Water Resources Data New Jersey Water Year 1993

Volume 2. Ground-Water Data

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NJ-93-2
Prepared in cooperation with the New Jersey Department of Environmental Protection and Energy and with other agencies

CALENDAR FOR WATER YEAR 1993

1992

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1993

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United States Department of the Interior

GEOLOGICAL SURVEY
Water Resources Division
Mountain View Office Park
810 Bear Tavern Road, Suite 206
West Trenton, New Jersey 08628

I am pleased to announce the release of our Annual report "Water Resources Data for New Jersey, Water Year 1993". This report was prepared by the U.S. Geological Survey, in cooperation with the State of New Jersey as well as local and federal government agencies.

This report is being published again in two volumes:

Volume 1.--Surface-water data.

Volume 2.--Ground-water data.

Volume 1 contains all records for surface water in the State and includes stream discharge and surface-water-quality measurements, elevations of lakes and reservoirs, major surface-water diversions and tidal elevations. Special sections are devoted to low-flow and crest-stage data as well as to summaries of tidal-crest elevations in the New Jersey estuaries and intracoastal waterways.

Streamflow data in Volume 1 again are presented in the format that was introduced in the 1988 report. The format includes extensive tabular presentations of streamflow statistics. Also, station numbers are included in the table of contents, and tables of discontinued surface-water and surface-water-quality stations are presented.

Volume 2 includes data and hydrographs of most continuous record wells operated by the U.S. Geological Survey throughout the State. In addition, water-level measurements are presented for the manually measured observation wells. A table of discontinued ground-water-level sites for which data are available is included. The New Jersey District well numbers are included in the table of contents to facilitate cross-referencing. Hydrographs of selected manually measured wells have been included. Whenever possible, the hydrographs of wells equipped with water-level recorders have been lengthened to show 10 years of record.

Copies of this report in paper or microfiche are for sale through the National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia 22161. Data can also be provided in various machine-readable formats on magnetic tape or 5-1/4 inch and 3-1/2 inch floppy disk. Beginning with the 1990 water year, all water-data reports are also available on Compact Disc - Read Only Memory (CD-ROM). When ordering, refer to U.S. Geological Survey Water-Data Report NJ-93-1 (for Volume 1) and NJ-93-2 (for Volume 2). For further information on this report, or to change or remove your address from our mailing list, please contact me at the above address or telephone (609) 771-3980.

Sincerely,

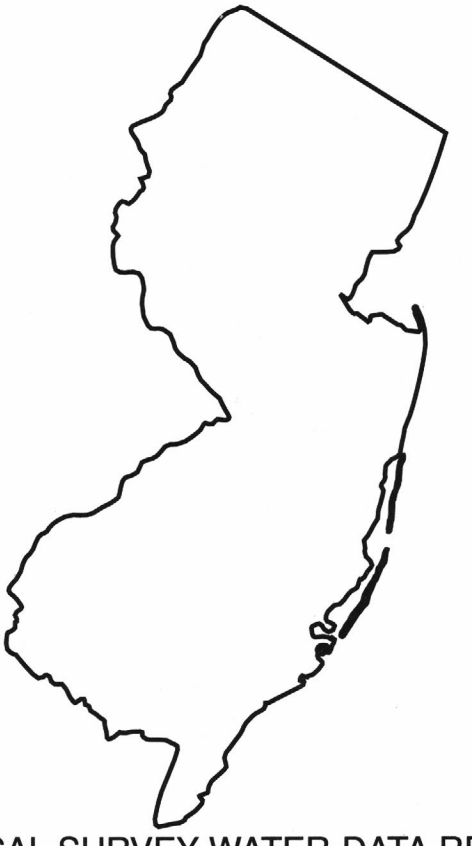
William R. Bauersfeld

William R. Bauersfeld, Chief
Hydrologic Data Assessment Program

Water Resources Data New Jersey Water Year 1993

Volume 2. Ground-Water Data

by W.R. Bauersfeld, W.D. Jones, and C.E. Gurney



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NJ-93-2
Prepared in cooperation with the New Jersey Department of Environmental Protection and Energy and with other agencies

UNITED STATES DEPARTMENT OF THE INTERIOR

BRUCE BABBITT, Secretary

GEOLOGICAL SURVEY

Gordon P. Eaton, Director

For information on the water program in New Jersey write to:

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West Trenton, New Jersey 08628

1994

PREFACE

This volume of the annual hydrologic data report of New Jersey is one of a series of annual reports that document hydrologic data gathered from the U.S. Geological Survey's surface- and ground-water data-collection networks in each State, Puerto Rico, and the Trust Territories. These records of streamflow, ground-water levels, and water quality provide the hydrologic information needed by state, local, and federal agencies, and the private sector for developing and managing our Nation's land and water resources.

Hydrologic data for New Jersey are contained in 2 volumes:

Volume 1. Surface-Water Data
Volume 2. Ground-Water Data

This report is the culmination of a concerted effort by dedicated personnel of the U.S. Geological Survey who collected, compiled, analyzed, verified, and organized the data, and who typed, edited, and assembled the report. The authors had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to Geological Survey policy and established guidelines. The following individuals contributed significantly to the completion of the report.

Jacob Gibs G. Allan Brown Edward W. Moshinsky George M. Farlekas

M.D. Morgan word processed the text of the report, and G.L. Simpson and D.K. Sun prepared the illustrations.

The data were collected, computed, and processed by the following U.S. Geological Survey personnel:

M. Campbell	V. Corcino	J.D. Joyner	J.J. Scudder
G.L. Centinaro	M.J. DeLuca	D.S. Kauffman	T.J. Reed
R.S. Cole	J.F. Dudek	K.L. Laubach	T.P. Suro

Some water-quality samples were collected by the following N.J. Department of Environmental Protection and Energy personnel:

A.A. Altieri	R. Maruska	J.R. Spiritosanto
R.F. Fenton	J.R. Specht	

This report was prepared in cooperation with the State of New Jersey and with other agencies under the general supervision of Eric J. Evenson, Assistant District Chief for Hydrologic Data Assessment and Information Management; Janice R. Ward, District Chief, New Jersey; Donald E. Vaupel, Area Assistant Regional Hydrologist, Mid-East Programs; and William J. Carswell, Jr., Acting Regional Hydrologist, Northeastern Region.

Selected Water Resources Abstracts
Input Transaction Form

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3. Accession No. **W**

4. Title
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5. Report Date June 1994

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7. Author(s)
W.R. Bauersfeld, W.D. Jones, and C.E. Gurney

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9. Organization
U.S. Geological Survey, Water Resources Division
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11. Contract/Grant No.

12. Sponsoring Organization Same as above (#9).

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15. Supplementary Notes
Prepared in cooperation with the New Jersey Department of Environmental Protection and Energy, and with other agencies.

16. Abstract
Water Resources data for the 1993 water year for New Jersey consists of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; and water levels and water quality in ground water. Volume 2 contains records of ground-water levels from 199 wells and water-quality analyses of ground water from 49 wells. These data represent that part of the National Water Data System operated by U.S. Geological Survey and cooperating Federal, State, and local agencies in New Jersey.

17a. Descriptors
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17c. COWRR Field & Group

18. Availability
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Abstractor

Institution

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GROUND-WATER LEVEL RECORDS

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GROUND-WATER LEVEL RECORDS

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GROUND-WATER LEVEL RECORDS

QUALITY OF GROUND WATER RECORDS

GROUND WATER WELLS, BY COUNTY, FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME

QUALITY OF GROUND WATER RECORDS

WATER RESOURCES DATA - NEW JERSEY, 1993

INTRODUCTION

The Water Resources Division of the U.S. Geological Survey, in cooperation with State agencies, obtains a large amount of data pertaining to the water resources of New Jersey each water year. These data, accumulated during many water years, constitute a valuable data base for developing an improved understanding of the water resources of the State. To make these data readily available to interested parties outside the Geological Survey, the data are published annually in this report series entitled "Water Resources Data - New Jersey."

This report series includes records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; and water levels and water quality of ground-water wells. This volume contains records for water quality at 49 wells and water levels at 199 wells. Locations of these sites are shown on figures 11 and 12. These data represent that part of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in New Jersey.

This series of annual reports for New Jersey began with the 1961 water year with a report that contained only data relating to the quantities of surface water. For the 1964 water year, a similar report was introduced that contained only data relating to water quality. For the 1975 through 1989 water years, the report format was changed to present, in one volume, data on quantities of surface water, quality of surface and ground water, and ground-water levels. Beginning with the 1977 water year, these data were published in two volumes. Beginning with the 1990 water year, the report format was changed to include surface-water and surface-water-quality data in Volume 1 and ground-water-level and ground-water-quality data in Volume 2.

Prior to introduction of this series and for several water years concurrent with it, water-resources data for New Jersey were published in U.S. Geological Survey Water-Supply Papers. Data on stream discharge and stage and on lake or reservoir contents and stage, through September 1960, were published annually under the title "Surface-Water Supply of the United States, Part 1B." For the 1961 through 1970 water years, the data were published in two 5-year reports. Data on chemical quality, temperature, and suspended sediment for the 1941 through 1970 water years were published annually under the title "Quality of Surface Waters of the United States," and water levels for the 1935 through 1974 water years were published under the title "Ground-Water Levels in the United States." The above mentioned Water-Supply Papers may be consulted in the libraries of the principal cities of the United States and may be purchased from the Books and Open-File Reports Section, U.S. Geological Survey, Federal Center, Box 25425, Denver, Colorado, 80225.

Publications similar to this report are published annually by the Geological Survey for all States. These official Survey reports have an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "U.S. Geological Survey Water-Data Report NJ-93-2." For archiving and general distribution, the reports for 1971-74 water years also are identified as water-data reports. These water-data reports are for sale in paper copy or in microfiche by the National Technical Information, Service, U.S. Department of Commerce, Springfield, VA 22161. Beginning with the 1990 water year, all water-data reports will also be available on Compact Disc - Read Only Memory (CD-ROM). All data reports published for the current water year for the entire Nation, including Puerto Rico and the Trust Territories, will be reproduced on a single CD-ROM disc.

Additional information, including current prices, for ordering specific reports may be obtained from the District Chief at the address given on the back of the title page or by telephone (609) 771-3900. A limited number of CD-ROM discs will be available for sale by the Books and Open-File Reports Section, U.S. Geological Survey, Federal Center, Box 25425, Denver, Colorado 80225.

COOPERATION

This report was prepared by the U.S. Geological Survey under cooperative agreement with the following organizations:

New Jersey Department of Environmental Protection and Energy, Robert C. Shinn, Jr., Commissioner.
County of Gloucester, Robert V. Scolpino, Director of Planning.
Atlantic Highlands Water Department, Frank Dougherty, Superintendent.
Medford Township Department of Municipal Utilities, Bruce Eichmann, Sr., Director
Washington Township Municipal Utilities Authority, Paul R. DeCosta, Superintendent.

SUMMARY OF HYDROLOGIC CONDITIONS

Streamflow

Streamflow for the 1993 water year varied from above normal in the northern part of the State (115 percent of normal) to below normal in the southern part of the State (96 percent of normal). Precipitation for the water year ranged from 45.8 inches, 105 percent of the 30-year reference-period (1961-90) mean, at Trenton to 42.07 inches, 95.7 percent of the 30-year mean, at Newark. Precipitation in the Atlantic City area was 39.68 inches, 98.5 percent of the 30-year mean. Figure 1 shows monthly precipitation at three National Weather Service sites compared with the 30-year means. Combined contents of 13 major water-supply reservoirs was about average at the beginning of the year, increased to maximum contents in March, slowly decreased to below average in July, and continued to decrease through September (see figure 2).

Water year 1993 began with streamflow slightly below normal throughout the State. By the end of October streamflow had declined to about 60 percent of normal because precipitation in October was only about 40 percent of average. A storm on November 3 produced more than 1.5 inches of rain, which resulted in increased streamflow. Additional storms on November 13 and 23 and other intermittent rainfall resulted in precipitation being about 130 percent of average. Streamflow increased to about 80 percent of normal for November. Weather conditions in December were harsh. A severe storm along the coast on December 11 and 12 resulted in tidal flooding from Cape May to Bergen County and caused estimated damages of 750 million dollars. Wind gusts up to 90 miles per hour were recorded. Property damage was extensive. The storm was reported to be the worst in 30 or more years. At Toms River, more than 5 inches of precipitation was recorded. Inland communities also experienced flooding as streams exceeded bankfull stage. Recorded precipitation from the storm at Hightstown was more than 5.6 inches. Most gaging stations recorded peaks for the year from this event. Streamflow in December was about 140 percent of normal. Precipitation in January and February was about 90 percent of normal and streamflow was about 80 percent of normal. Snowfall during the winter months (December through March) was below normal, with maximum accumulations of 29 inches in the northern part of the State and 20 inches in the southern part. Precipitation in March was well above average but much of it fell as snow. The above-average precipitation combined with snowmelt resulted in above-normal streamflow for March. April began with heavy precipitation. On April 1 more than 1.5 inches was recorded from storms at Newark, Cranford, and Woodcliff Lake. Additional storms on April 11, 17, 22, and 27 and snowmelt resulted in streamflow that was about 140 percent of normal. More precipitation was reported in the northern part of the State than in the southern and coastal areas. Severe flooding resulted, especially in the communities of Wayne and Lincoln Park in the Passaic River Basin. Some minor flooding of the Delaware River in Lambertville and nearby localities was reported. Precipitation was below average from May through August, ranging from 50 percent of average at Newark to 74 percent of average at Atlantic City. Streamflow was directly affected by the below-average precipitation and decreased from about 70 percent of normal in May to about 40 percent of normal in August. Drought warnings were considered. Reservoir contents fell to below average by the end of July and continued to decrease to about 50 percent of capacity by the end of September. Precipitation in September was about 180 percent of average in the northern part of the State and about average in the southern part. Resulting streamflow in September increased to about 95 percent of normal in the southern part of the State and to about 60 percent of normal in the northern part. Streamflow at the end of the water year was below normal.

Streamflow at the index station for northern New Jersey (South Branch Raritan River near High Bridge) averaged 141 ft^3/s for the water year; this flow is 115 percent of the 1919-93 average. Streamflow at the index station for southern New Jersey (Great Egg Harbor River at Folsom) averaged 82.5 ft^3/s for the water year; this flow is 96.2 percent of the 1926-93 average. The observed annual mean discharge of the Delaware River at Trenton was 12,550 ft^3/s, which is 108 percent of the 1913-93 average. The Delaware River is highly regulated by reservoirs and diversions. The natural flow at Trenton (adjusted for upstream storage and diversion) for the year was 126 percent of the long-term (1961-90) normal. Monthly mean discharge at each of these index gaging stations during the current water year and the long-term normal monthly discharge are shown in figure 3. Annual mean discharge at each of these index gaging stations and the mean annual discharge for the period of record are shown in figure 4.

Combined usable storage in 13 major water-supply reservoirs in New Jersey decreased from 62.1 billion gallons (77.3 percent of capacity) on September 30, 1992, to 39.6 billion gallons (49.3 percent of capacity) on September 30, 1993. Storage in Wanaque Reservoir decreased from 18.8 billion gallons (63.3 percent of capacity) on September 30, 1992, to 9.3 billion gallons (31.5 percent of capacity) on September 30, 1993. Pumped storage in Round Valley Reservoir, the largest capacity reservoir in the State, decreased from 52.0 billion gallons (94.5 percent of capacity) on September 30, 1992, to 51.8 billion gallons (94.2 percent of capacity) on September 30, 1993.

Water Quality

Below-normal precipitation in October, May, June, and July caused decreased dilution and, in turn, increased concentrations of dissolved solids in streams throughout the State. In November, December, and March, above-normal precipitation caused higher streamflows and increased dilution of dissolved solids. Dilution of dissolved solids generally results in an improvement in water quality because concentrations of undesirable substances, such as trace elements, organic compounds, nutrients, bacteria, and nuisance aquatic organisms,

usually also are diluted. The degree of dilution is apparent when monthly mean values of specific conductance, which is related directly to dissolved-solids concentration, for water year 1993 are compared with mean specific-conductance values for an earlier period. Monthly mean specific-conductance values for the Delaware River at Trenton, a large drainage area in central New Jersey and parts of New York and Pennsylvania, in 1993 are compared with the monthly mean values for 1968-92 in figure 5. Specific-conductance values were above the maximum historical monthly mean values for May, June, July, and August, reflecting below-normal streamflow. Normal streamflow in October caused monthly mean specific conductance to approximate the historical October mean for the previous 25 years. The mean monthly specific-conductance values for November and January were below the historical monthly mean values as a result of above-normal streamflows. Instrument malfunction during April resulted in insufficient data to calculate the mean monthly specific conductance for that month.

The monthly mean values of the temperature of the water flowing past the continuous-monitoring station on the Delaware River at Trenton in water year 1993 were about equal to the historical monthly mean values for the months of November, December, February, May, June, August, and September (fig. 6). The lowest historical monthly mean water temperature was equaled in October and April. The highest historical monthly mean water temperature was equaled in January and exceeded in July.

The extreme monthly median concentrations of dissolved oxygen in the Delaware River at Trenton during the 1993 water year were within the range of historical (1968-92) extreme median values (fig. 7). The monthly median of the daily minimum concentrations was lowest in July and August (7.2 and 7.1 milligrams per liter, respectively), when the monthly mean water temperature was highest for the year. The monthly median of the daily maximum concentrations was highest (14.9 milligrams per liter) in February, when the monthly mean water temperature was 2°C, the minimum for the year. The median of daily maximum concentrations in June and July (11.9 and 12.5 milligrams per liter, respectively) are not inversely related to the mean water temperature because oxygen produced by aquatic-plant photosynthesis increased the daily maximum concentration of dissolved oxygen. Instrument malfunction during December resulted in insufficient data to calculate the median values for the daily maximums and minimums for that month.

Ground-Water Levels

Ground-water levels fluctuate in response to such factors as recharge from precipitation, discharge of ground water to streams, changes in atmospheric pressure, evapotranspiration, and ground-water withdrawals from wells. In addition, tidal fluctuations affect water levels in aquifers near oceans, bays, and estuaries. When recharge to the ground-water system exceeds discharge, water levels rise; conversely, when discharge from wells, to surface-water bodies, and to the atmosphere through evapotranspiration exceeds recharge, water levels decline. Records of water levels in wells, therefore, are useful in evaluating seasonal and long-term changes in ground-water storage and local and regional effects of pumping from wells (Rooney, 1971, p. 20).

Changes in ground-water levels during the 1993 water year were determined from a Statewide network of observation wells. Ground-water levels in many water-table observation wells were nearly equal to their long-term averages at the beginning of the water year. Water levels rose to above average during March and April, then declined throughout the summer. By August, water levels had declined to average or below average.

Water levels in observation wells that tap the heavily pumped confined aquifers in the southern part of the Coastal Plain continued to undergo long-term net declines, whereas water levels rose dramatically in the confined aquifers in the northern part of the Coastal Plain (Monmouth, eastern Middlesex, and northern Ocean Counties). The greatest water-level decline in an observation well in the 1993 water year occurred in the New Brooklyn Park 3 observation well screened in the Wenonah-Mount Laurel aquifer in Camden County (NJ-WRD well number 07-0478), where the previous record low was exceeded by 4.3 feet. The water level in this well has declined a total of 38.2 feet since April 1983. Other aquifers in the southern New Jersey Coastal Plain in which water levels fell below previous lows of record include the Potomac-Raritan-Magothy aquifer system, the Piney Point aquifer, the Atlantic City 800-foot sand of the Kirkwood Formation, and the Kirkwood-Cohansey aquifer system.

Near the beginning of the 1991 water year, long-term declines in water levels reversed in several observation wells screened in the deep confined aquifers in the northern part of the Coastal Plain (Monmouth, eastern Middlesex, and northern Ocean Counties). Water levels in these wells continued to rise during the 1992 and 1993 water years. This trend resulted, in part, from the substitution of surface water for the ground water previously used for public supply in parts of Middlesex and Monmouth Counties. In addition, some public water-supply systems shifted their withdrawals from the deep confined aquifers to the shallower confined aquifers and the unconfined aquifer. Since October 1990, the water level in the Marlboro 1 (NJ-WRD well number 25-0272) observation well screened in the Potomac-Raritan-Magothy aquifer system has risen more than 60 feet; the water level in the Allaire State Park C observation well (NJ-WRD well number 25-0429) screened in the Englishtown aquifer system has risen more than 69 feet; and the water level in the DOE-Sea Girt observation well (NJ-WRD well number 25-0486) screened in the Wenonah-Mount Laurel aquifer has risen more than 85 feet.

Water-level hydrographs included in this report illustrate the data presented in the tables. Daily mean water levels in two water-table observation wells in 1993 are compared with monthly extremes and long-term averages in figure 8. These two wells are the Lebanon State Forest 23-D well (NJ-WRD well number 05-0689) in Burlington County and the Taylor well (NJ-WRD well number 37-0202) in Sussex County. For further comparison, 20-year water-level hydrographs of two wells in the Coastal Plain--one in an unconfined aquifer (NJ-WRD well number 05-0689) and one in a confined aquifer (NJ-WRD well number 07-0413)--are presented in figure 9. In addition, multiyear hydrographs that include the water-level data for the 1993 water year are provided with the tabular data for most of the wells presented in this report.

SALTWATER-MONITORING NETWORK

The usability of the ground water from the Coastal Plain of New Jersey depends primarily on its chemical quality. In nearshore areas, actual or potential saltwater contamination of ground water is of paramount importance, and chloride concentration is an accurate index of the extent and degree of saltwater contamination. The presence of high concentrations of chloride alone is not definitive proof of active saltwater encroachment, however. It may represent a natural static condition common in shallow deposits bordering saline creeks, bays, and marshes. In the deep formations, saline ground water may be residual water trapped in the sediments. Saltwater encroachment in these areas can be proven by analysis of periodically collected samples that indicates an increase in chloride concentration with time. Because saltwater encroachment is indicated by changes in chloride concentration rather than by actual concentration, the establishment of a chloride-concentration value as a limit that can be used to indicate encroachment is difficult; however, concentrations of chloride less than 10 ppm (parts per million) generally do not indicate encroachment (Seaber, 1963, p. 5).

The U.S. Geological Survey established a saltwater-monitoring network in the Coastal Plain of New Jersey in the 1940's to document and evaluate the movement of saline water into freshwater aquifers that serve as sources of water supply. Water samples are collected from public supply, industrial, and domestic wells and, to a lesser extent, from U.S. Geological Survey observation wells. Sampling is concentrated along the coast from Raritan Bay to Cape May and along the Delaware River from Cape May County to Gloucester County. In the 1993 water year, water samples were collected from 23 wells in 7 counties. The results of analysis of these samples collected from the Saltwater-Monitoring-Network wells are presented in tables in the section of this report titled "Quality of Ground Water."

