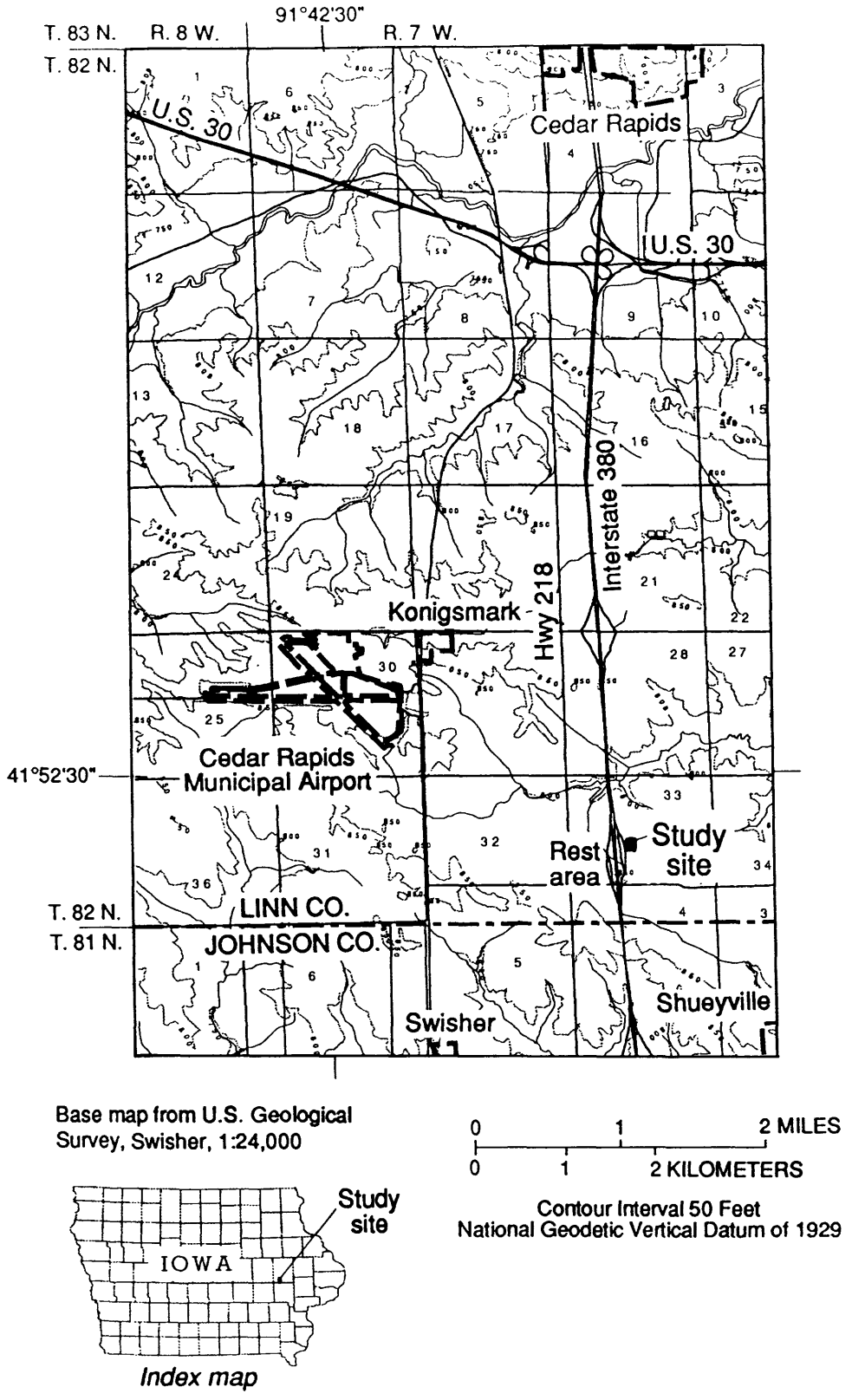

Figure 1. Location of study area.

include water levels measured by 12 continuous water-level recorders and intermittent water-level measurements at 22 observation wells. The water-quality data include determinations of specific conductance, water temperature, and pH. Data from the 10 pressure transducers and thermistors, buried at selected depths in two boreholes, include hydraulic-pressure and water-temperature measurements. The data are presented graphically and summarized in tables 1-8 at the end of this report. Graphs depict daily means, unless otherwise specified.

Hydrologic Setting

The study site is located on the east side of Interstate Highway 380, at the rest area, about 4 miles south of U.S. Highway 30, in the NE 1/4 SE 1/4 sec. 33, T. 82 N., R. 7 W. in Linn County, Iowa (fig. 1). The study site is 400 feet long by 150 feet wide (fig. 2) and has a maximum relief of about 17 feet. Surface drainage is toward the north-northeast. Significant environmental features near the site include a pumped well completed in Silurian bedrock about 1/4 mile south of the site, a sewage lagoon located about 1/2 mile west of the site on the west side of Interstate Highway 380, and pavement about 500 feet west of the site. Drainage from the pavement is toward the west-northwest.

The site was selected primarily because of the absence of a loess cover. The absence of a loess cover allowed for the study of the hydraulic properties of the pre-Illinoian till without interference from a different, overlying hydrologic unit. The glacial drift at the study site consists of about 100 feet of unconsolidated material overlying Silurian bedrock. Locally, the topography is flat to slightly rolling, and the topography of the bedrock surface, in general, may look very similar to present-day land-surface topography (Wahl and Bunker, 1986).

Methods

A level line was run from a benchmark in Konigsmark, Iowa (fig. 1), to the study site to establish land-surface elevations and observation-well measuring points. The study site was divided into a coordinated grid with elevations established at 50-foot intervals (fig. 2).

Two methods of drilling were used to install observation wells and boreholes at the study site. Sixteen observation wells less than 45 feet in depth, including a well for continuous water-quality measurements, were drilled by auger. Four observation wells and one borehole (south site) and three observation wells and one borehole (north site) greater than 45 feet in depth were installed by hydraulic-rotary drilling (fig. 2). Observation well EI-1 was constructed with 6-inch-diameter steel casing. All other observation wells were constructed with 2-inch-diameter polyvinyl-chloride (PVC) plastic casing. Well construction of the 2-inch wells consisted of placing sand packs around and 1 foot above the screened intervals. Dry bentonite then was poured into the hole to a depth of about 1 foot below land surface. Wells were not developed so that hydraulic-conductivity tests could be compared for pre-developed and post-developed wells. Hydraulic-conductivity tests had not been completed on the pre-developed wells by the end of the 1990 water year.

Because of the differences in land-surface elevations throughout the study site, observation wells were installed at specific depths so that flow paths would be aligned stratigraphically in relation to each other. The slope of the land surface at the site is to the north-northeast; thus, observation wells were installed along the western, northwestern, and eastern boundaries of the site to help measure hydrologic conditions (fig. 2). Well construction began in October 1989, and was completed in early April 1990. The upper 2 to 3 feet of well casing on wells not instrumented were enclosed in steel shelters. The upper 2 to 3 feet of casing on wells with instruments were enclosed in 6-inch-diameter PVC plastic casing. Cement was poured into the 6-inch casing surrounding the wells, and wooden shelters were placed on top of each well to enclose instruments. All shelters were locked to prevent vandalism.

All monitoring instruments at the study site were connected to digital data loggers. Rainfall, barometric pressure, and air temperature were recorded every 15 minutes, and continuous water-level measurements, water-quality measurements, and pressure-transducer and thermistor measurements were recorded hourly. All data were retrieved weekly by downloading data from the data loggers to a portable lap-top computer.

A meteorological station, consisting of an unheated tipping-bucket rain gage, a barometric-pressure sensor, and an air-temperature sensor, was installed in April 1990 to record climatic conditions (fig. 2). Barometric-pressure measurements were compared periodically with readings from a U.S. National Weather Service station at the Cedar Rapids Municipal Airport about 2.5 miles northwest of the study site (fig. 1). Continuous water-level recorders were installed during March and April 1990, on 12 observation wells to monitor water-level fluctuations. Steel-tape measurements of water levels were made periodically to calibrate water-level fluctuations measured by the continuous water-level

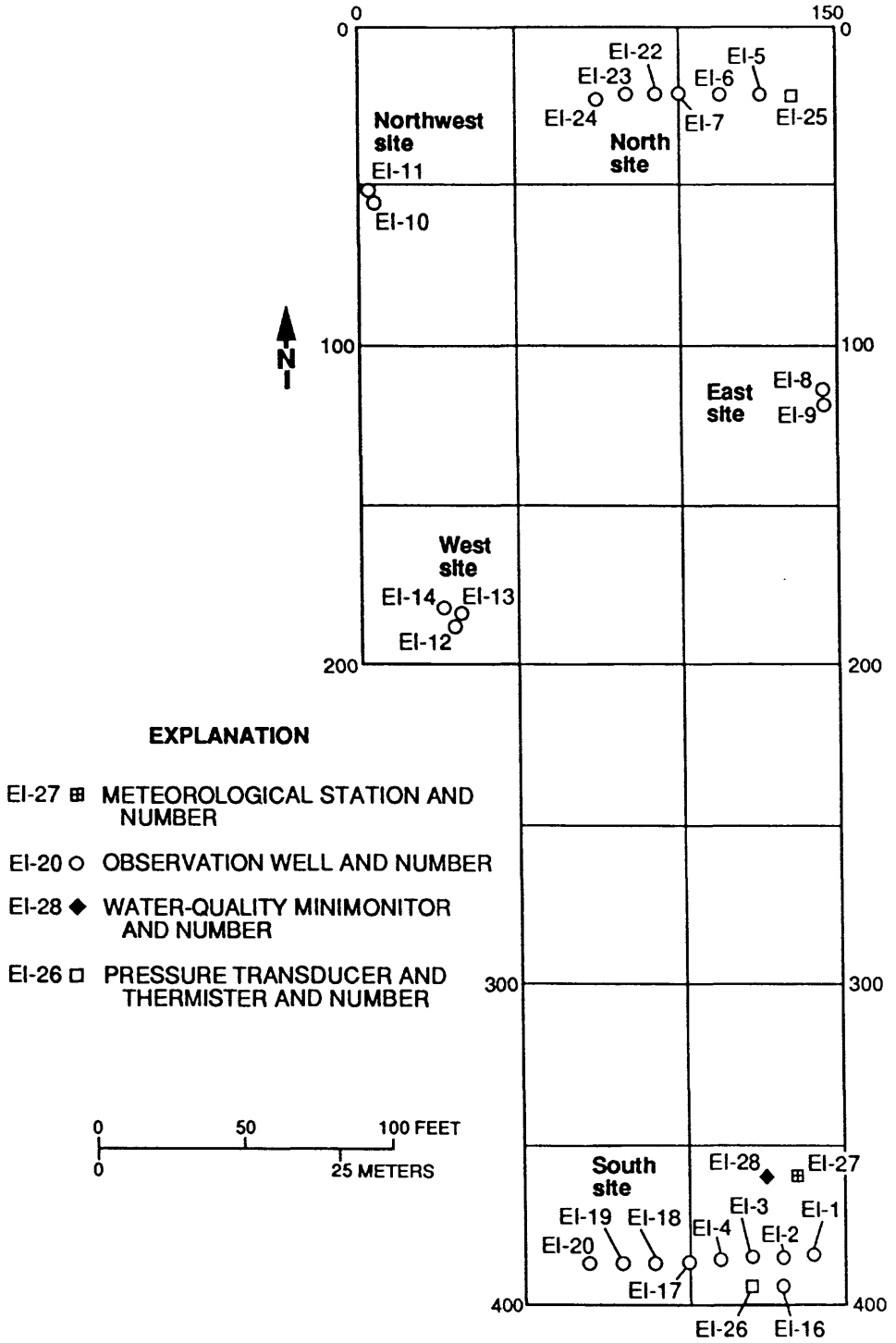

Figure 2. Location of meteorological station, observation wells, water-quality minimonitor, and pressure transducers and thermistors.

recorders. The intermittent water-level measurements began soon after the wells were installed.

A multiple-constituent water-quality minimonitor was installed in April 1990 to measure temporal changes in specific conductance, water temperature, and pH of the ground water and to measure the changes that occur because of precipitation. The well in which the water-quality measurements were made is 4 inches in diameter, 15 feet deep, and has a screened interval from 12 to 15 feet below land surface (fig. 2).

Ten unvented, vibrating-wire, pressure transducers with internal thermistors were buried in two boreholes at the south and north sites to provide an alternate method of collecting water-level and water-temperature measurements (fig. 2). The depths of the transducers at the south and north sites were 9, 15, 40, 55, and 90 feet and 9, 22, 33, 53, and 75 feet below land surface, respectively. The boreholes were drilled in November 1989, and the transducers placed at depths selected to correspond with observation-well depths. The transducers were enclosed in the middle of vertical 2-foot sand packs. The sand packs in each borehole were separated from each other with a slurry of bentonite. The sensors were connected to digital data loggers and recorded hydraulic pressure and water temperature at each depth.

Acknowledgments

This study was supported in part by the Iowa Department of Natural Resources through the Aquitard Hydrology Project, with funds provided from the Iowa Groundwater Protection Act. George Hallberg, coordinator of the Aquitard Hydrology Project, and other members of the Iowa Department of Natural Resources, Geological Survey Bureau, provided technical advice and onsite support. Installation of observation wells and pressure transducers and thermistors by hydraulic-rotary drilling was done by employees of the Iowa Department of Natural Resources, Geological Survey Bureau. The Iowa Department of Transportation granted permission to use the land near the rest area for the study.

HYDROLOGIC DATA SUMMARY

Meteorological Station

Daily rainfall, mean barometric pressure, and air temperature at the study site are shown in figure 3 and are summarized in table 1, at the end of this report. Rainfall from April to September 30, 1990, totaled 35.49 inches. The greatest monthly rainfall was 13.15 inches and occurred during June 1990. The greatest daily rainfall was 6.00 inches, which occurred June 16, 1990. The daily mean barometric pressure from April through September 30, 1990, ranged from a high of 772 millimeters of mercury on April 18, 1990, to 751 millimeters of mercury on April 28 and May 9, 1990. Daily air temperatures at the site from April through September 30, 1990, ranged from a high of 36.7 degrees Celsius on July 4, 1990, to a low of -5.9 degrees Celsius on April 12, 1990.

Observation Wells

Construction records for the 22 observation wells at the study site are listed in table 2. Contained in the table are the observation-well local number, station identification number, land-surface elevation, depth of well, screened interval, measuring-point elevation, and aquifer type.

The daily mean water levels in the 12 observation wells instrumented with continuous recorders are displayed graphically in figure 4 and are listed in table 3. The water levels measured intermittently by steel tape in all of the observation wells are displayed graphically in figure 5 and are listed in table 4. The highest water levels were recorded in the 16 wells less than 50 feet in depth and occurred during the 4 months of greatest rainfall in 1990. The monthly rainfall accumulations for the 4 months were 6.19 inches in May, 13.15 inches in June, 5.12 inches in July, and 9.38 inches in August 1990. Water levels in the observation well (EI-1) drilled into consolidated material (Silurian bedrock) fluctuated from a low of 751.83 feet above sea level on November 30, 1989, to a high of 756.28 feet above sea level on August 29, 1990. Water levels in wells EI-2, EI-3, EI-5, and EI-6 continued to rise and had not reached equilibrium from the time the wells were drilled in October 1989 until September 30, 1990. Well EI-7 had water levels greater than the top of the casing for most of the period from mid-May to mid-September 1990; therefore, instrumentation was removed, and no additional data were collected. Data missing after the continuous recorders were installed resulted from equipment malfunction or from the removal of recorders so that hydraulic tests of the wells could be conducted.

Water-Quality Minimonitor

Daily mean specific conductance, water temperatures, and median pH values of the water in the water-quality observation well EI-28 are displayed graphically in figure 6 and are listed in table 5. Daily mean specific

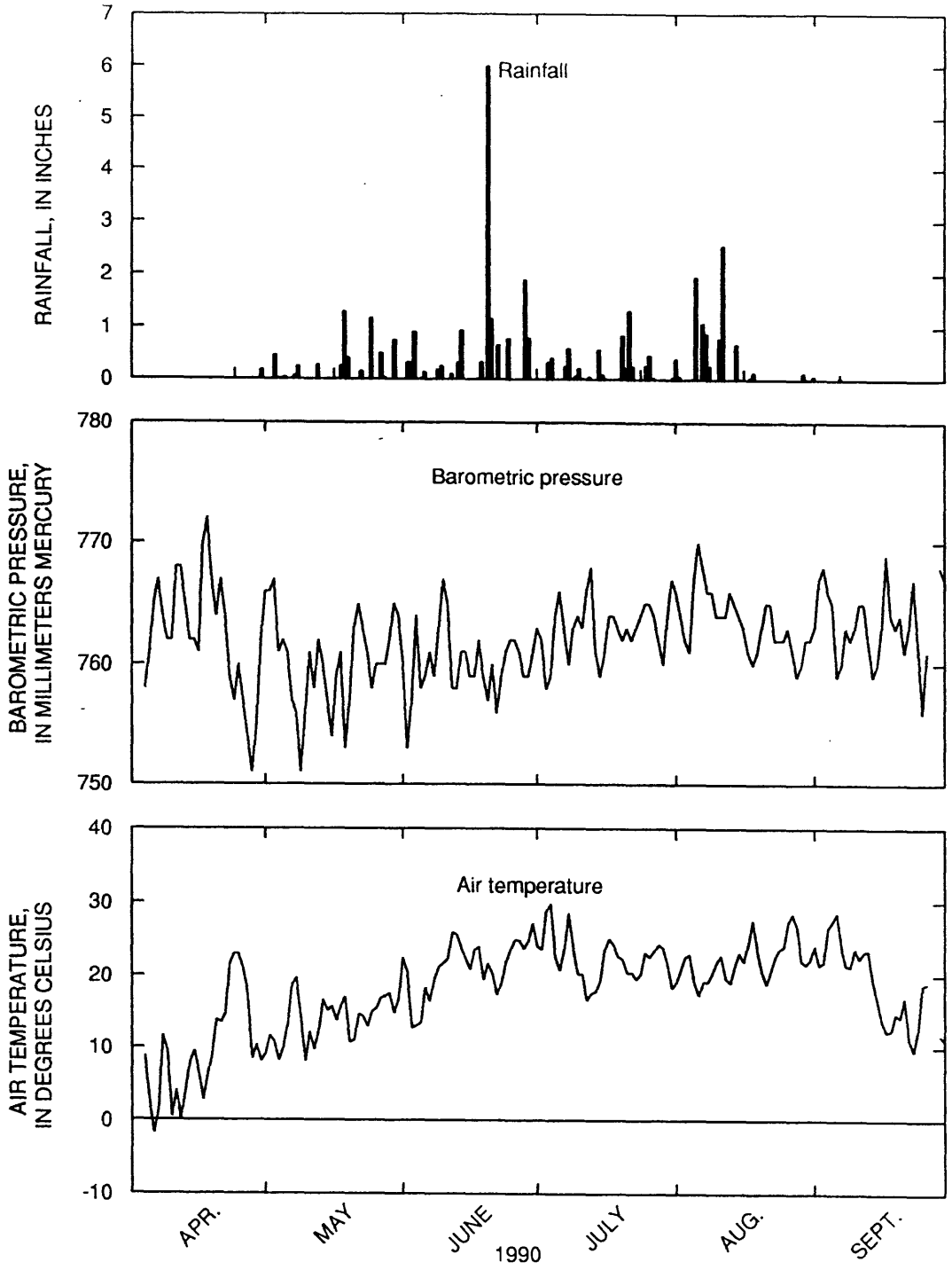

Figure 3. Daily rainfall, mean barometric pressure, and maximum and minimum air temperature, April-September 1990.

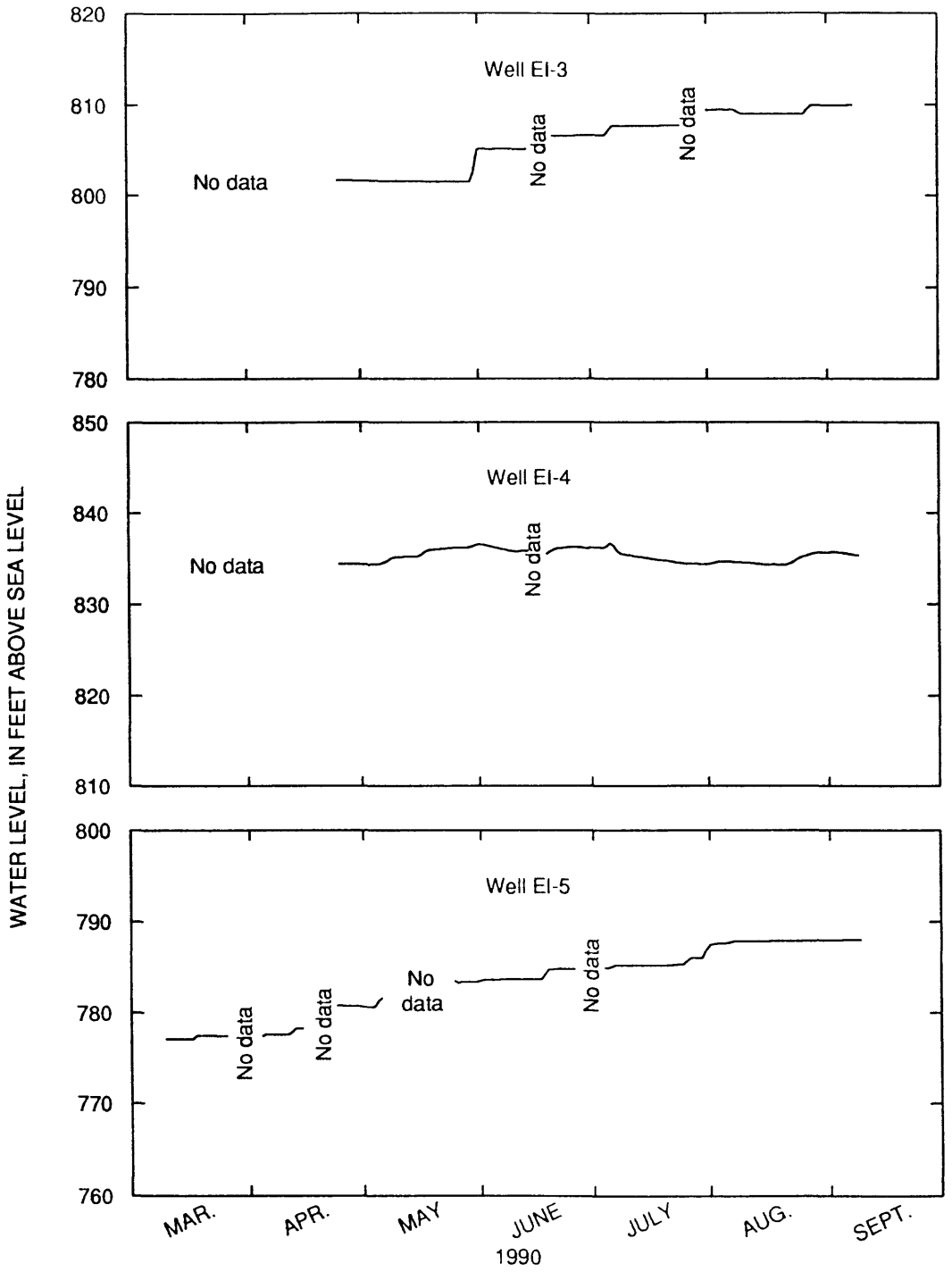

Figure 4. Daily mean water levels in continuously monitored observation wells, March-September 1990.

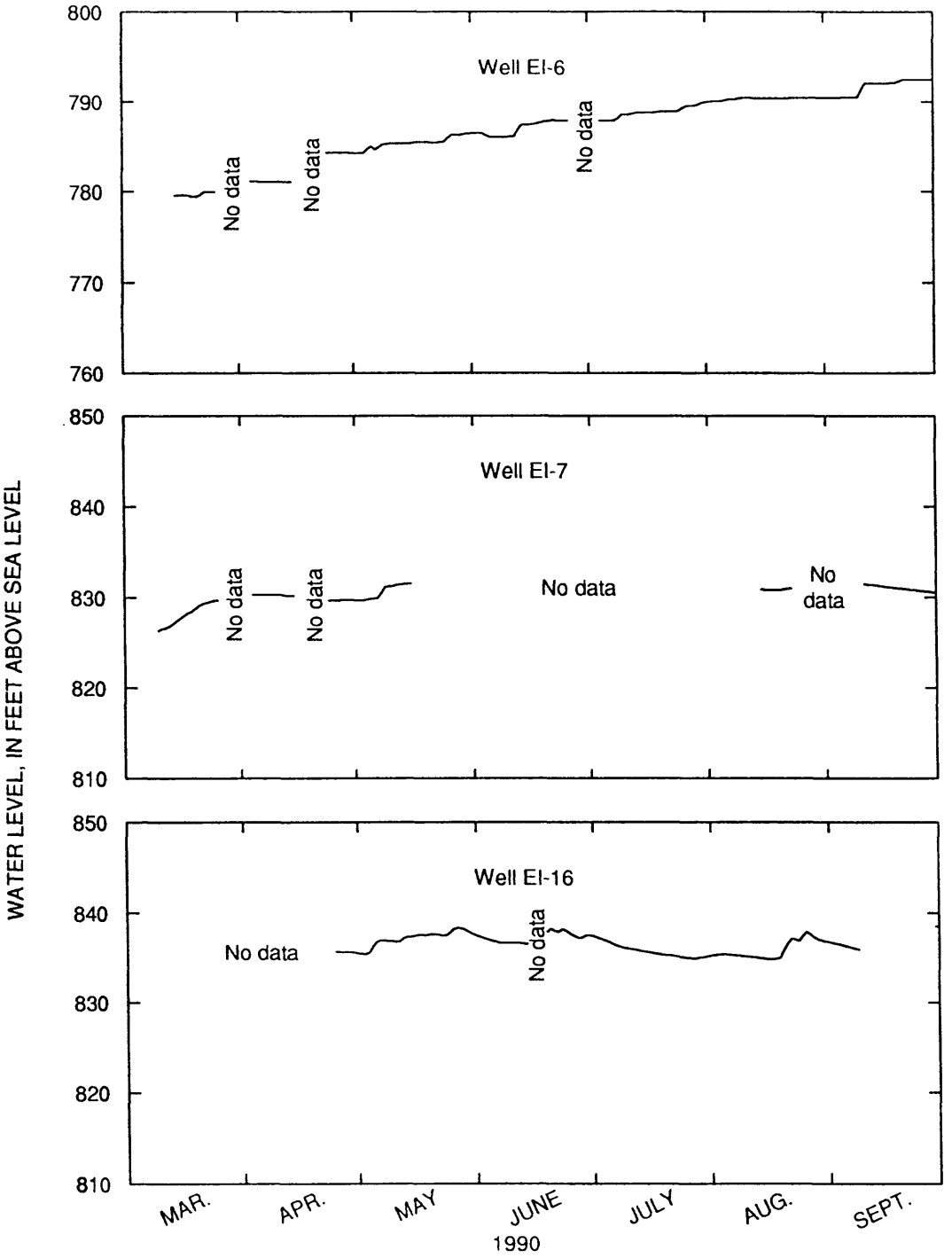

Figure 4. Daily mean water levels in continuously monitored observation wells, March-September 1990--Continued.