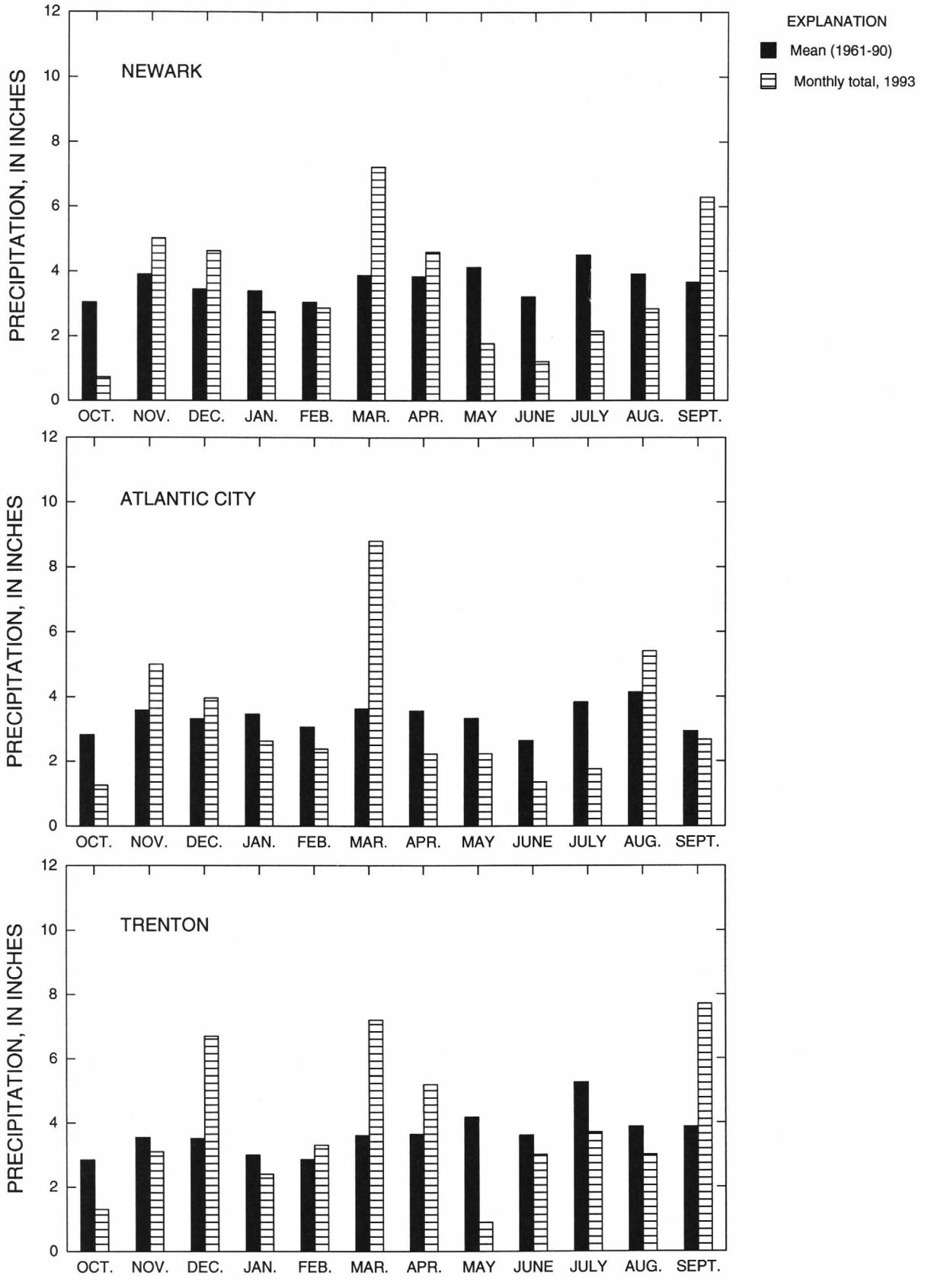
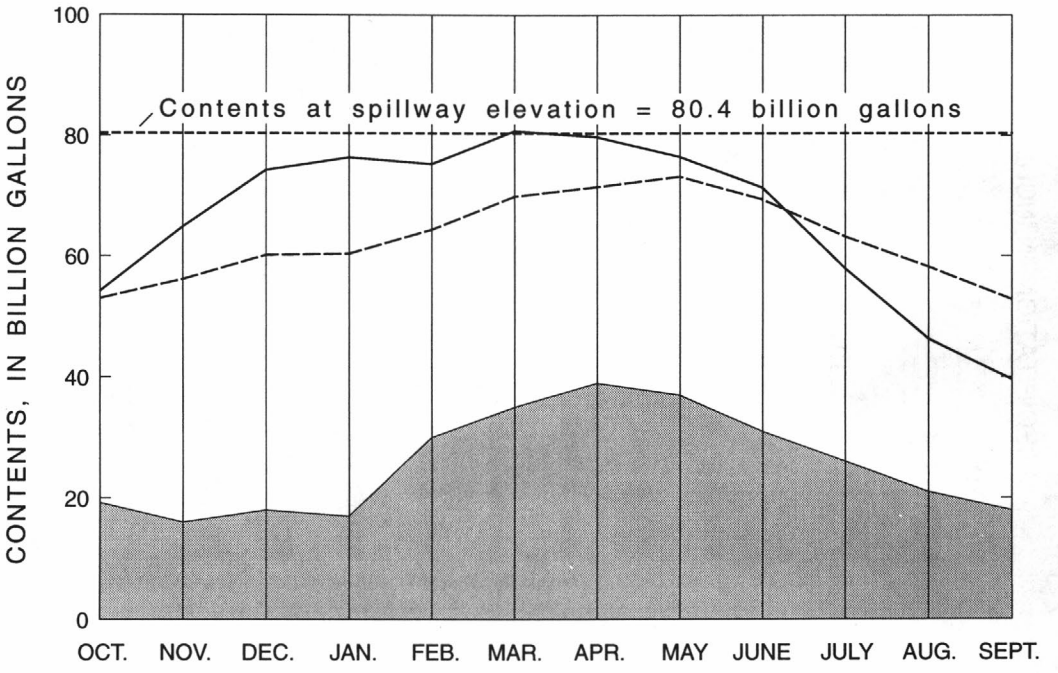


Figure 1.--Monthly precipitation at three National Weather Service locations.

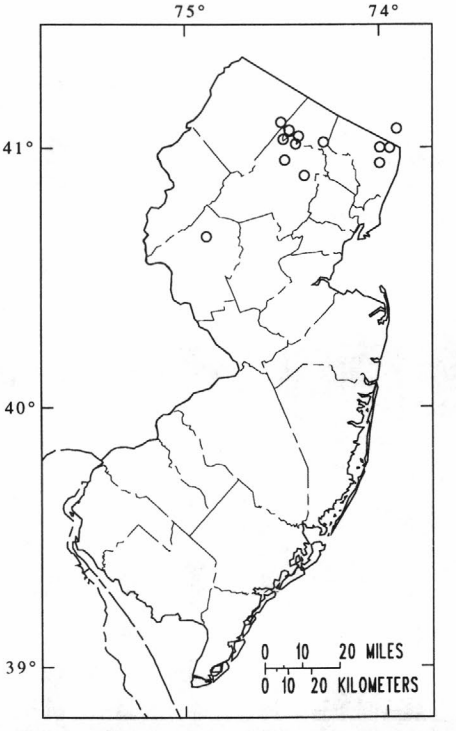


EXPLANATION

Average contents, 1961-90

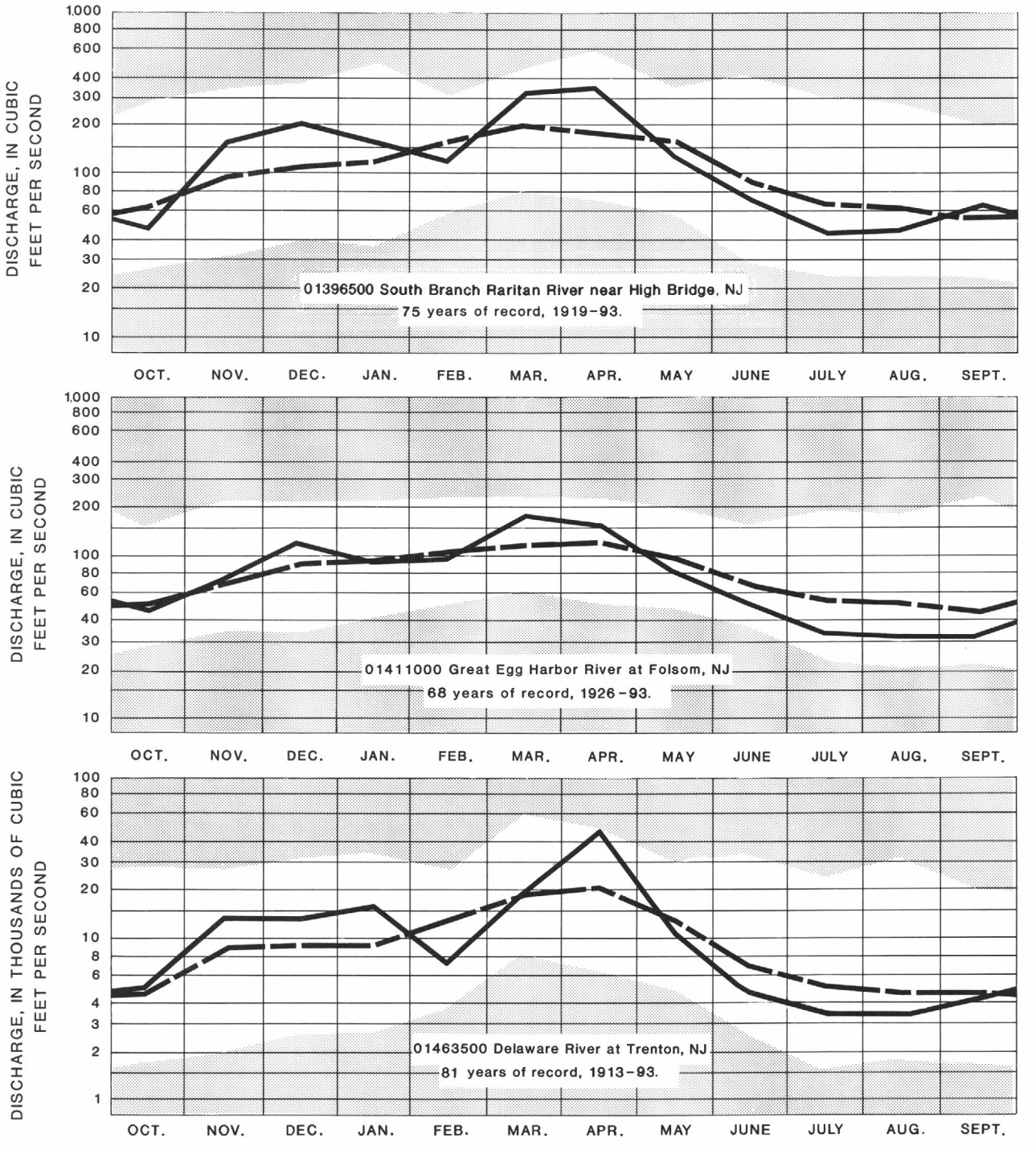
Month-end contents, 1993 water year

Shaded area indicates lowest monthly contents for reference period



Map showing locations of reservoirs

Figure 2.--Combined usable storage in 13 major water-supply reservoirs.



Unshaded area.--Indicates range between highest and lowest mean recorded for the month, prior to 1993 water year.

Broken line.--Indicates normal (median of the monthly means) for the standard reference period, 1961-90.

Solid line.--Indicates observed monthly mean flow for the 1993 water year.

Figure 3.--Monthly mean discharge at index gaging stations.

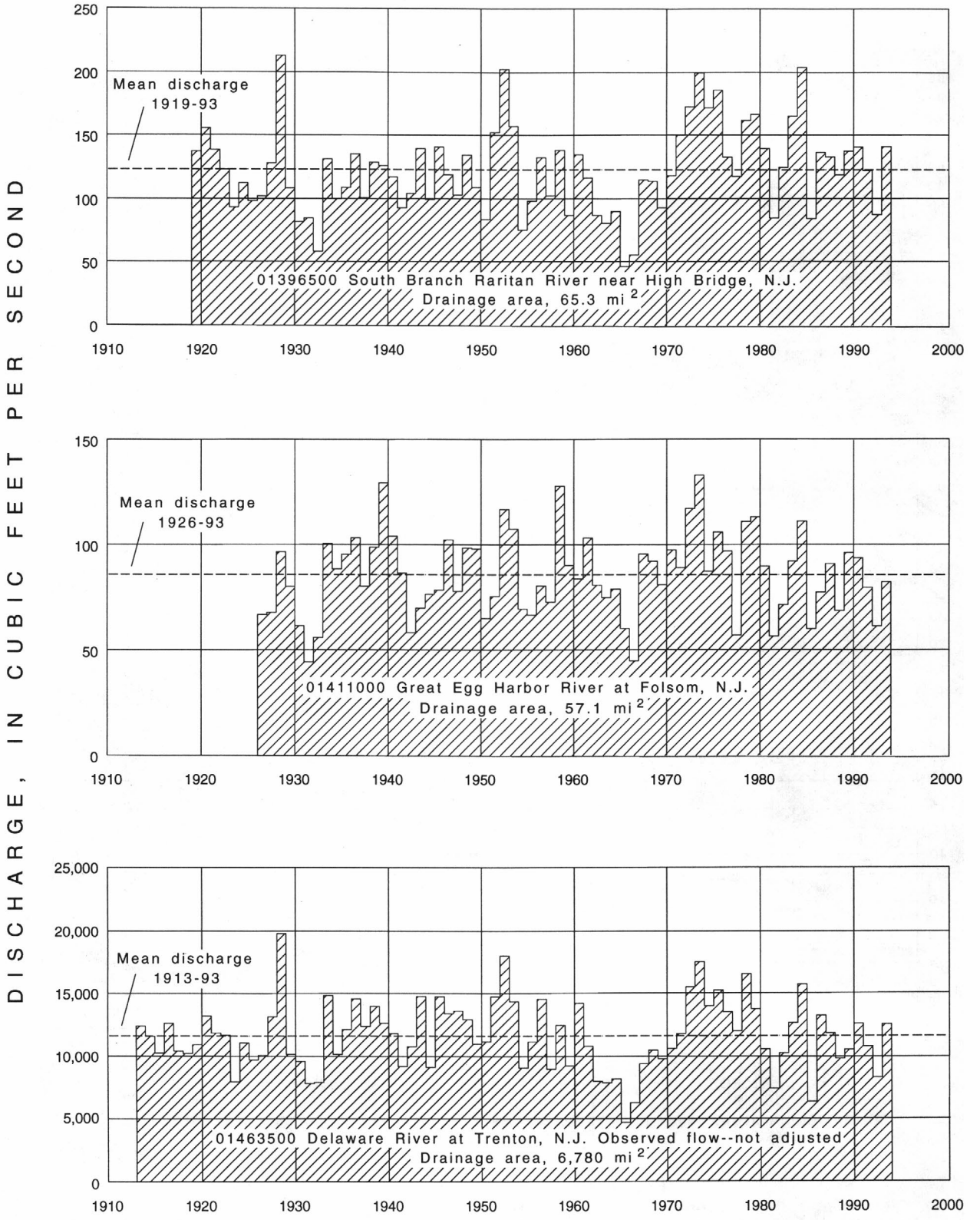
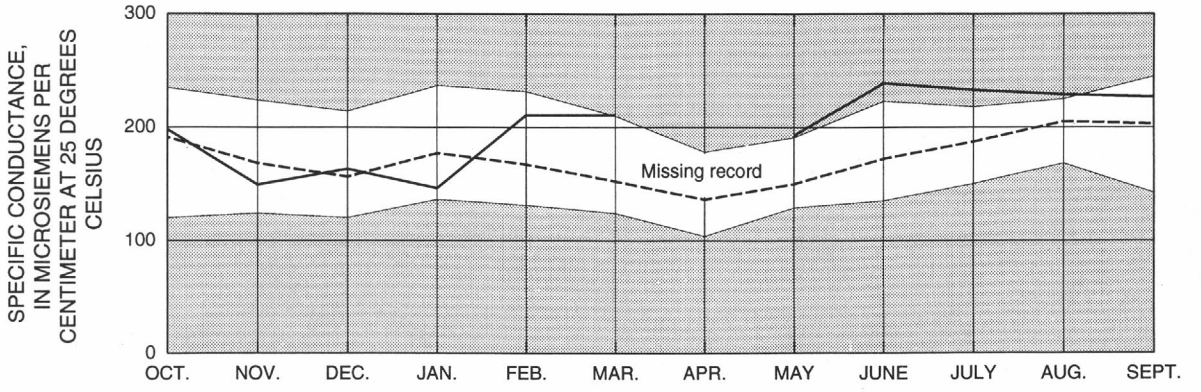


Figure 4.--Annual mean discharge at index gaging stations.



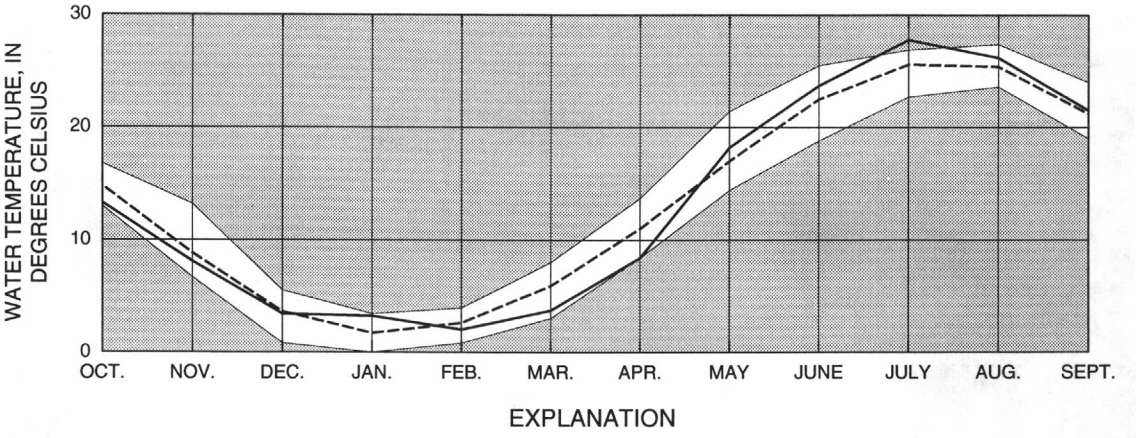
EXPLANATION

UNSHADED AREA--Indicates the range between the highest monthly mean of daily values and the lowest monthly mean of daily values, water years 1968-92.

SOLID LINE--Indicates the monthly mean of daily values for water year 1993.

BROKEN LINE--Indicates the mean of monthly mean values for water years 1968-92.

Figure 5.--Monthly mean specific conductance at Delaware River at Trenton, New Jersey.



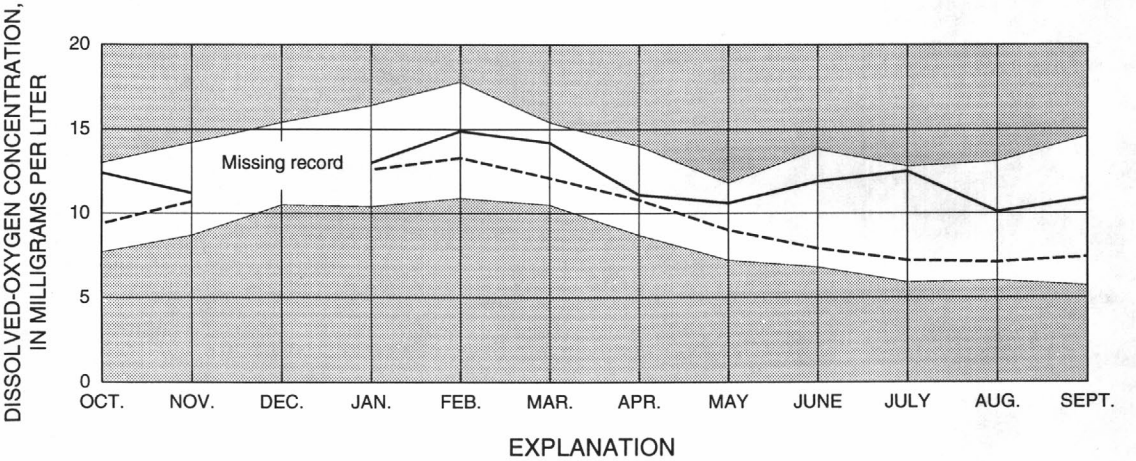
EXPLANATION

UNSHADED AREA--Indicates the range between the highest monthly mean of daily values and the lowest monthly mean of daily values, water years 1968-92.

SOLID LINE--Indicates the monthly mean of daily values for water year 1993.

BROKEN LINE--Indicates the mean of monthly mean values for water years 1968-92.

Figure 6.--Monthly mean water temperature at Delaware River at Trenton, New Jersey.



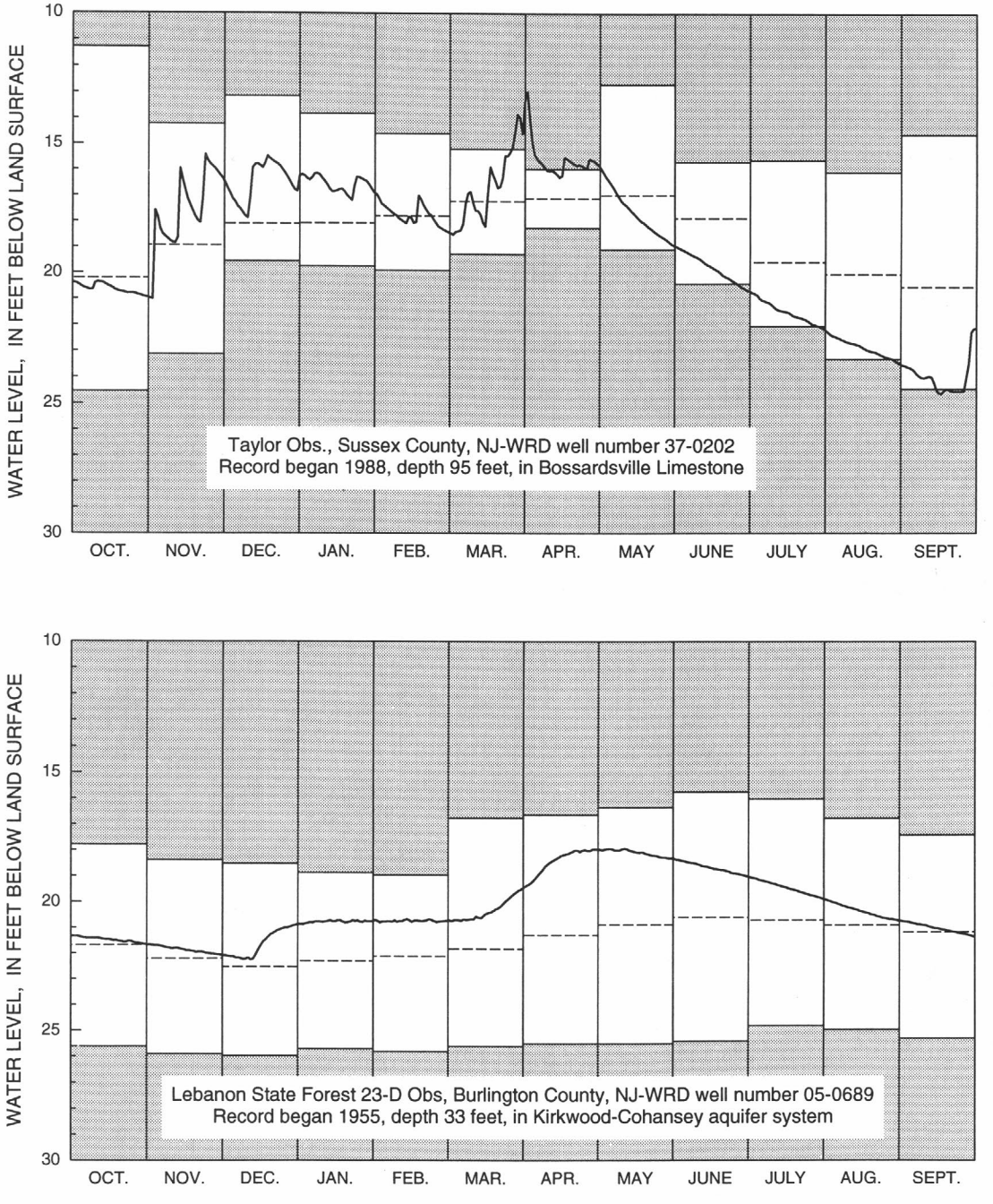
EXPLANATION

UNSHADED AREA--Indicates the range between the highest monthly median of daily maximum values and the lowest monthly median of daily minimum values, water years 1968-92.

SOLID LINE--Indicates the monthly median of daily maximum values for water year 1993.

BROKEN LINE--Indicates the monthly median of daily minimum values for water year 1993.

Figure 7.--Monthly medians of daily maximum and minimum dissolved-oxygen concentrations at Delaware River at Trenton, New Jersey.



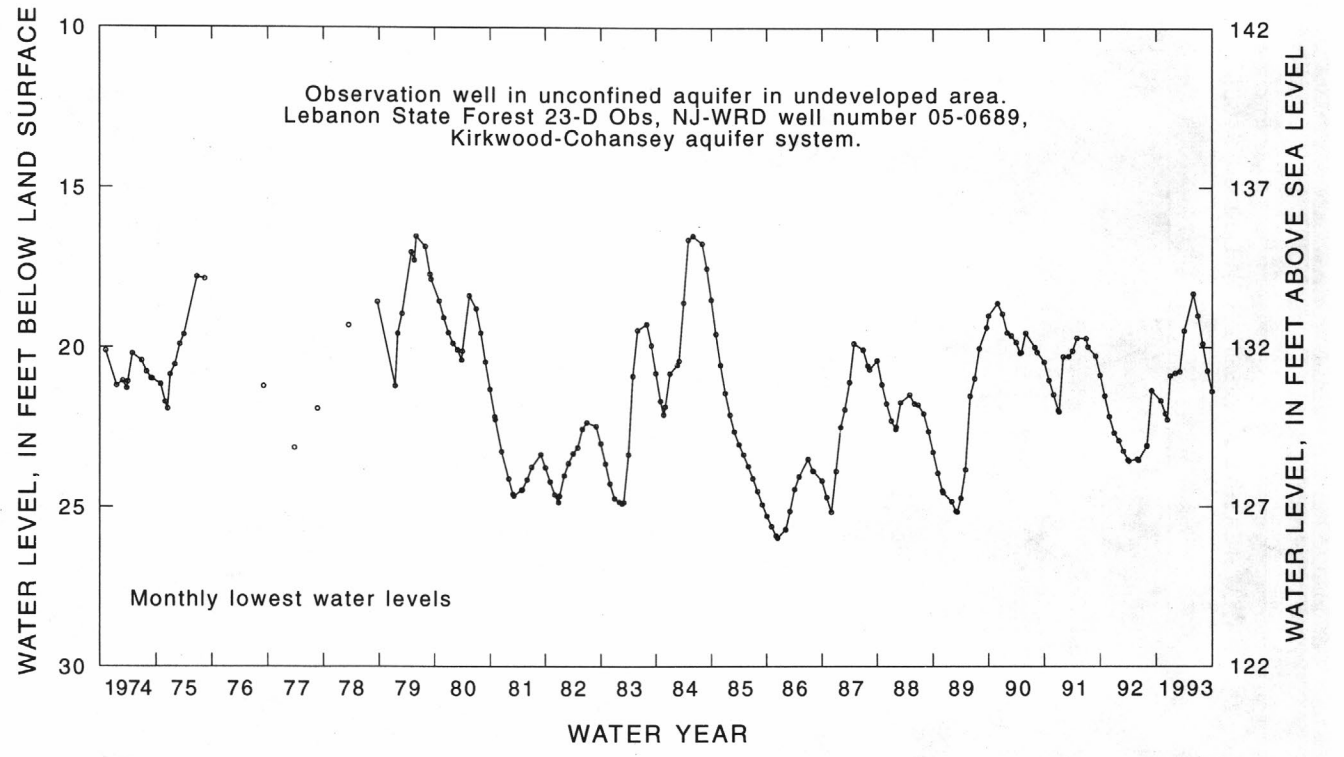
EXPLANATION

Unshaded area--Indicates range between highest and lowest instantaneously recorded monthly water level, prior to the current year.