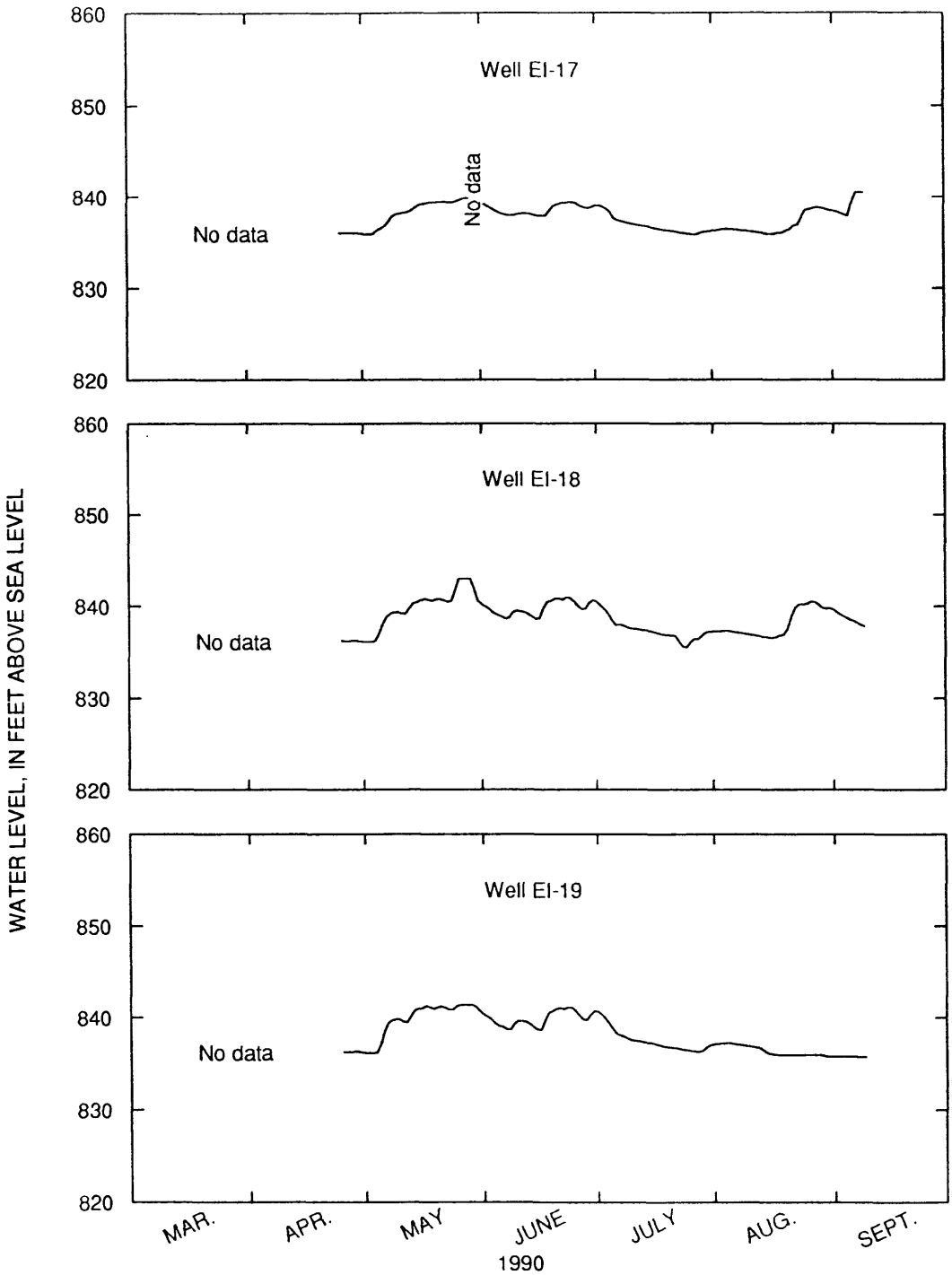

Figure 4. Daily mean water levels in continuously monitored observation wells, March-September 1990--Continued.

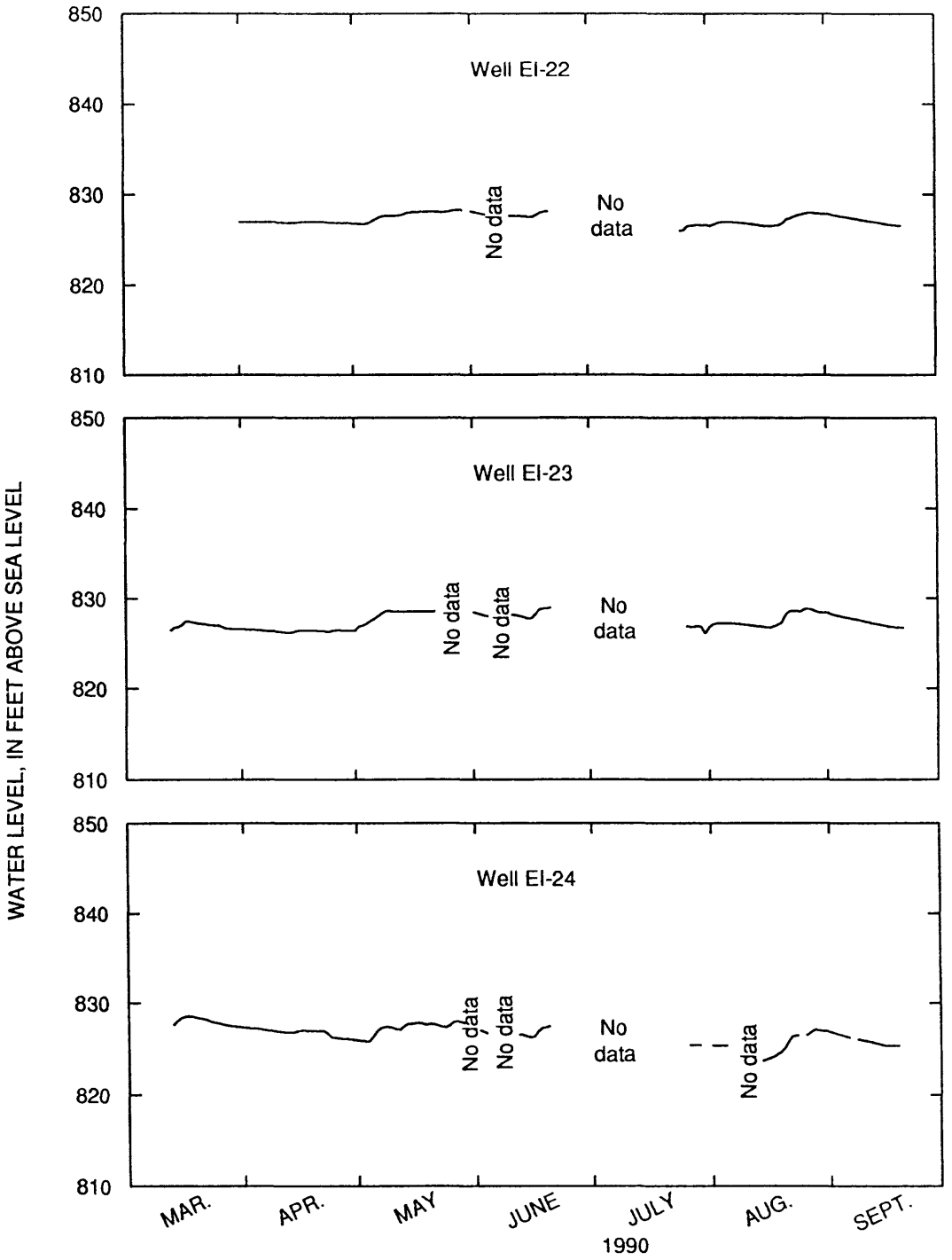

Figure 4. Daily mean water levels in continuously monitored observation wells, March-September 1990--Continued.

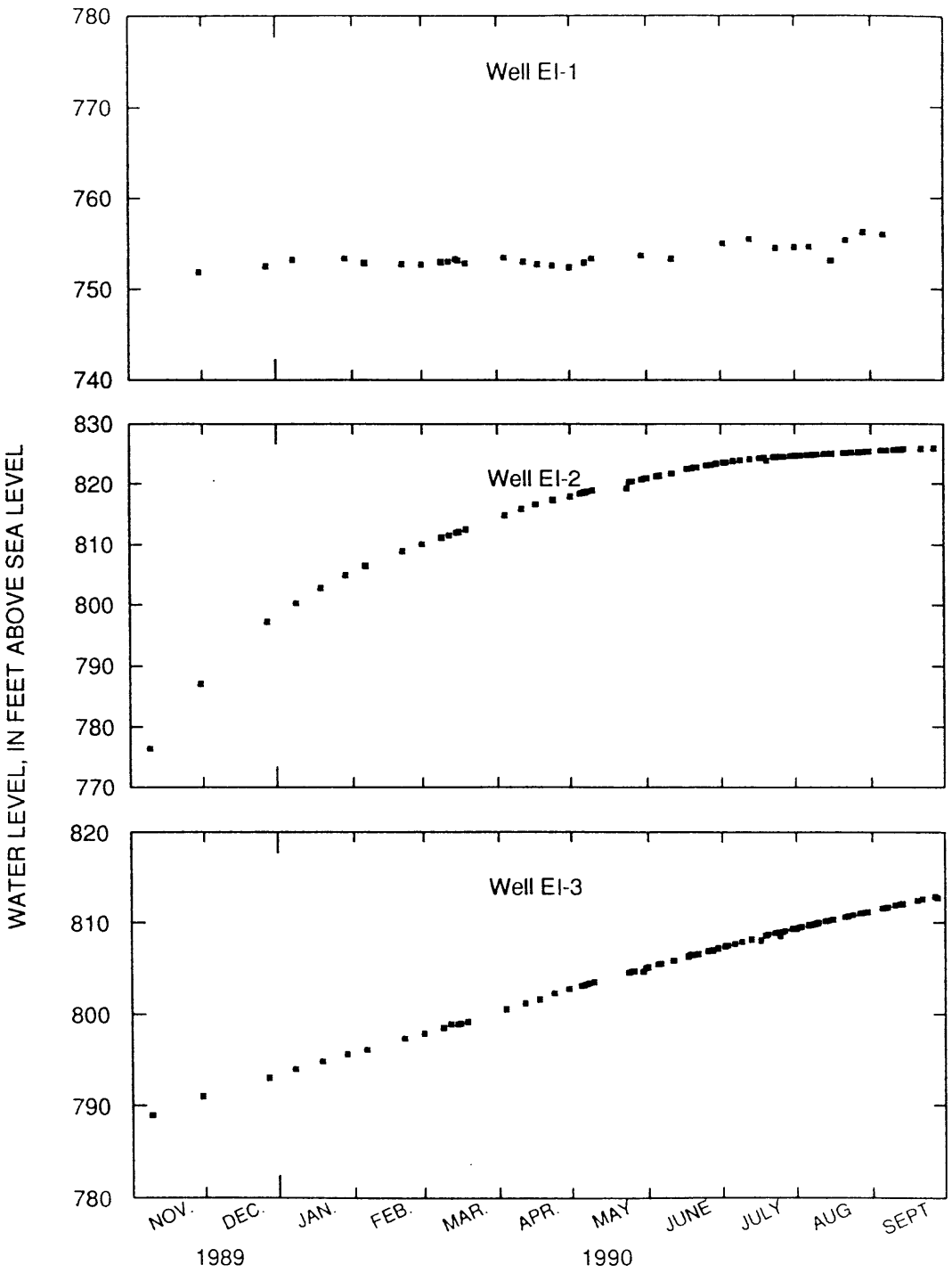

Figure 5. Water levels in observation wells measured intermittently, November 1989-September 1990.

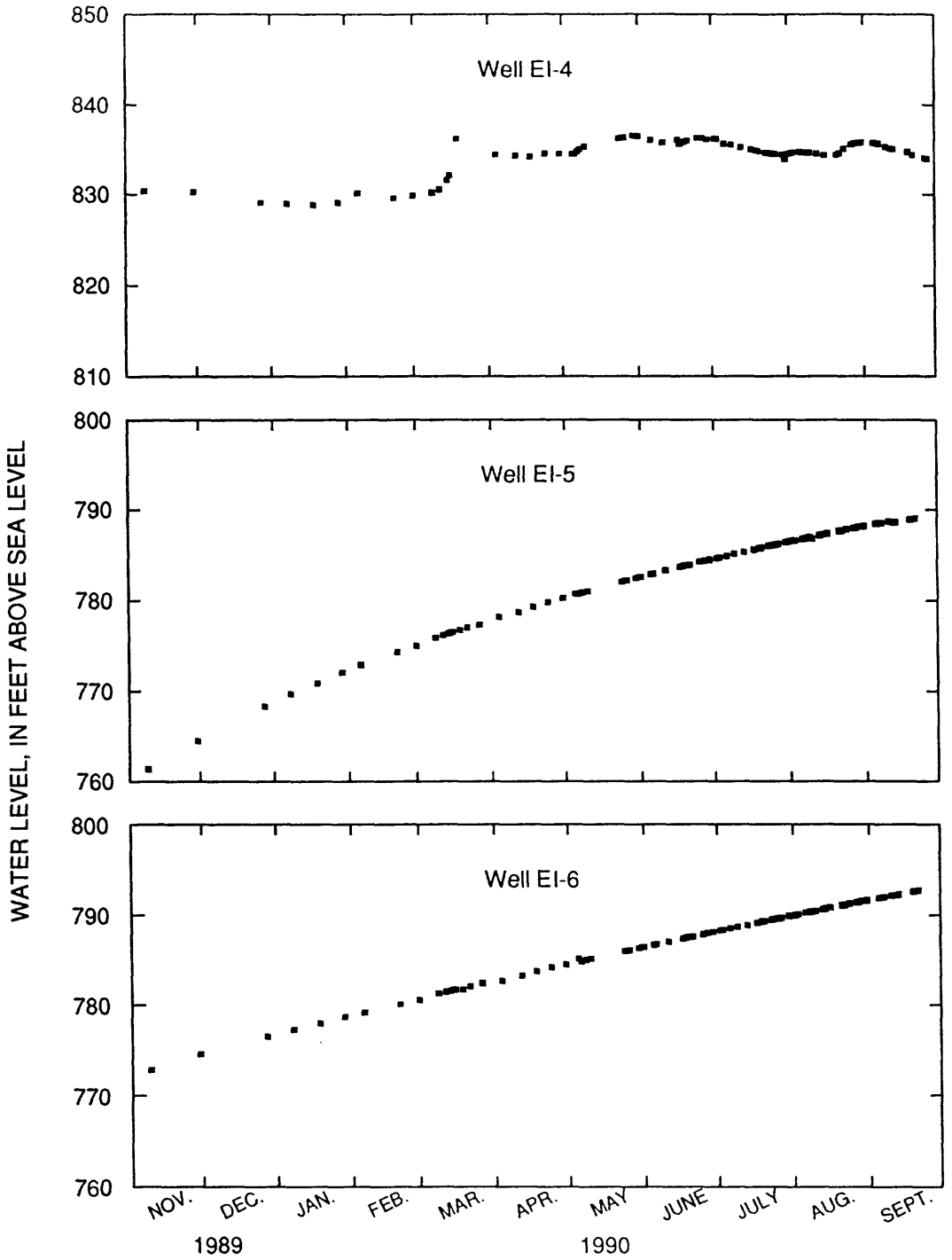

Figure 5. Water levels in observation wells measured intermittently, November 1989-September 1990--Continued.

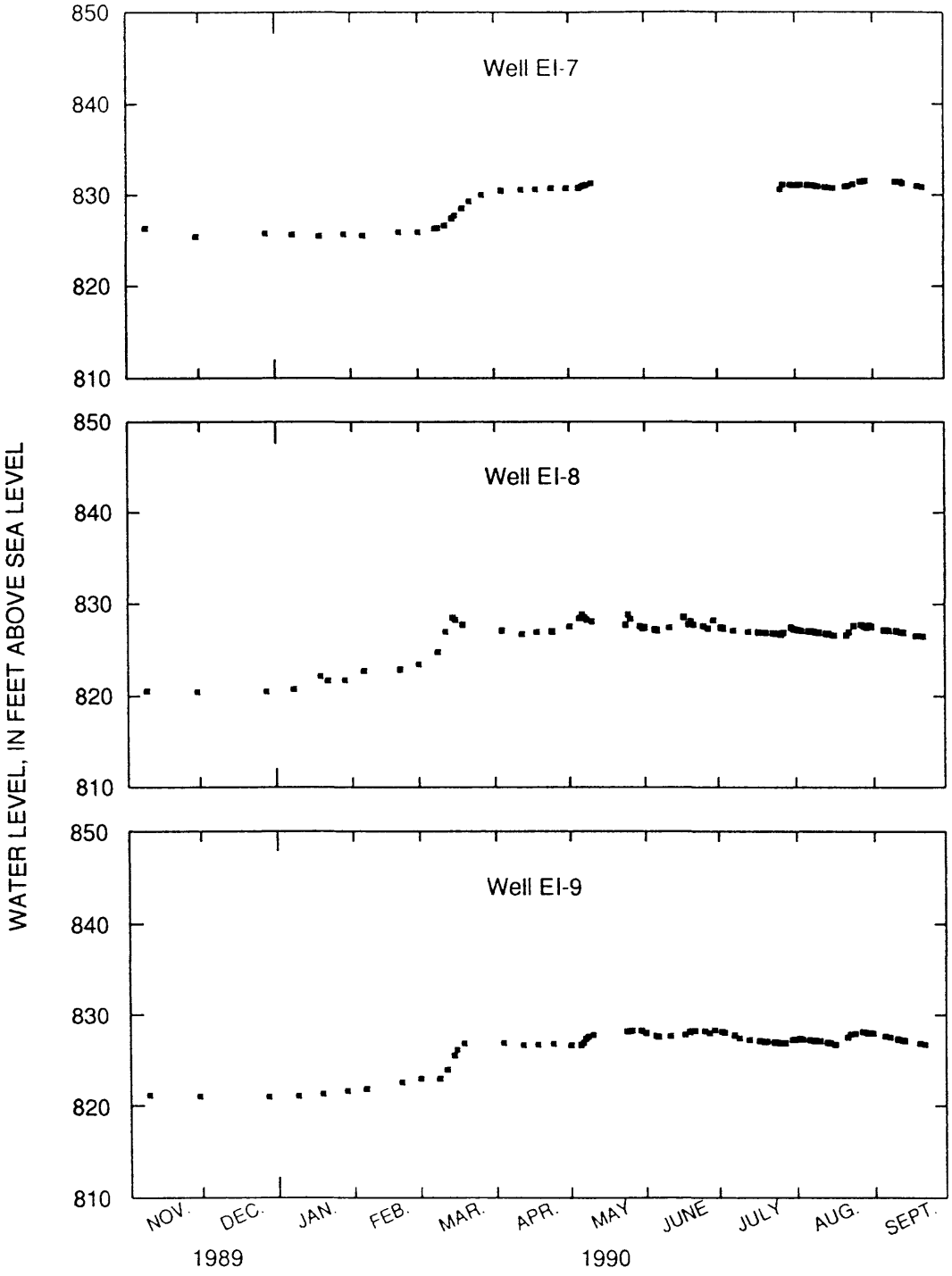

Figure 5. Water levels in observation wells measured intermittently, November 1989-September 1990--Continued.

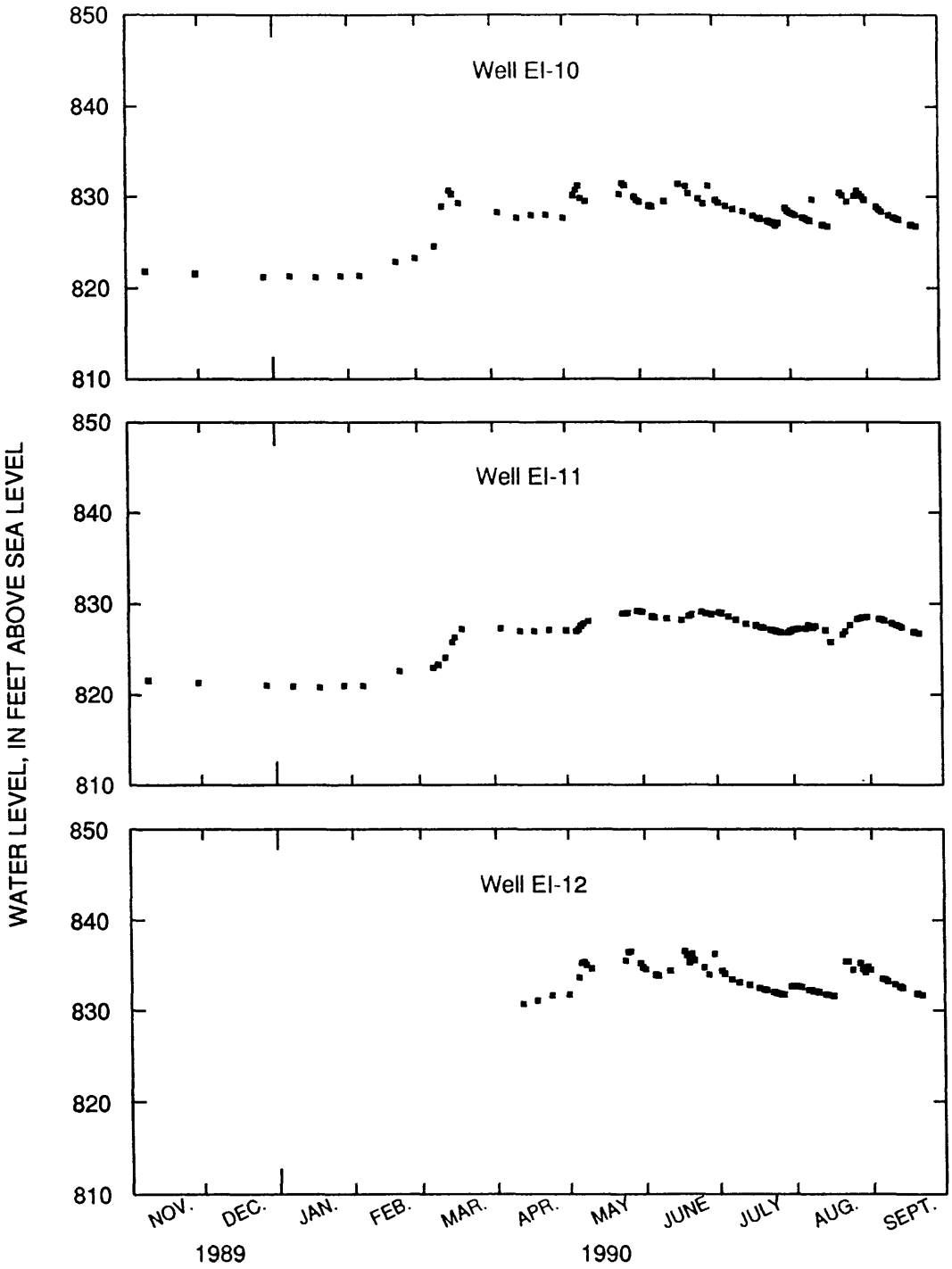

Figure 5. Water levels in observation wells measured intermittently, November 1989-September 1990--Continued.

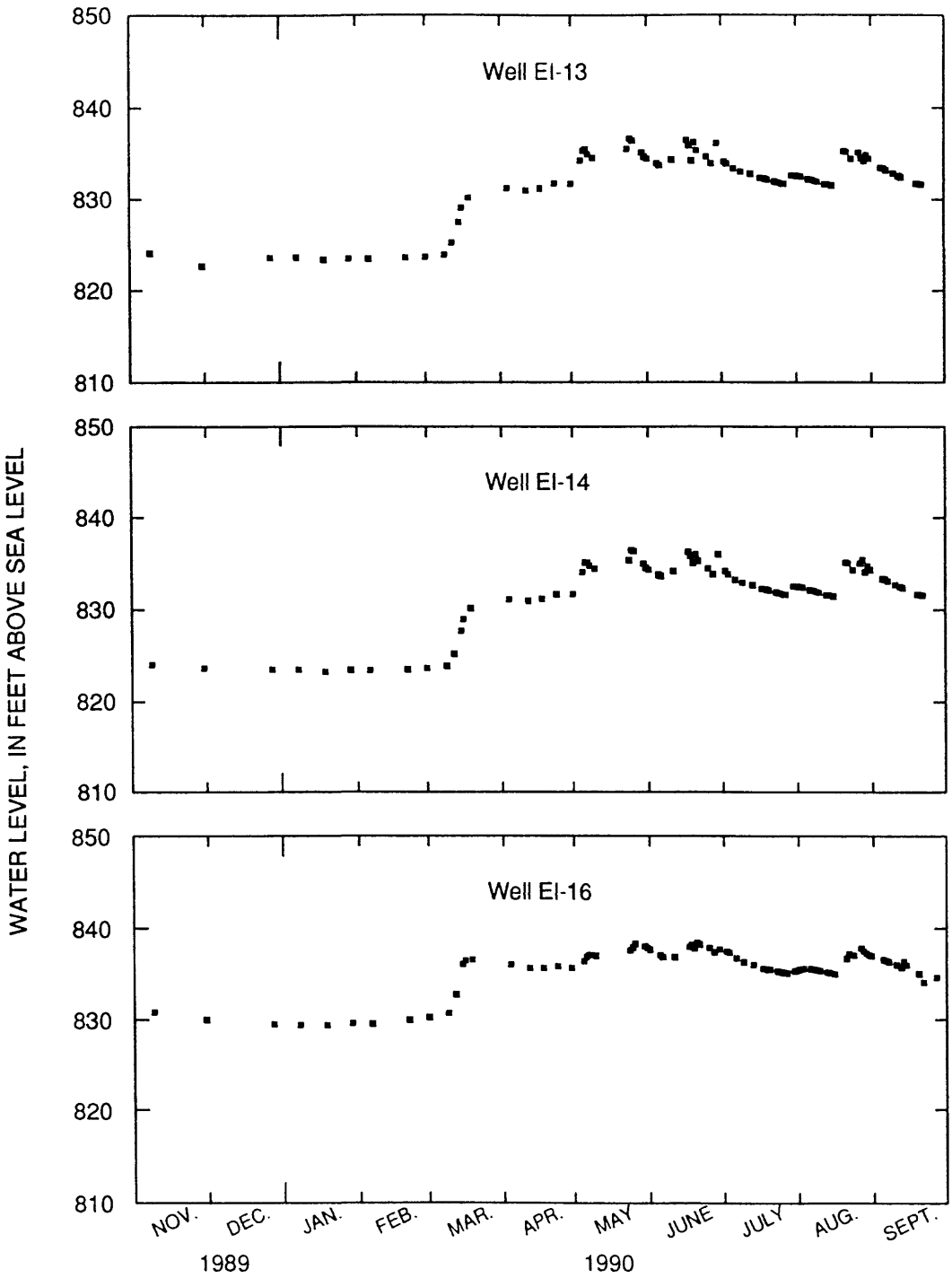

Figure 5. Water levels in observation wells measured intermittently, November 1989-September 1990--Continued.