Dashed line--Indicates average of monthly mean water levels, prior to the current year.

Solid line--Indicates daily mean water level for the current year.

Figure 8.--Ground-water levels at key observation wells.



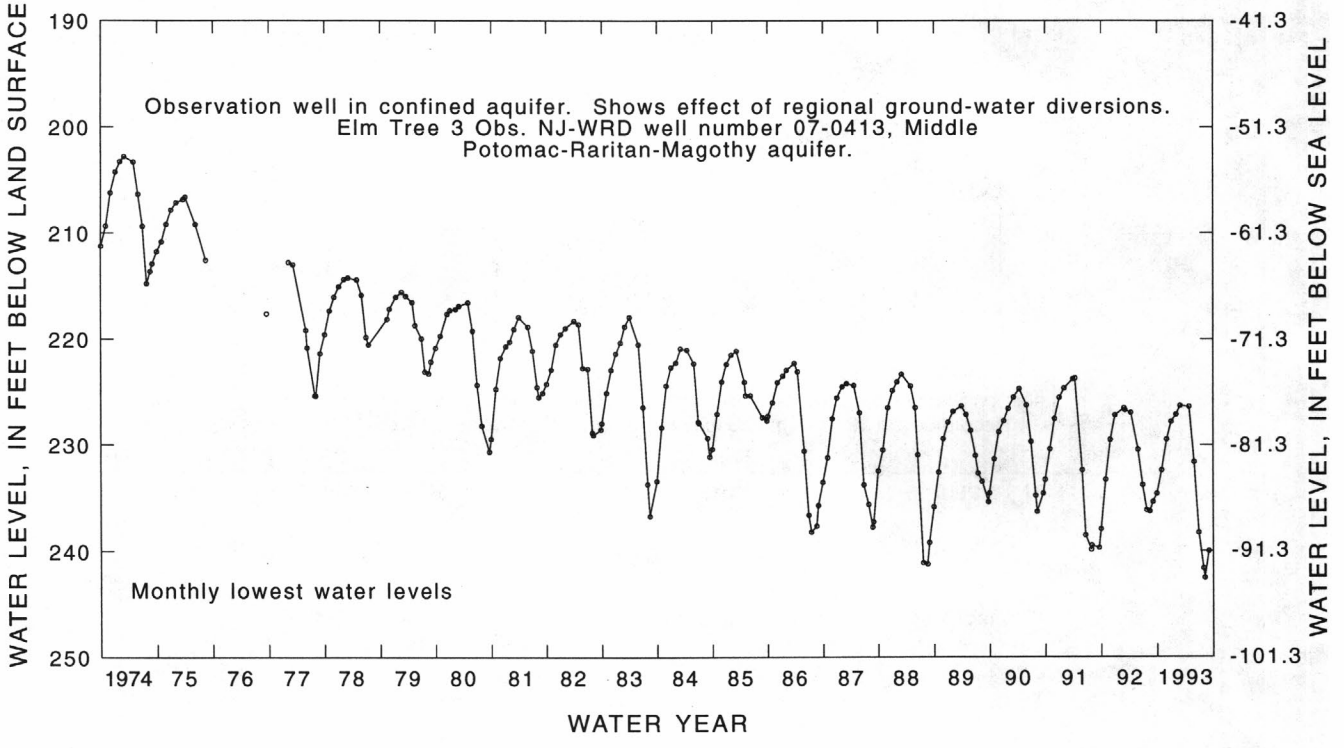


Figure 9.--Twenty-year water-level hydrographs of an observation well in an unconfined aquifer and an observation well in a confined aquifer.

EXPLANATION OF THE RECORDS

The ground-water level and ground-water quality data published in this report are for the 1993 water year that began October 1, 1992, and ended September 30, 1993. A calendar of the water year is provided on the inside of the front cover. The locations of the wells where data were collected are shown in figures 11 and 12. The following sections of the introductory text are presented to provide users with a more detailed explanation of how the hydrologic data published in this report were collected, analyzed, computed, and arranged for presentation.

Station Identification Numbers

Each well in this report is assigned a unique identification number. This number is unique in that it applies specifically to a given well and to no other. The number is assigned when a well is first established and is retained for that well indefinitely. The latitude-longitude system used by the U.S. Geological Survey to assign identification numbers to ground-water well sites is based on geographic location.

Latitude-Longitude System

The identification numbers for wells are assigned according to the grid system of latitude and longitude. The number consists of 15 digits. The first six digits denote the degrees, minutes, and seconds of latitude; the next seven digits denote degrees, minutes, and seconds of longitude; and the last two digits (assigned sequentially) identify the wells within a 1-second grid. This site-identification number, once assigned, is a pure number and has no locational significance. In the rare instance where the initial determination of latitude and longitude are found to be in error, the well will retain its initial identification number; however, its true latitude and longitude will be listed in the LOCATION paragraph of the station description. (See figure 10 below.)

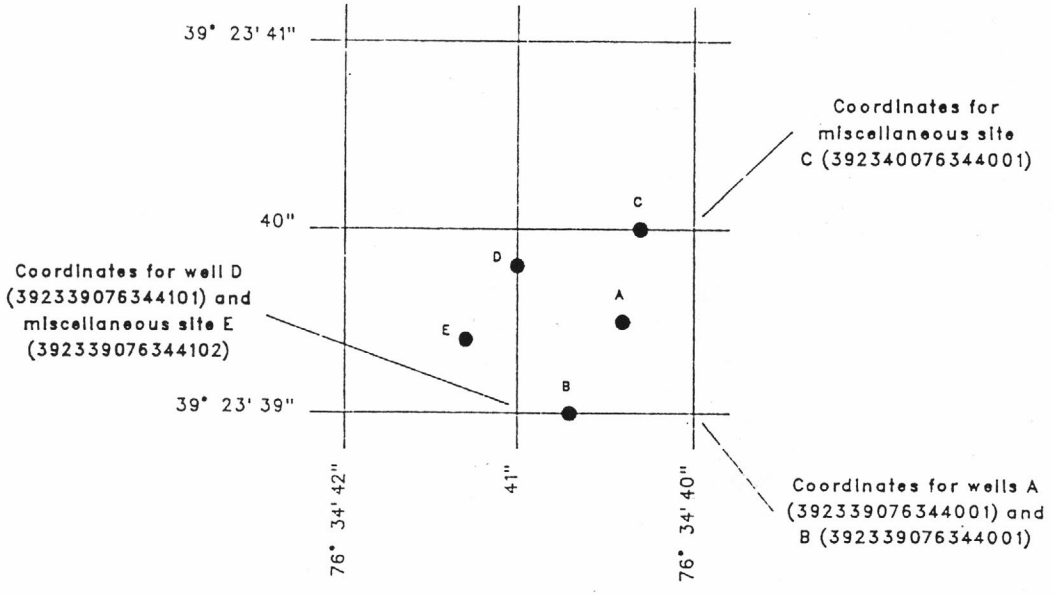


Figure 10.--System for numbering wells and miscellaneous sites (latitude and longitude)

Records of Ground-Water Levels

Water-level data from the New Jersey Observation-Well Network and other current ground water projects are given in this report. These data are intended to provide a historical record of water-level changes in the State's most important aquifers. The locations of these wells are shown in figure 11.

Data Collection and Computation

Measurements of water levels are made in many types of wells under varying conditions. The methods of measurement are standardized to incorporate continuous precision. The equipment and measuring techniques used at each well ensure that measurements are of consistent accuracy and reliability.

Water-level data are presented by counties arranged in alphabetical order. The prime identification number for a given well is the 15-digit number that appears in the upper left corner of the table. The secondary identification number is the NJ-WRD well number, a hyphenated 6 digit identification number assigned to all New Jersey wells in the Ground Water Site Inventory (GWSI) data base. The first two digits are a code for the county in which the well is located and the last four digits are a sequence number. These NJ-WRD well numbers are being used now in the ground-water level descriptions, to identify ground-water quality sites, and on the corresponding location maps in this report.

Water levels are measured manually using steel tape or electric sensing device at regular time intervals. Some wells are equipped with digital water-level recorders or various pressure transducer-data logger combinations to observe daily fluctuations in water level. Beginning in the 1977 water year, water-level recorders were removed from some wells and replaced by water-level extremes recorders. The extremes are read from these recorders at about three month intervals, but the actual dates of occurrence of these extremes (highest and lowest water levels) are unknown. In this report, the water-level extremes are given together with the manually measured water levels.

Water-level measurements in this report are given in feet with reference to land-surface datum (lsd). Land-surface datum is a datum plane that is approximately at land surface at each well. The altitude of the land-surface datum and the height of the measuring point (MP) above or below land-surface datum are given in each well description.

Data Presentation

At wells with recording devices, each well record consists of three parts; the station description, the data table of water levels observed during the current water year, and a hydrograph of the water levels for a selected time period including the current water year. A description of each well precedes the tabular data and hydrograph. The comments to follow clarify information presented under the various headings of the well description.

LOCATION.--This paragraph follows the well-identification number and reports the latitude and longitude (given in degrees, minutes, and seconds); the hydrologic-unit number; a description of the location; and the owner's name. The hydrologic unit number is a code for the river basin where the well is located (U.S. Geological Survey, 1974: Hydrologic Unit Map).

AQUIFER.--This entry designates by name and geologic age the aquifer(s) open to the well.

WELL CHARACTERISTICS.--This entry describes the well in terms of depth, diameter of screened interval or open hole segment, method of construction, use, and additional information known about the physical characteristics of the well.

INSTRUMENTATION.--This paragraph provides information on both the frequency of measurement and the collection method used, allowing the user to better evaluate the reported water-level extremes by knowing whether they are based on weekly, monthly, or some other frequency of measurement.

DATUM.--This entry describes both the measuring point and the land-surface altitude at the well. The measuring point is described physically (such as top of coupling, top of recorder shelf, plug in pump base and so on), and in relation to land surface (such as 1.3 ft above land-surface). The altitude of the land-surface datum is described in feet above sea level; it is reported with a precision depending on the method of determination.

REMARKS.--This entry describes factors that may influence the water level in a well or the measurement of the water level. It may give other important data relevant to the well site.

PERIOD OF RECORD.--This entry indicates the period for which there are records for the well. It reports the month and year of the start of collection of water-level records by the U.S. Geological Survey and the words "to current year" if the records are to be continued into the following year. Periods for which water-level records are available, but are not published by the Geological Survey, are noted.

EXTREMES FOR PERIOD OF RECORD.--This entry identifies the highest and lowest water levels of the period of record, with respect to land-surface datum, and the dates of their occurrence.

A table of water levels follows the station description for each well. Water levels are reported in reference to either land surface or sea level datum. For wells equipped with recorders, only abbreviated tables are published. Daily mean water-levels are listed for every fifth day and at the end of the month (eom). The highest and lowest water levels of the water year and their dates of occurrence are shown on a line below the abbreviated table. Because all values are not published for wells with recorders, the extremes may be values that are not listed in the table. Missing records are indicated by dashes in place of the water level. A hydrograph for a selected period of record follows each water-level table.

Records of Ground-Water Quality

Records of ground-water quality in this report usually consist of only one set of measurements for the water year. Because ground-water movement is normally slow compared to surface water, frequent measurements are not necessary for monitoring purposes. More frequent measurements may be necessary for studying ground-water problems, trends, or processes. Locations of wells for which water-quality data are published are shown in figure 12.

Data Collection and Computation

The records of ground-water quality in this report were obtained from water-quality monitoring studies in specific areas. Consequently, chemical analyses are presented for some counties but not for others. As a result, the records for this year, by themselves, do not provide a balanced view of ground-water quality Statewide. Such a view can be attained only by considering records for this year in context with similar records obtained for these and other counties in earlier years.

In ground-water observation wells, water in the casing may not be representative of aquifer water quality. To collect samples representative of aquifer water, samples are collected only after at least three casing volumes of water have been pumped from the well and measurements of temperature, specific conductance, and pH have stabilized during the pumping.

Data Presentation

The records of ground-water quality are published in a section titled QUALITY OF GROUND WATER immediately following the ground-water-level records. Data for quality of ground water are listed alphabetically by County and are identified by NJ-WRD well number. No descriptive statements are given for ground-water-quality records; however, the well number, depth of well, date of sampling, and other pertinent data are given in the table containing the chemical analyses of the ground water.

Remark Codes

The following remark codes may appear with the water-quality data in this report:

PRINTED OUTPUT	REMARK
E	Estimated.
>	Actual value is known to be greater than the value shown.
<	Actual value is known to be less than the value shown.
K	Results based on colony count outside the acceptance range (non-ideal colony count).
L	Biological organism count less than 0.5 percent (organism may be observed rather than counted).
D	Biological organism count equal to or greater than 15 percent (dominant).
&	Biological organism estimated as dominant.
*	Laboratory determination (used when field determination is otherwise expected or indicated in column heading).

CURRENT WATER RESOURCES PROJECTS IN NEW JERSEY

The Geological Survey is currently involved in a number of hydrologic investigations in the State of New Jersey. The following is a list of these investigations. Results are published at the conclusion of short-term projects or periodically in the case of long-term projects. Hydrologic data from these projects are entered into the WATSTORE data base. Subsequent sections contain information on recent publications and on WATSTORE.

Compositional Modeling of Organic Transport and Biodegradation of Organic Compounds in the Unsaturated Zone and Ground Water

Confining Unit Chemistry

Data Base Development and Determination of Confinement for Public Supply Wells in New Jersey

Development of a Geographical Information System Data Base, Gloucester County, New Jersey

Estimation of Non-Permitted Constituent Loads in the Musconetcong, Rockaway, and Whippany River Basins

Flood Characteristics of New Jersey Streams

Geohydrology at Picatinny Arsenal in Morris County, New Jersey

Ground-Water Contamination with Chlorinated Volatile Organic Compounds at Picatinny Arsenal, Morris County, New Jersey

Ground-Water Data Collection Network

Ground-Water Flow Modeling in the Passaic River Flood Tunnel

Ground-Water Levels in Major Aquifers of the Coastal Plain, 1993

Ground-Water Resources and Saltwater Intrusion of Cape May County

Hydrologic Controls on Well-Contributing Areas in New Jersey

Hydrology of Surficial Aquifer Systems

Hydrology of Wetlands

Interpretation of Water Quality in New Jersey Streams, 1976-1986

Investigation of Optimal Recharge to Augment Ground-Water Supply in Peninsular Cape May County, New Jersey

Investigation of Water Quality in the Wanaque South Diversion Area, Morris and Passaic Counties, New Jersey

Land Subsidence Related to Ground-Water Withdrawals in the Coastal Plain Aquifer of New Jersey

Mercury Distribution, Sources and Mobility in the Kirkwood-Cohansey Aquifer System, New Jersey Coastal Plain

Modeling and Experimental Investigation of Hydrocarbon Transport and Biodegradation in the Unsaturated Zone

Multispecies Transport in Ground Water

New Jersey Water Use Program

Nonpoint-Source Ground-Water Contamination, Coastal Plain of Long Island, New York, and of Southern New Jersey

Optimal Withdrawals from a Coastal Aquifer in Cape May County Subject to Saltwater Encroachment: Numerical Analysis and Case Study

Optimization of Ground-Water-Withdrawal Strategies for the Coastal Plain Aquifer System of New Jersey

Pesticide Vulnerability of Public Ground-Water Supplies

Radium and Trace Metal Leaching in the Kirkwood-Cohansey Aquifer System

Relation of Agricultural Pesticide Usage to Presence of these Pesticides in Surficial Waters Used for Water Supply

Quality of Water Data Collection Network

Regionalization of Low Flows for New Jersey Streams

Relation Between Land Use and Ground-Water Quality in Franklin Township, Gloucester County, New Jersey

Relations between Streamflow, Salinity, and Water Quality in Estuaries of the Toms and Metedeconk Rivers, New Jersey

Removal of Volatile Ground-Water Contaminants by Inducing Air-Phase Transport

Review of Remedial Investigation for the Vineland Chemical Superfund Site

Small-Scale Watershed Delineation for GIS (14-Digit Hydrologic Unit Codes)

Somerset County Flood-Monitoring Network

Spatial Analysis of Statewide Water-Quality Data

Surface Water Data Collection Network

Surface-Water-Temperature Statistics for New Jersey Streams

Surfactant Sorption to Soil and its Effect on the Distribution of Anthropogenic Organic Compounds

Transport of Organic Contaminants Transport and Plume Delineation of Contaminant in Fractured Bedrock of the Passaic Formation, Rutgers University Busch Campus, New Brunswick, New Jersey

WATER-RELATED REPORTS FOR NEW JERSEY COMPLETED BY THE GEOLOGICAL SURVEY IN RECENT YEARS

Ayers, M.A., Wolock, D.M., McCabe, G.J., Hay, L.E., and Tasker, G.D., 1993, Sensitivity of water resources in the Delaware River Basin to climate variability and change: U.S. Geological Survey Open-File Report 92-52, 68 p.

Baehr, A.L., Fischer, J.M., Lahvis, Matthew, Baker, R.J., and Smith, N.P., 1991, A method to estimate microbial degradation rates for hydrocarbons based on gas transport in the unsaturated zone at a gasoline spill site in Galloway Township, N.J.: Proceedings of the Fifth U.S. Geological Survey Toxic Substances Hydrology Technical Meeting, March 11-15, 1991, Monterey, California, Water-Resources Investigations Report 91-4034, p. 250-255.

Baker, R.J., Fischer, J.M., Smith, N.P., Koehnlein, S.A., and Baehr, A.L., 1991, Gas chromatography methods for determining the composition of vapor phase in gasoline contaminated soils: Proceedings of the Fifth U.S. Geological Survey Toxic Substances Hydrology Technical Meeting, March 11-15, 1991, Monterey, California, Water-Resources Investigations Report 91-4034, p. 280-286.

Barringer, J.L., and Johnsson, P.A., in press, Theoretical considerations and a simple method for measuring alkalinity and acidity in low-pH waters: U.S. Geological Survey Water-Resources Investigations Report 89-4029.

Barton, Cynthia, and Kozinski, Jane, 1991, Hydrogeology of the region of Greenwich Township, Gloucester County, New Jersey: U.S. Geological Survey Water-Resources Investigations Report 90-4198, 77 p., 11 pls.

Barton, G.J., and Ivahnenko, Tamara, 1992, Hydrogeologic, geophysical, and ground-water-quality reconnaissance at and near the Ciba-Geigy Superfund Site, Ocean County, New Jersey: U.S. Geological Survey Water-Resources Investigations Report 91-4048, 84 p., 10 pls.

Bauersfeld, W.R., Moshinsky, E.W., and Gurney, C.E., 1993, Water resources data for New Jersey, 1992--Volume 1 - Surface-Water Data: U.S. Geological Survey Water-Data Report NJ-92-1.

Bauersfeld, W.R., Jones, W.D., and Gurney, C.E., 1993, Water resources data, New Jersey, 1992--Volume 2 - Ground-Water Data: U.S. Geological Survey Water-Data Report NJ-92-2.

Bauersfeld, W.R., and Schopp, R.D., 1991, New Jersey floods and droughts: in National Water Summary, 1988-89--Floods and droughts: U.S. Geological Survey Water-Supply Paper 2375, p. 401-405.

Bruell, C.J., Gilbert, C.D., and Baehr, A.L., 1991, Non-Fickian vapor transport in sand columns contaminated with volatile organic compounds: Proceedings of the Fifth U.S. Geological Survey Toxic Substances Hydrology Technical Meeting, March 11-15, 1992, Monterey, California.

Cho, H.J., Jaffe, P.R., and Smith, J.A., 1991, Design of a field experiment to study the dynamics of trichloroethylene vapors in the unsaturated zone during an infiltration event: Proceedings of the Fifth U.S. Geological Survey Toxic Substances Hydrology Technical Meeting, March 11-15, 1992, Monterey, California.

Fischer, J.M., Baehr, A.L., and Smith, N.P., 1991, An investigation of the transport and microbial degradation of hydrocarbons in the subsurface at a gasoline spill site in Galloway Twp., New Jersey: Proceedings of the Fifth U.S. Geological Survey Toxic Substances Hydrology Technical Meeting, March 11-15, 1992, Monterey, California.

Gibs, Jacob, Imbrigiotta, T.E., and Turner, Kenneth, 1990, Bibliography on sampling ground water for organic compounds: U.S. Geological Survey Open-File Report 90-564, 22 p..

Gronberg, J.M., Pucci, A.A., Jr., and Birkelo, B.A., 1991, Hydrogeologic framework of the Potomac-Raritan-Magothy aquifer system, northern Coastal Plain of New Jersey: U.S. Geological Survey Water-Resources Investigations Report 90-4016, 37 p., 8 pls.

Hickman, R.E., 1992, Water-quality data from reconnaissance surveys of selected estuaries in southern New Jersey, July-October 1989: U.S. Geological Survey Open-File Report 91-491, 61 p.

Hill, M.C., Lennon, G.P., Brown, G.A., Hebson, C.S., and Rheaume, S.J., 1992, Geohydrology of, and simulation of ground-water flow in, the valley-fill deposits in the Ramapo River Valley, New Jersey: U.S. Geological Survey Water-Resources Investigations Report 90-4151, 92 p.

Horn, M.A., and Bratton, Lisa, 1991, Ground-water withdrawals from Coastal Plain aquifers for public supply and self-supplied industrial use in Middlesex and Monmouth Counties, New Jersey, 1901-85: U.S. Geological Survey Water-Resources Investigations Report 90-4083, 50 p.

Jacobsen, Eric, Hardy, M.A., and Kurtz, B.A., 1993, Hydrologic conditions in the Jacobs Creek, Stony Brook, and Beden Brook drainage basins, west-central New Jersey, 1986-88: U.S. Geological Survey Water-Resources Investigations Report 91-4164, 104 p., 1 pl.

Johnsson, P.A., and Barringer, J.L., 1993, Water quality and hydrogeochemical processes in McDonalds Branch Basin, New Jersey Pinelands, 1984-88: U.S. Geological Survey Water-Resources Investigations Report 91-4081, 111 p.

Lewis, J.C., Hochreiter, J.J., Jr., Barton, G.J., Kozinski, Jane, and Spitz, F.J., 1991, Hydrogeology of, and ground-water quality in, the Potomac-Raritan-Magothy aquifer system in the Logan Township region, Gloucester and Salem Counties, New Jersey: U.S. Geological Survey Water-Resources Investigations Report 90-4142, 92 p., 11 pls.

McAuley, S.D., Nicholson, R.S., Barringer, J.L., and Blyskun, G.J., 1992, Plan to evaluate the hydrogeology of the valley-fill and carbonate-rock aquifers near Long Valley in the New Jersey Highlands: New Jersey Geological Survey Open-File Report 92-3, 24 p.

McDonald, C.L., Gibs, Jacob, Ehlke, T.A., and Koehnlein, S.A., 1992, Preservation of volatile aromatic hydrocarbons with silver salts: Proceedings of Water Quality Technology Conference, American Water Works Association, November 11-15, 1990, San Diego, California, p. 995-1008.

Pucci, A.A., Jr., Ehlke, T.A., and Owens, J.P., 1992, Confining unit effects on water quality in the New Jersey Coastal Plain: Ground Water, v. 30, no. 3, May-June 1992, p. 415-427.

Pucci, A.A., Jr., and Owens, J.P., in press, Geochemical variations in pore squeezed ground-water samples from the Freehold, New Jersey, corehole, in Proceedings of the 1988 U.S. Geological Survey Workshop on Geology and Geohydrology of the Atlantic Coastal Plain: U.S. Geological Survey Circular 1058.

Pucci, A.A., Jr., Pope, D.A., and Gronberg, J.M., in press, Hydrogeology, ground-water flow model, and saltwater intrusion of the Potomac-Raritan-Magothy aquifer system in the northern Coastal Plain of New Jersey.

Schaefer, F.L., Harte, P.T., Smith, J.A., and Kurtz, B.A., 1993, Hydrologic conditions in the upper Rockaway River Basin, New Jersey, 1984-86: U.S. Geological Survey Water-Resources Investigations Report 91-4169, 103 p., 2 pls.

Schopp, R.D., and Burns, R.J., 1991, Local flood warning systems in New Jersey: Proceedings of the Fifteenth Annual Conference of the Association of State Floodplain Managers, June 10-14, 1991, Denver, Colorado, p. 172-175.

Smith, J.A., Cho, H.J., Jaffe, P.R., MacLeod, C.L., and Koehnlein, S.A., 1992, Sampling and analysis of unsaturated-zone water for trichloroethene: A comparison of four methods: Proceedings of the Fifth U.S. Geological Survey Toxic Substances Hydrology Technical Meeting, March 11-15, 1992, Monterey, California.

Spitz, F.J., and Barringer, T.H., 1992, Ground-water hydrology and simulation of saltwater encroachment, shallow aquifer system of southern Cape May County, New Jersey: U.S. Geological Survey Water-Resources Investigations Report 91-4191, 87 p.

Szabo, Zoltan, and Zapecza, O.S., 1991, Geologic and geochemical factors controlling uranium, radium-226, and radon-222 in ground water, Newark Basin, New Jersey, in Gunderson, L.C.S., and Wanty, R.B., eds., Field studies of radon rocks, soils, and water: U.S. Geological Survey Bulletin 1971, p. 243-265.

Vowinkel, E.F., and Siwiew, S.F., 1991, Plan to evaluate the effects of hydrogeologic conditions and human activities on water quality in the Coastal Plain of New York and New Jersey: U.S. Geological Survey Water-Resources Investigations Report 91-4091, 42 p.

Watt, M.K., and Johnson, M.L., 1992, Water-resources of the unconfined aquifer system of the Great Egg Harbor River Basin, New Jersey, 1989-90: U.S. Geological Survey Water-Resources Investigations Report 91-4126, 5 pls.

Zapecza, O.S., Brickey, D.W., and Ulery, R.L., in press, Delineation of lineaments by radar and photographic imagery in the northern Coastal Plain of New Jersey: U.S. Geological Survey Water-Resources Investigations Report 88-4121.

ACCESS TO WATSTORE DATA

The U.S. Geological Survey is the principal Federal water-data agency and, as such, collects and disseminates about 70 percent of the water data currently being used by numerous State, local, private, and other Federal agencies to develop and manage our water resources. As part of the Geological Survey's program of releasing water data to the public, a large-scale computerized system has been developed for the storage and retrieval of water data collected through its activities. The National Water Data Storage and Retrieval System (WATSTORE) was established in 1972 to provide an effective and efficient means for the processing and maintenance of water data collected through the activities of the U.S. Geological Survey and to facilitate release of the data to the public. A variety of useful products, ranging from data tables to complex statistical analyses such as Log Pearson Type III, can be produced using WATSTORE. The system resides on the central computer facilities of the U.S. Geological Survey at its National Center in Reston, Virginia, and consists of related files and data bases.

- Station Header File - Contains descriptive information on more than 440,000 sites throughout the United States and its territories where the U.S. Geological Survey collects or has collected data.

- Daily Values File - Contains more than 220 million daily values of stream flows, stages, reservoir contents, water temperatures, specific conductances, sediment concentrations, sediment discharges, and ground-water levels.

- Peak Flow File - Contains approximately 500,000 maximum (peak) streamflow and gage-height values at surface-water sites.

- Water Quality File - Contains approximately 2 million analyses of water samples that describe the chemical, physical, biological, and radio-chemical characteristics of both surface and ground water.

- Ground-Water Site Inventory Data Base - Contains inventory data for over 900,000 wells, springs, and other sources of ground water. The data includes site location, geohydrologic characteristics, well-construction history, and one-time field measurements such as water temperature.

In 1976, the U.S. Geological Survey opened WATSTORE to the public for direct access. The signing of a Memorandum of Agreement with the Survey is required to obtain direct access to WATSTORE. The system can be accessed either synchronously or asynchronously. The requestor will be expected to pay all computer costs he/she incurs. Direct access may be obtained by contacting:

U.S. Geological Survey
National Water Data Exchange
421 USGS National Center
Reston, Virginia 22092

In addition to providing direct access to WATSTORE, data can be provided in various machine-readable formats on magnetic tape or 5-1/4 inch and 3-1/2 inch floppy disk; and, as noted in the introduction, on CD-ROM discs. Beginning with the 1990 water year, all water-data reports will also be available on Compact Disc - Read Only Memory (CD-ROM). All data reports published for the current water year for the entire Nation, including Puerto Rico and the Trust Territories, will be reproduced on a single CD-ROM disc. Information about the availability of specific types of data or products, and user charges, can be obtained locally from each of the Water Resources Division's District offices. (See address on the back of the title page.) A limited number of CD-ROM discs will be available for sale by Books and Open-File Reports Section, U.S. Geological Survey, Federal Center, Box 25425, Denver, Colorado 80225.

DEFINITION OF TERMS

Terms related to ground-water levels, ground-water quality, and other hydrologic data, as used in this report, are defined below. See also table for converting English units to International System (SI) Units on the inside of the back cover.

Aquifer is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

Artesian means confined and is used to describe a well in which the water level stands above the top of the aquifer tapped by the well. A flowing artesian well is one in which the water level is above the land surface.

Bacteria are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, while others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. This group includes coliforms that inhabit the intestine of warm-blooded animals and those that inhabit soils. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria which ferment lactose with gas formation within 48 hours at 35°C. In the laboratory these bacteria are defined as all the organisms that produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35°C plus or minus 1.0°C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal coliform bacteria are bacteria that are present in the intestine or feces of warm-blooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory they are defined as all organisms that produce blue colonies within 24 hours when incubated at 44.5°C plus or minus 0.2°C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal streptococcal bacteria are bacteria found also in the intestine of warm-blooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as Gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at 35°C plus or minus 1.0°C on KF-streptococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Continuing-record station is a specified site which meets one or all conditions listed:

1. When chemical samples are collected daily or monthly for 10 or more months during the water year.

2. When water temperature records include observations taken one or more times daily.

Dissolved refers to that material in a representative water sample which passes through a 0.45 um membrane filter. This is a convenient operational definition used by Federal agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate.

Dissolved-solids concentration of water is determined either analytically by the "residue-on-evaporation" method, or mathematically by totaling the concentrations of individual constituents reported in a comprehensive chemical analysis. During the analytical determination of dissolved solids, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. Therefore, in the mathematical calculation of dissolved-solids concentration, the bicarbonate value, in milligrams per liter, is multiplied by 0.492 to reflect the change.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is computed as the sum of equivalents of polyvalent cations and is expressed as the equivalent concentration of calcium carbonate ($CaCo_3$).

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as delineated by the Office of Water Data Coordination on the State Hydrologic Unit Maps; each hydrologic unit is identified by an eight-digit number.

Land-surface datum (lsd) is a datum plane that is approximately at land surface at each ground-water observation well.

Measuring point (MP) is an arbitrary permanent reference point from which the distance to the water surface in a well is measured to obtain the water level.

Micrograms per liter (UG/L, µg/L) is a unit expressing the concentration of chemical constituents in solution as mass (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

Milligrams per liter (MG/L, mg/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represents the mass of solute per unit volume (liter) of water. Concentration of suspended sediment also is expressed in mg/L and is based on the mass of dry sediment per liter of water-sediment mixture.

National Geodetic Vertical Datum of 1929 (NGVD of 1929) is a geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada. It was formerly called "Sea Level Datum of 1929" or "mean sea level" in this series of reports. Although the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf of Mexico, and Pacific Coasts, it does not necessarily represent local mean sea level at any particular place.

NJ-WRD well number is a hyphenated, 6-digit identification number which the U.S. Geological Survey assigned to all New Jersey wells in the Ground Water Site Inventory (GWSI) data base. This numbering system was developed in 1978 to simplify identification of wells. The first two digits are a code for the county in which the well is located, and the last four digits are a sequence number. Each well added to GWSI is assigned the next higher sequence number for the county in which the well is located. These NJ-WRD well numbers are being used now in the ground-water level descriptions, to identify ground-water quality sites, and on the corresponding location maps in this report.

Open or screened interval is the length of unscreened opening or of well screen through which water enters a well, in feet below land surface.

Parameter Code is a 5-digit number used in the U.S. Geological Survey computerized data system, WATSTORE, to uniquely identify a specific constituent. The codes used in WATSTORE are the same as those used in the U.S. Environmental Protection Agency data system, STORET. The Environmental Protection Agency assigns and approves all requests for new codes.

Pesticides are chemical compounds used to control undesirable organisms. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides.

Picocurie (PC, pCi) is one trillionth (1×10^{12}) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields 3.7×10^{10} radioactive disintegrations per second. A picocurie yields 2.22 dpm (disintegrations per minute).

Polychlorinated biphenyls (PCB's) are industrial chemicals that are mixtures of chlorinated biphenyl compounds having various percentages of chlorine. They are similar in structure to organochlorine insecticides.

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

Solute is any substance that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current. It is expressed in microsiemens per centimeter at 25°C. Specific conductance is related to the type and concentration of ions in solution and can be used for approximating the dissolved-solids content of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is from 55 to 75 percent of the specific conductance (in microsiemens). This relation is not constant from stream to stream, and it may vary in the same source with changes in the composition of the water.

Total is the total amount of a given constituent in a representative water-suspended sediment sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total." (Note that the word "total" does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determined all of the constituent in the sample.)

Total, recoverable is the amount of a given constituent that is in solution after a representative water-suspended sediment sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of analytical data, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Water table is that surface in an unconfined ground-water body at which the pressure is atmospheric.

Water year in Geological Survey reports dealing with water supply is the 12-month period October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 1985, is called the "1985 water year."

WDR is used as an abbreviation for "Water-Data Report" in the REVISED RECORDS paragraph to refer to State annual hydrologic-data reports (WRD was used as an abbreviation for "Water-Resources Data" in reports published prior to 1976).

WSP is used as an abbreviation for "Water-Supply Paper" in reference to previously published reports.

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The reports listed below are for sale by the U.S. Geological Survey, Earth Science Information Center, Federal Center, Box 25286, MS 517, Denver, Colorado 80225 (authorized agent of the Superintendent of Documents, Government Printing Office). Prepayment is required. Remittance should be sent by check or money order payable to the U.S. Geological Survey. Prices are not included because they are subject to change. Current prices can be obtained by writing to the above address. When ordering or inquiring about prices for any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations."

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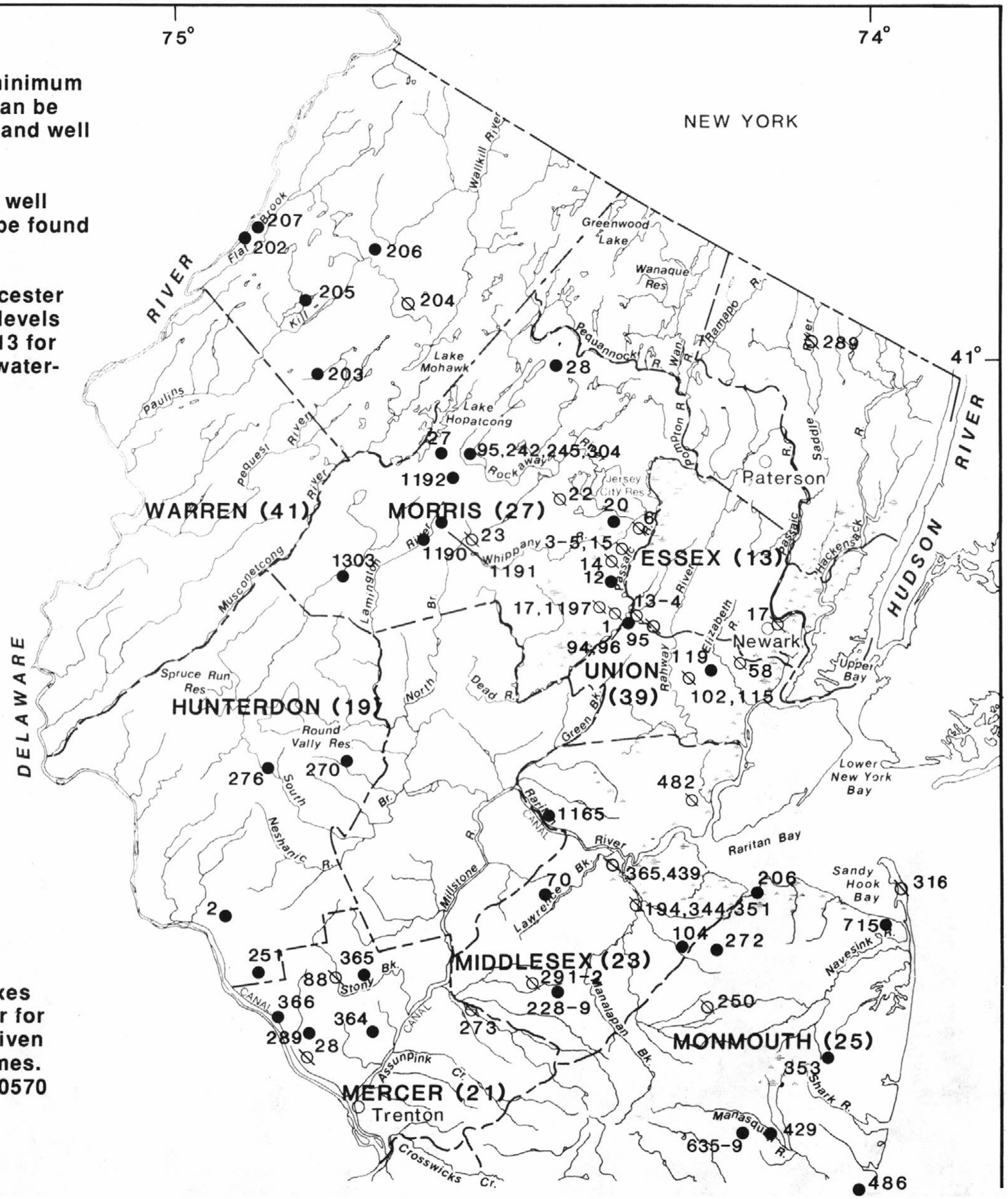
EXPLANATION

● 2 Location and number of observation well with continuous or maximum-minimum water-level recorder. Water levels can be found in the report by county name and well number.

⦰20 Location and number of observation well without recorder. Water levels can be found in table 2.

◒ Location of observation well in Gloucester County water-table network. Water levels can be found in table 1. See figure 13 for detailed map of Gloucester County water-table network.



Note: The well numbers with county prefixes constitute the NJ-WRD well number for each well. The county codes are given in parentheses with the county names. Example: NJ-WRD well number 05-0570 is shown as well 570 in county 05.

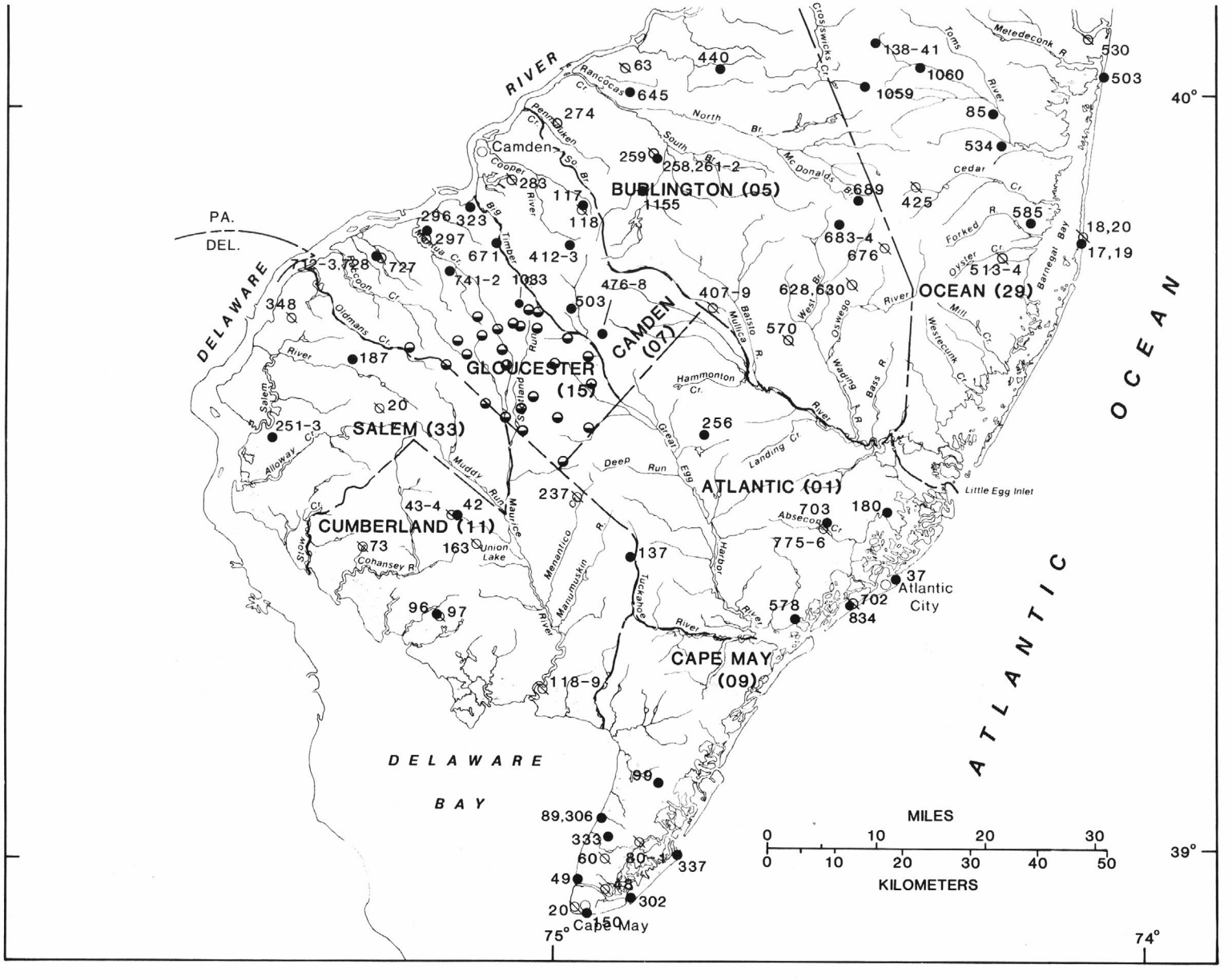
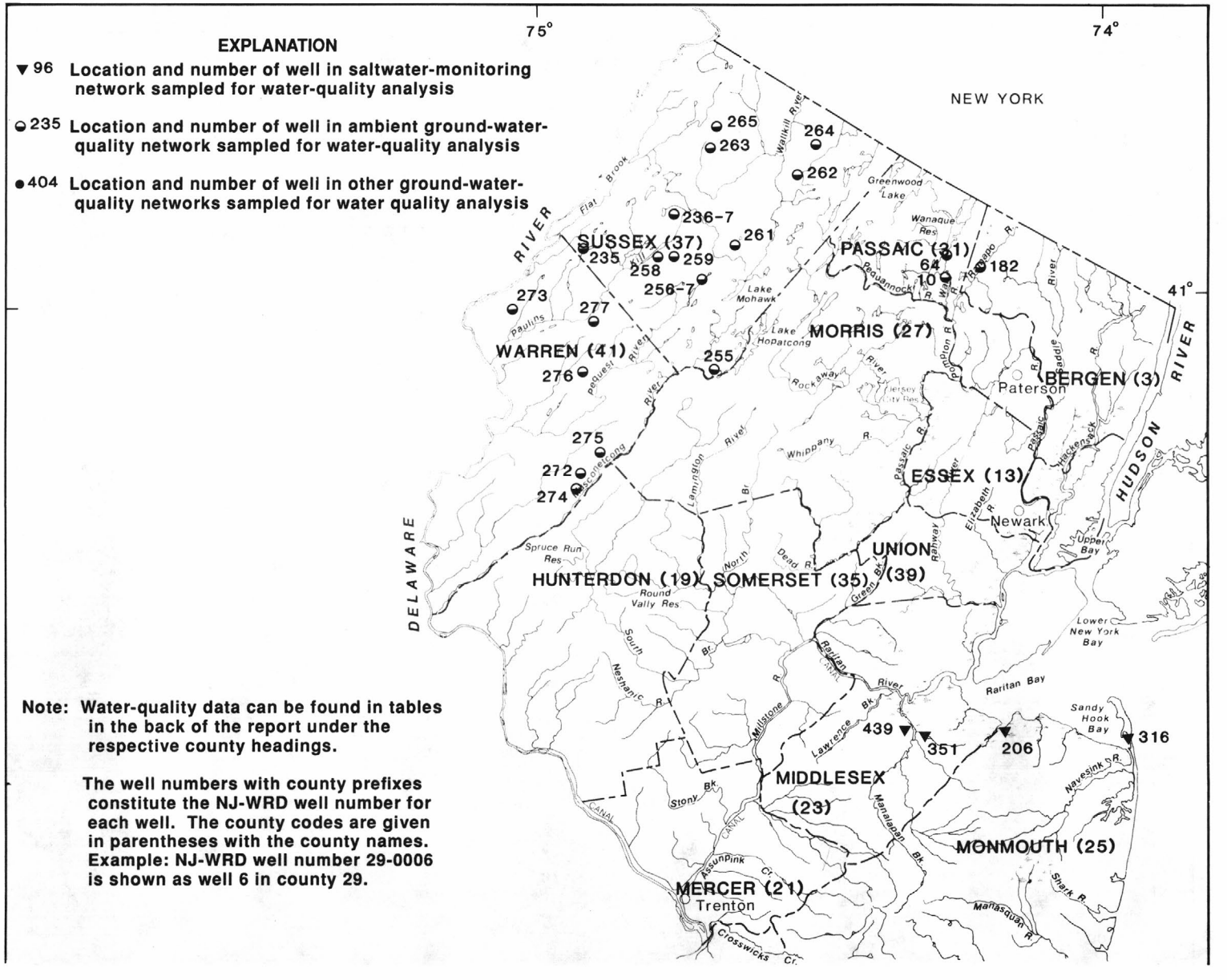


Figure 11.--Locations of ground-water-level observation wells.



Note: Water-quality data can be found in tables in the back of the report under the respective county headings.

The well numbers with county prefixes constitute the NJ-WRD well number for each well. The county codes are given in parentheses with the county names. Example: NJ-WRD well number 29-0006 is shown as well 6 in county 29.

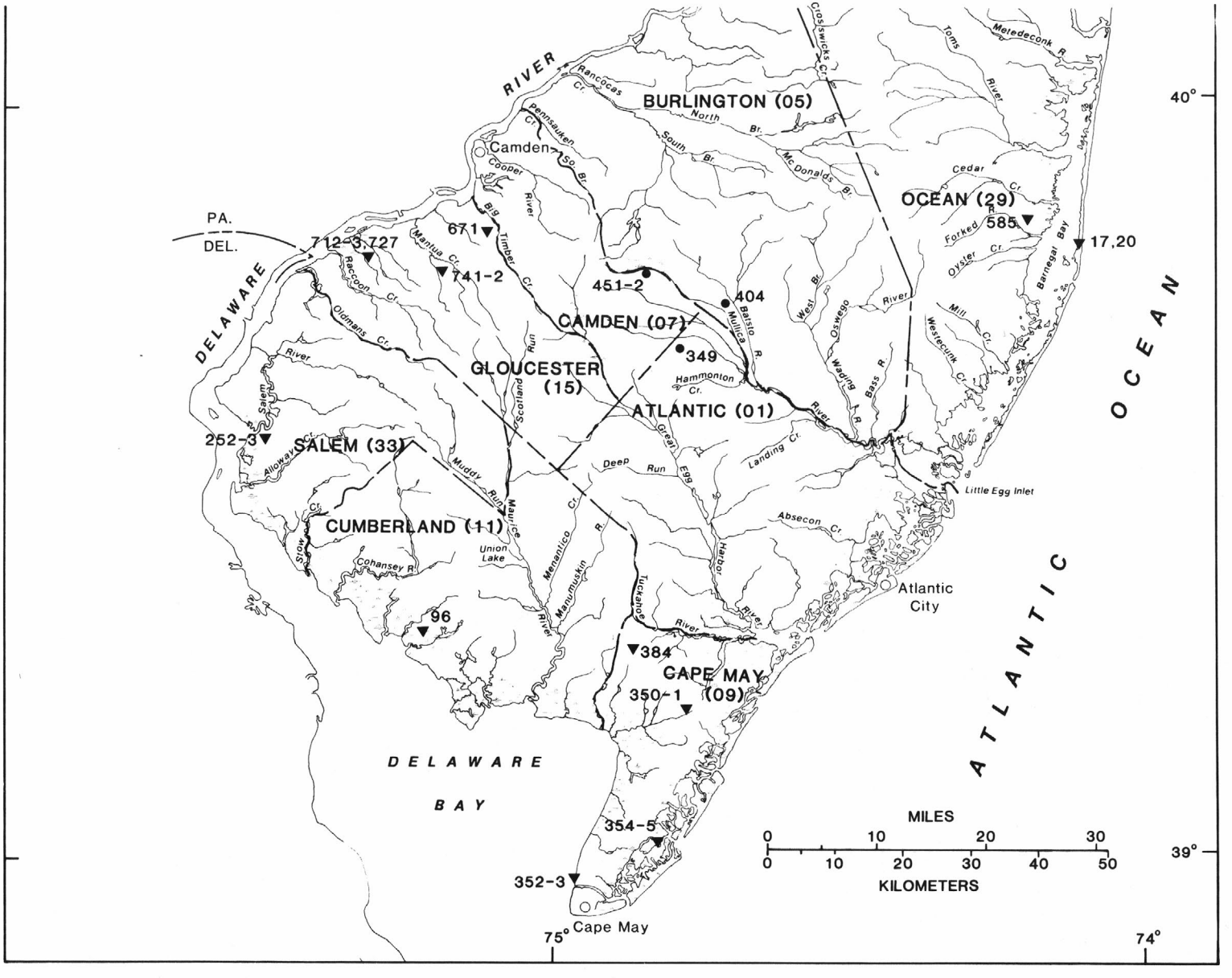


Figure 12.--Locations of ground-water-quality sampling sites.