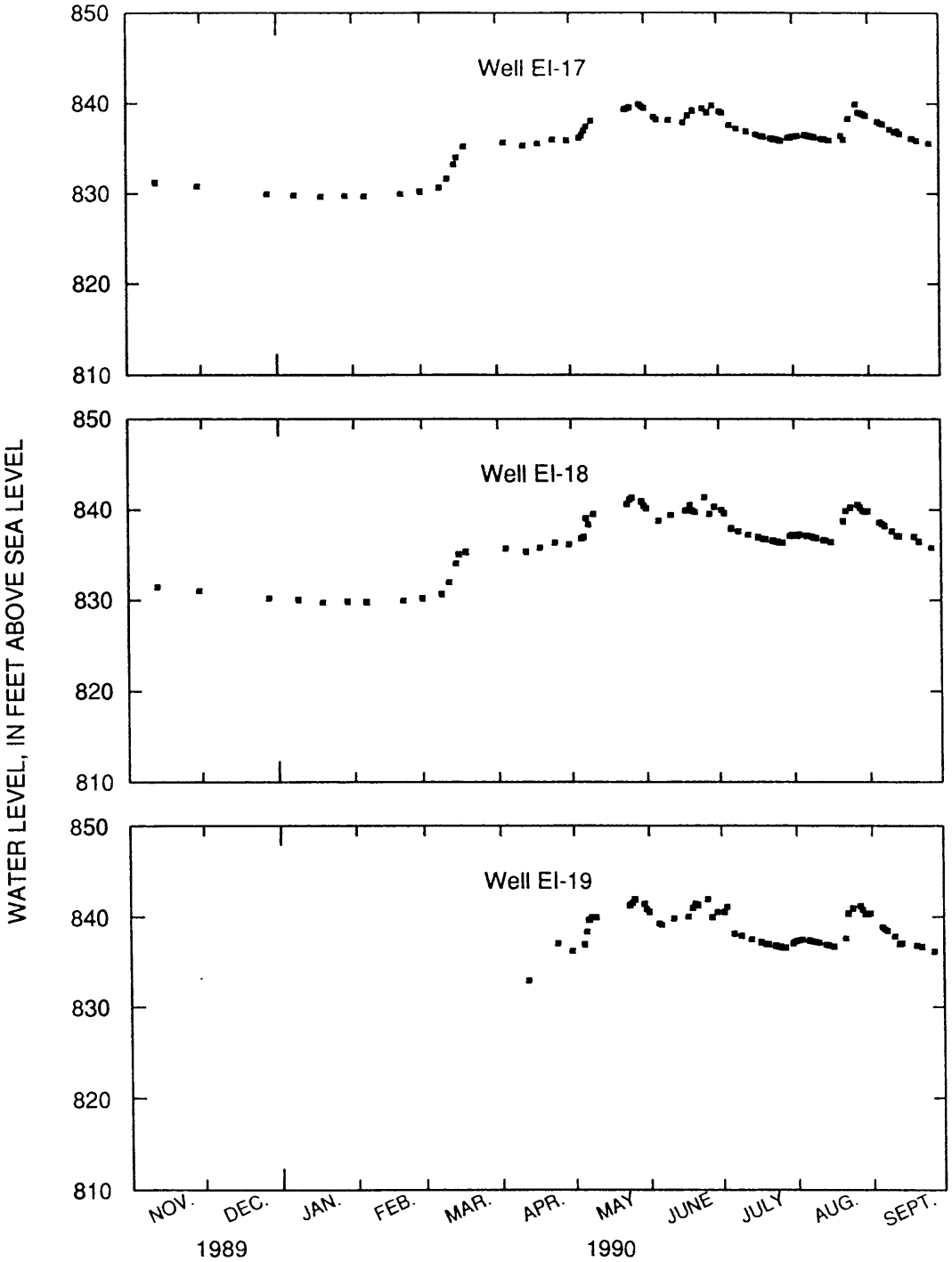

Figure 5. Water levels in observation wells measured intermittently, November 1989-September 1990--Continued.

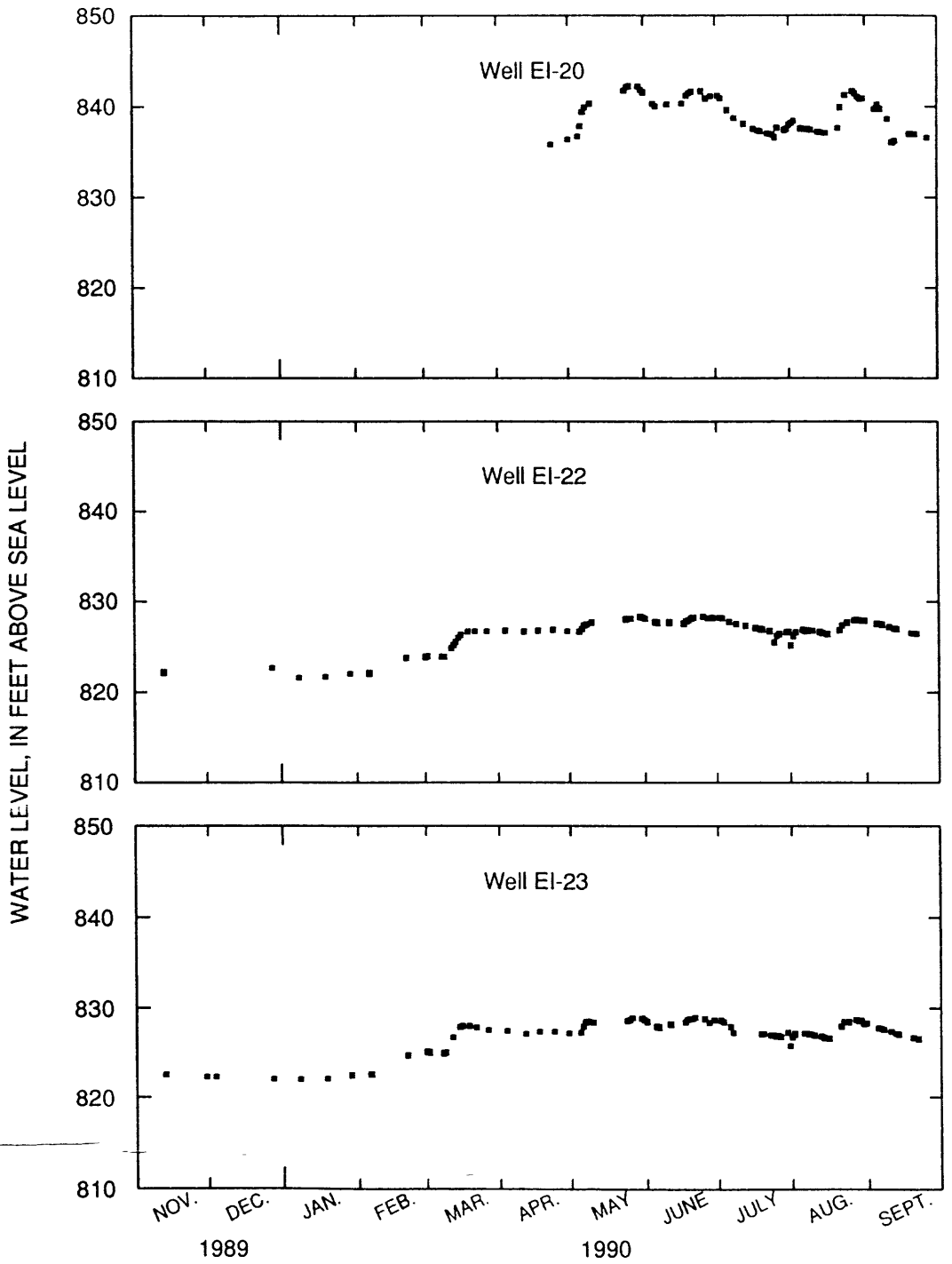

Figure 5. Water levels in observation wells measured intermittently, November 1989-September 1990--Continued.

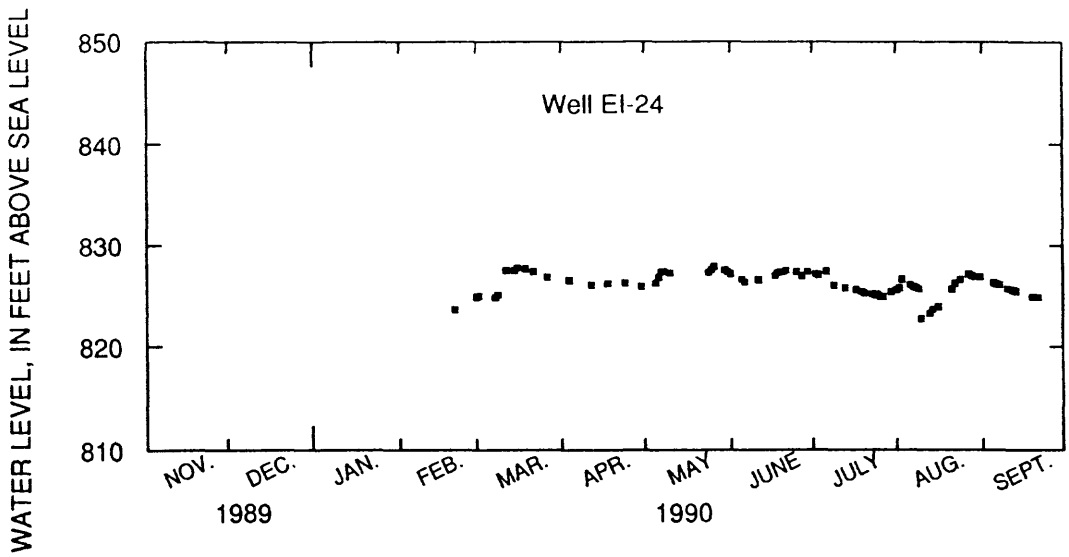

Figure 5. Water levels in observation wells measured intermittently, November 1989-September 1990--Continued.

conductance from April through September 30, 1990, ranged from a high of 864 µS/cm (microsiemens per centimeter at 25 degrees Celsius) on September 21, 1990, to a low of 705 µS/cm on April 13, 1990. Daily mean water temperature in the well from April through September 30, 1990, ranged from 15.6 degrees Celsius during four days in mid-September 1990, to a low of 5.2 degrees Celsius on April 10, 1990. Daily median pH values in observation well EI-28 from April through September 30, 1990, remained nearly constant at 7.0 to 7.2 standard units.

Pressure Transducers and Thermistors

Construction records for the 10 buried pressure transducers with internal thermistors are listed in table 6. Daily mean water levels and water temperatures collected from the pressure transducers and thermistors in borehole EI-26 at the south site (fig. 2) are displayed graphically in figure 7 and are listed in table 7. Daily mean water levels and water temperatures collected in borehole EI-25 at the north site (fig. 2) are displayed graphically in figure 8 and are listed in table 8.

REFERENCES CITED

Wahl, K.D., and Bunker, B.J., 1986, Hydrology of carbonate aquifers in southwestern Linn County and adjacent parts of Benton, Iowa, and Johnson Counties, Iowa: Iowa Geological Survey Water-Supply Bulletin 15, 56 p.

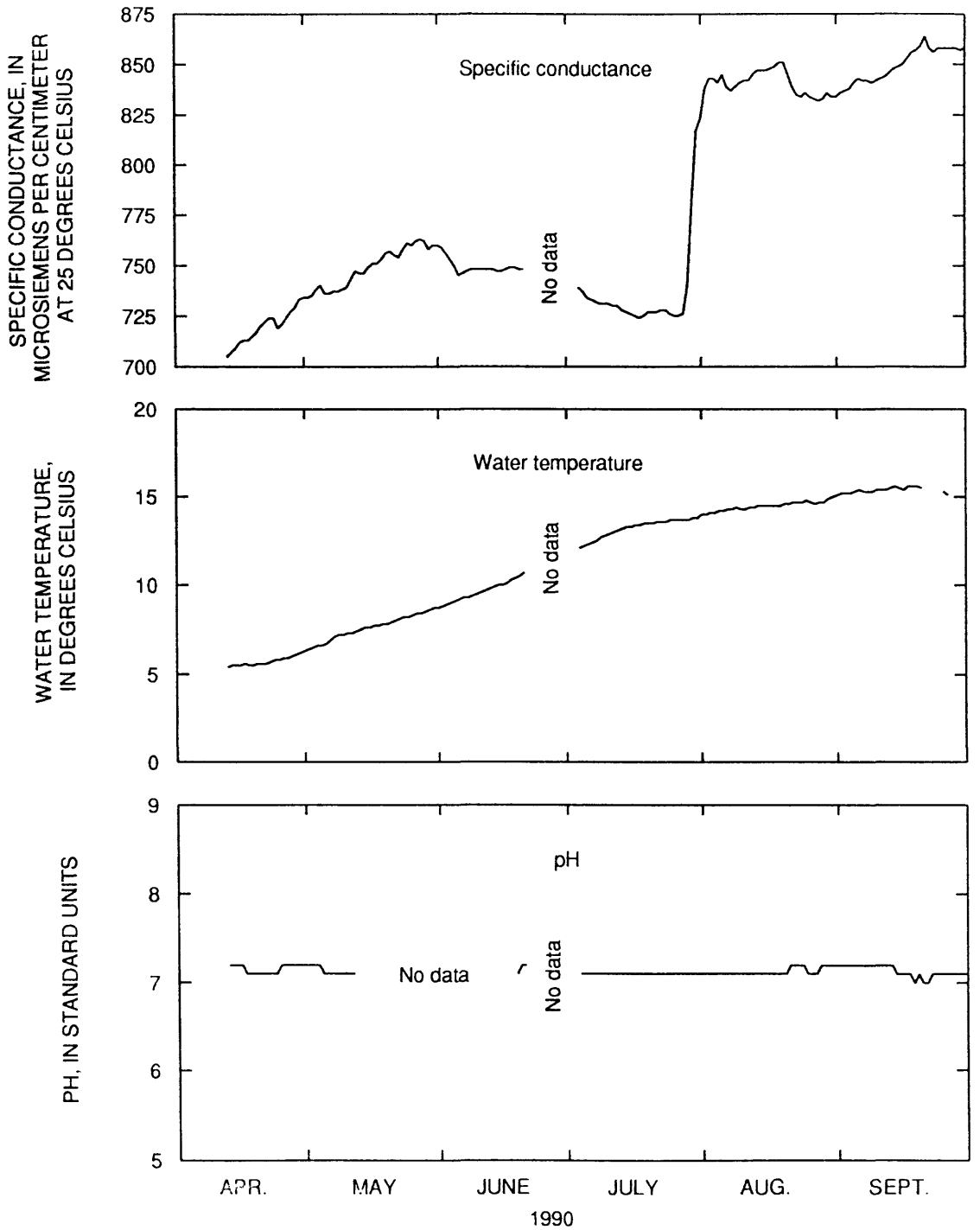

Figure 6. Daily mean specific conductance, water temperature, and median pH in observation well EI-28, April-September 1990.

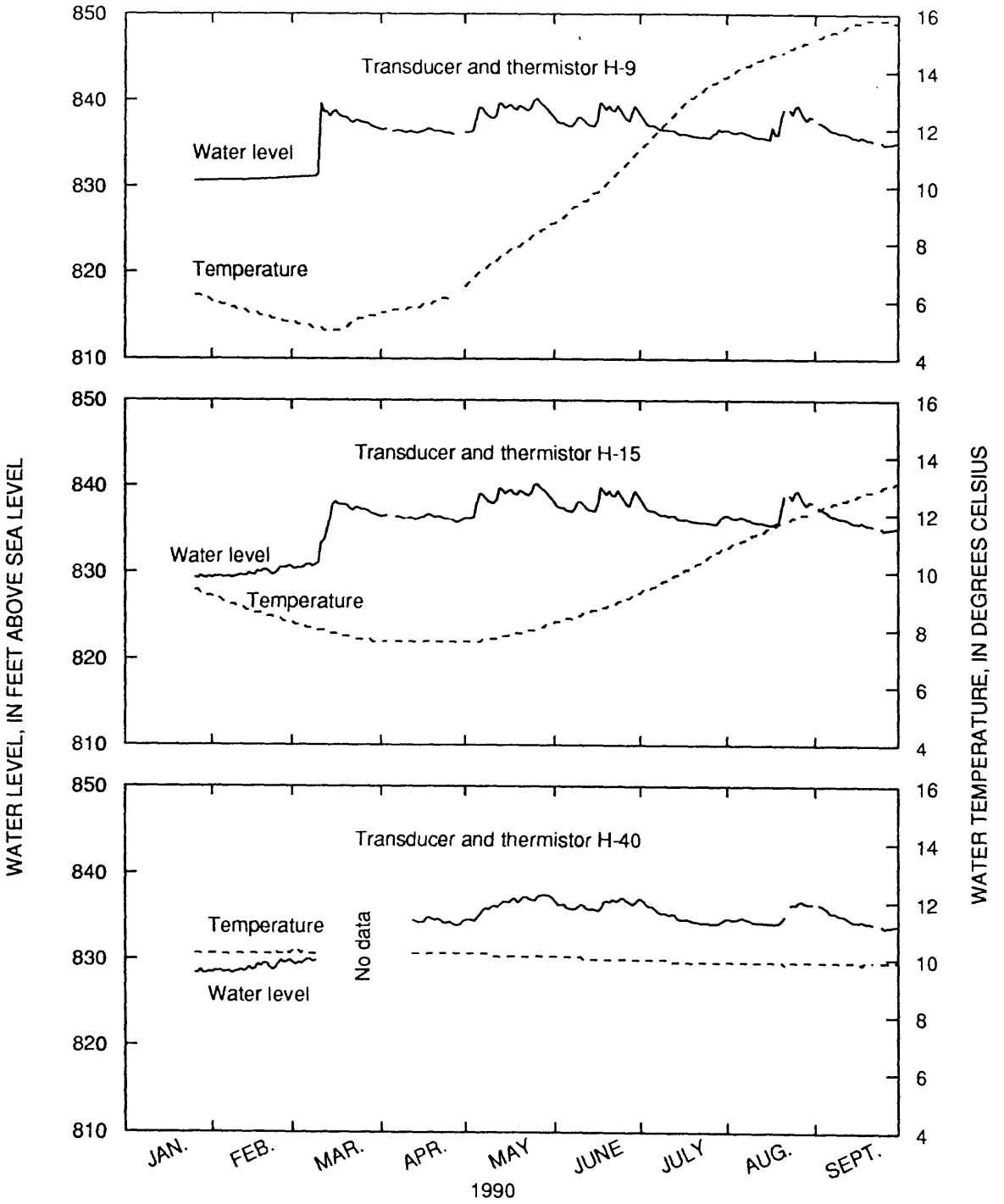

Figure 7. Daily mean water levels and water temperatures for pressure transducers and thermistors in borehole El-26 at south site, January-September 1990.

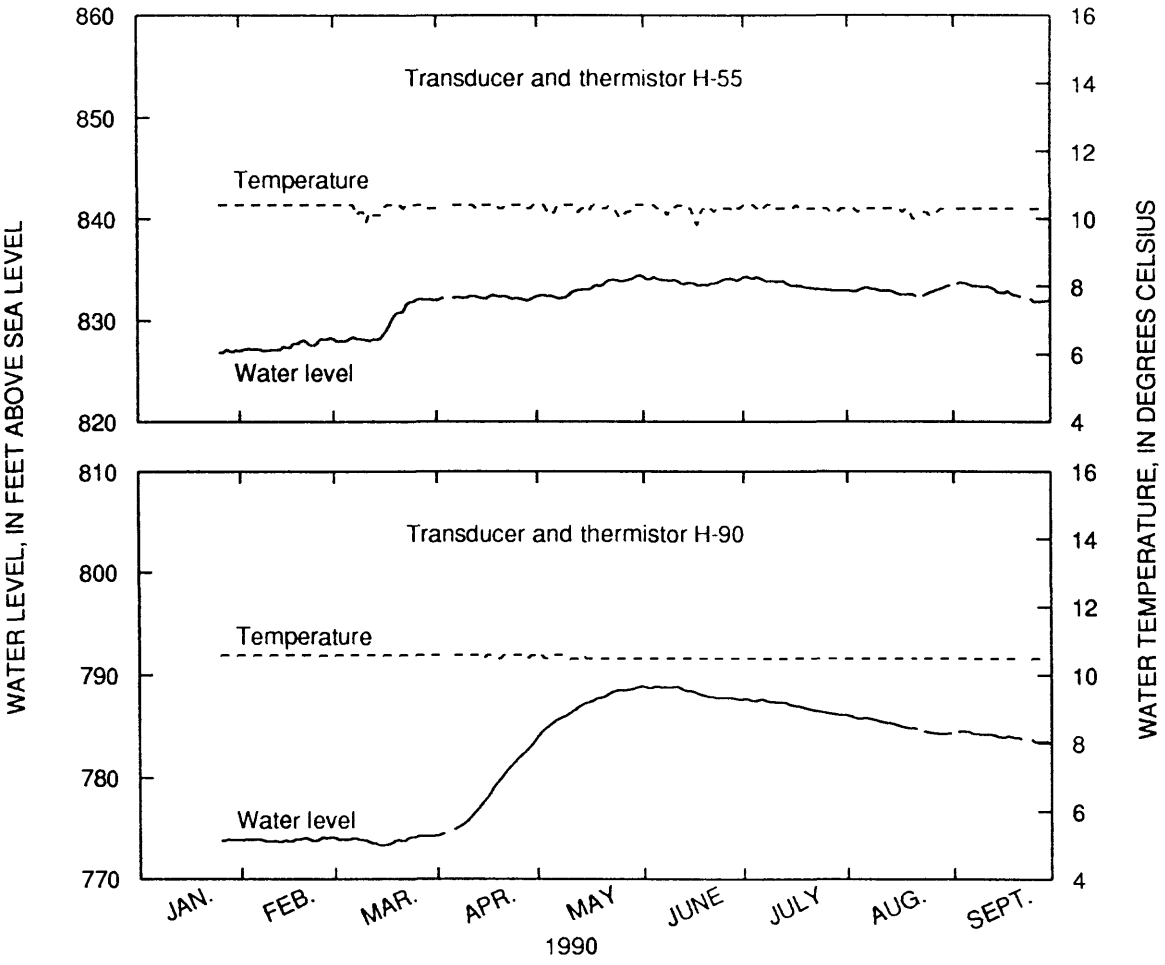

Figure 7. Daily mean water levels and water temperatures for pressure transducers and thermistors in borehole EI-26 at south site, January-September 1990--Continued

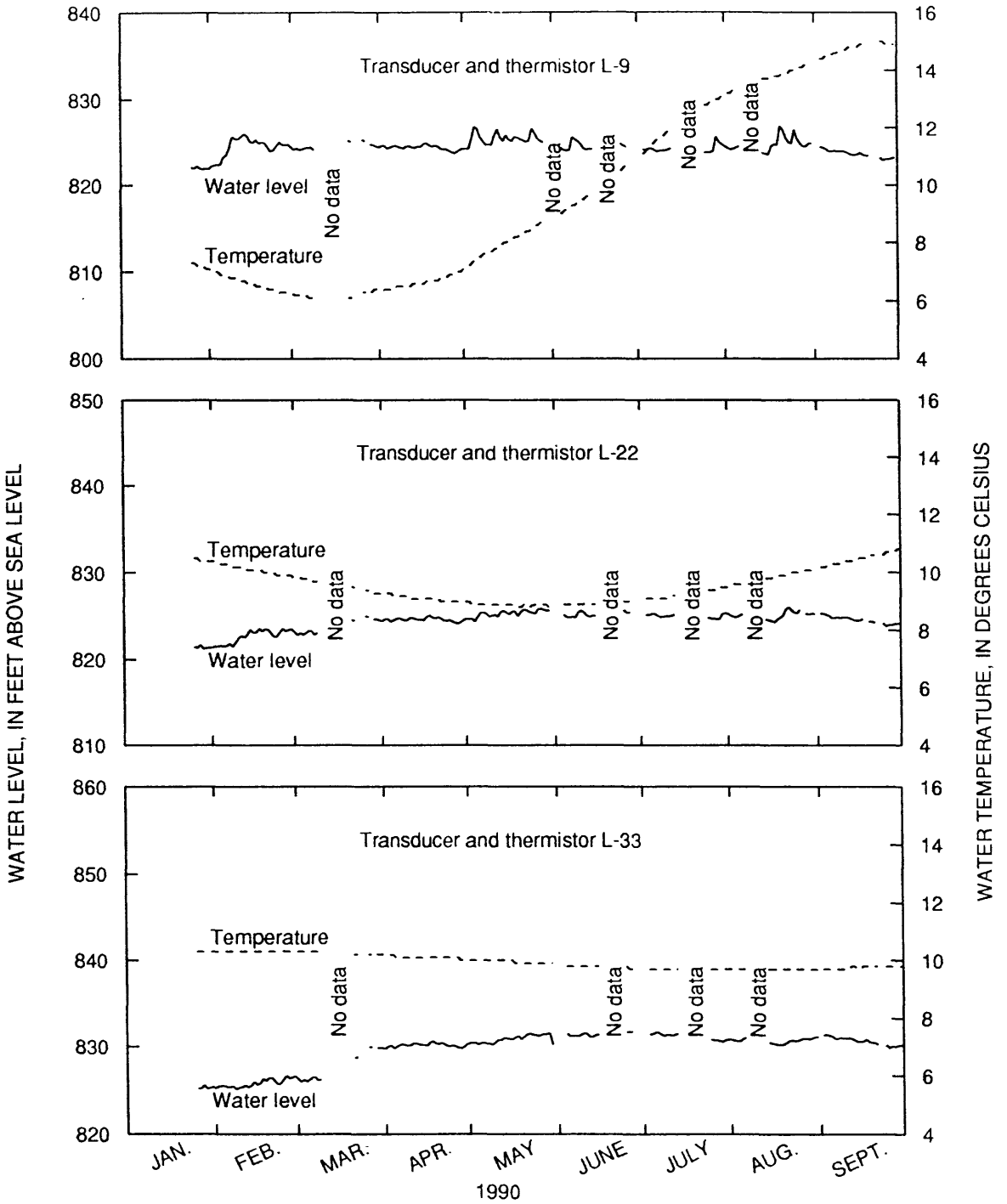

Figure 8. Daily mean water levels and water temperatures for pressure transducers and thermistors in borehole EI-25 at north site, January-September 1990.

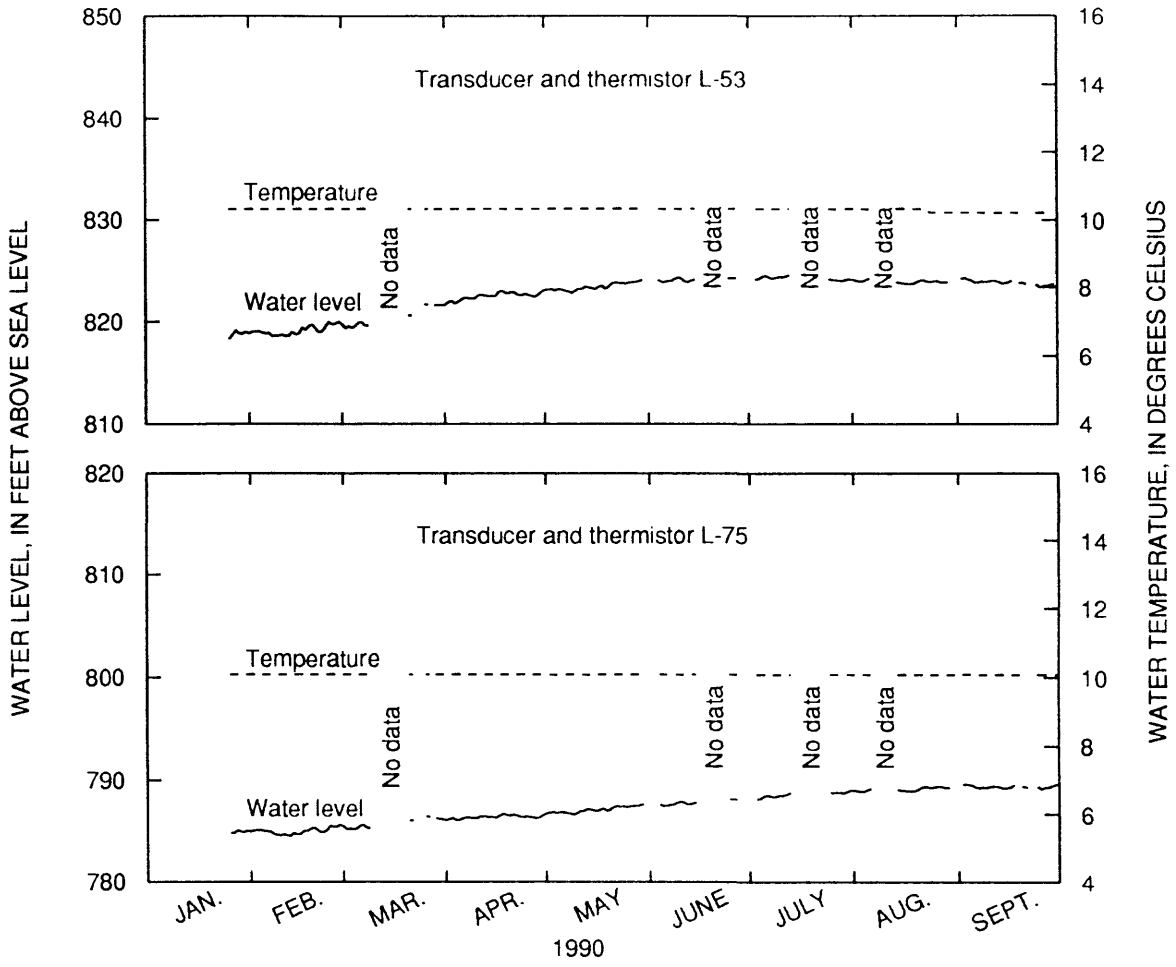

Figure 8. Daily mean water levels and water temperatures for pressure transducers and thermistors in borehole EI-25 at north site, January-September 1990--Continued

HYDROLOGIC DATA

Table 1. *Daily rainfall, mean barometric pressure, and maximum and minimum air temperature, April-September 1990*

[---, data not collected]

Day	Apr.	May	June	July	Aug.	Sept.
			Rainfall, in inches			
1	---	0.01	0.00	0.00	0.00	0.00
2	---	0.00	.25	.00	.26	.04
3	---	.25	.00	.00	.45	.13
4	0.00	1.28	.00	.32	.03	.00
5	.00	.41	.09	.40	.00	.00
6	.00	.00	.00	.00	.00	.00
7	.00	.00	.31	.00	.00	.00
8	.00	.00	.93	.00	.00	.00
9	.17	.15	.00	.24	.00	.00
10	.00	.00	.00	.58	.04	.00
11	.00	.00	.00	.00	.39	.00
12	.00	1.16	.00	.06	.06	.00
13	.45	.00	.01	.20	.00	.00
14	.01	.00	.33	.01	.00	.00
15	.01	.49	.00	.00	.00	.00
16	.03	.03	6.00	.04	.01	.00
17	.00	.00	1.15	.00	1.94	.00
18	.00	.00	.00	.00	.00	.12
19	.06	.74	.65	.56	1.07	.01
20	.24	.00	.00	.09	.88	.00
21	.00	.00	.00	.01	.26	.06
22	.00	.00	.77	.00	.00	.00
23	.00	.32	.00	.00	.00	.00
24	.00	.31	.00	.00	.78	.00
25	.00	.90	.00	.01	2.53	.00
26	.27	.00	.00	.83	.00	.00
27	.00	.01	1.88	.22	.00	---
28	.00	.13	.78	1.30	.00	---
29	.00	.00	.00	.25	.67	.04
30	.00	.00	.00	.00	.01	.01
31	---	.00	---	.00	.00	---
Total	1.24	6.19	13.15	5.12	9.38	0.41

Table 1. *Daily rainfall, mean barometric pressure, and maximum and minimum air temperature, April-September 1990*--Continued

Day	Apr.	May	June	July	Aug.	Sept.
			Mean barometric pressure, in millimeters of mercury			
1	---	766	760	763	766	763
2	---	766	753	762	764	767
3	---	767	757	758	762	768
4	758	761	764	759	761	766
5	761	762	758	764	767	765
6	765	761	759	766	770	759
7	767	757	761	763	768	760
8	764	756	759	760	766	763
9	762	751	763	763	766	762
10	762	756	767	764	764	763
11	768	761	765	763	764	765
12	768	758	758	766	764	765
13	765	762	758	768	766	762
14	762	760	761	761	765	759
15	762	757	761	759	764	760
16	761	754	759	761	763	763
17	770	759	759	764	761	769
18	772	761	762	764	760	764
19	767	753	759	763	761	763
20	764	757	757	762	763	764
21	767	763	760	763	765	761
22	764	765	756	762	765	763
23	759	763	759	763	762	767
24	757	761	761	764	762	762
25	760	758	762	765	762	756
26	757	760	762	765	763	761
27	754	760	761	764	761	---
28	751	760	759	762	759	---
29	755	762	759	760	760	768
30	762	765	761	764	762	767
31	---	764	---	767	762	---

Table 1. *Daily rainfall, mean barometric pressure, and maximum and minimum air temperature, April-September1990*--Continued

Day	Apr.		May		June		July		Aug.		Sept.	
	Maximum (max) and minimum (min) air temperature, in degrees Celsius											
	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
1	---	---	14.8	2.2	28.3	16.9	27.9	19.7	26.0	12.0	29.4	18.2
2	---	---	19.5	.8	24.0	15.1	29.1	17.9	27.1	14.6	23.8	19.1
3	---	---	15.0	8.4	17.2	8.8	36.1	22.4	26.7	20.3	27.3	17.8
4	---	---	10.0	5.8	19.6	5.9	36.7	21.0	28.3	17.7	33.8	20.3
5	---	---	18.2	4.1	17.7	11.1	28.3	17.4	24.2	14.0	34.6	20.0
6	---	---	20.8	4.8	25.0	10.5	25.3	15.8	23.2	10.6	34.8	23.9
7	---	---	26.0	10.7	22.9	10.4	30.5	17.6	25.8	11.7	28.4	20.3
8	---	---	24.3	14.5	24.3	15.8	33.0	25.0	26.4	9.8	27.1	17.5
9	11.5	7.4	19.4	6.4	26.8	14.3	29.4	19.0	26.7	12.6	28.0	15.7
10	10.3	2.3	12.9	4.2	29.4	12.6	22.8	16.4	28.1	16.7	30.9	17.4
11	3.7	-3.6	18.9	3.7	28.2	16.6	25.8	15.7	28.8	18.1	28.8	17.5
12	10.2	-5.9	11.3	8.4	32.0	19.9	19.2	14.7	22.6	16.5	31.0	16.1
13	5.5	.9	19.3	4.4	31.1	22.7	22.9	13.0	25.2	14.9	29.5	17.9
14	15.9	1.7	23.9	10.5	28.6	20.0	22.1	14.7	28.0	15.4	23.3	12.4
15	13.8	5.9	21.7	10.9	27.0	18.5	26.0	13.7	28.8	17.2	25.8	8.2
16	14.3	.5	18.7	12.7	23.2	19.5	30.8	16.3	27.1	18.6	18.3	8.7
17	8.5	-3.0	18.8	8.7	29.1	18.0	30.1	20.1	30.5	19.7	18.5	4.9
18	14.5	-4.9	24.5	6.2	29.9	17.6	28.9	20.8	32.7	23.2	13.8	10.5
19	12.7	5.2	22.6	12.5	22.7	15.6	30.8	19.6	29.0	19.6	19.2	10.8
20	18.9	10.7	13.8	8.5	27.0	17.1	28.2	19.0	21.3	18.7	19.9	7.9
21	19.7	8.1	14.7	8.5	23.8	15.7	22.9	17.8	21.4	17.0	20.6	10.7
22	23.8	3.9	21.2	7.5	22.2	14.4	24.8	16.1	25.4	18.2	16.3	7.5
23	28.9	14.5	19.7	11.3	24.3	14.1	25.6	13.0	28.0	17.3	14.5	5.2
24	29.8	16.8	16.4	9.1	28.7	14.2	27.3	13.0	30.4	20.0	22.2	3.6
25	29.2	16.2	17.2	13.3	29.4	17.5	27.7	17.8	29.8	18.3	28.7	10.8
26	28.1	15.9	18.4	13.0	30.7	19.9	27.1	20.4	34.2	22.3	27.5	11.0
27	21.4	14.9	23.4	9.5	33.2	18.1	29.4	19.1	34.4	23.3	---	---
28	16.0	3.6	22.4	13.6	30.7	19.0	29.1	20.9	31.1	22.4	---	---
29	20.7	1.5	23.3	11.7	28.8	20.2	28.6	20.7	29.5	17.7	16.7	8.4
30	14.7	1.0	20.9	7.7	33.5	20.4	25.6	16.9	28.6	15.0	19.0	3.3
31	---	---	23.7	7.8	---	---	24.8	13.3	28.0	17.2	---	---

Table 2. *Construction records of observation wells at the till hydrology site in Linn County, Iowa*

[Well-construction data from U.S. Geological Survey, Iowa City, Iowa, and Iowa Department of Natural Resources Geological Survey Bureau, Iowa City, Iowa]

Local number (fig. 2)	Station identification number	Land surface elevation (feet above sea level)	Well depth (feet)	Screened interval (feet)	Measuring-point elevation (feet above sea level)	Aquifer type
			South site			
EI-1	415219091400201	840	105	102-105	841.60	Silurian bedrock
EI-2	415219091400202	841	93	90-93	843.62	Unconsolidated deposits
EI-3	415219091400203	842	60	57-60	844.19	Do.
EI-4	415219091400204	842	53	50-53	844.62	Do.
EI-16	415219091400205	841	48	45-48	843.82	Do.
EI-17	415219091400206	843	41	38-41	844.63	Do.
EI-18	415219091400207	843	33	30-33	845.54	Do.
EI-19	415219091400208	843	28	25-28	846.10	Do.
EI-20	415219091400210	843	16	13-16	846.52	Do.
			North site			
EI-5	415216091400201	828	78	75-78	830.12	Do.
EI-6	415216091400202	828	62	59-62	831.48	Do.
EI-7	415216091400203	828	41	38-41	831.59	Do.
EI-22	415216091400204	829	37	34-37	831.83	Do.
EI-23	415216091400205	829	28	25-28	831.63	Do.
EI-24	415216091400206	829	13	10-13	831.93	Do.
			West site			
EI-12	415217091400203	837	15	12-15	839.04	Do.
EI-13	415217091400204	837	24	21-24	839.15	Do.
EI-14	415217091400205	837	35	32-35	838.84	Do.
			Northwest site			
EI-10	415217091400207	832	15	12-15	834.01	Do.
EI-11	415217091400208	831	36	33-36	833.45	Do.
			East site			
EI-8	415217091400201	830	16	13-16	831.90	Do.
EI-9	415217091400202	830	35	32-35	832.26	Do.

Table 3. *Daily mean water levels in continuously monitored observation wells, March-September 1990*

[Values are in feet above sea level; ---, data not collected]

Day	Mar.	Apr.	May	June	July	Aug.	Sept.
			Well EI-3 (Land-surface elevation 842 feet above sea level)				
1	---	---	801.57	805.06	806.56	809.34	809.88
2	---	---	801.56	805.08	806.56	809.34	809.88
3	---	---	801.56	805.07	806.56	809.36	809.88
4	---	---	801.57	805.06	806.56	809.39	809.88
5	---	---	801.57	805.06	806.56	809.39	809.87
6	---	---	801.55	805.09	807.06	809.37	809.87
7	---	---	801.54	805.08	807.60	809.38	809.90
8	---	---	801.53	805.08	807.60	809.40	809.91
9	---	---	801.53	805.08	807.60	809.18	809.91
10	---	---	801.52	805.07	807.60	808.98	---
11	---	---	801.50	805.06	807.60	808.98	---
12	---	---	801.50	805.06	807.60	808.98	---
13	---	---	801.51	805.06	807.60	808.98	---
14	---	---	801.51	805.07	807.61	808.98	---
15	---	---	801.51	---	807.61	808.98	---
16	---	---	801.51	---	807.61	808.98	---
17	---	---	801.50	---	807.61	808.98	---
18	---	---	801.49	---	807.62	808.98	---
19	---	---	801.49	---	807.62	808.98	---
20	---	---	801.49	---	807.62	808.98	---
21	---	---	801.49	806.52	807.63	808.98	---
22	---	---	801.49	806.53	807.63	808.98	---
23	---	---	801.49	806.53	807.63	808.98	---
24	---	---	801.49	806.53	807.63	808.98	---
25	---	801.62	801.49	806.53	807.63	808.98	---
26	---	801.61	801.49	806.53	---	808.98	---
27	---	801.61	801.49	806.54	---	809.48	---
28	---	801.61	801.49	806.56	---	809.87	---
29	---	801.61	801.48	806.56	---	809.88	---
30	---	801.59	801.45	806.56	---	809.88	---
31	---	---	802.67	---	---	809.88	---

Table 3. *Daily mean water levels in continuously monitored observation wells, March-September 1990*--Continued

Day	Mar.	Apr.	May	June	July	Aug.	Sept.
			Well EI-4 (Land-surface elevation 842 feet above sea level)				
1	---	---	834.41	836.58	836.19	834.42	835.72
2	---	---	834.38	836.56	836.21	834.49	835.73
3	---	---	834.35	836.45	836.20	834.60	835.73
4	---	---	834.41	836.35	836.17	834.68	835.72
5	---	---	834.41	836.25	836.32	834.69	835.66
6	---	---	834.42	836.17	836.67	834.67	835.60
7	---	---	834.58	836.05	836.40	834.65	835.51
8	---	---	834.75	836.00	835.81	834.63	835.43
9	---	---	835.04	835.88	835.53	834.61	835.35
10	---	---	835.17	835.83	835.45	834.58	---
11	---	---	835.19	835.83	835.42	834.55	---
12	---	---	835.21	835.84	835.33	834.53	---
13	---	---	835.23	835.85	835.23	834.48	---
14	---	---	835.23	835.84	835.19	834.43	---
15	---	---	835.25	---	835.14	834.39	---
16	---	---	835.27	---	835.08	834.33	---
17	---	---	835.49	---	834.99	834.36	---
18	---	---	835.83	---	834.93	834.37	---
19	---	---	835.96	835.53	834.86	834.33	---
20	---	---	836.00	835.81	834.83	834.36	---
21	---	---	836.03	836.01	834.80	834.35	---
22	---	---	836.07	836.15	834.73	834.50	---
23	---	---	836.11	836.17	834.62	834.70	---
24	---	---	836.14	836.20	834.57	835.02	---
25	---	834.44	836.18	836.26	834.52	835.20	---
26	---	834.44	836.20	836.29	834.45	835.31	---
27	---	834.44	836.21	836.29	834.45	835.46	---
28	---	834.45	836.21	836.26	834.47	835.59	---
29	---	834.45	836.21	836.18	834.45	835.66	833.90
30	---	834.44	836.32	836.17	834.40	835.72	833.84
31	---	---	836.47	---	834.39	835.71	---

Table 3. *Daily mean water levels in continuously monitored observation wells, March-September 1990*--Continued

Day	Mar.	Apr.	May	June	July	Aug.	Sept.
			Well EI-5 (Land-surface elevation 828 feet above sea level)				
1	---	---	780.64	783.53	---	787.47	787.97
2	---	---	780.62	783.64	---	787.53	787.97
3	---	---	780.61	783.64	---	787.59	787.97
4	---	777.39	780.62	783.64	784.93	787.62	787.97
5	---	777.59	781.30	783.65	784.93	787.62	787.98
6	---	777.57	781.65	783.66	785.08	787.70	787.98
7	---	777.57	---	783.67	785.24	787.81	787.98
8	---	777.57	---	783.67	785.24	787.84	787.98
9	---	777.57	---	783.66	785.24	787.84	787.98
10	774.01	777.57	---	783.66	785.24	787.84	---
11	774.01	777.57	---	783.66	785.24	787.84	---
12	774.86	777.80	---	783.66	785.24	787.84	---
13	778.47	778.23	---	783.68	785.24	787.84	---
14	778.48	778.23	---	783.66	785.24	787.84	---
15	778.77	778.23	---	783.66	785.24	787.84	---
16	779.03	---	---	783.66	785.24	787.85	---
17	779.03	---	---	783.66	785.24	787.87	---
18	779.02	---	---	784.21	785.24	787.87	---
19	779.25	---	---	784.78	785.24	787.87	---
20	779.45	---	---	784.79	785.24	787.87	---
21	779.45	---	---	784.81	785.24	787.87	---
22	779.80	---	---	784.86	785.24	787.87	---
23	780.36	---	---	784.82	785.29	787.88	---
24	780.35	780.81	---	784.81	785.33	787.89	---
25	780.34	780.77	783.52	784.81	785.33	787.88	---
26	780.33	780.76	783.29	784.81	785.69	787.88	---
27	---	780.76	783.43	---	786.02	787.90	---
28	---	780.76	783.42	---	786.02	787.91	---
29	---	780.75	783.42	---	786.02	787.94	---
30	---	780.71	783.42	---	786.02	787.97	---

Table 3. *Daily mean water levels in continuously monitored observation wells, March-September 1990*--Continued

Day	Mar.	Apr.	May	June	July	Aug.	Sept.
			Well EI-6 (Land-surface elevation 828 feet above sea level)				
1	---	---	784.20	786.43	---	789.92	790.45
2	---	---	784.19	786.43	---	789.97	790.45
3	---	---	784.19	786.43	---	790.02	790.45
4	---	781.04	784.22	786.44	787.88	790.04	790.45
5	---	781.04	784.67	786.17	787.88	790.04	790.45
6	---	781.04	784.92	786.01	787.88	790.12	790.46
7	---	781.03	784.58	786.02	787.89	790.23	790.47
8	---	781.03	784.83	786.02	787.89	790.27	790.47
9	---	781.03	785.16	786.02	788.16	790.28	790.47
10	---	781.03	785.21	786.02	788.58	790.36	790.47
11	---	781.03	785.27	786.06	788.58	790.43	791.29
12	---	781.02	785.27	786.08	788.58	790.43	792.07
13	---	781.02	785.27	786.89	788.68	790.41	792.08
14	---	781.02	785.27	787.43	788.77	790.39	792.08
15	779.54	781.02	785.27	787.43	788.77	790.39	792.09
16	779.55	---	785.27	787.43	788.78	790.38	792.09
17	779.57	---	785.33	787.48	788.78	790.38	792.09
18	779.57	---	785.41	787.58	788.78	790.38	792.09
19	779.51	---	785.42	787.70	788.83	790.38	792.12
20	779.40	---	785.41	787.77	788.87	790.38	792.15
21	779.40	---	785.41	787.82	788.88	790.39	792.27
22	779.60	---	785.40	787.97	788.88	790.40	792.48
23	779.93	---	785.40	787.86	788.88	790.40	792.48
24	779.93	784.23	785.41	787.85	788.88	790.41	792.48
25	779.92	784.23	785.44	787.85	788.98	790.42	792.48
26	779.92	784.22	785.86	787.85	789.28	790.42	792.48
27	---	784.22	786.21	---	789.52	790.43	792.48
28	---	784.23	786.21	---	789.54	790.43	792.48
29	---	784.23	786.21	---	789.54	790.43	792.48
30	---	784.22	786.31	---	789.63	790.43	792.48
31	---	---	786.41	---	789.83	790.44	---

Table 3. *Daily mean water levels in continuously monitored observation wells, March-September 1990*--Continued

Day	Mar.	Apr.	May	June	July	Aug.	Sept.
			Well EI-7 (Land-surface elevation 829 feet above sea level)				
1	---	---	829.70	---	---	---	---
2	---	---	829.69	---	---	---	---
3	---	---	829.68	---	---	---	---
4	---	830.32	829.75	---	---	---	---
5	---	830.30	829.84	---	---	---	---
6	---	830.31	829.88	---	---	---	---
7	---	830.32	829.93	---	---	---	---
8	---	830.32	830.49	---	---	---	---
9	---	830.33	831.14	---	---	---	---
10	826.34	830.33	831.20	---	---	---	---
11	826.54	830.33	831.23	---	---	---	831.48
12	826.63	830.28	831.37	---	---	---	831.41
13	826.80	830.19	831.43	---	---	---	831.37
14	827.07	830.19	831.48	---	---	---	831.35
15	827.39	830.19	831.49	---	---	830.88	831.27
16	827.68	---	831.50	---	---	830.83	831.20
17	827.97	---	---	---	---	830.81	831.13
18	828.25	---	---	---	---	830.81	831.10
19	828.43	---	---	---	---	830.81	831.04
20	828.75	---	---	---	---	830.81	831.00
21	829.08	---	---	---	---	830.88	830.96
22	829.30	---	---	---	---	830.95	830.91
23	829.42	---	---	---	---	830.98	830.85
24	829.54	829.69	---	---	---	---	830.81
25	829.65	829.68	---	---	---	---	830.78
26	829.71	829.69	---	---	---	---	830.71
27	---	829.71	---	---	---	---	830.67
28	---	829.75	---	---	---	---	830.62
29	---	829.75	---	---	---	---	830.56
30	---	829.73	---	---	---	---	830.52
31	---	---	---	---	---	---	---

Table 3. *Daily mean water levels in continuously monitored observation wells, March-September 1990*--Continued

Day	Mar.	Apr.	May	June	July	Aug.	Sept.
			Well EI-16 (Land-surface elevation 841 feet above sea level)				
1	---	---	835.54	837.53	837.46	835.27	836.79
2	---	---	835.48	837.38	837.30	835.34	836.69
3	---	---	835.44	837.22	837.14	835.40	836.60
4	---	---	835.61	837.07	836.98	835.43	836.50
5	---	---	836.35	836.93	836.82	835.42	836.39
6	---	---	836.82	836.83	836.58	835.38	836.28
7	---	---	836.99	836.68	836.41	835.33	836.17
8	---	---	836.96	836.69	836.29	835.29	836.06
9	---	---	836.93	836.70	836.16	835.24	835.95
10	---	---	836.91	836.68	836.08	835.20	---
11	---	---	836.83	836.69	836.02	835.15	---
12	---	---	836.86	836.67	835.94	835.11	---
13	---	---	837.22	836.62	835.84	835.07	---
14	---	---	837.37	836.56	835.77	835.00	---
15	---	---	837.38	---	835.70	834.94	---
16	---	---	837.50	---	835.62	834.87	---
17	---	---	837.60	---	835.54	834.88	---
18	---	---	837.58	---	835.47	834.93	---
19	---	---	837.57	837.90	835.39	835.02	---
20	---	---	837.67	838.24	835.35	835.89	---
21	---	---	837.68	838.04	835.32	836.62	---
22	---	---	837.64	837.91	835.26	837.15	---
23	---	---	837.55	838.21	835.17	837.11	---
24	---	---	837.51	838.01	835.11	836.93	---
25	---	835.75	837.77	837.72	835.05	837.49	---
26	---	835.70	838.18	837.48	834.98	837.93	---
27	---	835.68	838.33	837.27	834.95	837.67	---
28	---	835.68	838.30	837.29	834.95	837.35	---
29	---	835.68	838.17	837.53	835.05	837.11	838.53
30	---	835.61	837.93	837.57	835.09	836.98	838.53
31	---	---	837.72	---	835.19	836.87	---