ATLANTIC COUNTY

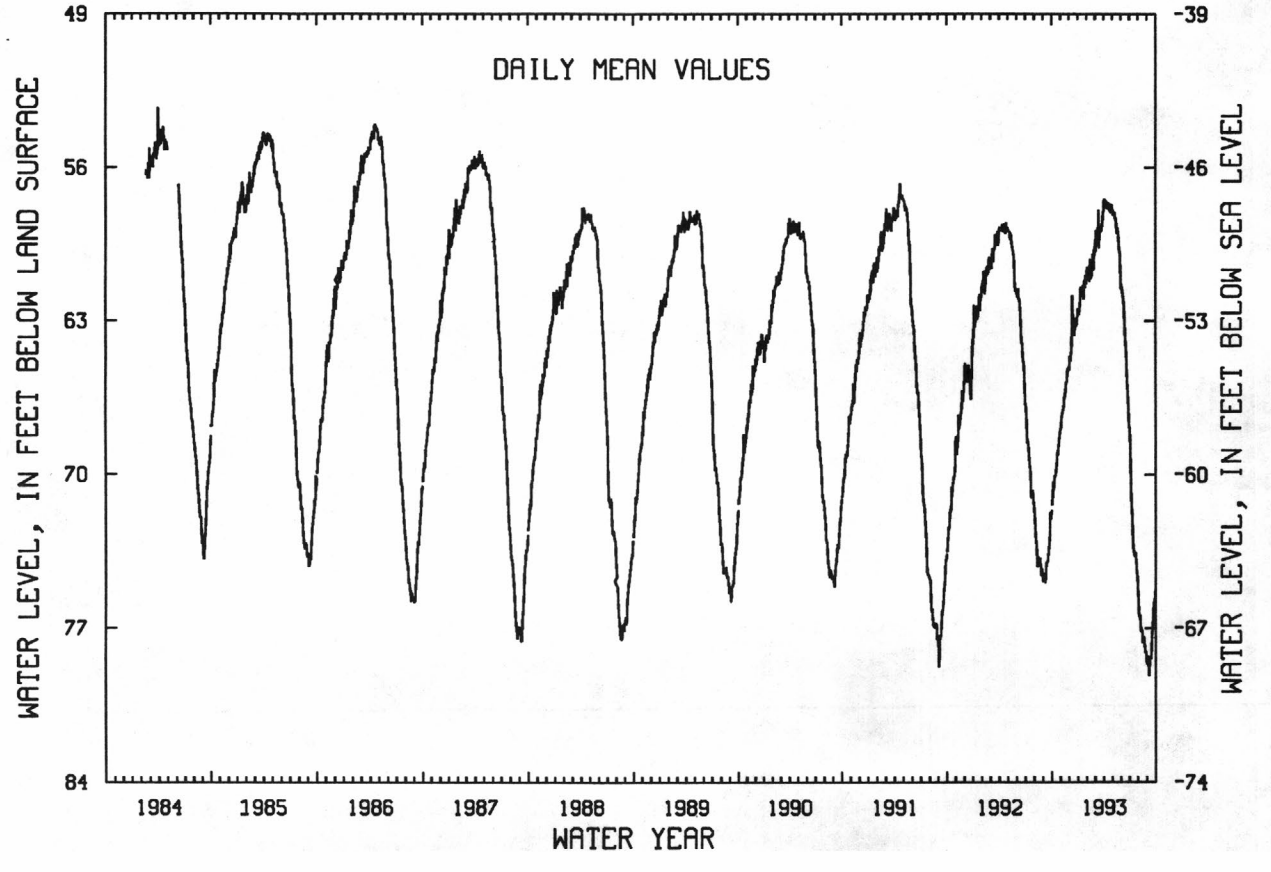
391827074371001. Local I.D., Jobs Point Obs. NJ-WRD Well Number, 01-0578.
LOCATION.--Lat 39°18'26", long 74°37'09", Hydrologic Unit 02040302, on the west side of the Garden State Parkway at interchange 29, Somers Point City.
Owner: U.S. Geological Survey.
AQUIFER.--Atlantic City 800-foot sand of the Kirkwood Formation of Miocene age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 8 in., depth 680 ft, screened 670 to 680 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Water-level extremes recorder, May 1977 to Feb. 1984.
DATUM.--Land surface is 10.00 ft above sea level.
Measuring point: Top of recorder shelf, 9.34 ft above land surface.
REMARKS.--Water level affected by tidal fluctuation and nearby pumping.
PERIOD OF RECORD.--Oct. 1959 to current year. Records for 1975 to 1980 are unpublished and are available in files of the New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 29.10 ft below land surface, Apr. 13, 1961; lowest, 79.74 ft below land surface, Sept. 7, 1993.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	70.32	67.17	64.83	62.55	61.05	58.85	57.70	58.17	61.46	69.55	76.43	78.60
10	70.10	66.91	63.36	61.46	61.18	59.11	57.54	58.25	62.07	71.79	77.13	78.38
15	69.81	66.31	63.40	61.61	60.93	59.68	57.77	58.58	63.45	73.52	77.27	78.26
20	68.97	65.80	63.21	61.99	60.34	58.81	57.91	58.74	64.68	73.64	77.40	76.91
25	68.40	65.15	63.23	61.48	60.48	58.53	58.02	59.49	66.22	73.96	78.08	75.87
EOM	67.87	65.24	62.44	60.68	59.67	57.98	57.71	60.75	67.83	75.26	78.64	75.23
MEAN	69.53	66.31	63.48	61.71	60.62	58.92	57.75	58.79	63.86	72.50	77.29	77.45

WTR YR 1993 MEAN 65.72 HIGH 56.33 APR 6 LOW 79.74 SEP 7

NJ-WRD WELL NO.01-0578



ATLANTIC COUNTY

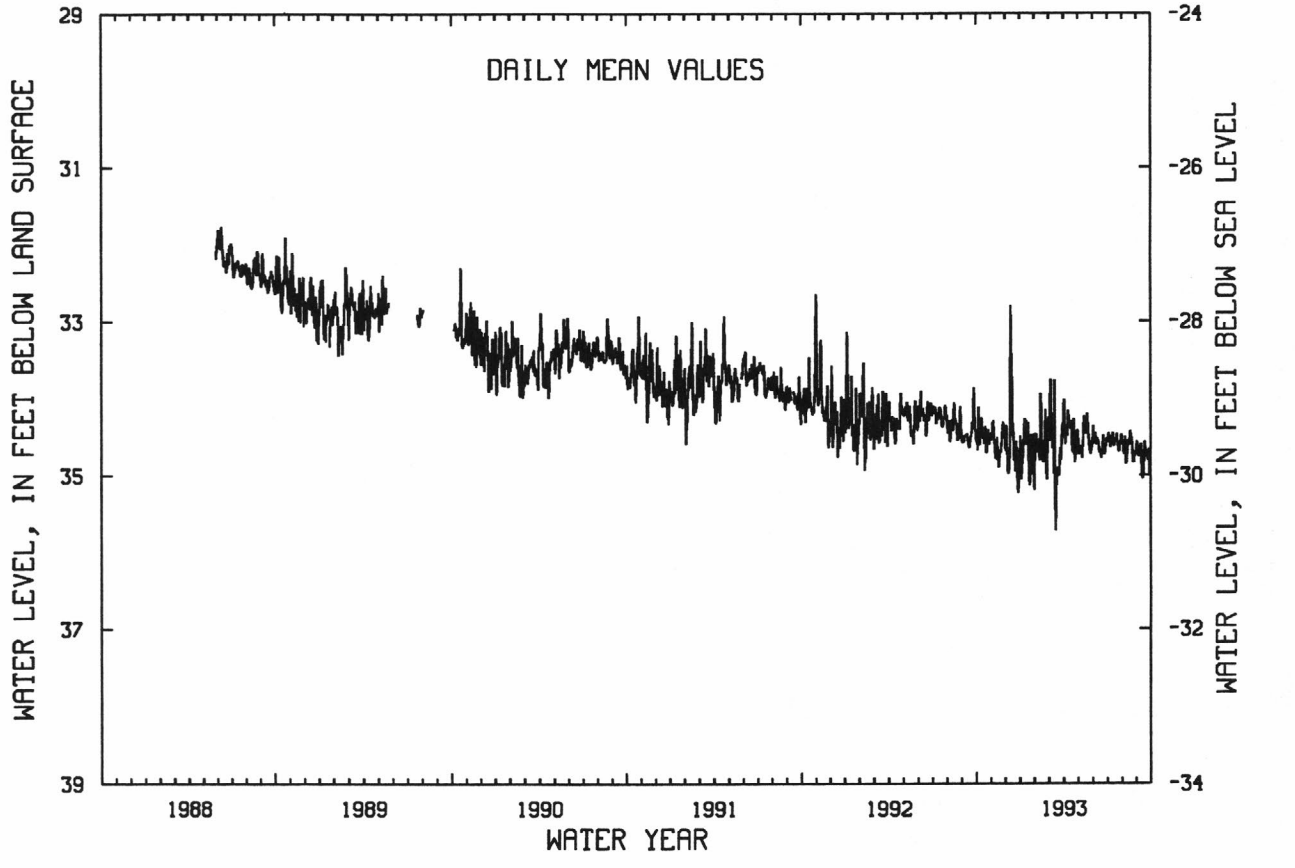
392017074300201. Local I.D., Margate Firehouse 1 Obs. NJ-WRD Well Number, 01-0834.
LOCATION.--Lat 39°20'17", long 74°30'02", Hydrologic Unit 02040302, behind Margate Firehouse No. 2, Fremont Ave., Margate City.
Owner: U.S. Geological Survey.
AQUIFER.--Piney Point aquifer of Eocene age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 997 ft, screened 970 to 991 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land surface is 5 ft above sea level, from topographic map.
Measuring point: Top of recorder shelf, 2.00 ft above land surface.
REMARKS.--Water level affected by tidal fluctuation.
PERIOD OF RECORD.--May 1988 to current year. Records for 1988 are unpublished and are available in files of the New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 31.05 ft below land surface, June 2, 1988; lowest, 36.08 ft below land surface, Mar. 15, 1993.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	34.12	34.29	34.94	34.78	34.70	33.76	34.54	34.69	34.45	34.55	34.72	34.66
10	34.34	34.78	34.21	34.27	34.81	34.59	34.16	34.68	34.55	34.52	34.83	34.59
15	34.53	34.76	34.23	34.45	34.81	35.72	34.40	34.34	34.67	34.61	34.55	35.00
20	34.48	34.71	34.61	35.13	34.57	34.93	34.71	34.20	34.66	34.46	34.50	34.76
25	34.41	34.31	35.03	34.99	35.06	34.65	34.76	34.67	34.73	34.69	34.83	34.81
EOM	34.45	34.68	34.49	34.67	34.32	34.40	34.43	34.48	34.53	34.56	34.67	34.88
MEAN	34.49	34.58	34.56	34.69	34.59	34.64	34.44	34.53	34.60	34.56	34.65	34.76

WTR YR 1993 MEAN 34.59 HIGH 31.85 DEC 11 LOW 36.08 MAR 15

NJ-WRD WELL NO.01-0834



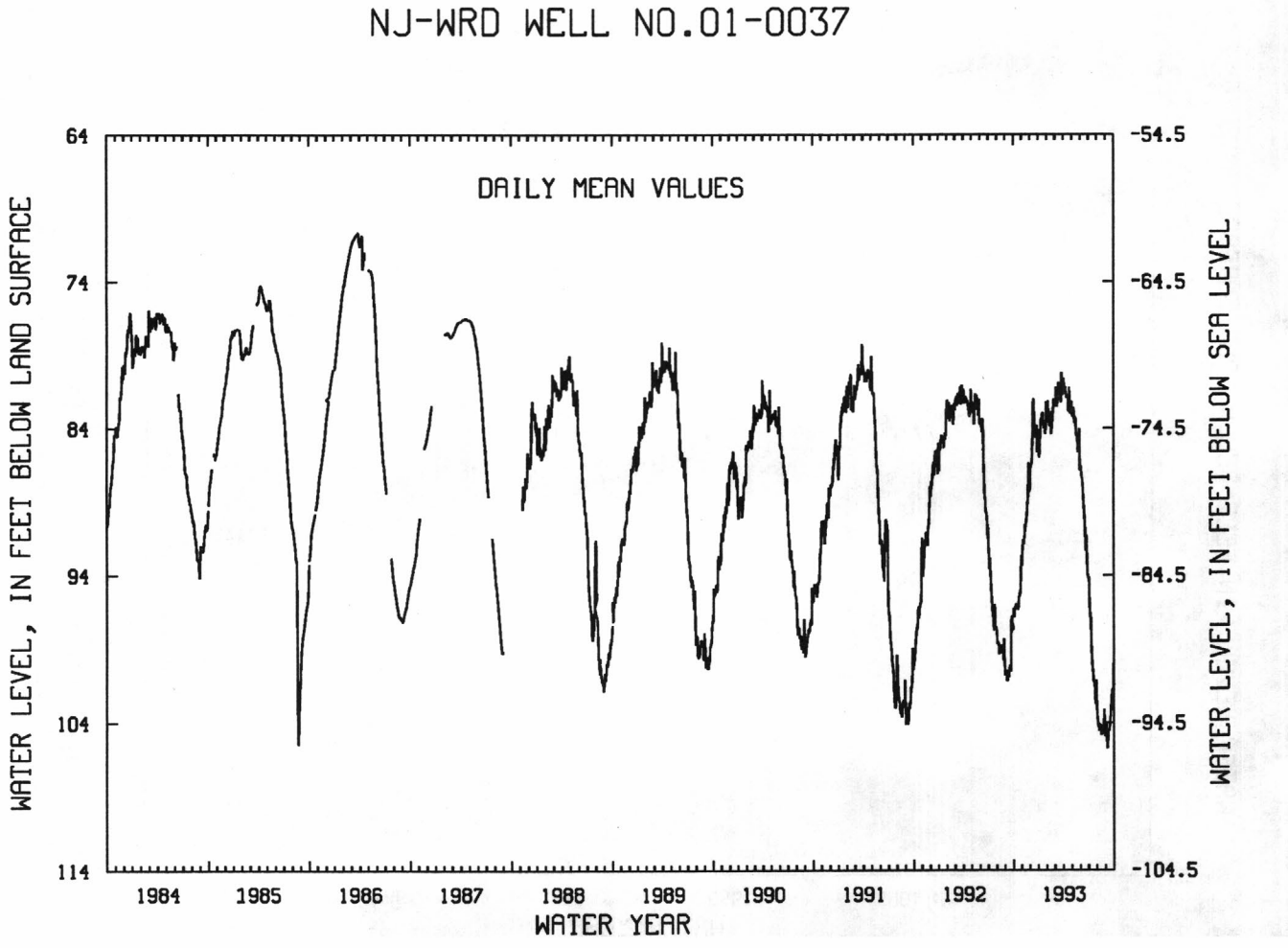
ATLANTIC COUNTY

392153074250101. Local I.D., Galen Hall Obs. NJ-WRD Well Number, 01-0037.
LOCATION.--Lat 39°21'51", long 74°24'59", Hydrologic Unit 02040302, near the intersection of Pacific Ave. and Congress Ave., Atlantic City.
Owner: Atlantic City Municipal Utilities Authority.
AQUIFER.--Atlantic City 800-foot sand of the Kirkwood Formation of Miocene age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 842 ft, screened 782 to 837 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land surface is 9.54 ft above sea level.
Measuring point: Top of recorder shelf, 2.75 ft above land surface.
REMARKS.--Water level affected by tidal fluctuation and nearby pumping. Water level affected by USGS aquifer test, Aug. 16-23, 1985. Well damaged by construction equipment in Aug. 1987 and rehabilitated Nov. 1987.
PERIOD OF RECORD.--Jan. 1949 to current year. Records for 1949 to 1976 are unpublished and are available in files of the New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 52.58 ft below land surface, Mar. 7, 1962; lowest, 105.81 ft below land surface, Sept. 6-7, 1993.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	96.49	91.74	86.43	85.48	83.07	81.21	81.63	82.83	86.65	95.90	104.10	105.02
10	95.93	91.42	84.43	83.31	83.83	82.24	81.58	83.61	87.61	97.72	104.36	104.81
15	96.02	90.69	82.59	82.93	84.42	82.01	81.71	83.44	89.31	100.20	104.46	104.36
20	95.61	89.58	84.43	83.93	83.42	81.46	82.82	84.55	91.42	101.22	104.38	103.19
25	95.35	86.37	84.28	84.37	82.52	80.19	82.82	85.57	91.92	102.28	104.14	101.77
EOM	93.30	88.15	85.05	83.29	82.45	81.17	82.15	86.80	94.12	102.35	104.49	99.72
MEAN	95.61	90.18	84.71	83.86	83.22	81.72	81.86	84.06	89.79	99.38	104.22	103.54

WTR YR 1993 MEAN 90.22 HIGH 79.91 MAR 25 LOW 105.81 SEP 6-7



ATLANTIC COUNTY

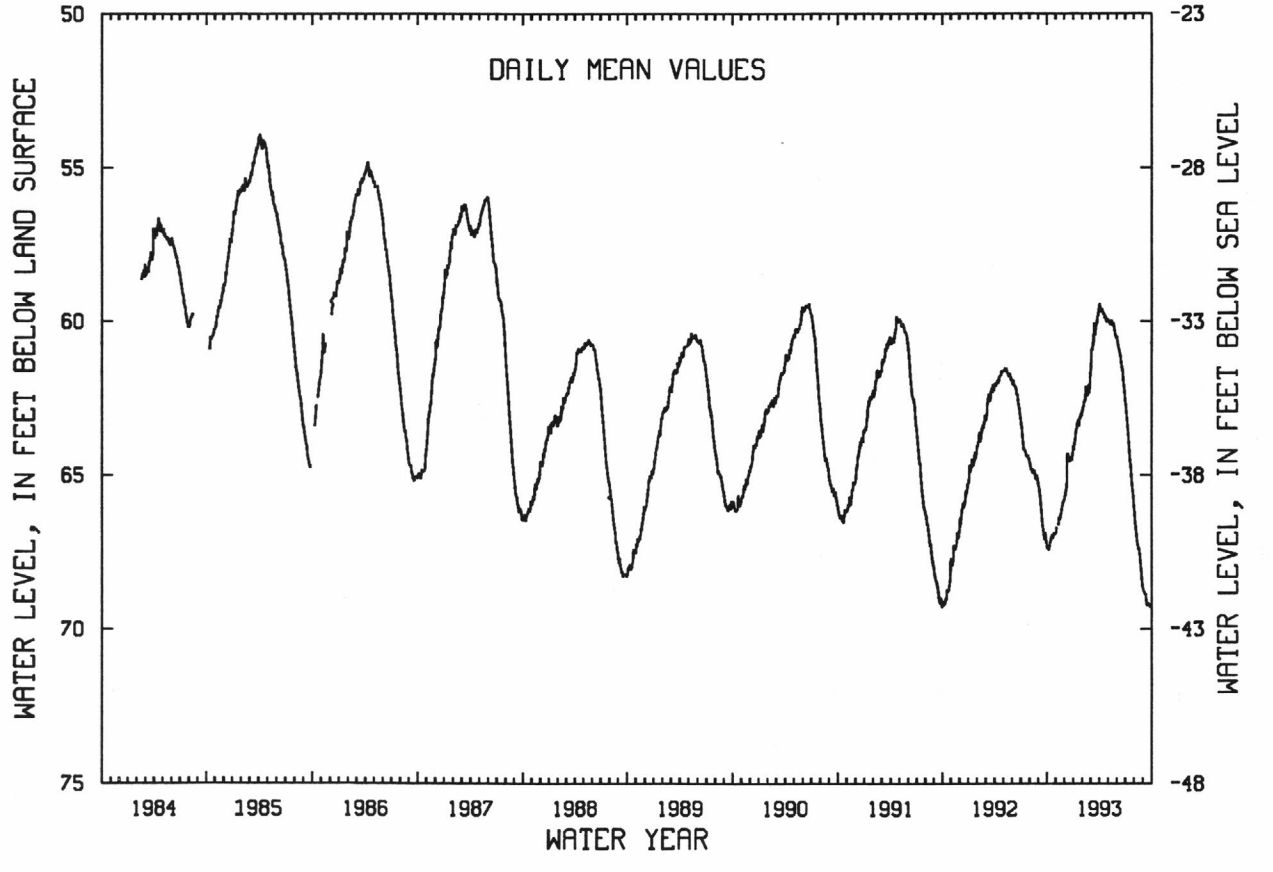
392754074270101. Local I.D., Oceanville 1 Obs. NJ-WRD Well Number, 01-0180.
LOCATION.--Lat 39°27'54", long 74°27'01", Hydrologic Unit 02040302, at the Edwin B. Forsythe National Wildlife Refuge, Brigantine Division, Oceanville, Galloway Township.
Owner: U.S. Geological Survey.
AQUIFER.--Atlantic City 800-foot sand of the Kirkwood Formation of Miocene age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 570 ft, screened 560 to 570 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land surface is 27 ft above sea level, from topographic map.
Measuring point: Top of bushing, 2.30 ft above land surface.
REMARKS.--Water level affected by tidal fluctuation and nearby pumping.
PERIOD OF RECORD.--Oct. 1959 to current year. Records for 1975 to 1981 are unpublished and are available in files of the New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 33.62 ft below land surface, Apr. 13, 1961; lowest, 69.38 ft below land surface, Sept. 30, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	67.32	---	65.56	63.93	62.75	60.94	59.67	60.02	60.68	62.95	66.53	68.79
10	67.32	66.63	65.12	63.53	62.60	60.75	59.58	60.11	60.92	63.47	67.01	68.86
15	67.08	66.43	64.41	63.32	62.45	60.44	59.78	60.04	61.12	64.09	67.34	69.23
20	66.98	66.24	64.46	63.41	62.36	60.15	59.91	60.04	61.52	64.63	67.54	69.24
25	66.88	65.94	64.46	63.17	62.34	59.83	60.01	60.33	61.99	65.31	68.07	69.29
EOM	66.87	65.83	64.07	62.93	61.87	59.62	59.92	60.52	62.46	65.93	68.69	69.28
MEAN	67.12	66.28	64.77	63.45	62.44	60.41	59.77	60.16	61.31	64.21	67.38	69.08

WTR YR 1993 MEAN 63.84 HIGH 59.22 APR 2 LOW 69.36 SEP 25

NJ-WRD WELL NO.01-0180



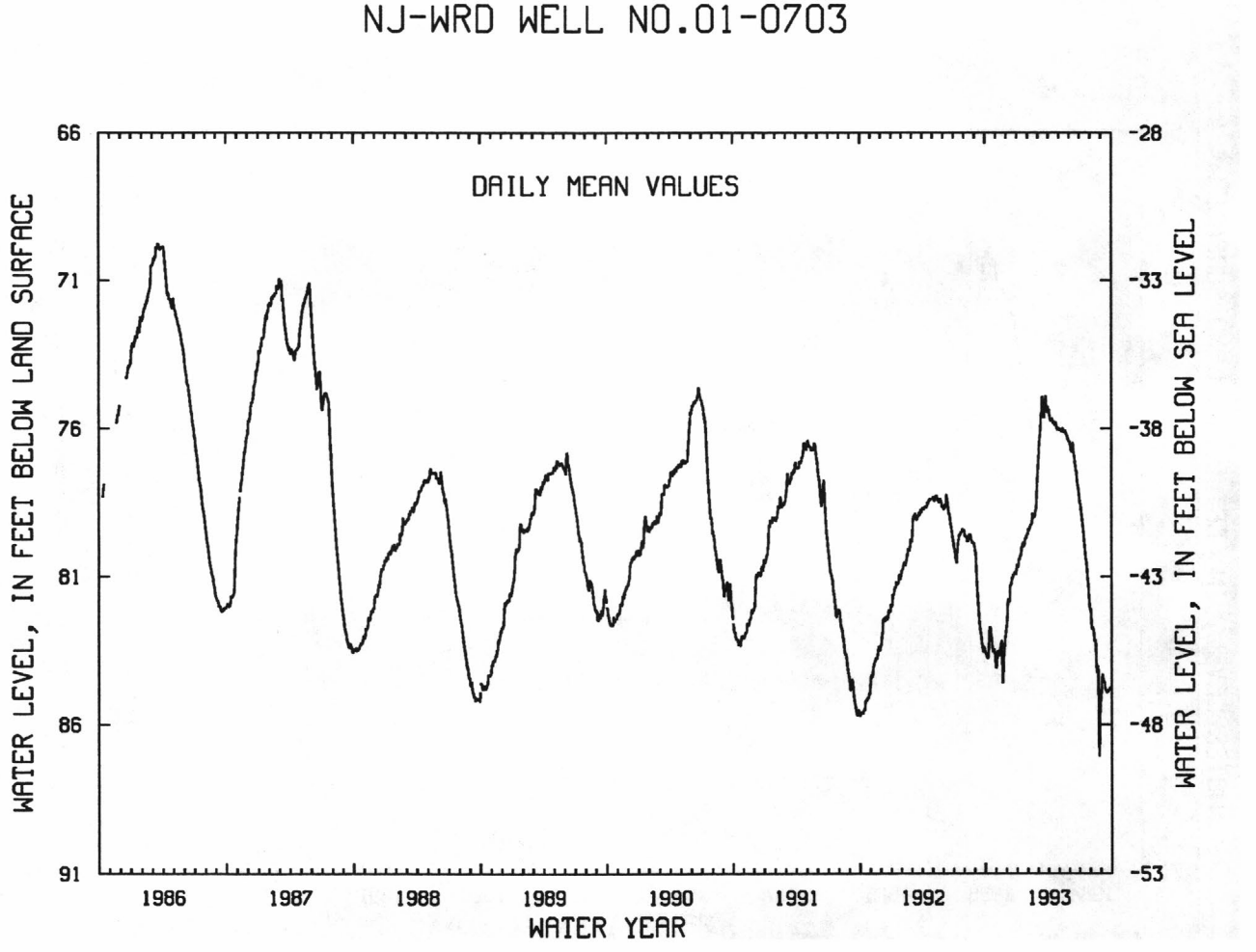
ATLANTIC COUNTY

393232074263901. Local I.D., FAA Pomona Obs. NJ-WRD Well Number, 01-0703.
LOCATION.--Lat 39°26'39", long 74°32'32", Hydrologic Unit 02040302, at the NAFEC Atlantic City Airport, Egg Harbor Township.
Owner: U.S. Geological Survey
AQUIFER.--Atlantic City 800-foot sand of the Kirkwood Formation of Miocene age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 575 ft, screened 560 to 570 ft.
INSTRUMENTATION.--Digital water-level recorder--60 minute punch.
DATUM.--Land surface is 38 ft above sea level, from topographic map.
Measuring point: Top of recorder shelf, 1.75 ft above land surface.
REMARKS.--Water level affected by nearby pumping. Water level affected by New Jersey-American Water Company aquifer test, Aug. 23-31, 1993.
PERIOD OF RECORD.--Oct. 1985 to current year. Records for 1985 to 1986 are unpublished and are available in files of the New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 69.74 ft below land surface, Mar. 18, 1986; lowest, 87.29 ft below land surface, Aug. 26, 1993 (see remarks).