Table 3. *Daily mean water levels in continuously monitored observation wells, March-September 1990*--Continued

Day	Mar.	Apr.	May	June	July	Aug.	Sept.
			Well EI-17 (Land-surface elevation 843 feet above sea level)				
1	---	---	835.89	---	838.95	836.17	838.45
2	---	---	835.85	839.15	838.97	836.21	838.35
3	---	---	835.83	838.92	838.85	836.29	838.19
4	---	---	835.87	838.68	838.62	836.37	838.00
5	---	---	836.21	838.41	838.29	836.39	837.82
6	---	---	836.44	838.21	837.56	836.36	839.38
7	---	---	836.64	838.02	837.34	836.31	840.46
8	---	---	837.15	837.92	837.24	836.25	840.46
9	---	---	837.74	837.88	837.12	836.20	840.46
10	---	---	838.00	837.92	837.01	836.17	---
11	---	---	838.10	838.04	836.92	836.11	---
12	---	---	838.16	838.09	836.84	836.07	---
13	---	---	838.23	838.09	836.75	836.00	---
14	---	---	838.40	838.05	836.70	835.94	---
15	---	---	838.71	837.90	836.62	835.88	---
16	---	---	838.98	837.82	836.54	835.82	---
17	---	---	839.10	837.81	836.44	835.84	---
18	---	---	839.22	837.81	836.37	835.95	---
19	---	---	839.30	838.38	836.28	835.95	---
20	---	---	839.33	838.91	836.22	836.19	---
21	---	---	839.34	839.07	836.17	836.34	---
22	---	---	839.35	839.22	836.12	836.77	---
23	---	---	839.35	839.27	836.03	836.85	---
24	---	---	839.30	839.29	835.96	837.64	---
25	---	835.99	839.34	839.30	835.91	838.49	---
26	---	835.97	839.47	839.19	835.83	838.56	---
27	---	835.96	839.63	838.94	835.81	838.71	---
28	---	835.96	839.76	838.78	835.80	838.80	---
29	---	835.96	839.79	838.66	835.96	838.76	---
30	---	835.94	---	838.77	836.06	838.65	---
31	---	---	---	---	836.11	838.50	---

Table 3. *Daily mean water levels in continuously monitored observation wells, March-September 1990*--Continued

Day	Mar.	Apr.	May	June	July	Aug.	Sept.
			Well EI-18 (Land-surface elevation 843 feet above sea level)				
1	---	---	836.10	840.21	840.49	837.23	839.66
2	---	---	836.09	839.96	840.11	837.25	839.33
3	---	---	836.08	839.69	839.73	837.27	839.06
4	---	---	836.21	839.29	839.25	837.31	838.84
5	---	---	836.98	839.06	838.54	837.29	838.61
6	---	---	838.06	838.91	837.94	837.19	838.44
7	---	---	838.83	838.66	838.00	837.12	838.22
8	---	---	839.18	838.71	837.92	837.08	837.98
9	---	---	839.34	839.32	837.71	837.00	837.81
10	---	---	839.38	839.52	837.57	836.94	---
11	---	---	839.21	839.46	837.54	836.85	---
12	---	---	839.19	839.36	837.48	836.79	---
13	---	---	839.76	839.16	837.38	836.70	---
14	---	---	840.28	838.88	837.35	836.64	---
15	---	---	840.41	838.62	837.30	836.59	---
16	---	---	840.61	838.69	837.19	836.52	---
17	---	---	840.77	839.78	837.06	836.58	---
18	---	---	840.68	840.48	836.96	836.79	---
19	---	---	840.57	840.56	836.87	836.84	---
20	---	---	840.73	840.81	836.83	837.48	---
21	---	---	840.77	840.82	836.79	838.85	---
22	---	---	840.65	840.72	836.75	839.83	---
23	---	---	840.48	840.94	836.13	840.22	---
24	---	---	840.53	840.89	835.57	840.20	---
25	---	836.20	841.70	840.51	835.50	840.24	---
26	---	836.18	842.97	840.07	836.04	840.47	---
27	---	836.18	842.97	839.67	836.42	840.50	---
28	---	836.21	842.97	839.74	836.41	840.23	---
29	---	836.21	842.97	840.36	836.75	839.87	---
30	---	836.16	841.94	840.64	837.12	839.76	---
31	---	---	840.56	---	837.19	839.80	---

Table 3. *Daily mean water levels in continuously monitored observation wells, March-September 1990*--Continued

Day	Mar.	Apr.	May	June	July	Aug.	Sept.
			Well EI-19 (Land-surface elevation 843 feet above sea level)				
1	---	---	836.16	840.35	840.68	837.13	835.82
2	---	---	836.15	840.08	840.33	837.18	835.82
3	---	---	836.14	839.79	839.89	837.22	835.82
4	---	---	836.22	839.36	839.35	837.25	835.82
5	---	---	837.10	839.08	838.75	837.25	835.82
6	---	---	838.48	838.97	838.24	837.17	835.79
7	---	---	839.39	838.72	838.06	837.11	835.76
8	---	---	839.68	838.69	837.93	837.05	835.76
9	---	---	839.76	839.31	837.70	836.98	835.76
10	---	---	839.76	839.62	837.55	836.91	---
11	---	---	839.52	839.60	837.50	836.84	---
12	---	---	839.44	839.51	837.45	836.76	---
13	---	---	840.11	839.30	837.36	836.69	---
14	---	---	840.77	839.00	837.30	836.33	---
15	---	---	840.92	838.71	837.27	836.12	---
16	---	---	841.02	838.63	837.18	836.05	---
17	---	---	841.23	839.60	837.05	836.00	---
18	---	---	841.11	840.50	836.93	836.00	---
19	---	---	840.92	840.71	836.83	836.00	---
20	---	---	841.12	840.94	836.78	836.00	---
21	---	---	841.18	841.04	836.73	836.00	---
22	---	---	841.06	840.93	836.69	836.00	---
23	---	---	840.85	841.09	836.60	836.00	---
24	---	---	840.88	841.10	836.52	836.00	---
25	---	836.28	841.24	840.76	836.46	836.00	---
26	---	836.23	841.36	840.26	836.39	836.00	---
27	---	836.24	841.36	839.79	836.34	836.00	---
28	---	836.29	841.37	839.71	836.32	836.00	---
29	---	836.29	841.36	840.28	836.43	835.91	---
30	---	836.22	841.16	840.70	836.82	835.82	---
31	---	---	840.72	---	837.03	835.82	---

Table 3. *Daily mean water levels in continuously monitored observation wells, March-September 1990*--Continued

Day	Mar.	Apr.	May	June	July	Aug.	Sept.
			Well EI-22 (Land-surface elevation 829 feet above sea level)				
1	---	826.92	826.78	828.11	---	826.59	827.85
2	---	826.92	826.74	828.03	---	826.49	827.81
3	---	826.92	826.71	827.93	---	826.64	827.73
4	---	826.93	826.71	827.83	---	826.83	827.66
5	---	826.93	826.75	827.74	---	826.91	827.58
6	---	826.93	826.97	---	---	826.93	827.52
7	---	826.93	827.23	---	---	826.92	827.45
8	---	826.93	827.43	---	---	826.90	827.37
9	---	826.92	827.56	---	---	826.86	827.30
10	---	826.91	827.61	---	---	826.82	827.23
11	---	826.89	827.63	827.60	---	826.77	827.15
12	---	826.86	827.63	827.59	---	826.72	827.08
13	---	826.83	827.63	827.59	---	826.67	827.00
14	---	826.82	827.70	827.58	---	826.61	826.95
15	---	826.81	827.87	827.54	---	826.55	826.88
16	---	826.84	827.95	827.50	---	826.49	826.79
17	---	826.89	827.99	827.52	---	826.45	826.71
18	---	826.91	828.02	827.74	---	826.45	826.64
19	---	826.92	828.04	827.97	---	826.52	826.59
20	---	826.92	828.04	828.07	---	826.57	826.54
21	---	826.92	828.05	828.14	---	826.81	826.50
22	---	826.92	828.05	---	---	827.24	---
23	---	826.92	828.05	---	---	827.36	---
24	---	826.90	828.03	---	---	827.54	---
25	---	826.86	828.02	---	825.91	827.69	---
26	---	826.84	828.05	---	825.97	827.78	---
27	---	826.83	828.17	---	826.43	827.90	---
28	---	826.83	828.24	---	826.52	827.94	---
29	---	826.82	828.26	---	826.56	827.93	---
30	---	826.79	828.25	---	826.59	827.89	---
31	---	---	---	---	826.54	827.85	---

Table 3. *Daily mean water levels in continuously monitored observation wells, March-September 1990*--Continued

Day	Mar.	Apr.	May	June	July	Aug.	Sept.
			Well EI-23 (Land-surface elevation 830 feet above sea level)				
1	---	826.62	826.44	828.51	---	826.78	828.42
2	---	826.59	826.90	828.37	---	827.11	828.30
3	---	826.57	827.00	828.26	---	827.22	828.17
4	---	826.54	827.20	828.13	---	827.25	828.09
5	---	826.53	827.50	828.05	---	827.27	827.99
6	---	826.49	827.73	---	---	827.27	827.90
7	---	826.44	828.03	---	---	827.24	827.82
8	---	826.41	828.33	---	---	827.21	827.72
9	---	826.39	828.59	---	---	827.16	827.66
10	---	826.37	828.64	---	---	827.11	827.55
11	---	826.32	828.55	828.22	---	827.06	827.44
12	---	826.27	828.55	828.17	---	827.02	827.35
13	826.44	826.23	828.55	828.07	---	826.95	827.24
14	826.79	826.20	828.55	827.96	---	826.90	827.16
15	826.83	826.32	828.55	827.81	---	826.86	827.09
16	827.07	826.44	828.55	827.83	---	826.79	827.01
17	827.46	826.47	828.55	828.25	---	826.76	826.91
18	827.45	826.46	828.55	828.76	---	826.91	826.84
19	827.37	826.44	828.57	828.86	---	827.08	826.81
20	827.28	826.43	828.55	828.89	---	827.30	826.79
21	827.22	826.42	828.56	828.98	---	828.11	826.76
22	827.20	826.42	828.58	---	---	828.55	---
23	827.11	826.36	---	---	---	828.63	---
24	827.06	826.30	---	---	---	828.59	---
25	827.03	826.45	---	---	---	828.56	---
26	826.99	826.48	---	---	826.92	828.79	---
27	826.83	826.49	---	---	826.87	828.85	---
28	826.67	826.44	---	---	826.85	828.76	---
29	826.65	826.46	---	---	826.96	828.57	---
30	826.62	826.47	---	---	826.87	828.44	---

Table 3. *Daily mean water levels in continuously monitored observation wells, March-September 1990*--Continued

Day	Mar.	Apr.	May	June	July	Aug.	Sept.
			Well EI-24 (Land-surface elevation 830 feet above sea level)				
1	---	827.33	825.92	---	---	825.37	826.84
2	---	827.26	825.87	827.02	---	825.37	826.70
3	---	827.23	825.82	826.85	---	825.37	826.57
4	---	827.22	825.83	826.67	---	825.37	826.46
5	---	827.17	826.32	---	---	825.37	826.33
6	---	827.09	826.92	---	---	---	826.22
7	---	827.02	827.26	---	---	---	826.11
8	---	826.97	827.37	---	---	---	826.03
9	---	826.93	827.37	---	---	---	825.96
10	---	826.89	827.29	---	---	---	825.86
11	---	826.82	827.13	---	---	---	825.81
12	---	826.77	827.07	826.56	---	---	825.71
13	827.57	826.74	827.42	826.51	---	---	825.60
14	827.99	826.77	827.67	826.35	---	823.67	825.49
15	828.31	826.89	827.70	826.25	---	823.83	825.38
16	828.48	826.98	827.76	826.31	---	823.98	825.35
17	828.56	826.97	827.82	826.90	---	824.13	825.33
18	828.53	826.94	827.72	827.24	---	824.40	825.33
19	828.42	826.93	827.61	827.32	---	824.64	825.33
20	828.32	826.93	827.71	827.47	---	825.09	825.33
21	828.25	826.93	827.67	---	---	825.81	---
22	828.15	826.93	827.53	---	---	826.32	---
23	827.96	826.66	827.39	---	---	826.43	---
24	827.85	826.24	827.35	---	---	826.47	---
25	827.78	826.19	827.53	---	---	826.51	---
26	827.66	826.14	827.88	---	825.41	826.51	---
27	827.56	826.09	827.97	---	825.40	826.82	---
28	827.50	826.07	827.90	---	825.39	827.09	---
29	827.44	826.04	827.79	---	825.39	826.98	---
30	827.40	825.98	---	---	---	826.94	---
31	827.36	---	---	---	---	826.92	---

Table 4. *Water levels in observation wells measured intermittently, November 1989-September 1990*

[Values are in feet above sea level]

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Well EI-1 (Land-surface elevation 840 feet above sea level)											
Nov. 30	751.83	Feb. 21	752.76	Mar. 16	753.13	Apr. 24	752.57	June 11	753.32	Aug. 07	754.66
Dec. 28	752.50	Mar. 01	752.65	19	752.78	May 01	752.35	July 02	755.07	16	753.13
Jan. 08	753.16	09	752.92	Apr. 04	753.41	07	752.86	13	755.53	22	755.40
29	753.35	12	753.00	12	753.02	10	753.35	24	754.52	29	756.28
Feb. 06	752.87	15	753.26	18	752.66	30	753.71	Aug. 01	754.58	Sept. 06	756.01
Well EI-2 (Land-surface elevation 841 feet above sea level)											
Nov. 09	776.46	Apr. 04	814.88	May 31	820.96	July 06	823.92	Aug. 02	824.81	Aug. 28	825.41
30	787.17	11	815.93	June 01	821.03	09	824.06	03	824.83	29	825.44
Dec. 28	797.26	17	816.64	05	821.37	13	824.26	06	824.91	30	825.48
Jan. 09	800.29	24	817.37	06	821.45	17	824.39	07	824.92	31	825.52
19	802.89	May 01	817.96	11	821.82	19	824.45	08	824.94	Sept. 05	825.65
29	804.98	05	818.43	17	822.62	20	823.99	09	824.97	06	825.67
Feb. 06	806.48	06	818.52	19	822.72	23	824.57	10	824.99	07	825.70
21	808.95	07	818.65	20	822.89	24	824.60	13	825.06	10	825.77
Mar. 01	810.08	08	818.75	21	822.85	25	824.62	14	825.09	12	825.80
09	811.17	10	818.94	25	823.18	26	824.64	16	825.11	13	825.81
12	811.57	24	819.30	27	823.30	27	824.67	21	825.25	14	825.92
15	811.94	25	820.42	29	823.51	30	824.74	22	825.26	21	825.94
16	812.10	26	820.50	July 02	823.68	31	824.76	24	825.31	26	826.00
19	812.53	30	820.85	03	823.73	Aug. 01	824.78	27	825.38		
Well EI-3 (Land-surface elevation 842 feet above sea level)											
Nov. 09	788.94	Apr. 04	800.50	May 31	805.06	July 03	807.49	Aug. 01	809.30	Aug. 27	810.99
30	790.96	12	801.12	June 01	805.12	06	807.67	02	809.45	28	811.06
Dec. 28	792.98	18	801.59	05	805.43	09	807.89	03	809.52	29	811.12
Jan. 08	793.93	24	802.29	06	805.51	13	808.14	06	809.72	30	811.18
19	794.80	30	802.70	11	805.86	17	808.02	07	809.75	Sept. 05	811.56
29	795.57	May 05	803.07	17	806.32	19	808.55	08	809.82	06	811.63
Feb. 06	796.07	06	803.13	18	806.49	20	808.66	09	809.89	07	811.69
21	797.28	07	803.24	19	806.44	23	808.86	10	809.95	10	811.89
Mar. 01	797.85	08	803.32	20	806.51	24	808.87	13	810.14	12	812.00
09	798.44	10	803.48	21	806.59	25	808.49	14	810.20	13	812.05
12	798.85	24	804.53	25	806.89	26	808.99	16	810.33	19	812.42
15	798.84	25	804.60	27	806.94	27	809.07	21	810.62	21	812.59
16	798.92	26	804.67	29	807.17	30	809.29	22	810.69	26	812.87
19	799.11	30	804.65	July 02	807.39	31	809.33	24	810.81	27	812.70
Well EI-4 (Land-surface elevation 842 feet above sea level)											
Nov. 09	830.41	Apr. 04	834.42	May 31	836.59	July 06	835.65	Aug. 02	834.58	Aug. 29	835.74
30	830.32	12	834.31	June 01	836.55	09	835.55	03	834.66	30	835.77
Dec. 28	829.11	18	834.24	06	836.11	13	835.27	06	834.74	31	835.80
Jan. 08	828.97	24	834.51	11	835.81	17	835.01	07	834.73	Sept. 05	835.73
19	828.85	30	834.54	17	836.15	19	834.87	08	834.73	06	835.68
29	829.04	May 05	834.49	18	835.66	20	834.85	09	834.69	07	835.60
Feb. 06	830.17	06	834.51	19	835.80	23	834.67	10	834.65	10	835.32
21	829.63	07	834.77	20	835.91	24	834.62	13	834.53	12	835.13
Mar. 01	829.86	08	835.00	21	836.03	25	834.57	16	834.36	13	835.05
09	830.21	10	835.31	25	836.30	26	834.52	21	834.38	19	834.75
12	830.55	24	836.26	27	836.29	27	834.51	22	834.56	21	834.37
15	831.61	25	836.31	29	836.15	30	834.43	24	835.08	26	834.03
16	832.09	26	836.33	July 02	836.20	31	833.95	27	835.55	27	833.98
19	836.19	30	836.58	03	836.22	Aug. 01	834.51	28	835.69		

Table 4. *Water levels in observation wells measured intermittently, November 1989-September 1990*--Continued

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Well EI-5 (Land-surface elevation 828 feet above sea level)											
Nov. 09	761.40	Mar. 19	776.80	May 26	782.22	July 02	784.71	Aug. 01	786.50	Aug. 28	787.99
30	764.57	22	777.11	30	782.50	03	784.76	02	786.55	29	788.11
Dec. 28	768.35	27	777.40	31	782.59	06	784.94	03	786.61	30	788.08
Jan. 08	769.70	Apr. 04	778.23	June 01	782.65	09	785.16	06	786.77	31	788.14
19	770.92	12	778.83	05	782.92	13	785.36	07	786.82	Sept. 05	788.40
29	772.08	18	779.35	06	783.00	17	785.62	08	786.89	06	788.45
Feb. 06	772.93	24	779.89	11	783.33	19	785.74	09	786.96	07	788.50
21	774.37	30	780.33	17	783.75	20	785.80	10	787.01	10	788.66
Mar. 01	775.08	May 05	780.77	18	783.80	23	785.98	13	787.17	12	788.56
09	775.96	06	780.76	19	783.89	24	786.04	14	787.23	13	788.61
12	776.23	07	780.83	20	783.92	25	786.10	16	787.34	19	788.92
12	776.23	08	780.91	21	783.97	26	786.15	21	787.62	21	789.02
14	776.40	10	781.07	25	784.30	27	786.23	22	787.67		
15	776.50	24	782.09	27	784.38	30	786.39	24	787.82		
16	776.57	25	782.16	29	784.50	31	786.44	27	787.93		
Well EI-6 (Land-surface elevation 828 feet above sea level)											
Nov. 09	772.91	Mar. 22	782.04	May 31	786.36	July 06	788.48	Aug. 03	790.06	Aug. 30	791.53
30	774.62	27	782.33	June 01	786.41	09	788.66	06	790.23	31	791.58
Dec. 28	776.59	Apr. 04	782.67	05	786.65	13	788.85	07	790.26	Sept. 05	791.83
Jan. 08	777.33	12	781.68	06	786.73	17	789.10	08	790.33	06	791.90
19	777.99	18	783.68	11	787.00	19	789.25	09	790.38	07	791.95
29	778.69	24	784.12	17	787.39	20	789.28	10	790.44	10	792.13
Feb. 06	779.19	30	784.47	18	787.44	23	789.47	13	790.61	12	792.18
21	780.11	May 05	785.08	19	787.49	24	789.51	14	790.67	13	792.27
Mar. 01	780.56	06	784.78	20	787.53	25	789.56	16	790.81	19	792.56
09	781.23	08	784.94	21	787.58	26	789.59	21	791.08	21	792.71
12	781.42	10	785.08	25	787.84	27	789.68	22	791.09		
14	781.53	24	785.92	27	787.98	30	789.88	24	791.21		
15	781.61	25	786.00	29	788.08	31	789.89	27	791.38		
16	781.67	26	786.06	July 02	788.26	Aug. 01	789.94	28	791.42		
19	781.70	30	786.28	03	788.32	02	789.99	29	791.48		
EI-7 (Land-surface elevation 829 feet above sea level)											
Nov. 09	826.31	Mar. 09	826.30	Apr. 04	830.46	July 26	829.62	Aug. 09	830.99	Aug. 29	831.55
30	825.40	09	826.32	12	830.56	27	831.11	10	830.96	30	831.59
Dec. 28	825.71	12	826.65	18	830.61	30	831.11	13	830.88	Sept. 10	831.47
Jan. 08	825.59	12	826.65	24	830.70	31	831.05	14	830.83	12	831.45
19	825.45	15	827.39	30	830.72	Aug. 01	831.06	16	830.78	13	831.30
29	825.59	16	827.69	May 05	830.74	02	831.09	21	830.93	19	831.00
Feb. 06	825.50	19	828.55	06	830.89	03	831.11	22	831.00	21	830.89
21	825.90	19	828.54	07	830.99	06	831.08	24	831.19		
Mar. 01	825.93	22	829.32	08	831.04	07	831.07	27	831.42		
08	826.29	27	829.99	10	831.22	08	830.99	28	831.52		
Well EI-8 (Land-surface elevation 830 feet above sea level)											
Nov. 09	820.57	Apr. 04	827.16	June 01	827.50	July 07	827.25	Aug. 06	827.14	Aug. 31	827.61
30	820.45	12	826.82	05	827.27	13	827.09	07	827.10	Sept. 05	827.25
Dec. 28	820.52	18	827.05	05	827.26	17	826.99	08	827.07	06	827.24
Jan. 08	820.81	24	827.04	06	827.22	19	826.95	09	827.03	07	827.17
19	822.20	May 01	827.64	11	827.53	20	826.94	10	826.98	10	827.15
22	821.70	05	828.50	17	828.64	23	826.91	13	826.88	12	827.00
29	821.75	06	828.88	19	827.81	24	826.88	14	826.82	13	826.98
Feb. 06	822.76	07	828.60	20	828.20	25	826.84	16	826.66	18	826.63
21	822.90	08	828.35	21	827.82	26	826.73	21	828.66	19	826.63
Mar. 01	823.43	10	828.16	25	827.64	27	826.95	22	827.01	21	826.57
09	824.79	24	827.78	27	827.43	30	827.51	24	827.68		
12	827.01	25	828.90	27	827.43	31	827.37	27	827.81		
15	828.53	26	828.44	29	828.32	Aug. 01	827.30	28	827.64		
16	828.32	30	827.66	July 02	827.56	02	827.25	29	827.54		
19	827.78	31	827.44	03	827.44	03	827.20	30	827.74		

Table 4. *Water levels in observation wells measured intermittently, November 1989-September 1990*--Continued

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Well EI-9 (Land-surface elevation 830 feet above sea level)											
Nov. 09	821.10	Apr. 04	826.77	May 31	828.02	July 07	827.67	Aug. 02	827.37	Aug. 28	828.02
30	820.98	12	826.56	June 01	827.94	09	827.36	03	827.25	29	827.91
Dec. 28	820.94	18	826.61	05	827.57	13	827.21	06	827.17	30	827.96
Jan. 09	820.98	24	826.71	06	827.49	17	827.08	07	827.14	31	827.90
19	821.25	May 01	826.57	11	827.61	19	826.98	08	827.10	Sept. 05	827.58
29	821.58	05	826.59	17	827.73	20	827.02	09	827.06	06	827.53
Feb. 06	821.78	06	826.86	19	828.06	23	826.92	10	827.06	07	827.46
21	822.53	07	827.26	20	828.16	24	826.88	13	826.91	10	827.27
Mar. 01	822.91	08	827.49	21	828.18	25	826.86	14	826.86	12	827.15
09	822.95	10	827.70	25	828.14	26	826.83	16	826.66	13	827.10
12	823.90	24	828.05	27	827.93	27	826.85	21	827.47	19	826.82
15	825.43	25	828.06	29	828.25	30	827.17	22	827.82	21	826.73
16	826.03	26	828.21	July 02	828.09	31	827.21	24	827.86		
19	826.74	30	828.17	03	827.99	Aug. 01	827.24	27	828.10		
Well EI-10 (Land-surface elevation 832 feet above sea level)											
Nov. 09	821.90	Apr. 04	828.30	May 31	829.62	July 06	828.99	Aug. 02	828.10	Aug. 29	830.29
30	821.58	12	827.68	June 01	829.45	09	828.65	03	827.95	30	830.00
Dec. 28	821.29	18	827.94	05	828.98	13	828.42	06	827.67	31	829.63
Jan. 08	821.35	24	828.04	05	829.01	17	827.89	07	827.58	Sept. 05	828.87
19	821.19	May 01	827.69	06	828.91	19	827.65	08	827.46	06	828.59
29	821.30	05	830.14	11	829.46	20	827.58	09	827.32	07	828.35
Feb. 06	821.37	06	830.74	17	831.35	23	827.35	10	829.66	10	827.93
21	822.94	07	831.21	20	831.13	24	827.23	14	826.86	12	827.68
Mar. 01	823.31	08	829.84	21	830.33	25	827.14	16	826.69	13	827.56
09	824.60	10	829.47	25	829.79	26	826.82	21	830.41	14	827.43
12	828.93	24	830.27	27	829.24	27	827.10	22	830.10	19	826.90
15	830.63	25	831.46	29	831.21	30	828.77	24	829.43	21	826.77
16	830.25	26	831.23	July 02	829.63	31	828.44	27	830.05		
19	829.27	30	829.97	03	829.33	Aug. 01	828.24	28	830.60		
Well EI-11 (Land-surface elevation 831 feet above sea level)											
Nov. 09	821.61	Apr. 04	827.38	May 31	829.22	July 09	828.28	Aug. 03	827.29	Aug. 30	828.53
30	821.38	12	827.05	June 01	829.16	13	827.86	06	827.30	31	828.57
Dec. 28	821.13	18	827.09	05	828.66	17	827.66	07	827.68	Sept. 05	828.38
Jan. 08	821.00	24	827.19	06	828.53	19	827.48	08	827.54	06	828.31
19	820.89	May 01	827.10	11	828.43	20	827.41	09	827.40	07	828.21
29	821.05	05	827.01	17	828.25	23	827.18	10	827.56	10	827.89
Feb. 06	821.07	06	827.21	20	828.72	24	827.11	14	827.09	12	827.67
21	822.69	07	827.60	21	828.86	25	827.03	16	825.83	13	827.57
Mar. 07	823.02	08	827.84	25	829.15	26	826.97	21	826.66	14	827.47
09	823.35	10	828.15	27	829.00	27	826.88	22	827.08	19	826.96
12	824.12	24	828.98	29	828.91	30	826.88	24	827.71	21	826.77
15	825.80	25	828.99	July 02	829.09	31	827.03	27	828.32		
16	826.33	26	829.07	03	829.03	Aug. 01	827.16	28	828.46		
19	827.30	30	829.29	06	828.64	02	827.25	29	828.53		
Well EI-12 (Land-surface elevation 837 feet above sea level)											
Nov. 09	823.84	May 24	835.59	June 19	835.40	July 19	832.37	Aug. 06	832.32	Aug. 28	834.67
30	823.84	25	836.54	20	836.34	20	832.29	07	832.29	29	834.30
Dec. 28	823.84	26	836.58	21	835.63	23	832.08	08	832.15	30	834.94
Apr. 12	830.77	30	835.30	25	834.87	24	831.97	09	832.13	31	834.56
18	831.20	31	834.84	27	834.07	25	831.91	10	832.05	Sept. 05	833.57
24	831.75	June 01	834.62	29	836.34	26	831.83	13	831.79	06	833.49
May 01	831.80	05	833.99	July 02	834.47	27	831.78	14	831.76	07	833.31
05	833.75	05	834.00	03	834.15	30	832.70	16	831.62	10	832.92
06	835.30	06	833.90	06	833.50	31	832.73	21	835.48	12	832.68
07	835.45	11	834.47	09	833.17	Aug. 01	832.73	22	835.49	13	832.56
08	835.12	17	836.62	13	832.90	02	832.69	24	834.61	19	831.91
10	834.72	18	836.15	17	832.54	03	832.65	27	835.30	21	831.76

Table 4. *Water levels in observation wells measured intermittently, November 1989-September 1990*--Continued

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Well EI-13 (Land-surface elevation 837 feet above sea level)											
Nov. 09	824.07	Apr. 04	831.22	May 31	834.66	July 02	834.19	July 31	832.63	Aug. 24	834.45
30	822.68	12	830.99	June 01	834.47	03	833.96	Aug. 01	832.62	27	835.13
Dec. 28	823.60	18	831.21	05	833.90	06	833.37	02	832.60	28	834.53
Jan. 08	823.60	24	831.73	05	833.90	09	833.05	03	832.54	29	834.18
19	823.35	May 01	831.73	06	833.75	13	832.79	06	832.22	30	834.85
29	823.45	05	834.25	11	834.32	17	832.38	07	832.20	31	834.45
Feb. 06	823.40	06	835.31	17	836.49	19	832.28	08	832.13	Sept. 05	833.48
21	823.64	07	835.47	18	835.91	20	832.20	09	832.04	06	833.40
Mar. 01	823.70	08	834.91	19	834.21	23	831.99	10	831.95	07	833.20
09	823.91	10	834.52	20	836.25	24	831.90	13	831.68	10	832.81
12	825.25	24	835.47	21	835.36	25	831.85	14	831.68	12	832.58
15	827.50	25	836.65	25	834.69	26	831.76	16	831.55	13	832.49
16	829.09	26	836.46	27	833.95	27	831.73	21	835.28	19	831.80
19	830.22	30	835.07	29	836.18	30	832.66	22	835.21	21	831.68
Well EI-14 (Land-surface elevation 837 feet above sea level)											
Nov. 09	824.05	Apr. 04	831.13	May 31	834.63	July 02	834.26	July 31	832.59	Aug. 24	834.41
30	823.64	12	830.96	June 01	834.42	03	833.94	Aug. 01	832.58	27	835.10
Dec. 28	823.57	18	831.20	05	833.84	06	833.33	02	832.57	28	835.51
Jan. 08	823.57	24	831.68	05	833.86	09	833.01	03	832.51	29	834.15
19	823.33	May 01	831.69	06	833.73	13	832.76	06	832.19	30	834.80
29	823.42	05	834.13	11	834.25	17	832.41	07	832.17	31	834.41
Feb. 06	823.41	06	835.18	17	836.39	19	832.25	08	832.11	Sept. 05	833.44
21	823.51	07	835.16	18	835.85	20	832.17	09	832.00	06	833.38
Mar. 01	823.69	08	834.84	19	835.14	23	831.97	10	831.92	07	833.18
09	823.90	10	834.47	20	836.14	24	831.87	13	831.67	10	832.79
12	825.22	24	835.42	21	835.33	25	831.80	14	831.65	12	832.55
15	827.75	25	836.54	25	834.53	26	831.73	16	831.52	13	832.45
16	829.00	26	836.40	27	833.91	27	831.69	21	835.17	19	831.77
19	830.18	30	835.04	29	836.10	30	832.61	22	835.14	21	831.66
Well EI-16 (Land-surface elevation 841 feet above sea level)											
Nov. 09	830.81	Apr. 12	835.64	June 05	837.03	July 09	836.29	Aug. 06	835.56	Aug. 31	837.01
30	829.99	18	835.63	05	836.99	13	835.97	07	835.52	Sept. 05	836.57
Dec. 28	829.50	24	835.82	06	836.89	17	835.58	08	835.48	06	836.47
Jan. 08	829.38	30	835.64	11	836.82	19	835.50	09	835.42	07	836.35
19	829.41	May 05	836.36	17	837.98	20	835.46	10	835.35	10	836.00
29	829.56	06	836.82	18	838.21	23	835.30	13	835.19	12	835.73
Feb. 06	829.53	07	837.07	19	837.79	24	835.22	14	835.13	13	836.35
21	829.93	08	837.05	20	838.40	25	835.16	16	835.01	14	835.96
Mar. 01	830.20	10	836.97	21	838.22	26	835.11	21	836.68	19	835.03
09	830.70	24	837.57	25	837.83	27	835.07	22	837.23	21	834.11
12	832.72	25	837.88	27	837.37	30	835.29	24	837.05	26	834.64
15	836.05	26	838.28	29	837.70	31	835.35	27	837.84		
16	836.44	30	838.04	July 02	837.44	Aug. 01	835.45	28	837.52		
19	836.56	31	837.83	03	837.32	02	835.53	29	837.28		
Apr. 04	835.97	June 01	837.65	06	836.71	03	835.57	30	837.10		
Well EI-17 (Land-surface elevation 843 feet above sea level)											
Nov. 13	831.24	Apr. 04	835.76	May 31	839.73	July 09	837.28	Aug. 03	836.50	Aug. 29	838.96
30	830.89	12	835.44	June 01	839.55	13	837.01	06	836.58	30	838.86
Dec. 28	829.97	18	835.63	05	838.57	17	836.61	07	836.51	31	838.69
Jan. 08	829.83	24	836.07	06	838.31	19	836.42	08	836.46	Sept. 05	838.02
19	829.69	30	835.99	11	838.23	20	836.36	09	836.40	06	837.86
29	829.79	May 05	836.25	17	837.97	23	836.20	10	836.34	07	837.72
Feb. 06	829.74	06	836.52	19	838.73	24	836.12	13	836.16	10	837.17
21	830.03	07	837.05	21	839.24	25	836.07	14	836.12	12	836.84
Mar. 01	830.27	08	837.51	25	839.49	26	836.00	16	835.99	13	836.97
09	830.71	10	838.14	27	839.07	27	835.94	21	836.47	14	836.66
12	831.70	24	839.41	29	839.82	30	836.24	22	836.04	19	836.13
15	833.27	25	839.49	July 02	839.18	31	836.29	24	838.36	21	835.92
16	834.03	26	839.59	03	839.03	Aug. 01	836.41	27	839.94	26	835.67
19	835.28	30	839.93	06	837.69	02	836.43	28	839.04		

Table 4. *Water levels in observation wells measured intermittently, November 1989-September 1990*--Continued

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Well EI-18 (Land-surface elevation 843 feet above sea level)											
Nov. 13	831.47	Apr. 04	835.77	May 31	840.49	July 09	837.67	Aug. 03	837.29	Aug. 29	839.92
30	831.08	12	835.38	June 01	840.22	13	837.34	06	837.19	30	839.84
Dec. 28	830.24	18	835.84	06	838.88	17	837.02	07	837.14	31	839.90
Jan. 09	830.09	24	836.40	11	839.50	19	836.82	08	837.09	Sept. 05	838.65
19	829.84	30	836.20	17	840.01	20	836.78	09	837.00	06	838.49
29	829.90	May 05	836.87	19	840.54	23	836.62	10	836.92	07	838.27
Feb. 06	829.87	06	837.02	20	839.97	24	836.54	13	836.68	10	837.65
21	830.05	07	839.09	21	839.84	25	836.51	14	836.65	12	837.14
Mar. 01	830.27	08	838.41	25	841.48	26	836.43	16	836.48	13	837.09
09	830.72	10	839.57	27	839.61	27	836.40	21	838.83	19	837.03
12	832.06	24	840.68	29	840.39	30	837.15	22	839.94	21	836.54
15	834.16	25	841.17	July 02	840.06	31	837.24	24	840.31	26	835.86
16	835.10	26	841.42	03	839.68	Aug. 01	837.25	27	840.63		
19	835.36	30	840.98	06	837.97	02	837.17	28	840.31		
Well EI-19 (Land-surface elevation 843 feet above sea level)											
Apr. 12	832.89	May 31	840.84	June 29	840.48	July 26	836.57	Aug. 13	836.91	Sept. 06	838.70
24	837.06	June 01	840.53	July 02	840.52	27	836.52	14	836.83	07	838.46
30	836.27	05	839.26	03	841.08	30	837.07	16	836.69	10	837.83
May 05	836.95	05	839.22	06	838.13	31	837.27	21	837.66	12	831.00
06	838.40	06	839.13	09	837.87	Aug. 01	837.37	22	840.36	13	834.11
07	839.66	11	839.82	13	837.56	02	837.44	24	840.93	19	836.81
08	839.91	17	840.03	17	837.23	03	837.50	27	841.17	21	836.67
10	839.94	19	840.95	19	837.00	06	837.40	28	840.78	26	836.16
24	841.26	20	841.37	20	836.94	07	837.33	29	840.28		
25	841.52	21	841.27	23	836.80	08	837.27	30	840.27		
26	841.88	25	841.94	24	836.71	09	837.22	31	840.40		
30	841.40	27	839.93	25	836.65	10	837.14	Sept. 05	838.88		
Well EI-20 (Land-surface elevation 843 feet above sea level)											
Apr. 24	835.87	June 01	841.55	July 02	841.18	July 27	837.68	Aug. 14	837.15	Sept. 07	839.74
May 01	836.36	05	840.28	03	840.90	30	837.41	16	837.12	10	838.66
05	836.70	05	840.22	06	839.57	31	837.55	21	837.67	12	835.07
06	837.86	06	840.02	09	838.69	Aug. 01	837.98	22	839.89	13	836.24
07	839.37	11	840.24	13	838.04	02	838.19	24	841.24	19	837.02
08	839.90	17	840.34	17	837.57	03	838.39	27	841.68	21	836.97
10	840.30	19	841.19	19	837.34	06	837.58	28	841.44	26	836.58
24	841.76	20	841.46	20	837.27	07	837.57	29	841.07		
25	842.04	21	841.66	23	837.06	08	837.57	30	840.86		
26	842.28	25	841.67	24	836.99	09	837.52	31	840.89		
30	842.20	27	840.88	25	836.93	10	837.46	Sept. 05	839.70		
31	841.82	29	841.11	26	836.62	13	837.21	06	840.24		
Well EI-22 (Land-surface elevation 829 feet above sea level)											
Nov. 13	822.20	Mar. 16	826.40	May 25	828.17	June 27	828.23	July 30	826.74	Aug. 28	828.05
Dec. 28	822.75	19	826.77	26	828.18	29	828.27	Aug. 02	826.28	29	828.02
Jan 08	821.64	22	826.83	30	828.38	July 02	828.31	03	826.70	30	827.96
19	821.75	27	826.83	31	828.28	03	828.25	06	826.96	31	827.94
29	822.11	Apr. 04	826.85	June 01	828.20	06	827.85	07	826.85	Sept. 05	827.64
Feb. 06	822.14	12	826.75	05	827.81	09	827.60	08	826.92	06	827.60
21	823.83	18	826.84	05	827.81	13	827.42	09	826.88	07	827.53
Mar. 01	823.96	24	826.93	06	827.70	17	827.19	10	826.86	10	827.27
02	824.02	30	826.82	11	827.75	19	827.07	13	826.74	12	827.12
08	824.00	May 05	826.78	17	827.64	20	827.02	14	826.62	13	827.03
09	823.99	06	827.03	18	827.90	23	826.85	16	826.51	19	826.60
12	824.95	07	827.44	19	828.00	25	825.56	21	826.93	21	826.53
13	825.30	08	827.54	20	828.21	25	825.56	22	827.43		
14	825.62	10	827.75	21	828.31	26	826.31	24	827.75		
15	826.09	24	828.10	25	828.39	27	826.51	27	828.03		

Table 4. *Water levels in observation wells measured intermittently, November 1989-September 1990*--Continued

Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level	Date	Water level
Well EI-23 (Land-surface elevation 830 feet above sea level)											
Nov. 13	822.60	Mar. 12	826.78	May 10	828.44	June 21	828.99	July 30	827.33	Aug. 24	828.52
30	822.36	15	827.95	24	828.60	25	828.86	31	825.84	27	828.80
Dec. 04	822.38	16	828.06	25	828.74	27	828.45	Aug. 01	826.79	28	828.66
28	822.15	19	828.05	26	828.95	29	828.71	02	827.09	29	828.70
Jan 08	822.09	22	827.88	30	828.91	July 02	828.70	02	827.23	30	828.35
19	822.17	27	827.59	31	828.68	03	828.50	06	827.26	31	828.39
29	822.52	Apr. 04	827.47	June 01	828.52	06	827.99	07	827.23	Sept. 05	827.87
Feb. 06	822.62	12	827.15	05	828.03	07	827.32	08	827.17	06	827.80
21	824.73	18	827.40	05	827.89	19	827.17	09	827.13	07	827.71
Mar. 01	825.03	24	827.43	06	827.96	20	827.19	10	827.03	10	827.47
01	825.12	30	827.27	11	828.24	23	827.04	13	826.90	12	827.25
02	825.08	May 05	827.29	17	828.51	24	827.02	14	826.76	13	827.16
08	824.93	06	827.99	18	828.80	25	826.94	16	826.67	19	826.75
09	825.08	07	828.47	19	828.87	26	826.94	21	828.03	21	826.64
12	826.78	08	828.55	20	828.88	27	826.85	22	828.52		
Well EI-24 (Land-surface elevation 830 feet above sea level)											
Nov. 13	822.03	Apr. 04	826.58	May 31	827.34	July 02	827.21	Aug. 01	825.64	Aug. 27	827.20
Feb. 21	823.64	12	826.08	June 01	827.20	03	827.14	02	825.83	28	827.08
Mar. 01	824.85	18	826.25	05	826.59	06	827.48	03	826.69	29	826.96
01	824.99	24	826.33	05	826.68	09	826.09	06	826.13	30	826.96
02	825.03	30	826.00	06	826.45	13	825.83	07	825.99	31	826.95
08	824.86	May 05	826.32	11	826.63	17	825.66	08	825.89	Sept. 05	826.35
09	825.13	06	826.90	17	827.07	19	825.47	09	825.74	06	826.24
12	827.58	07	827.38	18	827.34	20	825.33	10	822.82	07	826.14
12	827.54	08	827.43	19	827.35	23	825.24	13	823.32	10	825.77
15	827.54	10	827.28	20	827.55	24	825.13	14	823.69	12	825.61
16	827.80	24	827.35	21	827.55	25	825.21	16	823.97	13	825.50
19	827.71	25	827.63	25	827.43	26	824.99	21	825.73	19	824.97
22	827.43	26	827.93	27	827.03	27	824.98	22	826.29	21	824.90
27	826.88	30	827.61	29	827.44	30	825.44	24	826.68		

Table 5. *Daily mean specific conductance, water temperature, and median pH in observation well EI-28, April-September 1990*

[---, data not collected]

Day	Apr.	May	June	July	Aug.	Sept.
	Mean specific conductance, in microsiemens per centimeter at 25 degrees Celsius					
1	---	734	760	---	823	834
2	---	734	759	---	838	836
3	---	735	756	---	843	837
4	---	738	753	739	843	838
5	---	740	750	737	841	841
6	---	736	745	734	845	843
7	---	736	746	733	839	842
8	---	737	747	732	837	842
9	---	737	748	731	839	841
10	---	738	748	731	841	842
11	---	739	748	731	842	843
12	---	743	748	730	842	844
13	705	747	748	730	845	846
14	707	746	748	728	847	848
15	709	746	747	727	847	849
16	712	749	747	726	847	850
17	713	751	748	725	848	853
18	713	751	749	724	849	856
19	715	753	749	725	851	857
20	717	756	748	727	851	859
21	720	757	748	727	845	864
22	722	755	---	727	839	858
23	724	754	---	728	835	856
24	724	758	---	728	834	858
25	719	761	---	726	836	858
26	721	760	---	725	834	858
27	724	762	---	725	833	858
28	727	763	---	726	832	858
29	729	762	---	740	833	857
30	733	758	---	781	836	858
31	---	760	---	817	834	---

Table 5. *Daily mean specific conductance, water temperature, and median pH in observation well EI-28, April-September 1990*--Continued

Day	Apr.	May	June	July	Aug.	Sept.
			Mean water temperature, in degrees Celsius			
1	---	6.3	8.7	---	14.0	15.1
2	---	6.4	8.8	---	14.0	15.2
3	---	6.5	8.9	---	14.1	15.2
4	---	6.6	9.0	12.1	14.1	15.2
5	---	6.6	9.1	12.2	14.2	15.3
6	---	6.7	9.2	12.3	14.2	15.4
7	---	6.9	9.3	12.4	14.3	15.3
8	---	7.1	9.3	12.5	14.3	15.3
9	---	7.2	9.4	12.7	14.4	15.3
10	5.2	7.2	9.5	12.8	14.3	15.4
11	---	7.3	9.6	12.9	14.3	15.4
12	---	7.3	9.7	13.0	14.4	15.4
13	5.4	7.4	9.8	13.1	14.4	15.5
14	5.5	7.5	9.9	13.2	14.5	15.6
15	5.5	7.6	10.0	13.3	14.5	15.5
16	5.5	7.6	10.0	13.3	14.5	15.4
17	5.6	7.7	10.1	13.4	14.5	15.6
18	5.5	7.7	10.3	13.4	14.5	15.6
19	5.5	7.8	10.4	13.5	14.5	15.6
20	5.6	7.8	10.5	13.5	14.6	15.5
21	5.6	7.9	10.7	13.5	14.6	---
22	5.6	8.0	---	13.6	14.7	---
23	5.7	8.1	---	13.6	14.7	---
24	5.8	8.2	---	13.6	14.7	---
25	5.8	8.2	---	13.7	14.8	15.3
26	5.9	8.3	---	13.7	14.7	15.1
27	5.9	8.4	---	13.7	14.6	---
28	6.0	8.4	---	13.7	14.7	---
29	6.1	8.5	---	13.7	14.7	---
30	6.2	8.6	---	13.8	14.9	14.9
31	---	8.7	---	13.8	15.0	---

Table 5. *Daily mean specific conductance, water temperature, and median pH in observation well EI-28, April-September 1990*--Continued

Day	Apr.	May	June	July	Aug.	Sept.
			Median pH, in standard units			
1	---	7.2	---	---	7.1	7.2
2	---	7.2	---	---	7.1	7.2
3	---	7.2	---	---	7.1	7.2
4	---	7.2	---	7.1	7.1	7.2
5	---	7.1	---	7.1	7.1	7.2
6	---	7.1	---	7.1	7.1	7.2
7	---	7.1	---	7.1	7.1	7.2
8	---	7.1	---	7.1	7.1	7.2
9	---	7.1	---	7.1	7.1	7.2
10	---	7.1	---	7.1	7.1	7.2
11	---	7.1	---	7.1	7.1	7.2
12	---	7.1	---	7.1	7.1	7.2
13	7.2	---	---	7.1	7.1	7.2
14	7.2	---	---	7.1	7.1	7.1
15	7.2	---	---	7.1	7.1	7.1
16	7.2	---	---	7.1	7.1	7.1
17	7.1	---	---	7.1	7.1	7.1
18	7.1	---	---	7.1	7.1	7.0
19	7.1	---	7.1	7.1	7.1	7.1
20	7.1	---	7.2	7.1	7.1	7.0
21	7.1	---	7.2	7.1	7.2	7.0
22	7.1	---	---	7.1	7.2	7.1
23	7.1	---	---	7.1	7.2	7.1
24	7.1	---	---	7.1	7.2	7.1
25	7.2	---	---	7.1	7.1	7.1
26	7.2	---	---	7.1	7.1	7.1
27	7.2	---	---	7.1	7.1	7.1
28	7.2	---	---	7.1	7.2	7.1
29	7.2	---	---	7.1	7.2	7.1
30	7.2	---	---	7.1	7.2	7.1
31	---	---	---	7.1	7.2	---

Table 6. *Construction records of buried pressure transducers and thermistors at the till hydrology site in Linn County, Iowa*

[Borehole construction data from U.S. Geological Survey, Iowa City, Iowa, and Iowa Department of Natural Resources, Geological Survey Bureau, Iowa City, Iowa]

Sensor number	Station identification number	Land-surface elevation (feet above sea level)	Approximate sensor depth (feet)	Approximate sensor elevation (feet above sea level)
		South site (borehole EI-26)		
H-9	415219091400216	841	9	832.4
H-15	415219091400215	841	15	826.4
H-40	415219091400214	841	40	801.4
H-55	415219091400213	841	55	786.4
H-90	415219091400209	841	90	751.4
		North site (borehole EI-25)		
L-9	415216091400211	827	9	818.4
L-22	415216091400210	827	22	805.9
L-33	415216091400209	827	33	794.4
L-53	415216091400208	827	53	774.4
L-75	415216091400207	827	75	753.9

Table 7. *Daily mean water levels and water temperatures for pressure transducers and thermistors in borehole EI-26 at south site, January-September 1990*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
				(Sensor H-9)					
				Mean water level in feet above sea level.					
				Approximate sensor elevation 832 feet above sea level.					
				Depth below land surface 9 feet.					
1	---	830.66	831.06	836.59	836.26	838.02	838.39	836.58	---
2	---	830.67	831.07	836.59	836.28	837.57	837.93	836.49	837.51
3	---	830.68	831.08	836.68	836.28	837.35	837.45	836.33	837.39
4	---	830.70	831.10	---	836.52	837.44	837.16	836.27	837.18
5	---	830.70	831.12	836.39	837.94	837.22	837.14	836.33	836.98
6	---	830.71	831.15	836.46	839.17	837.05	837.10	836.41	836.66
7	---	830.72	831.17	836.53	839.13	837.02	836.91	836.31	836.48
8	---	830.72	831.18	836.45	838.63	837.37	836.67	836.16	836.45
9	---	830.72	831.19	836.33	838.24	838.02	836.65	836.05	836.31
10	---	830.73	831.46	836.24	838.01	838.03	836.61	835.91	836.23
11	---	830.74	839.66	836.35	837.93	837.84	836.61	835.81	836.21
12	---	830.74	838.63	836.38	838.26	837.45	836.55	835.72	836.09
13	---	830.75	838.66	836.28	839.72	837.17	836.59	835.73	835.94
14	---	830.76	838.15	836.22	839.60	837.11	836.32	835.68	835.69
15	---	830.76	838.61	836.35	839.10	837.03	836.12	835.58	835.65
16	---	830.77	838.81	836.40	839.31	837.79	836.09	835.51	835.57
17	---	830.79	838.36	836.56	839.52	839.79	836.10	836.90	835.77
18	---	830.81	838.09	836.73	839.08	839.52	836.07	836.04	835.64
19	---	830.84	838.04	836.62	838.88	838.94	835.99	836.08	835.46
20	---	830.88	837.96	836.47	839.41	839.44	835.89	838.06	835.46
21	---	830.90	837.65	836.48	839.25	838.88	835.86	838.95	835.31
22	---	830.90	837.39	836.48	839.01	838.76	835.79	---	---
23	---	830.91	837.62	836.34	838.81	839.45	835.76	838.96	---
24	---	830.92	837.63	836.23	839.11	838.87	835.75	838.41	835.25
25	---	830.96	837.47	836.24	839.95	838.32	835.73	839.29	834.93
26	830.64	830.99	837.41	836.17	840.21	837.90	835.75	839.49	834.97
27	830.63	831.02	837.34	836.02	839.87	837.61	836.14	838.76	834.97
28	830.65	831.05	837.15	835.84	839.54	838.55	836.25	838.11	835.02
29	830.65	---	836.98	835.92	839.24	839.39	836.72	837.74	835.11
30	830.65	---	836.85	836.08	838.81	838.94	836.48	838.16	835.09
31	830.66	---	836.73	---	838.43	---	836.57	838.03	---

Table 7. *Daily mean water levels and water temperatures for pressure transducers and thermistors in borehole EI-26 at south site, January-September 1990*--Continued