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	83.69	83.54	81.75	80.42	79.37	76.41	75.65	76.03	76.62	78.73	82.74	84.34
10	83.52	83.68	81.76	80.29	79.23	75.54	75.64	76.09	76.51	79.28	82.84	84.56
15	82.71	83.29	81.21	79.99	79.04	75.14	75.81	76.07	76.90	79.91	83.15	84.85
20	83.24	84.60	80.94	79.96	78.95	75.41	75.89	76.07	77.39	80.47	84.24	84.91
25	83.47	83.41	80.88	79.71	78.42	75.11	75.95	76.24	77.87	81.16	86.53	84.85
EOM	83.99	82.76	80.58	79.41	77.56	75.36	75.98	76.44	78.29	82.09	85.05	84.77
MEAN	83.40	83.57	81.32	80.03	78.93	75.63	75.77	76.14	77.14	80.09	83.86	84.73

WTR YR 1993 MEAN 80.06 HIGH 74.68 MAR 13 LOW 87.29 AUG 26



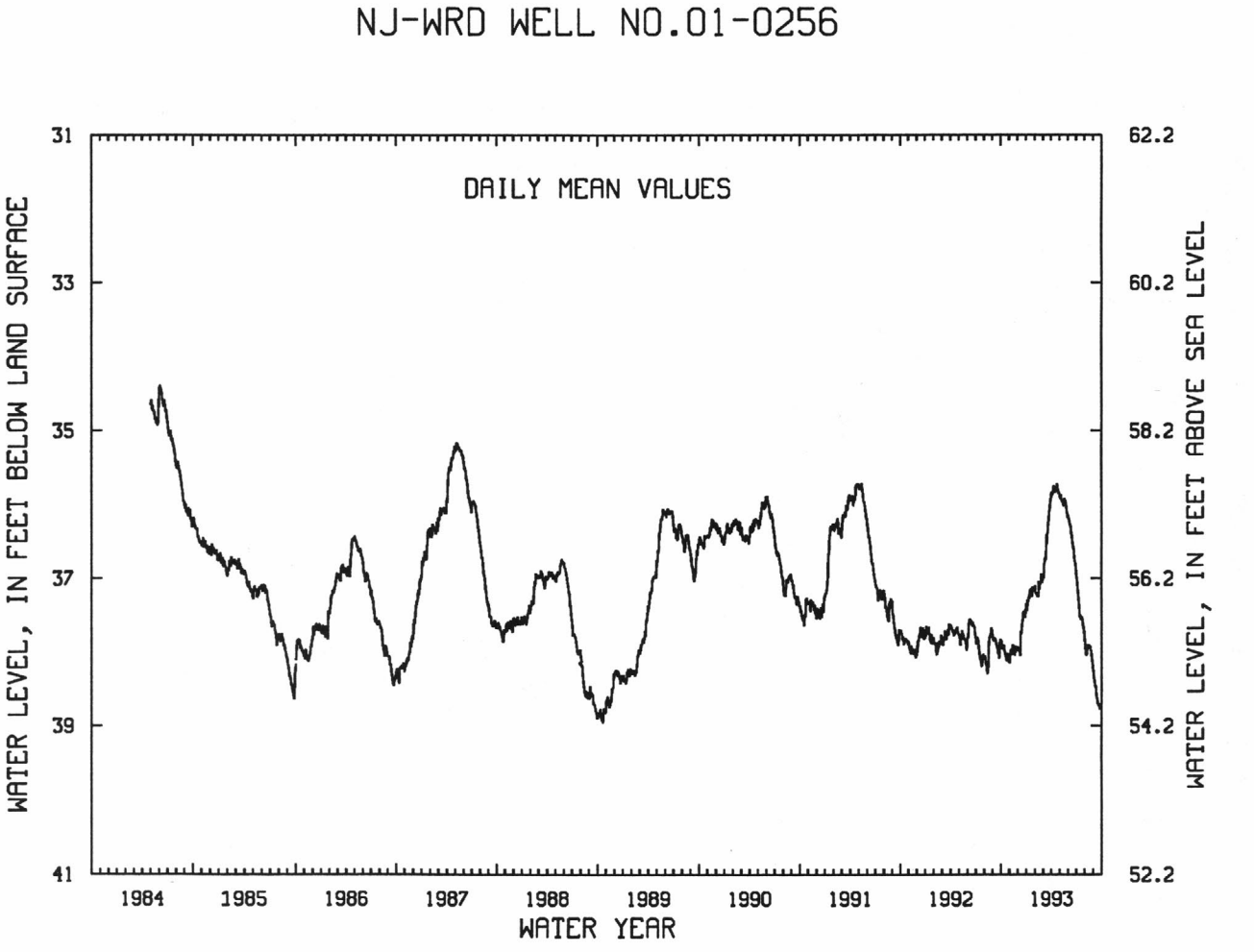
ATLANTIC COUNTY

393333074442401. Local I.D., Scholler 1 Obs. NJ-WRD Well Number, 01-0256.
LOCATION.--Lat 39°33'33", long 74°44'26", Hydrologic Unit 02040302, inside the boiler room at Scholler Inc., Weymouth Rd. and Second Rd., Elwood, Hamilton Township.
Owner: Scholler Incorporated.
AQUIFER.--Kirkwood-Cohansey aquifer system of Miocene age.
WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 8 in., depth 275 ft, screened 254 to 275 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land surface is 93.19 ft above sea level.
Measuring point: Top of recorder shelf, 2.66 ft above land surface.
REMARKS.--Water level affected by nearby pumping.
PERIOD OF RECORD.--Apr. 1962 to current year. Records for 1962 to 1976 are unpublished and are available in files of the New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 27.18 ft below land surface, Mar. 20, 1963; lowest, 39.56 ft below land surface, Sept. 13, 1966.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	37.88	37.97	37.95	37.30	37.21	36.81	35.86	35.89	36.20	37.07	38.03	38.40
10	37.94	38.03	38.00	37.28	37.24	36.72	35.75	35.96	36.28	37.30	37.94	38.48
15	37.99	37.97	37.67	37.19	37.16	36.54	35.84	36.01	36.43	37.50	37.92	38.64
20	38.08	38.05	37.47	37.25	37.06	36.32	35.82	35.92	36.59	37.52	37.93	38.73
25	38.02	37.99	37.48	37.16	37.06	36.09	35.82	36.00	36.75	37.63	38.04	38.77
EOM	38.13	37.94	37.34	37.10	37.01	35.95	35.85	36.16	36.88	37.81	38.25	38.75
MEAN	38.00	37.99	37.69	37.23	37.11	36.46	35.82	35.98	36.47	37.42	37.99	38.60

WTR YR 1993 MEAN 37.23 HIGH 35.69 APR 22-23 LOW 38.78 SEP 25



BURLINGTON COUNTY

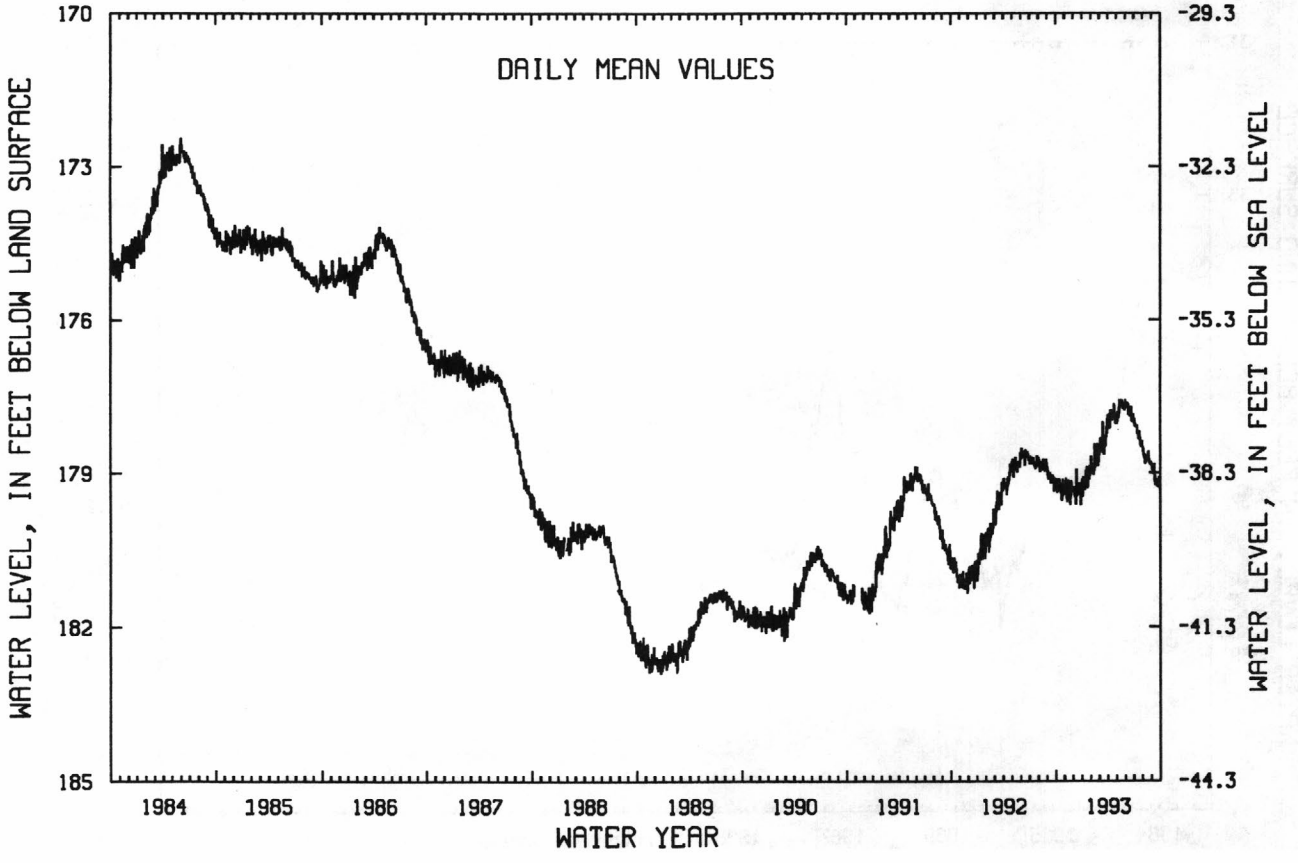
395122074301701. Local I.D., Butler Place 1 Obs. NJ-WRD Well Number, 05-0683.
LOCATION.--Lat 39°51'22", long 74°30'17", Hydrologic Unit 02040301, in Lebanon State Forest, Woodland Township.
Owner: U.S. Geological Survey.
AQUIFER.--Potomac-Raritan-Magothy aquifer system, undifferentiated, of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 2,117 ft, screened 2,102 to 2,117 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land surface is 140.66 ft above sea level.
Measuring point: Top of coupling, 2.80 ft above land surface.
PERIOD OF RECORD.--Oct. 1964 to current year. Records for 1964 to 1977 are unpublished and are available in files of the New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 143.20 ft below land surface, Feb. 25, 1965; lowest, 182.96 ft below land surface, Dec. 22-23, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	179.23	179.10	179.28	179.08	178.94	178.33	178.13	177.88	177.64	178.07	178.66	178.92
10	179.20	179.55	179.46	179.33	178.96	178.42	177.77	177.87	177.63	178.10	178.81	178.83
15	179.31	179.38	179.42	179.09	178.90	178.58	177.96	177.67	177.78	178.18	178.75	179.13
20	179.46	179.62	179.20	179.27	178.74	178.53	177.92	177.58	177.86	178.18	178.65	179.26
25	179.13	179.39	179.38	179.05	178.86	178.29	177.92	177.70	177.99	178.45	178.79	179.27
EOM	179.34	179.33	179.12	178.67	178.69	178.02	177.89	177.65	177.93	178.48	178.85	179.31
MEAN	179.27	179.36	179.34	179.10	178.79	178.36	177.92	177.75	177.78	178.22	178.72	179.10

WTR YR 1993 MEAN 178.64 HIGH 177.46 MAR 13 LOW 179.66 DEC 9-10,27

NJ-WRD WELL NO.05-0683

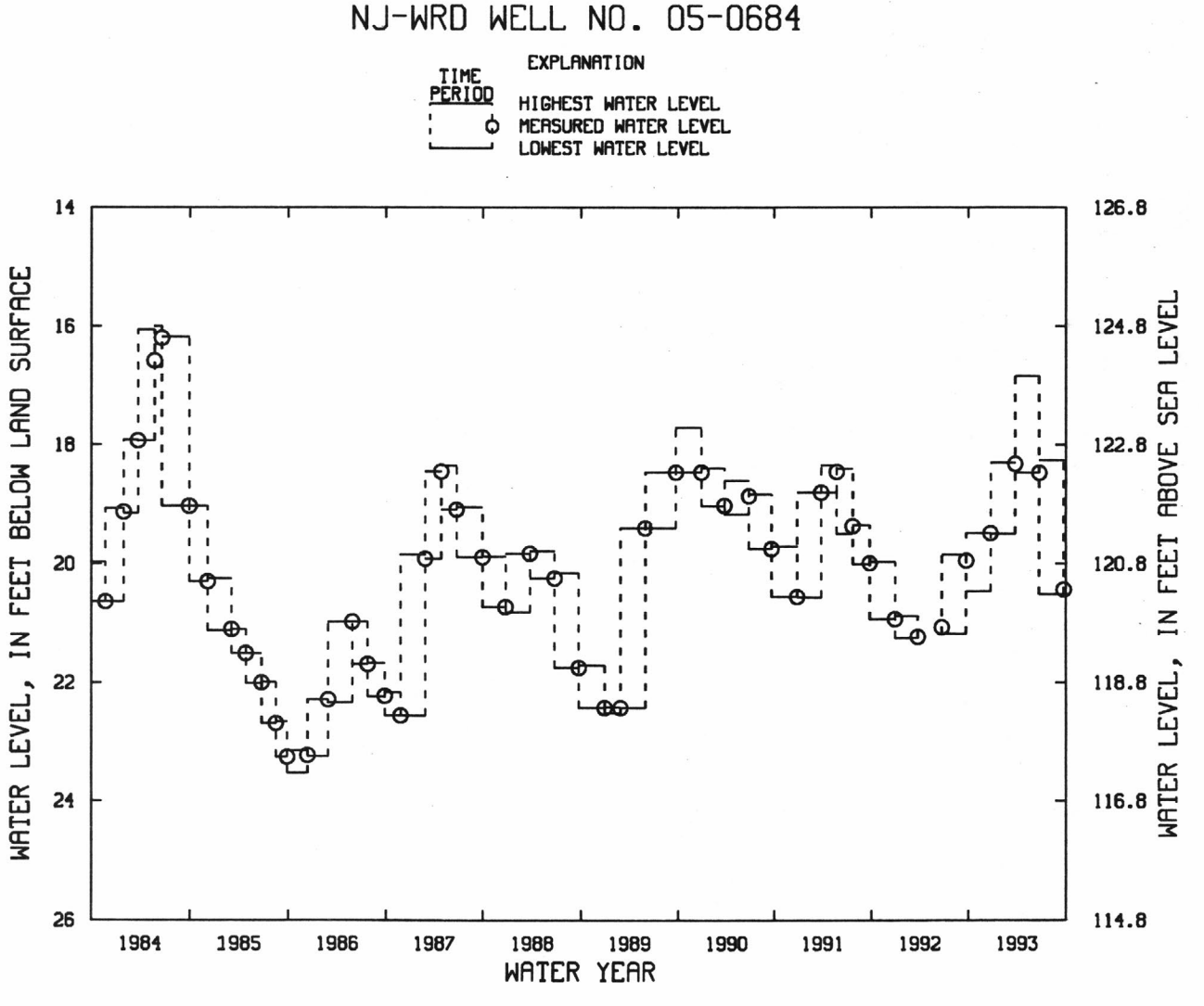


BURLINGTON COUNTY

395122074301702. Local I.D., Butler Place 2 Obs. NJ-WRD Well Number, 05-0684.
LOCATION.--Lat 39°51'22", long 74°30'17", Hydrologic Unit 02040301, in Lebanon State Forest, Woodland Township.
Owner: U.S. Geological Survey.
AQUIFER.--Kirkwood-Cohansey aquifer system of Miocene age.
WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 4 in., depth 170 ft, screened 160 to 170 ft.
INSTRUMENTATION.--Water-level extremes recorder.
DATUM.--Land surface is 140.82 ft above sea level.
Measuring point: Front edge of cutout in recorder housing, 2.67 ft above land surface.
PERIOD OF RECORD.--May 1965 to current year. Records for 1965 to 1981 are unpublished and are available in files of the New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 15.14 ft below land surface, Feb. 15, 1973; lowest, 23.53 ft below land surface, between Sept. 26, and Dec. 11, 1985.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

WATER-LEVEL EXTREMES			MEASURED WATER LEVEL	
PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 23, 1992 TO DEC. 23, 1992	19.49	20.47	DEC. 23, 1992	19.49
DEC. 23, 1992 TO MAR. 25, 1993	18.30	19.50	MAR. 25, 1993	18.32
MAR. 25, 1993 TO JUNE 24, 1993	16.84	18.47	JUNE 24, 1993	18.47
JUNE 24, 1993 TO SEPT. 23, 1993	18.26	20.52	SEPT. 23, 1993	20.44



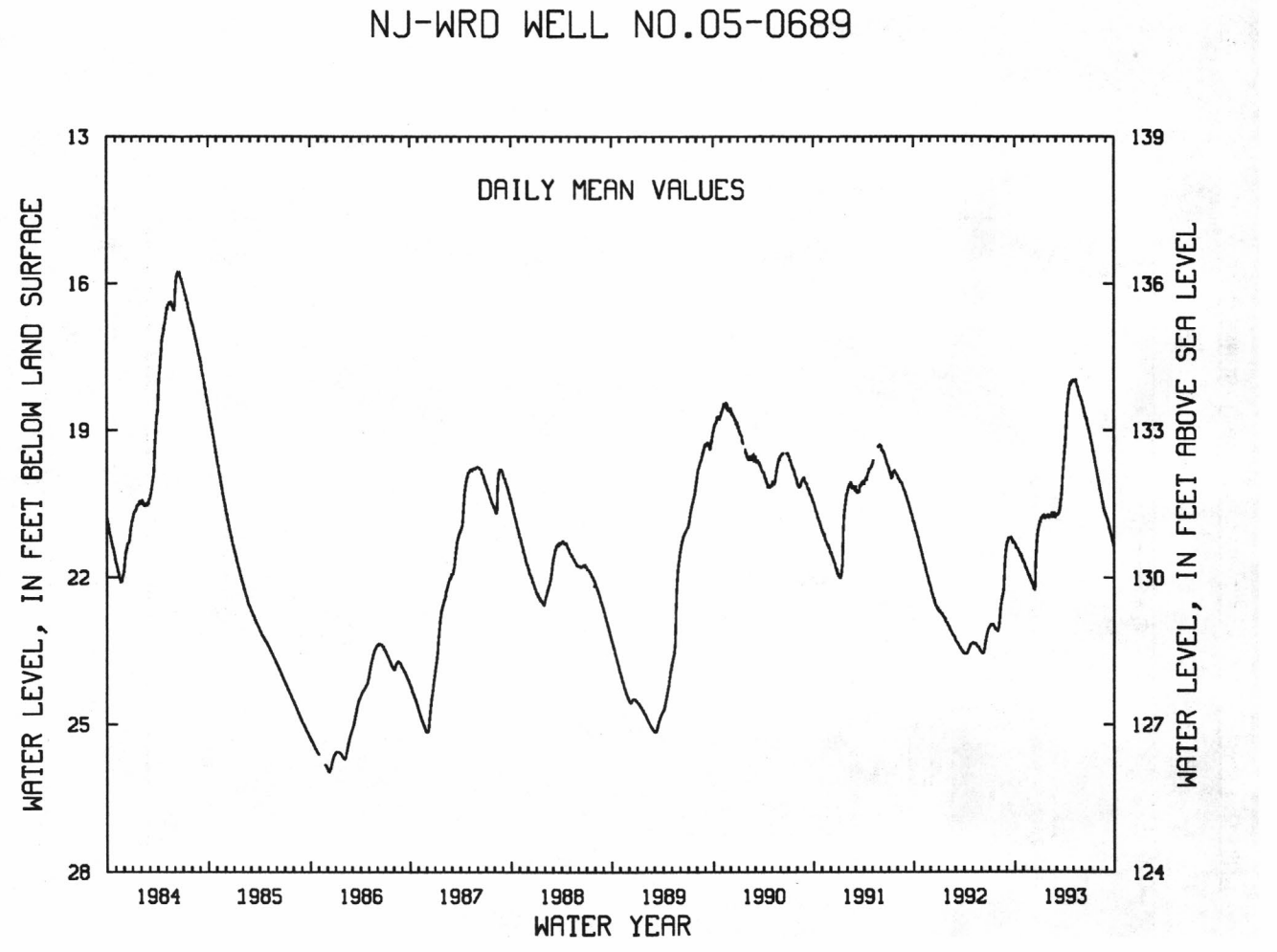
BURLINGTON COUNTY

395150074284201. Local I.D., Lebanon State Forest 23-D Obs. NJ-WRD Well Number, 05-0689.
LOCATION.--Lat 39°51'52", long 74°28'48", Hydrologic Unit 02040202, in Lebanon State Forest, Woodland Township.
Owner: U.S. Geological Survey.
AQUIFER.--Kirkwood-Cohansey aquifer system of Miocene age.
WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 8 in., depth 33 ft, open-end cement casing.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land surface is 152.02 ft above sea level.
Measuring point: Top of casing, 0.70 ft above land surface.
PERIOD OF RECORD.--Sept. 1955 to current year. Records for 1955 to 1979 are unpublished and are available in files of the New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 14.37 ft below land surface, Sept. 11, 1958; lowest, 25.97 ft below land surface, Dec. 8-10, 1985.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	21.36	21.70	22.14	20.80	20.76	20.71	19.20	17.97	18.43	19.14	20.04	20.82
10	21.40	21.81	22.23	20.79	20.75	20.70	18.64	18.01	18.53	19.27	20.21	20.91
15	21.46	21.86	21.87	20.76	20.78	20.64	18.32	18.05	18.66	19.41	20.36	21.03
20	21.53	21.96	21.27	20.80	20.74	20.36	18.12	18.13	18.77	19.55	20.50	21.14
25	21.54	22.01	21.03	20.78	20.79	19.98	18.03	18.24	18.90	19.71	20.64	21.25
EOM	21.66	22.08	20.87	20.71	20.75	19.53	17.98	18.33	19.00	19.88	20.74	21.37
MEAN	21.47	21.87	21.64	20.78	20.75	20.37	18.48	18.10	18.67	19.45	20.37	21.05