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
				(Sensor H-9)--Continued					
				Mean water temperature, in degrees Celsius.					
				Approximate sensor elevation 832 feet above sea level.					
1	---	6.0	5.3	5.6	6.5	8.7	11.3	13.8	---
2	---	6.0	5.3	5.6	6.6	8.8	11.4	13.9	15.2
3	---	6.0	5.2	5.6	6.7	8.9	11.5	13.9	15.2
4	---	5.9	5.2	---	6.8	8.9	11.6	14.0	15.3
5	---	5.9	5.2	---	6.9	9.0	11.7	14.1	15.3
6	---	5.9	5.2	5.7	7.0	9.1	11.8	14.1	15.3
7	---	5.8	5.2	5.7	7.1	9.2	11.9	14.2	15.4
8	---	5.8	5.1	5.7	7.1	9.3	12.0	14.2	15.4
9	---	5.8	5.1	5.7	7.2	9.3	12.1	14.2	15.4
10	---	5.7	5.1	5.7	7.3	9.4	12.2	14.3	15.5
11	---	5.7	5.1	5.8	7.4	9.5	12.3	14.3	15.5
12	---	5.7	5.0	5.8	7.4	9.5	12.4	14.4	15.6
13	---	5.7	5.0	5.8	7.5	9.6	12.5	14.4	15.6
14	---	5.6	5.0	5.8	7.6	9.7	12.6	14.5	15.6
15	---	5.6	5.0	5.8	7.6	9.8	12.7	14.5	15.7
16	---	5.6	5.0	5.9	7.7	9.8	12.8	14.5	15.7
17	---	5.6	5.0	5.9	7.8	9.9	12.9	14.6	15.7
18	---	5.5	5.0	5.9	7.8	10.0	13.0	14.6	15.8
19	---	5.5	5.1	5.9	7.9	10.1	13.1	14.6	15.8
20	---	5.5	5.1	6.0	7.9	10.2	13.1	14.6	15.8
21	---	5.5	5.2	6.0	8.0	10.3	13.2	14.7	15.8
22	---	5.4	5.3	6.0	8.1	10.4	13.3	---	---
23	---	5.4	5.3	6.1	8.1	10.5	13.3	14.8	---
24	---	5.4	5.4	6.1	8.2	10.6	13.4	14.8	15.8
25	---	5.4	5.4	6.1	8.3	10.7	13.5	14.9	15.8
26	6.2	5.3	5.4	6.2	8.3	10.8	13.5	14.9	15.8
27	6.2	5.3	5.5	6.2	8.4	10.9	13.6	14.9	15.8
28	6.2	5.3	5.5	6.3	8.5	11.0	13.6	15.0	15.7
29	6.1	---	5.5	6.3	8.5	11.1	13.7	15.0	15.7
30	6.1	---	5.5	6.4	8.6	11.2	13.7	15.0	15.7
31	6.1	---	5.5	---	8.7	---	13.8	15.1	---

Table 7. *Daily mean water levels and water temperatures for pressure transducers and thermistors in borehole EI-26 at south site, January-September 1990*--Continued

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
				(Sensor H-15)					
				Mean water level, in feet above sea level.					
				Approximate sensor elevation 826 feet above sea level.					
				Depth below land surface 15 feet.					
1	---	829.38	830.58	836.41	836.21	838.04	838.43	836.53	---
2	---	829.49	830.35	836.47	836.22	837.58	837.95	836.43	837.54
3	---	829.52	830.49	836.55	836.21	837.42	837.45	836.28	837.40
4	---	829.53	830.46	---	836.30	837.48	837.16	836.23	837.18
5	---	829.45	830.57	---	837.79	837.20	837.13	836.33	836.97
6	---	829.47	830.83	836.37	839.05	837.08	837.07	836.39	836.63
7	---	829.54	830.93	836.42	838.99	837.01	836.85	836.28	836.49
8	---	829.39	830.71	836.31	838.57	837.35	836.63	836.12	836.45
9	---	829.48	830.84	836.18	838.20	838.12	836.62	836.01	836.31
10	---	829.55	831.05	836.09	838.04	838.12	836.57	835.87	836.23
11	---	829.66	833.32	836.24	837.96	837.88	836.51	835.80	836.20
12	---	829.60	833.69	836.23	838.38	837.48	836.53	835.72	836.07
13	---	829.60	834.81	836.11	839.75	837.20	836.55	835.74	835.90
14	---	829.91	836.07	836.13	839.56	837.14	836.24	835.65	835.68
15	---	829.72	837.78	836.29	839.09	837.03	836.08	835.55	835.64
16	---	829.71	838.15	836.32	839.41	837.78	836.06	835.46	835.63
17	---	830.12	837.86	836.55	839.53	839.80	836.08	835.50	835.80
18	---	829.99	837.77	836.66	839.09	839.48	836.05	835.68	835.59
19	---	830.21	837.81	836.50	838.97	838.98	835.94	835.79	835.44
20	---	830.29	837.70	836.37	839.45	839.47	835.85	837.21	835.43
21	---	830.07	837.35	836.42	839.31	838.89	835.83	838.85	835.28
22	---	829.76	837.17	836.40	839.07	838.89	835.76	---	---
23	---	829.78	837.47	836.23	838.90	839.48	835.74	838.94	---
24	---	830.09	837.42	836.15	839.20	838.89	835.73	838.43	835.17
25	---	830.54	837.25	836.17	840.05	838.35	835.71	839.33	834.86
26	829.38	830.45	837.25	836.06	840.21	837.92	835.67	839.43	834.95
27	829.32	830.54	837.13	835.90	839.88	837.63	835.61	838.73	834.94
28	829.62	830.73	836.93	835.75	839.61	838.66	835.53	838.11	835.00
29	829.41	---	836.78	835.88	839.31	839.43	835.94	837.75	835.08
30	829.36	---	836.66	836.08	838.88	838.97	836.35	838.20	835.04
31	829.49	---	836.54	---	838.48	---	836.52	838.08	---

Table 7. *Daily mean water levels and water temperatures for pressure transducers and thermistors in borehole EI-26 at south site, January-September 1990*--Continued

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
				(Sensor H-15)--Continued					
				Mean water temperature, in degrees Celsius.					
				Approximate sensor elevation 826 feet above sea level.					
1	---	9.2	8.3	7.6	7.6	8.3	9.3	10.8	---
2	---	9.1	8.2	7.6	7.6	8.3	9.4	10.9	12.2
3	---	9.1	8.2	7.6	7.6	8.3	9.4	11.0	12.2
4	---	9.1	8.2	---	7.6	8.3	9.4	11.0	12.3
5	---	9.0	8.2	---	7.6	8.4	9.5	11.0	12.3
6	---	9.0	8.1	7.6	7.6	8.4	9.5	11.1	12.3
7	---	8.9	8.1	7.6	7.7	8.4	9.6	11.1	12.4
8	---	8.9	8.1	7.6	7.7	8.5	9.6	11.2	12.4
9	---	8.9	8.0	7.6	7.7	8.5	9.7	11.2	12.4
10	---	8.8	8.0	7.6	7.7	8.5	9.7	11.3	12.5
11	---	8.8	8.0	7.6	7.7	8.6	9.8	11.3	12.5
12	---	8.8	8.0	7.6	7.7	8.6	9.8	11.4	12.5
13	---	8.7	7.9	7.6	7.8	8.6	9.9	11.4	12.6
14	---	8.7	7.9	7.6	7.8	8.7	9.9	11.4	12.6
15	---	8.7	7.9	7.6	7.8	8.7	10.0	11.5	12.6
16	---	8.6	7.9	7.6	7.8	8.7	10.0	11.5	12.7
17	---	8.6	7.8	7.6	7.9	8.8	10.1	11.6	12.7
18	---	8.6	7.8	7.6	7.9	8.8	10.1	11.6	12.7
19	---	8.5	7.8	7.6	7.9	8.8	10.2	11.7	12.8
20	---	8.5	7.8	7.6	7.9	8.9	10.2	11.7	12.8
21	---	8.5	7.8	7.6	7.9	8.9	10.3	11.7	12.8
22	---	8.5	7.7	7.6	8.0	8.9	10.3	---	---
23	---	8.4	7.7	7.6	8.0	9.0	10.4	11.8	---
24	---	8.4	7.7	7.6	8.0	9.0	10.4	11.9	12.9
25	---	8.4	7.7	7.6	8.0	9.1	10.5	11.9	13.0
26	9.4	8.3	7.7	7.6	8.1	9.1	10.6	11.9	13.0
27	9.4	8.3	7.7	7.6	8.1	9.1	10.6	12.0	13.0
28	9.3	8.3	7.7	7.6	8.1	9.2	10.7	12.0	13.0
29	9.3	---	7.6	7.6	8.2	9.2	10.7	12.0	13.1
30	9.2	---	7.6	7.6	8.2	9.3	10.8	12.1	13.1
31	9.2	---	7.6	---	8.2	---	10.8	12.1	---

Table 7. *Daily mean water levels and water temperatures for pressure transducers and thermistors in borehole EI-26 at south site, January-September 1990*--Continued

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
				(Sensor H-40)--Continued					
				Mean water level, in feet above sea level.					
				Approximate sensor elevation 801 feet above sea level.					
				Depth below land surface 40 feet.					
1	---	828.44	829.65	---	834.59	836.78	837.01	834.74	---
2	---	828.67	829.37	---	834.57	836.32	836.75	834.68	836.41
3	---	828.66	829.61	---	834.58	836.35	836.35	834.62	836.32
4	---	828.68	829.50	---	834.41	836.47	836.18	834.65	836.08
5	---	828.53	829.71	---	834.86	836.04	836.16	834.79	835.87
6	---	828.59	830.01	---	835.23	835.94	835.91	834.91	835.46
7	---	828.63	830.03	---	835.71	835.87	835.62	834.74	835.38
8	---	828.37	829.74	---	835.94	835.89	835.36	834.62	835.36
9	---	828.56	829.89	---	835.81	836.10	835.41	834.53	835.18
10	---	828.60	---	---	836.05	836.39	835.35	834.37	835.11
11	---	828.78	---	---	836.21	836.29	835.20	834.34	835.06
12	---	828.62	---	834.61	836.04	835.93	835.31	834.31	834.81
13	---	828.77	---	834.45	836.40	835.83	835.26	834.31	834.58
14	---	829.14	---	834.33	836.69	835.90	834.78	834.25	834.38
15	---	828.79	---	834.33	836.72	835.77	834.66	834.22	834.36
16	---	828.90	---	834.33	836.61	835.69	834.64	834.18	834.36
17	---	829.44	---	834.80	836.94	835.98	834.68	834.19	834.49
18	---	829.16	---	834.91	837.10	836.77	834.64	834.24	834.30
19	---	829.51	---	834.68	836.63	836.81	834.50	834.26	834.25
20	---	829.54	---	834.61	836.92	836.73	834.41	834.60	834.23
21	---	829.15	---	834.73	837.28	837.00	834.38	835.03	834.11
22	---	828.79	---	834.57	837.28	836.77	834.27	---	---
23	---	828.93	---	834.27	837.04	836.91	834.25	836.32	---
24	---	829.43	---	834.22	836.94	837.16	834.24	836.40	833.97
25	---	829.88	---	834.37	836.87	837.05	834.23	836.39	833.71
26	828.44	829.56	---	834.18	837.29	836.80	834.21	836.73	833.82
27	828.40	829.71	---	834.02	837.48	836.59	834.22	836.81	833.80
28	828.81	829.91	---	833.98	837.47	836.40	834.19	836.59	833.87
29	828.39	---	---	834.06	837.46	836.63	834.27	836.49	833.93
30	828.43	---	---	834.43	837.42	837.01	834.48	836.47	833.88
31	828.61	---	---	---	837.18	---	834.68	836.47	---

Table 7. *Daily mean water levels and water temperatures for pressure transducers and thermistors in borehole EI-26 at south site, January-September 1990*--Continued

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
				(Sensor H-40)--Continued					
				Mean water temperature, in degrees Celsius.					
				Approximate sensor elevation 801 feet above sea level.					
1	---	10.2	10.3	---	10.2	10.1	10.0	9.9	---
2	---	10.2	10.2	---	10.2	10.1	10.0	9.9	9.9
3	---	10.2	10.3	---	10.2	10.1	10.0	9.9	9.9
4	---	10.2	10.2	---	10.2	10.1	10.0	9.9	9.9
5	---	10.2	10.3	---	10.2	10.1	10.0	9.9	9.9
6	--	10.2	10.2	---	10.2	10.1	10.0	9.9	9.9
7	---	10.2	10.2	---	10.2	10.1	10.0	9.9	9.9
8	---	10.2	10.2	---	10.2	10.1	10.0	9.9	9.9
9	---	10.2	10.2	---	10.2	10.1	10.0	9.9	9.9
10	---	10.2	---	---	10.1	10.1	10.0	9.9	9.9
11	---	10.2	---	---	10.1	10.0	10.0	9.9	9.9
12	---	10.2	---	10.2	10.1	10.0	9.9	9.9	9.9
13	---	10.2	---	10.2	10.1	10.0	9.9	9.9	9.9
14	---	10.2	---	10.2	10.1	10.0	9.9	9.9	9.9
15	---	10.2	---	10.2	10.1	10.0	9.9	9.9	9.9
16	---	10.2	---	10.2	10.1	10.0	9.9	9.9	9.9
17	---	10.2	---	10.2	10.1	10.0	9.9	9.9	9.8
18	---	10.2	---	10.2	10.1	10.0	9.9	9.9	9.9
19	---	10.2	---	10.2	10.1	10.0	9.9	9.9	9.9
20	---	10.2	---	10.2	10.1	10.0	9.9	9.9	9.9
21	---	10.2	---	10.2	10.1	10.0	9.9	9.8	9.8
22	---	10.2	---	10.2	10.1	10.0	9.9	---	---
23	---	10.3	---	10.2	10.1	10.0	9.9	9.9	---
24	---	10.2	---	10.2	10.1	10.0	9.9	9.9	9.9
25	---	10.2	---	10.2	10.1	10.0	9.9	9.9	9.9
26	10.2	10.2	---	10.2	10.1	10.0	9.9	9.9	9.9
27	10.2	10.3	---	10.2	10.1	10.0	9.9	9.9	9.9
28	10.2	10.2	---	10.2	10.1	10.0	9.9	9.9	9.9
29	10.2	---	---	10.2	10.1	10.0	9.9	9.9	9.9
30	10.2	---	---	10.2	10.1	10.0	9.9	9.9	9.9
31	10.2	---	---	---	10.1	---	9.9	9.9	---

Table 7. *Daily mean water levels and water temperatures for pressure transducers and thermistors in borehole EI-26 at south site, January-September 1990*--Continued

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
				(Sensor H-55)					
				Mean water level, in feet above sea level.					
				Approximate sensor elevation 786 feet above sea level.					
				Depth below land surface 55 feet.					
1	---	826.99	828.19	831.96	832.38	834.24	834.22	832.90	---
2	---	827.11	827.95	832.08	832.43	834.00	834.24	832.86	833.59
3	---	827.18	827.99	832.21	832.46	834.02	834.12	832.82	833.68
4	---	827.21	827.95	---	832.37	834.23	834.10	832.88	833.64
5	---	827.16	828.00	---	832.42	834.05	834.19	833.04	833.57
6	---	827.17	828.24	832.20	832.29	833.95	834.09	833.19	833.41
7	---	827.19	828.35	832.29	832.16	833.94	833.95	833.17	833.33
8	---	827.03	828.21	832.25	832.18	833.89	833.79	833.08	833.36
9	---	827.03	828.17	832.20	832.21	833.88	833.81	833.04	833.30
10	---	827.07	828.13	832.20	832.42	833.92	833.81	832.94	833.28
11	---	827.14	828.08	832.37	832.75	833.86	833.77	832.90	833.29
12	---	827.12	828.01	832.41	832.86	833.60	833.79	832.88	833.21
13	---	827.12	828.16	832.33	832.95	833.51	833.83	832.91	833.08
14	---	827.43	828.13	832.24	832.98	833.62	833.58	832.85	832.79
15	---	827.34	828.19	832.19	833.03	833.65	833.40	832.71	832.73
16	---	827.32	828.61	832.14	833.00	833.60	833.36	832.58	832.69
17	---	827.72	829.07	832.33	833.18	833.40	833.38	832.55	832.85
18	---	827.71	829.69	832.49	833.42	833.43	833.35	832.55	832.68
19	---	827.90	830.34	832.40	833.32	833.46	833.26	832.53	832.49
20	---	828.05	830.74	832.31	833.41	833.40	833.19	832.54	832.46
21	---	827.89	830.78	832.38	833.73	833.57	833.17	832.40	832.31
22	---	827.58	830.95	832.35	833.93	833.60	833.10	---	---
23	---	827.54	831.56	832.19	833.95	833.65	833.06	832.40	---
24	---	827.76	831.80	832.10	833.93	833.83	833.03	832.57	832.15
25	---	828.19	831.86	832.16	833.81	833.98	833.01	832.75	831.84
26	826.85	828.14	832.02	832.12	833.81	834.04	832.97	832.83	831.85
27	826.81	828.14	832.09	832.03	833.90	834.07	832.94	832.95	831.84
28	827.11	828.29	832.06	831.92	834.00	833.99	832.88	833.05	831.87
29	827.00	---	832.03	832.03	834.12	833.85	832.89	833.18	831.94
30	826.92	---	832.03	832.22	834.30	834.02	832.91	833.33	831.90
31	827.07	---	832.01	---	834.36	---	832.91	833.42	---

Table 7. *Daily mean water levels and water temperatures for pressure transducers and thermistors in borehole EI-26 at south site, January-September 1990*--Continued

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
				(Sensor H-55)--Continued					
				Mean water temperature, in degrees Celsius.					
				Approximate sensor elevation 786 feet above sea level.					
1	---	10.4	10.4	10.3	10.4	10.4	10.4	10.3	---
2	---	10.4	10.4	10.4	10.4	10.4	10.4	10.3	10.3
3	---	10.4	10.4	10.4	10.4	10.4	10.4	10.3	10.3
4	---	10.4	10.4	---	10.2	10.4	10.4	10.2	10.3
5	---	10.4	10.4	---	10.1	10.3	10.3	10.3	10.3
6	---	10.4	10.4	10.4	10.2	10.3	10.4	10.3	10.3
7	---	10.4	10.4	10.4	10.4	10.3	10.3	10.3	10.3
8	---	10.4	10.1	10.4	10.4	10.1	10.4	10.3	10.3
9	---	10.4	10.2	10.4	10.4	10.3	10.4	10.3	10.3
10	---	10.4	10.2	10.4	10.4	10.3	10.3	10.3	10.3
11	---	10.4	9.9	10.4	10.4	10.4	10.3	10.3	10.3
12	---	10.4	10.2	10.4	10.2	10.4	10.3	10.3	10.3
13	---	10.4	10.1	10.3	10.2	10.4	10.3	10.3	10.3
14	---	10.4	10.1	10.3	10.3	10.3	10.3	10.3	10.3
15	---	10.4	10.1	10.4	10.3	10.3	10.3	10.3	10.3
16	---	10.4	10.3	10.4	10.2	10.0	10.3	10.3	10.3
17	---	10.4	10.4	10.4	10.4	9.8	10.4	10.2	10.3
18	---	10.4	10.4	10.4	10.4	10.2	10.3	10.3	10.3
19	---	10.4	10.4	10.4	10.3	10.3	10.3	10.3	10.3
20	---	10.4	10.4	10.3	10.3	10.2	10.3	10.0	10.3
21	---	10.4	10.4	10.3	10.3	10.3	10.3	10.0	10.3
22	---	10.4	10.3	10.4	10.4	10.2	10.3	---	---
23	---	10.4	10.4	10.4	10.3	10.3	10.3	10.2	---
24	---	10.4	10.4	10.4	10.2	10.3	10.3	10.2	10.3
25	---	10.4	10.4	10.4	10.0	10.3	10.3	10.1	10.3
26	10.4	10.4	10.4	10.4	10.1	10.3	10.3	10.2	10.3
27	10.4	10.4	10.4	10.4	10.2	10.3	10.2	10.2	10.3
28	10.4	10.4	10.4	10.3	10.2	10.2	10.2	10.3	10.3
29	10.4	---	10.3	10.3	10.4	10.3	10.2	10.3	10.3
30	10.4	---	10.3	10.4	10.4	10.3	10.3	10.3	10.3
31	10.4	---	10.3	---	10.4	---	10.3	10.3	---

Table 7. *Daily mean water levels and water temperatures for pressure transducers and thermistors in borehole EI-26 at south site, January-September 1990*--Continued

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
				(Sensor H-90)					
				Mean water level, in feet above sea level.					
				Approximate sensor elevation 751 feet above sea level.					
				Depth below land surface 90 feet.					
1	---	773.84	774.07	774.30	783.98	788.91	787.68	786.06	---
2	---	773.89	773.91	774.43	784.38	788.80	787.67	785.96	784.43
3	---	773.90	773.92	774.55	784.72	788.79	787.56	785.81	784.50
4	---	773.92	773.88	---	784.98	788.91	787.50	785.74	784.49
5	---	773.89	773.90	---	785.27	788.88	787.58	785.77	784.48
6	---	773.89	774.00	774.91	785.53	788.85	787.65	785.84	784.29
7	---	773.89	774.05	775.10	785.72	788.86	787.59	785.76	784.21
8	---	773.77	773.92	775.28	785.88	788.84	787.46	785.68	784.21
9	---	773.76	773.89	775.48	786.01	788.85	787.41	785.60	784.18
10	---	773.75	773.85	775.74	786.24	788.89	787.39	785.48	784.18
11	---	773.77	773.71	776.12	786.49	788.86	787.35	785.40	784.20
12	---	773.70	773.59	776.49	786.70	788.69	787.36	785.33	784.16
13	---	773.69	773.56	776.86	786.96	788.54	787.38	785.31	784.08
14	---	773.83	773.42	777.26	787.17	788.50	787.24	785.24	783.94
15	---	773.73	773.34	777.65	787.33	788.46	787.09	785.14	783.91
16	---	773.72	773.38	778.00	787.41	788.38	787.01	785.03	783.91
17	---	773.91	773.43	778.52	787.55	788.21	786.97	784.93	784.01
18	---	773.89	773.57	779.06	787.76	788.12	786.92	784.85	783.93
19	---	773.99	773.79	779.48	787.81	788.04	786.82	784.81	783.85
20	---	774.07	773.86	779.85	787.90	787.93	786.72	784.80	783.83
21	---	773.96	773.79	780.28	788.09	787.92	786.66	784.74	783.75
22	---	773.81	773.80	780.71	788.31	787.84	786.57	---	---
23	---	773.78	774.04	781.05	788.44	787.79	786.50	784.47	---
24	---	773.90	774.12	781.40	788.53	787.81	786.43	784.42	783.67
25	---	774.11	774.14	781.78	788.53	787.84	786.38	784.36	783.45
26	773.82	774.05	774.22	782.10	788.55	787.83	786.31	784.30	783.43
27	773.80	774.08	774.25	782.41	788.59	787.82	786.25	784.27	783.41
28	773.92	774.16	774.24	782.70	788.65	787.75	786.19	784.21	783.44
29	773.85	---	774.25	783.06	788.73	787.67	786.13	784.21	783.48
30	773.83	---	774.27	783.51	788.85	787.66	786.12	784.28	783.47
31	773.87	---	774.28	---	788.93	---	786.11	784.32	---

Table 7. *Daily mean water levels and water temperatures for pressure transducers and thermistors in borehole EI-26 at south site, January-September 1990*--Continued

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
				(Sensor H-90)--Continued					
				Mean water temperature, in degrees Celsius.					
				Approximate sensor elevation 751 feet above sea level.					
1	---	10.6	10.6	10.6	10.5	10.5	10.5	10.5	---
2	---	10.6	10.6	10.6	10.6	10.5	10.5	10.5	10.5
3	---	10.6	10.6	10.6	10.5	10.5	10.5	10.5	10.5
4	---	10.6	10.6	---	10.5	10.5	10.5	10.5	10.5
5	---	10.6	10.6	---	10.5	10.5	10.5	10.5	10.5
6	---	10.6	10.6	10.6	10.6	10.5	10.5	10.5	10.5
7	---	10.6	10.6	10.6	10.6	10.5	10.5	10.5	10.5
8	---	10.6	10.6	10.6	10.6	10.5	10.5	10.5	10.5
9	---	10.6	10.6	10.6	10.5	10.5	10.5	10.5	10.5
10	---	10.6	10.6	10.6	10.5	10.5	10.5	10.5	10.5
11	---	10.6	10.6	10.6	10.5	10.5	10.5	10.5	10.5
12	---	10.6	10.6	10.6	10.5	10.5	10.5	10.5	10.5
13	---	10.6	10.6	10.6	10.5	10.5	10.5	10.5	10.5
14	---	10.6	10.6	10.6	10.6	10.5	10.5	10.5	10.5
15	---	10.6	10.6	10.5	10.5	10.5	10.5	10.5	10.5
16	---	10.6	10.6	10.6	10.5	10.5	10.5	10.5	10.5
17	---	10.6	10.6	10.6	10.5	10.5	10.5	10.5	10.5
18	---	10.6	10.6	10.6	10.5	10.5	10.5	10.5	10.5
19	---	10.6	10.6	10.5	10.5	10.5	10.5	10.5	10.5
20	---	10.6	10.6	10.5	10.5	10.5	10.5	10.5	10.5
21	---	10.6	10.6	10.6	10.5	10.5	10.5	10.5	10.5
22	---	10.6	10.6	10.6	10.5	10.5	10.5	---	---
23	---	10.6	10.6	10.6	10.5	10.5	10.5	10.5	---
24	---	10.6	10.6	10.6	10.5	10.5	10.5	10.5	10.5
25	---	10.6	10.6	10.6	10.5	10.5	10.5	10.5	10.5
26	10.6	10.6	10.6	10.6	10.5	10.5	10.5	10.5	10.5
27	10.6	10.6	10.6	10.5	10.5	10.5	10.5	10.5	10.5
28	10.6	10.6	10.6	10.5	10.5	10.5	10.5	10.5	10.5
29	10.6	---	10.6	10.6	10.5	10.5	10.5	10.5	10.5
30	10.6	---	10.6	10.6	10.5	10.5	10.5	10.5	10.5
31	10.6	---	10.6	---	10.5	---	10.5	10.5	---

Table 8. *Daily mean water levels and water temperatures for pressure transducers and thermistors in borehole EI-25 at north site, January-September 1990*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
				(Sensor L-9)					
				Mean water level, in feet above sea level.					
				Approximate sensor elevation 818 feet above sea level.					
				depth below land surface 9 feet.					
1	---	821.89	824.43	824.42	824.27	---	---	824.58	---
2	---	822.18	824.15	824.58	824.26	---	---	824.37	824.51
3	---	822.32	824.32	824.62	824.25	---	824.22	824.20	824.50
4	---	822.39	824.14	824.30	825.35	824.37	824.15	824.24	824.37
5	---	822.42	824.19	824.38	826.74	824.12	824.28	824.39	824.25
6	---	823.29	824.38	824.52	826.55	824.09	824.31	824.52	823.97
7	---	823.50	824.35	824.60	825.59	824.13	824.14	---	823.94
8	---	824.34	824.41	824.47	825.10	825.60	823.97	---	824.01
9	---	825.61	825.12	824.35	824.68	825.36	824.05	---	823.95
10	---	825.41	---	824.31	824.68	825.13	824.06	---	823.96
11	---	825.36	---	824.53	824.76	824.81	824.08	---	823.99
12	---	825.62	---	824.52	825.78	824.33	824.20	---	823.88
13	---	825.94	---	824.39	826.53	824.17	824.33	---	823.72
14	---	825.75	---	824.38	825.61	824.24	---	823.79	823.54
15	---	825.11	---	824.49	825.14	824.24	---	823.69	823.53
16	---	824.93	---	824.48	825.85	---	---	823.59	823.58
17	---	825.27	---	824.78	825.34	---	---	824.52	823.78
18	---	824.87	---	824.88	825.13	---	---	824.77	823.55
19	---	825.00	---	824.64	825.62	---	---	824.69	823.45
20	---	824.92	---	824.50	825.55	---	---	826.86	823.46
21	---	824.43	825.17	824.60	825.37	---	---	826.43	823.62
22	---	823.96	825.04	824.53	825.22	---	---	825.53	---
23	---	824.11	---	824.28	825.08	---	---	825.01	---
24	---	824.55	---	824.16	825.19	---	---	824.87	823.22
25	---	824.99	---	824.20	826.60	824.84	823.86	826.44	822.92
26	822.01	824.69	825.27	824.04	826.11	824.61	823.82	825.43	823.05
27	821.95	824.67	825.16	823.86	825.46	824.47	823.85	824.91	823.04
28	822.22	824.74	---	823.72	825.15	---	824.02	824.54	823.14
29	821.93	---	824.76	823.89	825.02	---	825.67	824.54	823.23
30	821.88	---	824.67	824.13	825.02	---	825.07	824.84	823.20
31	821.94	---	824.55	---	---	---	824.79	---	---

Table 8. *Daily mean water levels and water temperatures for pressure transducers and thermistors in borehole EI-25 at north site, January-September 1990*--Continued

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
				(Sensor L-9)--Continued					
				Mean temperature, in degrees Celsius.					
				Approximate sensor elevation 818 feet above sea level.					
1	---	7.1	6.3	6.4	7.1	---	---	13.1	---
2	---	7.0	6.2	6.4	7.2	---	---	13.2	14.3
3	---	7.0	6.2	6.4	7.2	---	11.1	13.2	14.4
4	---	7.0	6.2	6.4	7.3	9.0	11.2	13.3	14.4
5	---	6.9	6.2	6.4	7.4	9.1	11.3	13.3	14.5
6	---	6.9	6.2	6.4	7.4	9.2	11.4	13.4	14.5
7	---	6.9	6.1	6.5	7.5	9.2	11.5	---	14.5
8	---	6.8	6.1	6.5	7.6	9.3	11.6	---	14.6
9	---	6.8	6.1	6.5	7.6	9.3	11.7	---	14.6
10	---	6.8	---	6.5	7.7	9.4	11.7	---	14.7
11	---	6.7	---	6.5	7.7	9.5	11.8	---	14.7
12	---	6.7	---	6.5	7.8	9.5	11.9	---	14.7
13	---	6.7	---	6.6	7.8	9.6	12.0	---	14.8
14	---	6.6	---	6.6	7.9	9.6	---	13.7	14.8
15	---	6.6	---	6.6	8.0	9.7	---	13.7	14.8
16	---	6.6	---	6.6	8.0	---	---	13.7	14.8
17	---	6.5	---	6.6	8.1	---	---	13.8	14.9
18	---	6.5	---	6.7	8.1	---	---	13.8	14.9
19	---	6.5	---	6.7	8.2	---	---	13.8	14.9
20	---	6.5	---	6.7	8.2	---	---	13.8	14.9
21	---	6.4	6.1	6.7	8.3	---	---	13.9	15.0
22	---	6.4	6.1	6.7	8.3	---	---	13.9	---
23	---	6.4	---	6.8	8.4	---	---	13.9	---
24	---	6.4	---	6.8	8.4	---	---	14.0	15.0
25	---	6.3	---	6.8	8.5	10.5	12.8	14.0	15.0
26	7.3	6.3	6.3	6.9	8.6	10.6	12.8	14.1	14.9
27	7.3	6.3	6.3	6.9	8.6	10.7	12.9	14.1	14.9
28	7.2	6.3	---	6.9	8.7	---	12.9	14.1	14.9
29	7.2	---	6.3	7.0	8.7	---	13.0	14.2	14.9
30	7.2	---	6.4	7.0	8.8	---	13.0	14.2	14.9
31	7.1	---	6.4	---	---	---	13.1	14.2	---

Table 8. *Daily mean water levels and water temperatures for pressure transducers and thermistors in borehole EI-25 at north site, January-September 1990*--Continued

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
				(Sensor L-22)					
				Mean water level, in feet above sea level.					
				Approximate sensor elevation 805 feet above sea level.					
				Depth below land surface 22 feet.					
1	---	821.32	823.17	824.43	824.65	---	---	825.25	---
2	---	821.47	822.82	824.65	824.65	---	---	825.05	825.29
3	---	821.51	823.01	824.66	824.66	---	825.16	824.90	825.28
4	---	821.57	822.86	824.36	824.35	825.14	825.11	824.86	825.15
5	---	821.49	823.03	824.50	824.88	824.85	825.28	825.02	825.03
6	---	821.56	823.28	824.65	825.36	824.85	825.26	825.19	824.75
7	---	821.80	823.24	824.75	825.40	824.89	825.04	---	824.76
8	---	821.49	822.87	824.63	825.27	824.82	824.87	---	824.82
9	---	821.94	823.03	824.52	824.95	825.41	824.94	---	824.76
10	---	822.43	---	824.54	825.03	825.62	824.95	---	824.79
11	---	822.74	---	824.78	825.15	825.43	824.95	---	824.84
12	---	822.53	---	824.76	824.93	825.03	825.05	---	824.77
13	---	822.89	---	824.63	825.47	824.92	825.16	---	824.62
14	---	823.43	---	824.58	825.61	825.02	---	824.59	824.45
15	---	823.10	---	824.56	825.43	825.01	---	824.50	824.43
16	---	823.12	---	824.54	825.22	---	---	824.41	824.49
17	---	823.56	---	824.93	825.54	---	---	824.28	824.70
18	---	823.25	---	825.04	825.54	---	---	824.63	824.44
19	---	823.48	---	824.81	824.97	---	---	824.80	824.35
20	---	823.45	---	824.74	825.49	---	---	825.12	824.35
21	---	823.03	824.53	824.84	825.75	---	---	825.82	824.22
22	---	822.62	824.51	824.71	825.72	---	---	826.01	---
23	---	822.66	---	824.49	825.50	---	---	825.69	---
24	---	823.12	---	824.42	825.40	---	---	825.39	824.12
25	---	823.53	---	824.50	825.29	825.67	824.74	825.40	823.83
26	821.39	823.25	825.01	824.37	825.79	825.47	824.71	825.77	823.95
27	821.34	823.40	824.90	824.22	825.86	825.36	824.70	825.57	823.94
28	821.66	823.48	---	824.12	825.75	---	824.60	825.28	824.04
29	821.25	---	824.66	824.26	825.65	---	824.63	825.20	824.13
30	821.30	---	824.61	824.52	825.66	---	825.22	825.29	824.08
31	821.37	---	824.52	---	---	---	825.33	825.28	---

Table 8. *Daily mean water levels and water temperatures for pressure transducers and thermistors in borehole EI-25 at north site, January-September 1990*--Continued

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
				(Sensor L-22)--Continued					
				Mean water temperature, in degrees Celsius.					
				Approximate sensor elevation 805 feet above sea level.					
1	---	10.4	9.8	9.3	9.0	---	---	9.5	---
2	---	10.4	9.8	9.3	9.0	---	---	9.5	10.2
3	---	10.3	9.8	9.3	8.9	---	9.1	9.6	10.2
4	---	10.3	9.8	9.3	8.9	8.9	9.1	9.6	10.2
5	---	10.3	9.8	9.2	8.9	8.9	9.1	9.6	10.3
6	---	10.3	9.7	9.2	8.9	8.9	9.1	9.6	10.3
7	---	10.3	9.7	9.2	8.9	8.9	9.1	---	10.3
8	---	10.2	9.7	9.2	8.9	8.9	9.1	---	10.3
9	---	10.2	9.7	9.2	8.9	8.9	9.1	---	10.3
10	---	10.2	---	9.2	8.9	8.9	9.1	---	10.4
11	---	10.2	---	9.2	8.9	8.9	9.2	---	10.4
12	---	10.2	---	9.1	8.9	8.9	9.2	---	10.4
13	---	10.1	---	9.1	8.9	8.9	9.2	---	10.4
14	---	10.1	---	9.1	8.9	8.9	---	9.8	10.5
15	---	10.1	---	9.1	8.9	8.9	---	9.8	10.5
16	---	10.1	---	9.1	8.9	---	---	9.8	10.5
17	---	10.1	---	9.1	8.9	---	---	9.9	10.5
18	---	10.1	---	9.1	8.9	---	---	9.9	10.5
19	---	10.0	---	9.1	8.9	---	---	9.9	10.6
20	---	10.0	---	9.1	8.8	---	---	9.9	10.6
21	---	10.0	9.5	9.1	8.9	---	---	9.9	10.6
22	---	10.0	9.5	9.0	8.9	---	---	10.0	---
23	---	9.9	---	9.0	8.8	---	---	10.0	---
24	---	9.9	---	9.0	8.9	---	---	10.0	10.6
25	---	9.9	---	9.0	8.9	9.0	9.4	10.0	10.7
26	10.5	9.9	9.4	9.0	8.9	9.0	9.4	10.1	10.7
27	10.5	9.9	9.4	9.0	8.9	9.0	9.4	10.1	10.7
28	10.4	9.9	---	9.0	8.9	---	9.4	10.1	10.7
29	10.4	---	9.3	9.0	8.9	---	9.5	10.1	10.8
30	10.4	---	9.3	9.0	8.8	---	9.5	10.1	10.8
31	10.4	---	9.3	---	---	---	9.5	10.2	---

Table 8. *Daily mean water levels and water temperatures for pressure transducers and thermistors in borehole EI-25 at north site, January-September 1990*--Continued

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
				(Sensor L-33)					
				Mean water level, in feet above sea level.					
				Approximate sensor elevation 794 feet above sea level.					
				Depth below land surface 33 feet.					
1	---	825.27	826.30	829.77	830.39	---	---	830.82	---
2	---	825.44	825.98	830.03	830.40	---	---	830.73	831.37
3	---	825.46	826.16	830.09	830.43	---	831.43	830.64	831.40
4	---	825.49	826.00	829.80	830.25	831.51	831.45	830.65	831.31
5	---	825.36	826.19	829.98	830.38	831.24	831.65	830.85	831.22
6	---	825.37	826.48	830.17	830.43	831.24	831.65	831.02	830.94
7	---	825.42	826.49	830.28	830.34	831.28	831.45	---	830.95
8	---	825.12	826.14	830.18	830.35	831.24	831.28	---	831.02
9	---	825.27	826.21	830.10	830.24	831.40	831.37	---	830.95
10	---	825.35	---	830.13	830.49	831.57	831.37	---	830.97
11	---	825.52	---	830.38	830.77	831.46	831.31	---	831.01
12	---	825.34	---	830.38	830.74	831.14	831.39	---	830.92
13	---	825.53	---	830.25	831.00	831.15	831.49	---	830.76
14	---	825.92	---	830.18	830.96	831.35	---	830.47	830.58
15	---	825.64	---	830.17	830.90	831.37	---	830.38	830.57
16	---	825.75	---	830.12	830.85	---	---	830.30	830.63
17	---	826.29	---	830.49	831.08	---	---	830.23	830.83
18	---	826.06	---	830.61	831.23	---	---	830.21	830.57
19	---	826.38	---	830.37	830.87	---	---	830.26	830.47
20	---	826.43	---	830.30	831.13	---	---	830.46	830.45
21	---	826.06	828.68	830.41	831.42	---	---	830.67	830.29
22	---	825.68	828.83	830.29	831.52	---	---	830.73	---
23	---	825.76	---	830.07	831.41	---	---	830.66	---
24	---	826.23	---	830.02	831.38	---	---	830.69	830.18
25	---	826.66	---	830.13	831.26	831.78	830.80	830.84	829.87
26	825.21	826.36	829.95	830.02	831.39	831.73	830.75	830.94	830.02
27	825.20	826.48	829.94	829.88	831.44	831.71	830.73	830.93	830.00
28	825.57	826.60	---	829.79	831.47	---	830.63	830.88	830.10
29	825.19	---	829.83	829.94	831.54	---	830.59	830.99	830.19
30	825.25	---	829.85	830.24	831.69	---	830.74	831.13	830.14
31	825.35	---	829.82	---	---	---	830.82	831.18	---

Table 8. *Daily mean water levels and water temperatures for pressure transducers and thermistors in borehole EI-25 at north site, January-September 1990*--Continued

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
				(Sensor L-33)--Continued					
				Mean water temperature, in degrees Celsius.					
				Approximate sensor elevation feet above sea level.					
1	---	10.3	10.3	10.2	10.0	---	---	9.7	---
2	---	10.3	10.3	10.2	10.0	---	---	9.7	9.7
3	---	10.3	10.3	10.2	10.0	---	9.7	9.7	9.7
4	---	10.3	10.3	10.2	10.0	9.8	9.7	9.7	9.7
5	---	10.3	10.3	10.1	10.0	9.8	9.7	9.7	9.7
6	---	10.3	10.3	10.1	10.0	9.8	9.7	9.7	9.7
7	---	10.3	10.3	10.1	10.0	9.8	9.7	---	9.7
8	---	10.3	10.3	10.1	10.0	9.8	9.7	---	9.7
9	---	10.3	10.3	10.1	10.0	9.8	9.7	---	9.7
10	---	10.3	---	10.1	10.0	9.8	9.7	---	9.7
11	---	10.3	---	10.1	10.0	9.8	9.7	---	9.7
12	---	10.3	---	10.1	10.0	9.8	9.7	---	9.8
13	---	10.3	---	10.1	10.0	9.8	9.7	---	9.8
14	---	10.3	---	10.1	10.0	9.8	---	9.7	9.7
15	---	10.3	---	10.1	10.0	9.8	---	9.7	9.7
16	---	10.3	---	10.1	10.0	---	---	9.7	9.8
17	---	10.3	---	10.1	9.9	---	---	9.7	9.8
18	---	10.3	---	10.1	9.9	---	---	9.7	9.8
19	---	10.3	---	10.1	9.9	---	---	9.7	9.8
20	---	10.3	---	10.1	9.9	---	---	9.7	9.8
21	---	10.3	10.2	10.1	9.9	---	---	9.7	9.8
22	---	10.3	10.2	10.1	9.9	---	---	9.7	---
23	---	10.3	---	10.1	9.9	---	---	9.7	---
24	---	10.3	---	10.1	9.9	---	---	9.7	9.8
25	---	10.3	---	10.1	9.9	9.8	9.7	9.7	9.8
26	10.3	10.3	10.2	10.1	9.9	9.7	9.7	9.7	9.8
27	10.3	10.3	10.2	10.1	9.9	9.7	9.7	9.7	9.8
28	10.3	10.3	---	10.0	9.9	---	9.7	9.7	9.8
29	10.3	---	10.2	10.0	9.9	---	9.7	9.7	9.8
30	10.3	---	10.2	10.0	9.9	---	9.7	9.7	9.8
31	10.3	---	10.2	---	---	---	9.7	9.7	---

Table 8. *Daily mean water levels and water temperatures for pressure transducers and thermistors in borehole EI-25 at north site, January-September 1990*--Continued

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
				(Sensor L-53)					
				Mean water level, in feet above sea level.					
				Approximate sensor elevation 774 feet above sea level.					
				Depth below land surface 53 feet.					
1	---	818.87	819.72	821.60	823.02	---	---	824.10	---
2	---	819.01	819.37	821.86	823.06	---	---	824.00	824.17
3	---	819.05	819.54	821.99	823.11	---	824.09	823.89	824.25
4	---	819.07	819.41	821.74	822.97	824.04	824.14	823.89	824.11
5	---	818.95	819.56	821.92	823.10	823.82	824.37	824.04	824.02
6	---	818.89	819.87	822.13	823.08	823.83	824.44	824.17	823.78
7	---	818.90	819.93	822.29	822.94	823.93	824.30	---	823.79
8	---	818.61	819.59	822.24	822.88	823.95	824.17	---	823.90
9	---	818.63	819.59	822.20	822.73	824.13	824.27	---	823.86
10	---	818.64	---	822.24	822.91	824.27	824.30	---	823.90
11	---	818.73	---	822.52	823.15	824.17	824.30	---	823.98
12	---	818.61	---	822.57	823.13	823.87	824.39	---	823.95
13	---	818.63	---	822.50	823.34	823.82	824.51	---	823.87
14	---	819.02	---	822.45	823.28	823.99	---	823.81	823.70
15	---	818.77	---	822.45	823.20	824.03	---	823.75	823.73
16	---	818.81	---	822.43	823.12	---	---	823.70	823.81
17	---	819.42	---	822.79	823.33	---	---	823.65	824.05
18	---	819.21	---	822.96	823.46	---	---	823.62	823.85
19	---	819.56	---	822.77	823.14	---	---	823.66	823.76
20	---	819.68	---	822.70	823.36	---	---	823.83	823.78
21	---	819.37	820.59	822.83	823.66	---	---	824.00	823.65
22	---	818.98	820.60	822.76	823.77	---	---	824.02	---
23	---	819.06	---	822.57	823.71	---	---	823.90	---
24	---	819.46	---	822.52	823.72	---	---	823.86	823.62
25	---	819.97	---	822.64	823.65	824.23	824.08	823.91	823.32
26	818.80	819.70	821.62	822.57	823.75	824.19	824.06	823.95	823.44
27	818.74	819.79	821.67	822.46	823.79	824.20	824.04	823.87	823.44
28	819.17	819.97	---	822.38	823.82	---	823.96	823.78	823.55
29	818.85	---	821.56	822.55	823.90	---	823.94	823.83	823.66
30	818.83	---	821.60	822.84	824.03	---	824.06	823.95	823.63
31	819.01	---	821.61	---	---	---	824.12	823.97	---

Table 8. *Daily mean water levels and water temperatures for pressure transducers and thermistors in borehole EI-25 at north site, January-September 1990*--Continued

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
				(Sensor L-53)--Continued					
				Mean water temperature, in degrees Celsius.					
				Approximate sensor elevation 774 feet above sea level.					
1	---	10.3	10.3	10.3	10.3	---	---	10.3	---
2	---	10.3	10.3	10.3	10.3	---	---	10.3	10.2
3	---	10.3	10.3	10.3	10.3	---	10.3	10.3	10.2
4	---	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.2
5	---	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.2
6	---	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.2
7	---	10.3	10.3	10.3	10.3	10.3	10.3	---	10.2
8	---	10.3	10.3	10.3	10.3	10.3	10.3	---	10.2
9	---	10.3	10.3	10.3	10.3	10.3	10.3	---	10.2
10	---	10.3	---	10.3	10.3	10.3	10.3	---	10.2
11	---	10.3	---	10.3	10.3	10.3	10.3	---	10.2
12	---	10.3	---	10.3	10.3	10.3	10.3	---	10.2
13	---	10.3	---	10.3	10.3	10.3	10.3	---	10.2
14	---	10.3	---	10.3	10.3	10.3	---	10.3	10.2
15	---	10.3	---	10.3	10.3	10.3	---	10.3	10.2
16	---	10.3	---	10.3	10.3	---	---	10.3	10.2
17	---	10.3	---	10.3	10.3	---	---	10.3	10.2
18	---	10.3	---	10.3	10.3	---	---	10.3	10.2
19	---	10.3	---	10.3	10.3	---	---	10.3	10.2
20	---	10.3	---	10.3	10.3	---	---	10.3	10.2
21	---	10.3	10.3	10.3	10.3	---	---	10.3	10.2
22	---	10.3	10.3	10.3	10.3	---	---	10.3	---
23	---	10.3	---	10.3	10.3	---	---	10.3	---
24	---	10.3	---	10.3	10.3	---	---	10.2	10.2
25	---	10.3	---	10.3	10.3	10.3	10.3	10.2	10.2
26	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.2	10.2
27	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.2	10.2
28	10.3	10.3	---	10.3	10.3	---	10.3	10.2	10.2
29	10.3	---	10.3	10.3	10.3	---	10.3	10.2	10.2
30	10.3	---	10.3	10.3	10.3	---	10.3	10.2	10.2
31	10.3	---	10.3	---	---	---	10.3	10.2	---

Table 8. *Daily mean water levels and water temperatures for pressure transducers and thermistors in borehole EI-25 at north site, January-September 1990*--Continued

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
				(Sensor L-75)					
				Mean water level, in feet above sea level.					
				Approximate sensor elevation 753 feet above sea level.					
				Depth below land surface 75 feet.					
1	---	784.99	785.48	786.09	786.75	---	---	789.04	---
2	---	785.08	785.20	786.22	786.82	---	---	788.97	789.57
3	---	785.11	785.26	786.30	786.89	---	788.18	788.90	789.62
4	---	785.13	785.19	786.08	786.77	787.61	788.21	788.91	789.56
5	---	785.06	785.27	786.14	786.86	787.50	788.42	789.06	789.49
6	---	784.99	785.53	786.28	786.89	787.49	788.53	789.20	789.29
7	---	784.96	785.62	786.38	786.80	787.57	788.46	---	789.26
8	---	784.73	785.37	786.34	786.74	787.60	788.36	---	789.33
9	---	784.63	785.30	786.28	786.64	787.76	788.46	---	789.30
10	---	784.61	---	786.28	786.74	787.89	788.51	---	789.34
11	---	784.68	---	786.44	786.98	787.88	788.54	---	789.43
12	---	784.58	---	786.48	786.98	787.68	788.64	---	789.40
13	---	784.53	---	786.43	787.13	787.64	788.77	---	789.33
14	---	784.82	---	786.39	787.12	787.76	---	788.97	789.21
15	---	784.69	---	786.38	787.05	787.81	---	789.02	789.25
16	---	784.69	---	786.36	786.96	---	---	789.00	789.31
17	---	785.07	---	786.57	787.11	---	---	788.95	789.53
18	---	785.02	---	786.71	787.23	---	---	788.93	789.42
19	---	785.23	---	786.61	786.99	---	---	788.97	789.35
20	---	785.36	---	786.54	787.11	---	---	789.12	789.39
21	---	785.18	786.10	786.62	787.35	---	---	789.31	789.31
22	---	784.93	786.02	786.59	787.46	---	---	789.39	---
23	---	784.92	---	786.44	787.42	---	---	789.33	---
24	---	785.14	---	786.40	787.43	---	---	789.30	789.38
25	---	785.55	---	786.45	787.37	788.17	788.79	789.37	789.16
26	784.84	785.43	786.47	786.42	787.42	788.16	788.80	789.43	789.28
27	784.82	785.47	786.45	786.35	787.47	788.17	788.82	789.38	789.31
28	785.10	785.63	---	786.28	787.49	---	788.78	789.27	789.43
29	784.96	---	786.28	786.38	787.55	---	788.75	789.31	789.56
30	784.93	---	786.24	786.58	787.65	---	788.89	789.43	789.58
31	785.05	---	786.18	---	---	---	789.01	789.46	---

Table 8. *Daily mean water levels and water temperatures for pressure transducers and thermistors in borehole EI-25 at north site, January-September 1990*--Continued

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
				(Sensor L-75)--Continued					
				Mean water temperature, in degrees Celsius.					
				Approximate sensor elevation 753 feet above sea level.					
1	---	10.1	10.1	10.1	10.1	---	---	10.1	---
2	---	10.1	10.1	10.1	10.1	---	---	10.1	10.1
3	---	10.1	10.1	10.1	10.1	---	10.1	10.1	10.1
4	---	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1
5	---	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1
6	---	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1
7	---	10.1	10.1	10.1	10.1	10.1	10.1	---	10.1
8	---	10.1	10.1	10.1	10.1	10.1	10.1	---	10.1
9	---	10.1	10.1	10.1	10.1	10.1	10.1	---	10.1
10	---	10.1	---	10.1	10.1	10.1	10.1	---	10.1
11	---	10.1	---	10.1	10.1	10.1	10.1	---	10.1
12	---	10.1	---	10.1	10.1	10.1	10.1	---	10.1
13	---	10.1	---	10.1	10.1	10.1	10.1	---	10.1
14	---	10.1	---	10.1	10.1	10.1	---	10.1	10.1
15	---	10.1	---	10.1	10.1	10.1	---	10.1	10.1
16	---	10.1	---	10.1	10.1	---	---	10.1	10.1
17	---	10.1	---	10.1	10.1	---	---	10.1	10.1
18	---	10.1	---	10.1	10.1	---	---	10.1	10.1
19	---	10.1	---	10.1	10.1	---	---	10.1	10.1
20	---	10.1	---	10.1	10.1	---	---	10.1	10.1
21	---	10.1	10.1	10.1	10.1	---	---	10.1	10.1
22	---	10.1	10.1	10.1	10.1	---	---	10.1	---
23	---	10.1	---	10.1	10.1	---	---	10.1	---
24	---	10.1	---	10.1	10.1	---	---	10.1	10.1
25	---	10.1	---	10.1	10.1	10.1	10.1	10.1	10.1
26	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1
27	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1
28	10.1	10.1	---	10.1	10.1	---	10.1	10.1	10.1
29	10.1	---	10.1	10.1	10.1	---	10.1	10.1	10.1
30	10.1	---	10.1	10.1	10.1	---	10.1	10.1	10.1
31	10.1	---	10.1	---	---	---	10.1	10.1	---