WTR YR 1993 MEAN 20.25 HIGH 17.95 MAY 6,11-13 LOW 22.27 DEC 12-13



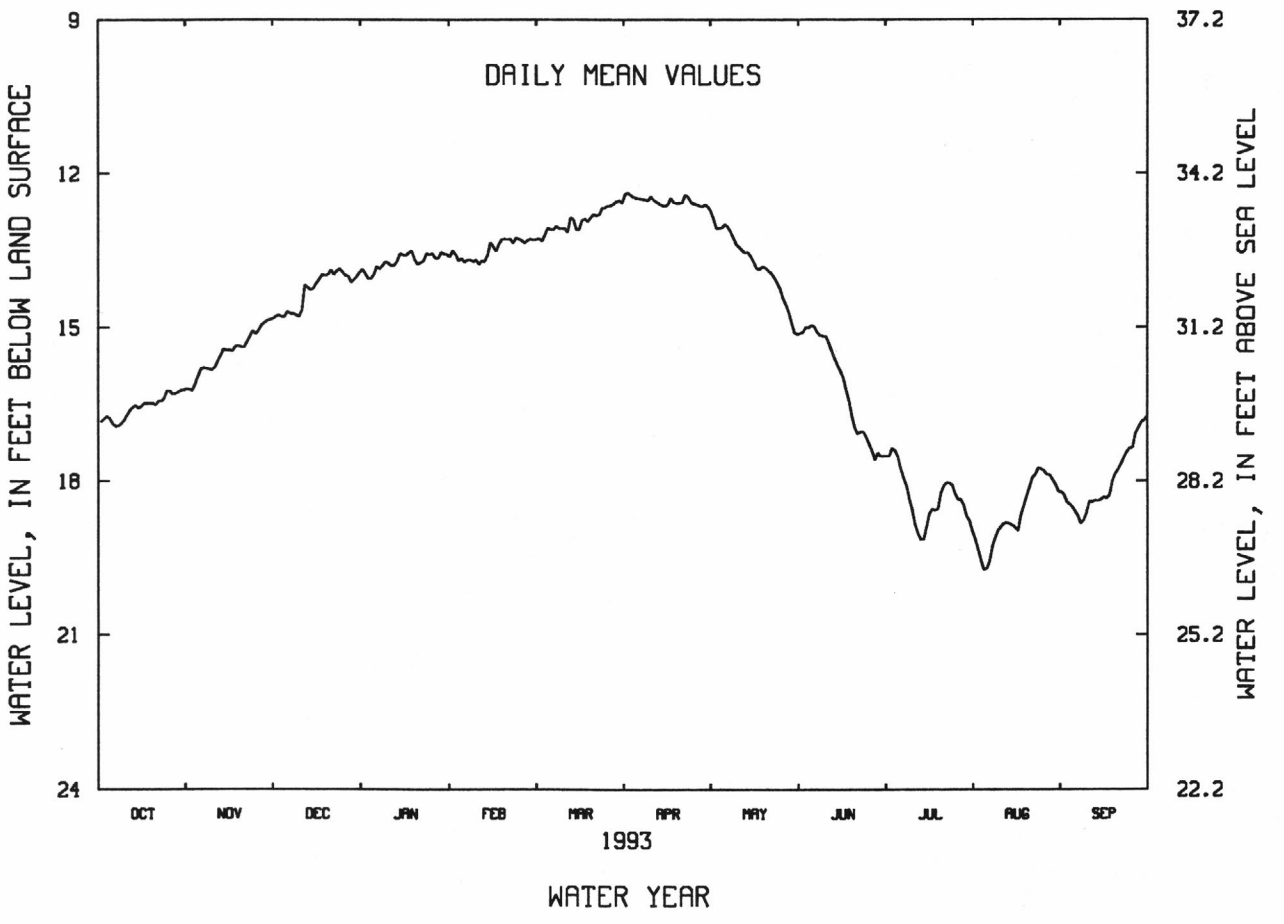
BURLINGTON COUNTY

395315074494601. Local I.D., Medford Twp MW-1 Obs. NJ-WRD Well Number, 05-1155.
LOCATION.--Lat 39°53'15", long 74°49'46", Hydrologic Unit 02040202, on the east side of Mill St. (County Rt. 623), 0.6 mi south of County Rt. 541, Medford Township.
Owner: Medford Township Department of Municipal Utilities.
AQUIFER.--Wenonah-Mount Laurel aquifer of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 180 ft, screened 120 to 180 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land surface is 46.15 ft above sea level (levels by Medford Township).
Measuring point: Top of recorder shelf, 2.90 ft above land surface.
REMARKS.--Water level affected by nearby pumping.
PERIOD OF RECORD.--Sept. 1992 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 12.34 ft below land surface, Apr. 1, 1993; lowest, 19.82 ft below land surface, Aug. 4-5, 1993.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	16.88	15.81	14.69	13.82	13.69	13.07	12.48	13.06	14.96	17.52	19.71	18.59
10	16.71	15.77	14.67	13.80	13.71	13.07	12.45	13.39	15.18	18.56	18.90	18.40
15	16.54	15.44	14.14	13.60	13.52	13.10	12.64	13.62	15.85	18.90	18.91	18.31
20	16.51	15.39	13.88	13.74	13.28	12.86	12.58	13.84	16.96	18.23	18.11	17.78
25	16.24	15.06	13.99	13.65	13.36	12.67	12.59	14.24	17.28	18.25	17.80	17.35
EOM	16.20	14.83	13.87	13.51	13.30	12.58	12.65	15.14	17.51	18.97	18.21	16.74
MEAN	16.54	15.46	14.26	13.70	13.48	12.92	12.54	13.76	16.14	18.31	18.62	17.98

WTR YR 1993 MEAN 15.32 HIGH 12.34 APR 1 LOW 19.82 AUG 4-5



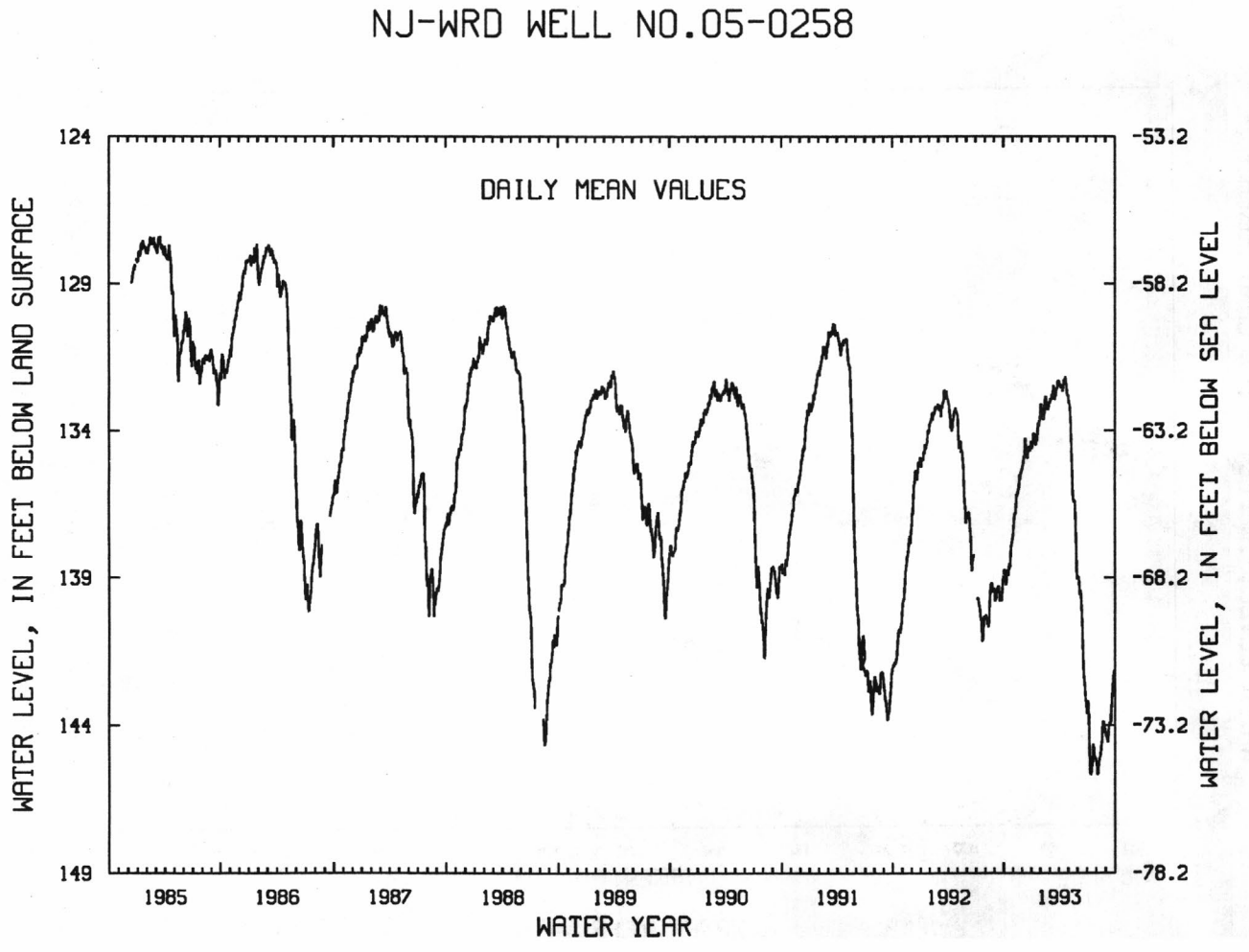
BURLINGTON COUNTY

395524074502501. Local I.D., Medford 1 Obs. NJ-WRD Well Number, 05-0258.
LOCATION.--Lat 39°55'24", long 74°50'25", Hydrologic Unit 02040202, at Medford Wildlife Management Area, Medford Township.
Owner: U.S. Geological Survey.
AQUIFER.--Upper Potomac-Raritan-Magothy aquifer of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 410 ft, screened 400 to 410 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Water-level extremes recorder, Feb. 1977 to Dec. 1984.
DATUM.--Land surface is 70.77 ft above sea level.
Measuring point: Top of coupling, 2.70 ft above land surface.
REMARKS.-- Water level affected by nearby pumping.
PERIOD OF RECORD.--Oct. 1963 to current year. Records for 1963 to 1978 are unpublished and are available in files of the New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 85.22 ft below land surface, Feb. 16-19, 1964; lowest, 145.71 ft below land surface, July 15, 1993.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	138.83	136.96	135.01	134.40	133.43	132.90	132.50	133.10	139.06	143.19	145.66	144.45
10	139.13	136.70	134.73	134.33	133.59	132.86	132.44	133.91	139.45	144.95	145.21	144.10
15	138.92	136.17	134.86	134.49	132.96	132.78	132.54	135.44	140.28	145.66	144.92	143.92
20	138.67	135.98	134.67	134.29	133.24	132.84	132.33	136.35	142.03	145.10	144.31	143.30
25	137.99	135.64	134.58	133.83	133.29	132.57	132.40	136.92	142.78	145.02	143.93	142.51
EOM	137.61	135.35	134.38	133.15	133.07	132.44	132.80	139.04	143.36	145.20	144.28	142.11
MEAN	138.58	136.24	134.78	134.13	133.24	132.74	132.47	135.48	140.88	144.73	144.74	143.55

WTR YR 1993 MEAN 137.66 HIGH 132.11 MAR 13 LOW 145.71 JUL 15



BURLINGTON COUNTY

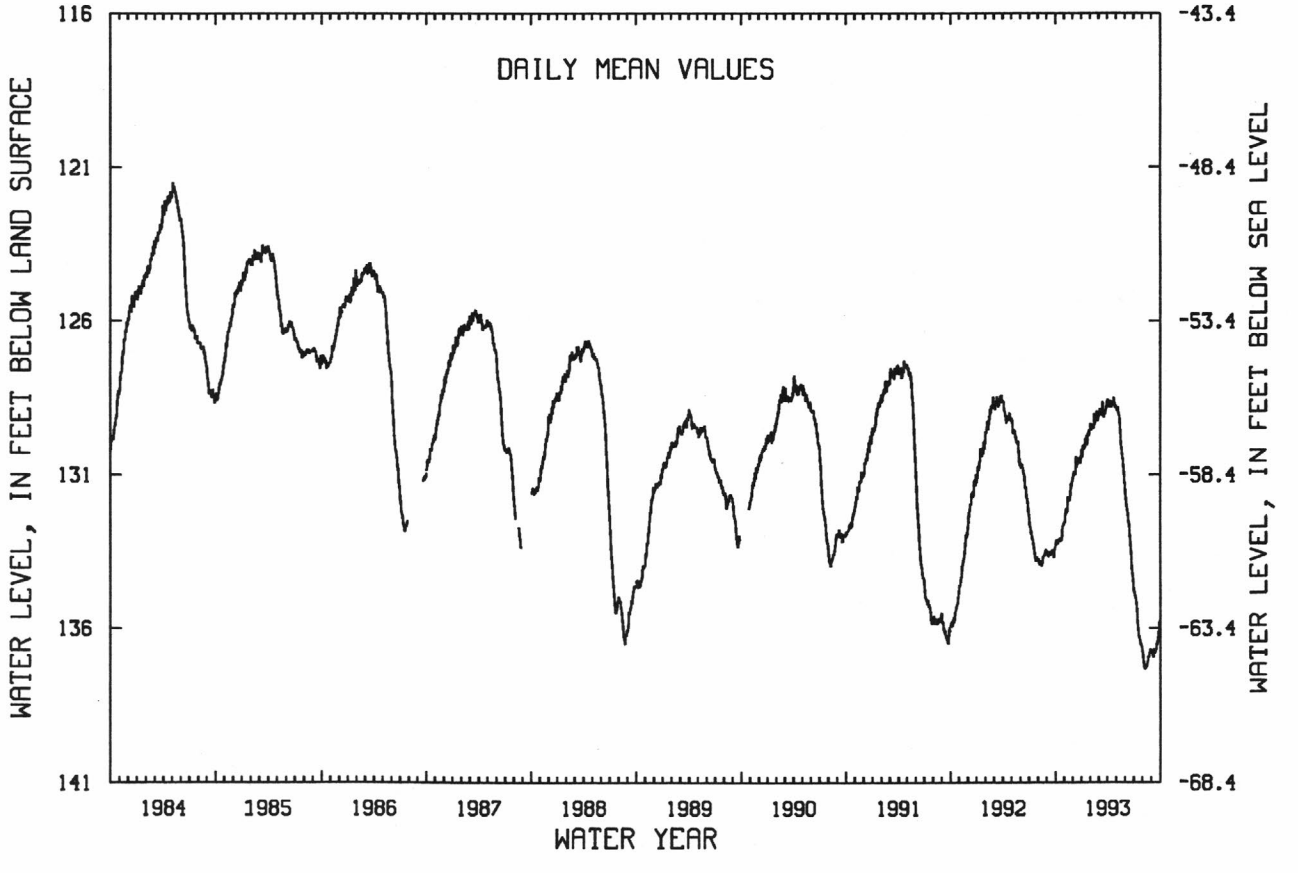
395525074502505. Local I.D., Medford 5 Obs. NJ-WRD Well Number, 05-0261.
LOCATION.--Lat 39°55'25", long 74°50'25", Hydrologic Unit 02040202, at Medford Wildlife Management Area, Medford Township.
Owner: U.S. Geological Survey.
AQUIFER.--Middle Potomac-Raritan-Magothy aquifer of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 750 ft, screened 740 to 750 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land surface is 72.60 ft above sea level.
Measuring point: Top of recorder shelf, 3.60 ft above land surface.
REMARKS.-- Water level affected by nearby pumping.
PERIOD OF RECORD.--Jan. 1968 to current year. Records for 1968 to 1977 are unpublished and are available in files of the New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 94.46 ft below land surface, Mar. 1, 1968; lowest, 137.33 ft below land surface, Aug. 9-11, 1993.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	133.17	132.13	130.89	130.06	129.45	128.85	128.79	128.84	131.87	134.93	137.13	136.87
10	133.16	132.20	130.86	130.17	129.46	128.94	128.59	129.06	132.22	135.23	137.32	136.66
15	133.16	131.84	130.71	129.92	129.37	129.07	128.79	129.57	132.63	135.90	137.26	136.68
20	133.16	131.85	130.46	129.98	129.19	129.07	128.71	130.15	133.35	136.25	136.98	136.52
25	132.69	131.42	130.51	129.71	129.27	128.91	128.70	130.54	134.16	136.51	136.80	136.20
EOM	132.57	131.13	130.18	129.33	129.13	128.71	128.74	131.29	134.65	136.73	136.73	135.75
MEAN	133.02	131.83	130.67	129.91	129.28	128.92	128.70	129.78	132.93	135.82	137.02	136.52

WTR YR 1993 MEAN 132.05 HIGH 128.19 MAR 13 LOW 137.33 AUG 9-11

NJ-WRD WELL NO.05-0261



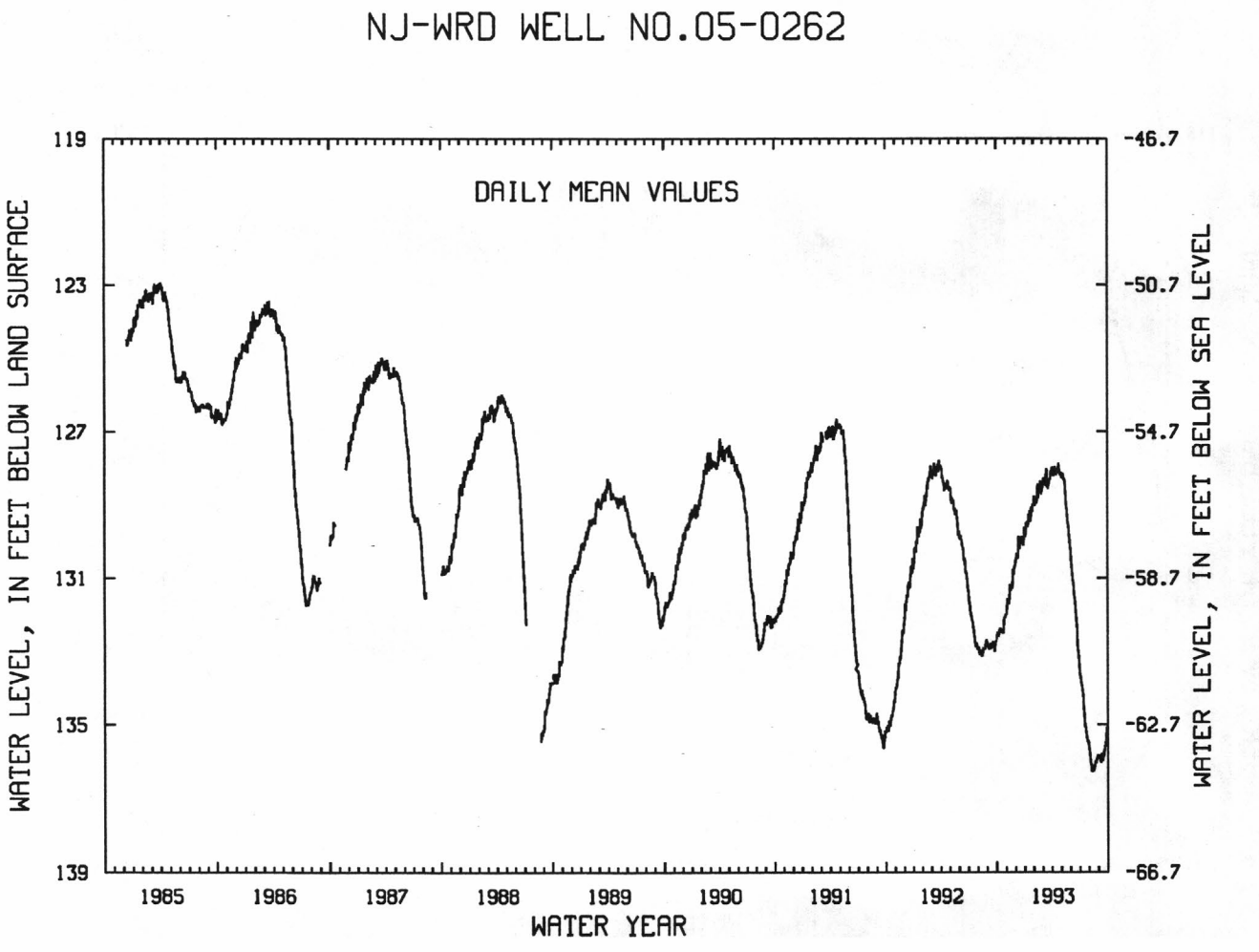
BURLINGTON COUNTY

395525074502601. Local I.D., Medford 4 Obs. NJ-WRD Well Number, 05-0262.
LOCATION.--Lat 39°55'24", long 74°50'25", Hydrologic Unit 02040202, at Medford Wildlife Management Area, Medford Township.
Owner: U.S. Geological Survey.
AQUIFER.--Lower Potomac-Raritan-Magothy aquifer of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 1,145 ft, screened 1,125 to 1,145 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Water-level extremes recorder, Feb. 1977 to Dec. 1984.
DATUM.--Land surface is 72.32 ft above sea level.
Measuring point: Top of recorder shelf, 2.40 ft above land surface.
REMARKS.--Water level affected by nearby pumping.
PERIOD OF RECORD.--Jan. 1968 to current year. Records for 1968 to 1978 are unpublished and are available in files of the New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 94.24 ft below land surface, Mar. 13, 1968; lowest, 136.31 ft below land surface, Aug. 16, 1993.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	132.53	131.56	130.34	129.50	128.91	128.26	128.20	128.18	130.79	133.83	136.02	135.94
10	132.44	131.66	130.30	129.62	128.88	128.35	127.95	128.33	131.17	134.08	136.27	135.78
15	132.48	131.29	130.15	129.35	128.82	128.49	128.17	128.67	131.57	134.64	136.25	135.84
20	132.51	131.29	129.89	129.41	128.63	128.47	128.10	129.19	132.16	135.06	136.04	135.71
25	132.09	130.87	129.96	129.17	128.71	128.31	128.10	129.59	132.96	135.41	135.94	135.44
EOM	131.99	130.60	129.61	128.77	128.55	128.13	128.10	130.20	133.43	135.63	135.85	135.04
MEAN	132.38	131.27	130.12	129.35	128.72	128.33	128.09	128.92	131.80	134.67	136.03	135.71

WTR YR 1993 MEAN 131.29 HIGH 127.56 MAR 13 LOW 136.31 AUG 16



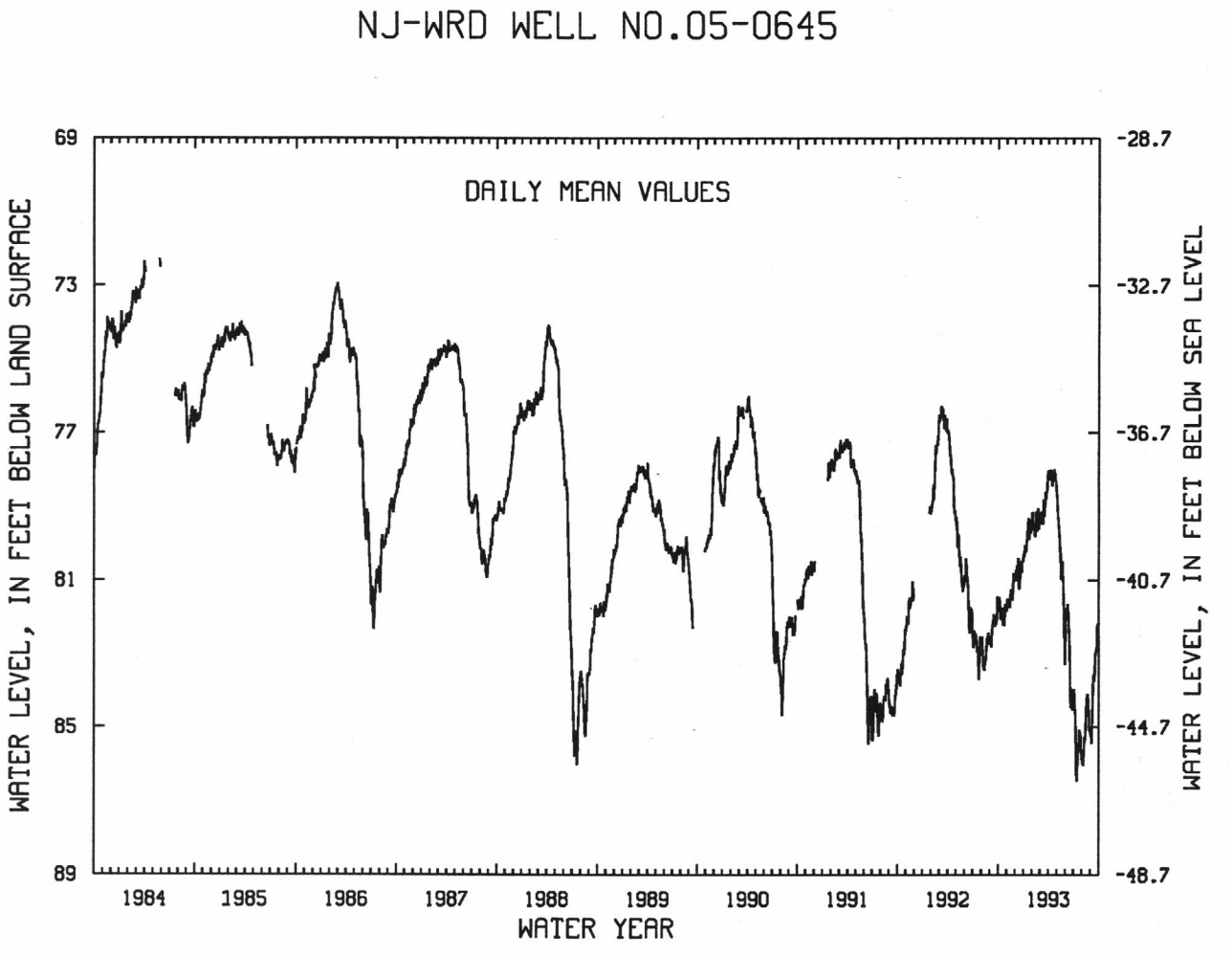
BURLINGTON COUNTY

400010074521601. Local I.D., Willingboro 2 Obs. NJ-WRD Well Number, 05-0645.
LOCATION.--Lat 40°00'10", long 74°52'16", Hydrologic Unit 02040202, near intersection of Bridge Street and Tiffany Lane, Willingboro Township.
Owner: Willingboro Municipal Utilities Authority.
AQUIFER.--Lower Potomac-Raritan-Magothy aquifer of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 441 ft, screened 431 to 441 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land surface is 40.30 ft above sea level.
Measuring point: Top of recorder shelf, 2.00 ft below land surface.
REMARKS.--Water level affected by tidal fluctuation and nearby pumping.
PERIOD OF RECORD.--Mar. 1966 to Sept. 1975, Mar. 1977 to current year. Records for 1966 to 1975 are unpublished and are available in files of the New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 49.79 ft below land surface, June 21, 1967; lowest, 86.60 ft below land surface, July 14, 1993.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	81.49	81.68	80.89	80.14	79.59	79.16	78.01	79.23	81.77	84.15	86.04	85.45
10	81.95	81.75	80.92	80.02	79.79	79.34	78.00	79.73	81.71	85.44	85.27	83.78
15	82.07	81.25	81.24	79.56	79.28	79.20	78.44	80.28	82.34	86.26	84.74	83.72
20	82.05	81.55	80.48	79.80	79.49	78.72	78.20	80.59	84.34	85.57	84.10	82.91
25	81.66	81.01	80.66	79.51	79.62	78.62	78.10	81.06	84.02	85.20	84.61	82.28
EOM	81.80	80.84	80.28	79.16	79.24	78.28	78.58	83.28	84.36	85.66	85.10	82.27
MEAN	81.86	81.35	80.75	79.79	79.45	78.94	78.19	80.47	82.99	85.26	85.05	83.57

WTR YR 1993 MEAN 81.49 HIGH 77.76 APR 1 LOW 86.60 JUL 14

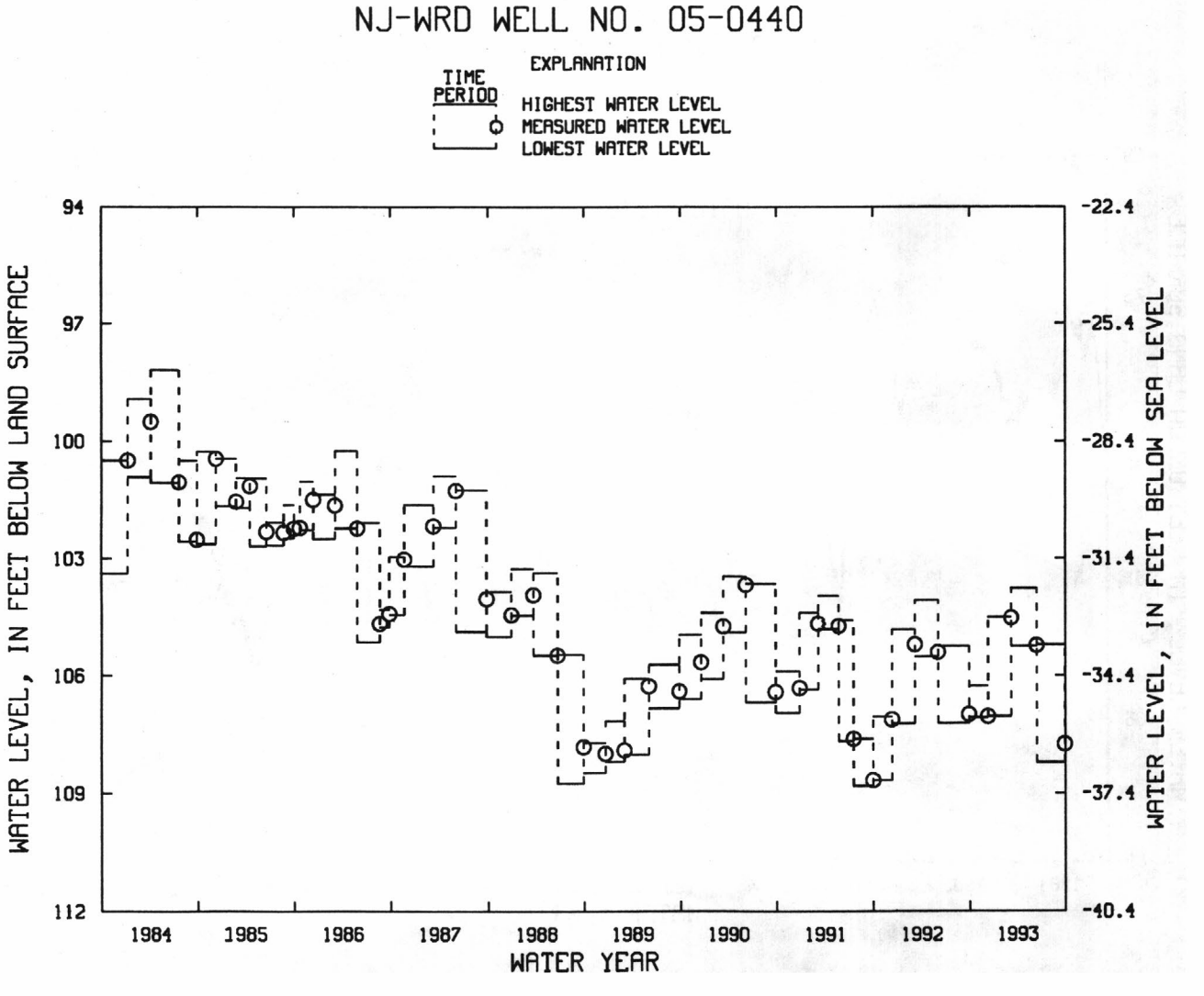


BURLINGTON COUNTY

400242074422301. Local I.D., Rhodia 1 Obs. NJ-WRD Well Number, 05-0440.
LOCATION.--Lat 40°02'42", long 74°42'23", Hydrologic Unit 02040201, at 1 Devi Dr. in Saddle Ridge Estates, near Jobstown, Springfield Township.
Owner: Toll Brothers Corp.
AQUIFER.--Middle Potomac-Raritan-Magothy aquifer of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 615 ft, screened 603 to 613 ft.
INSTRUMENTATION.--Water-level extremes recorder.
DATUM.--Land surface is 71.65 ft above sea level.
Measuring point: Front edge of cutout in recorder housing, 2.22 ft above land surface.
PERIOD OF RECORD.--Dec. 1968 to current year. Records for 1968 to 1978 are unpublished and are available in files of the New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 86.55 ft below land surface, Dec. 31, 1969; lowest, 108.81 ft below land surface, between July 18 and Sept. 30, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

WATER-LEVEL EXTREMES			MEASURED WATER LEVEL	
PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 28, 1992 TO DEC. 9, 1992	106.27	107.07	DEC. 9, 1992	107.04
DEC. 9, 1992 TO MAR. 8, 1993	104.51	107.04	MAR. 8, 1993	104.53
MAR. 8, 1993 TO JUNE 14, 1993	103.77	105.25	JUNE 14, 1993	105.23
JUNE 14, 1993 TO SEPT. 28, 1993	105.21	108.21	SEPT. 28, 1993	107.74



CAMDEN COUNTY

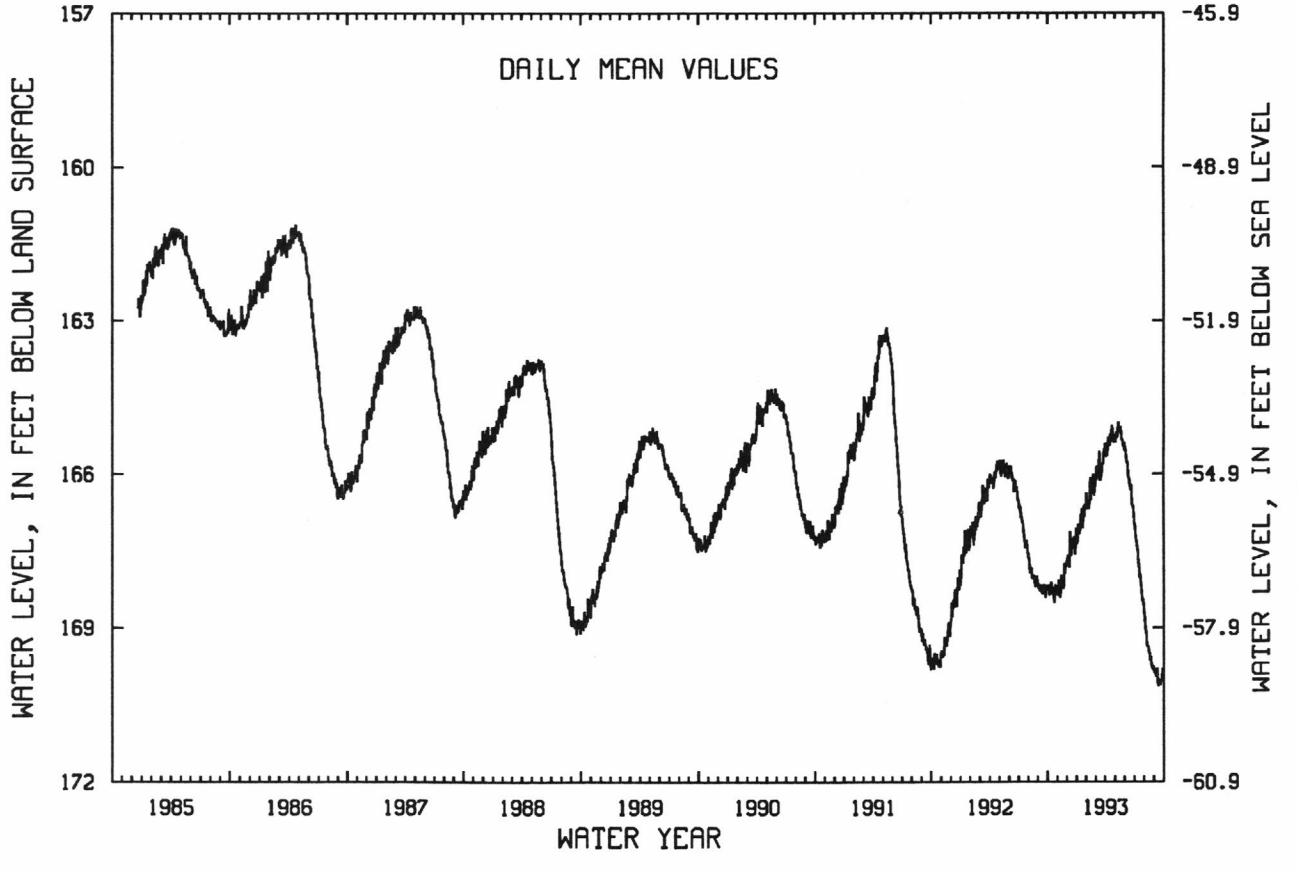
394215074561701. Local I.D., New Brooklyn Park 1 Obs. NJ-WRD Well Number, 07-0476.
LOCATION.--Lat 39°42'15", long 74°56'17", Hydrologic Unit 02040302, on eastern shore of New Brooklyn Lake about 900 ft upstream of Rt. 536, Winslow Township.
Owner: U.S. Geological Survey.
AQUIFER.--Potomac-Raritan-Magothy aquifer system, undifferentiated, of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 1,505 ft, screened 1,485 to 1,495 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Water-level extremes recorder, Mar. 1977 to Dec. 1984.
DATUM.--Land surface is 111.13 ft above sea level.
Measuring point: Top of coupling, 1.75 ft above land surface.
PERIOD OF RECORD.--Aug. 1960 to current year. Records for 1960 to 1981 are unpublished and are available in files of the New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 117.24 ft below land surface, Nov. 16, 1960; lowest, 170.18 ft below land surface, Sept. 13, 1993.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	168.25	168.08	167.59	166.99	166.61	165.85	165.66	165.26	165.59	167.17	169.03	169.87
10	168.19	168.39	167.63	167.17	166.60	165.96	165.29	165.25	165.78	167.42	169.36	169.79
15	168.28	168.15	167.55	166.90	166.51	166.10	165.44	165.10	166.08	167.73	169.46	170.04
20	168.43	168.25	167.26	167.03	166.32	166.06	165.34	165.11	166.31	167.97	169.58	170.12
25	168.16	167.92	167.36	166.78	166.42	165.82	165.30	165.34	166.64	168.40	169.77	170.05
EOM	168.31	167.76	167.06	166.37	166.25	165.59	165.27	165.44	166.82	168.67	169.83	169.94
MEAN	168.27	168.09	167.47	166.91	166.41	165.90	165.39	165.26	166.10	167.80	169.44	169.97

WTR YR 1993 MEAN 167.26 HIGH 164.95 MAY 12-13 LOW 170.18 SEP 13

NJ-WRD WELL NO.07-0476



CAMDEN COUNTY

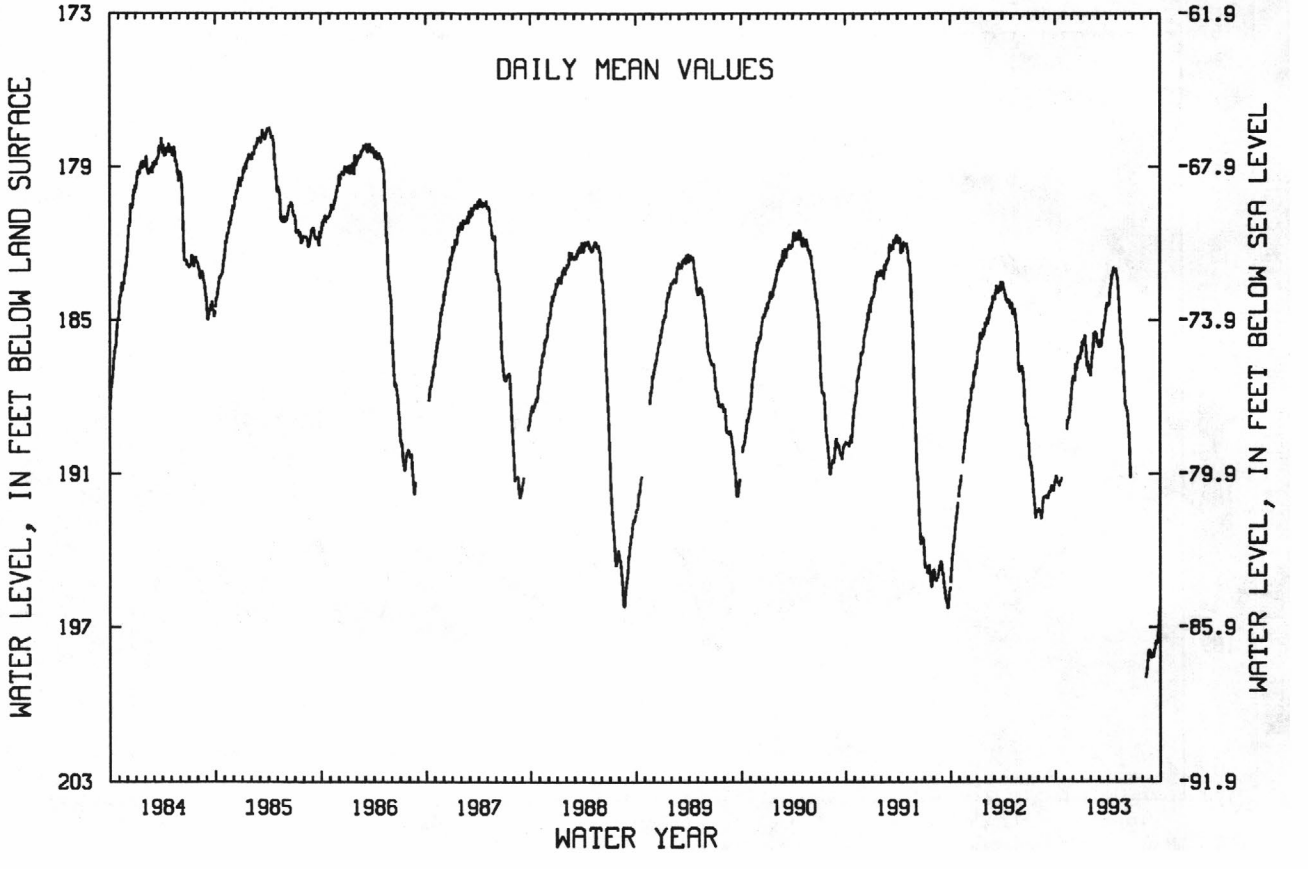
394215074561702. Local I.D., New Brooklyn Park 2 Obs. NJ-WRD Well Number, 07-0477.
LOCATION.--Lat 39°42'15", long 74°56'17", Hydrologic Unit 02040302, on eastern shore of New Brooklyn Lake about 900 ft upstream of Rt. 536, Winslow Township.
Owner: U.S. Geological Survey.
AQUIFER.--Upper Potomac-Raritan-Magothy aquifer of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 849 ft, screened 829 to 839 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land surface is 111.13 ft above sea level.
Measuring point: Top of recorder shelf, 3.30 ft above land surface.
PERIOD OF RECORD.--May 1961 to current year. Records for 1961 to 1976 are unpublished and are available in files of the New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 127.48 ft below land surface, May 5, 1961; lowest, 199.02 ft below land surface, Aug. 12, 1993.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	191.11	---	187.18	185.85	186.73	185.77	184.44	183.29	188.37	---	---	198.07
10	191.36	---	187.18	185.84	186.14	186.05	183.92	184.03	188.63	---	---	197.87
15	191.47	188.90	186.90	185.95	185.71	185.67	183.55	184.98	189.42	---	198.73	197.53
20	191.33	188.79	186.46	186.73	185.53	185.26	183.21	185.85	191.16	---	198.06	197.62
25	---	188.21	186.41	186.90	185.87	184.84	183.11	186.22	---	---	197.91	197.00
EOM	---	187.46	186.03	186.88	185.94	184.52	182.99	187.77	---	---	198.18	196.17
MEAN	191.29	188.47	186.78	186.32	186.03	185.39	183.62	185.08	189.06	---	198.26	197.52

WTR YR 1993 HIGH 182.91 APR 22 LOW 199.02 AUG 12

NJ-WRD WELL NO.07-0477



CAMDEN COUNTY

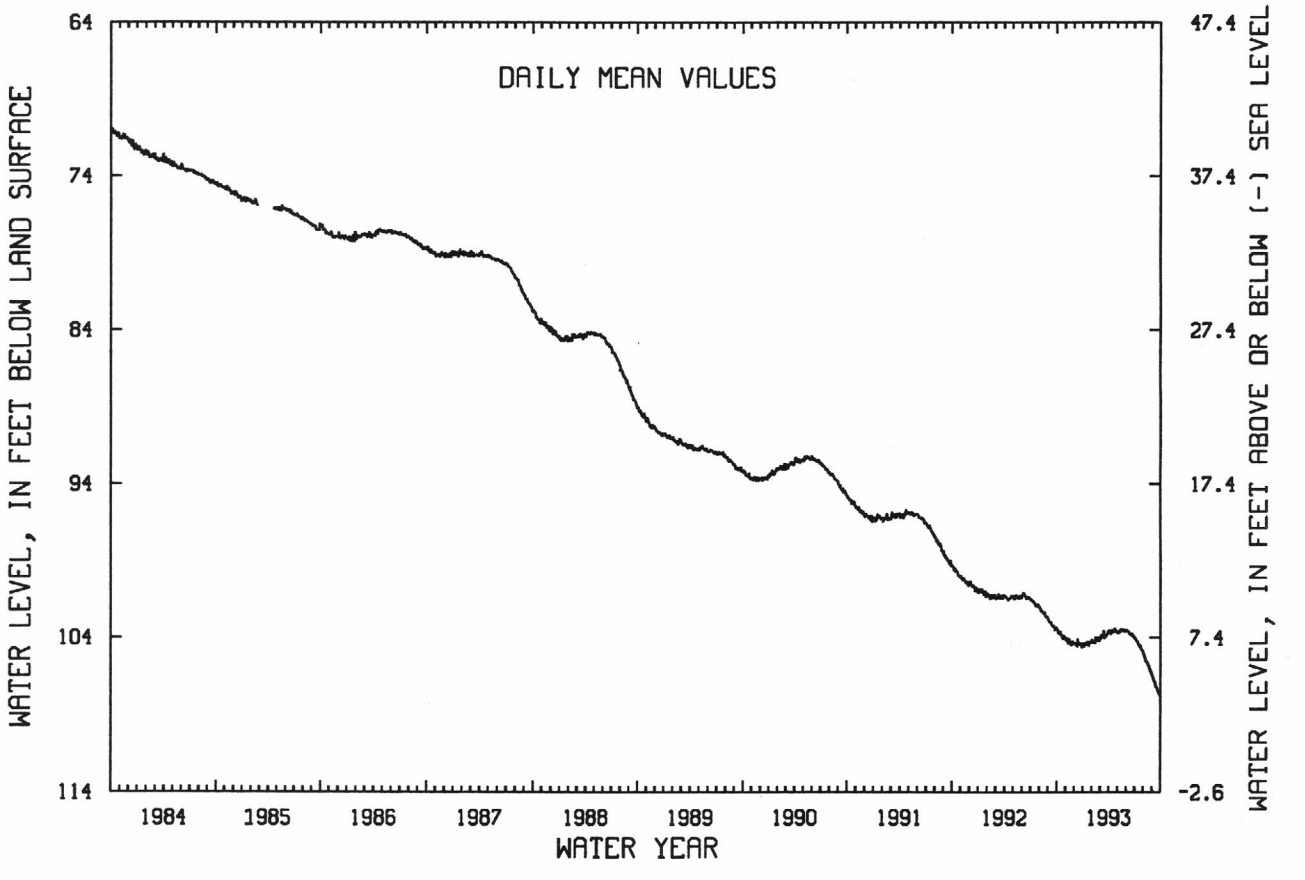
394215074561703. Local I.D., New Brooklyn Park 3 Obs. NJ-WRD Well Number, 07-0478.
LOCATION.--Lat 39°42'15", long 74°56'17", Hydrologic Unit 02040302, on eastern shore of New Brooklyn Lake about 900 ft upstream of Rt. 536, Winslow Township.
Owner: U.S. Geological Survey.
AQUIFER.--Wenonah-Mount Laurel aquifer of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 530 ft, screened 520 to 530 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land surface is 111.45 ft above sea level.
Measuring point: Top of coupling, 2.10 ft above land surface.
REMARKS.--Water level affected by regional cone of depression.
PERIOD OF RECORD.--May 1961 to current year. Records for 1961 to 1976 are unpublished and are available in files of the New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 56.12 ft below land surface, Aug. 14, 1962; lowest, 107.86 ft below land surface, Sept. 30, 1993.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	103.56	104.00	104.39	104.35	104.36	103.82	103.75	103.67	103.53	104.10	105.25	106.64
10	103.66	104.40	104.56	104.48	104.38	103.98	103.59	103.65	103.57	104.25	105.52	106.78
15	103.80	104.28	104.43	104.35	104.20	103.97	103.68	103.49	103.73	104.41	105.65	107.18
20	103.97	104.52	104.36	104.54	104.19	103.98	103.60	103.44	103.81	104.49	105.87	107.41
25	103.86	104.35	104.53	104.31	104.25	103.79	103.64	103.55	103.94	104.77	106.13	107.64
EOM	104.09	104.38	104.36	104.17	104.19	103.65	103.63	103.59	103.95	104.96	106.44	107.81
MEAN	103.80	104.28	104.43	104.38	104.21	103.88	103.62	103.58	103.72	104.45	105.72	107.15

WTR YR 1993 MEAN 104.43 HIGH 103.30 MAR 13-14 LOW 107.86 SEP 30

NJ-WRD WELL NO.07-0478



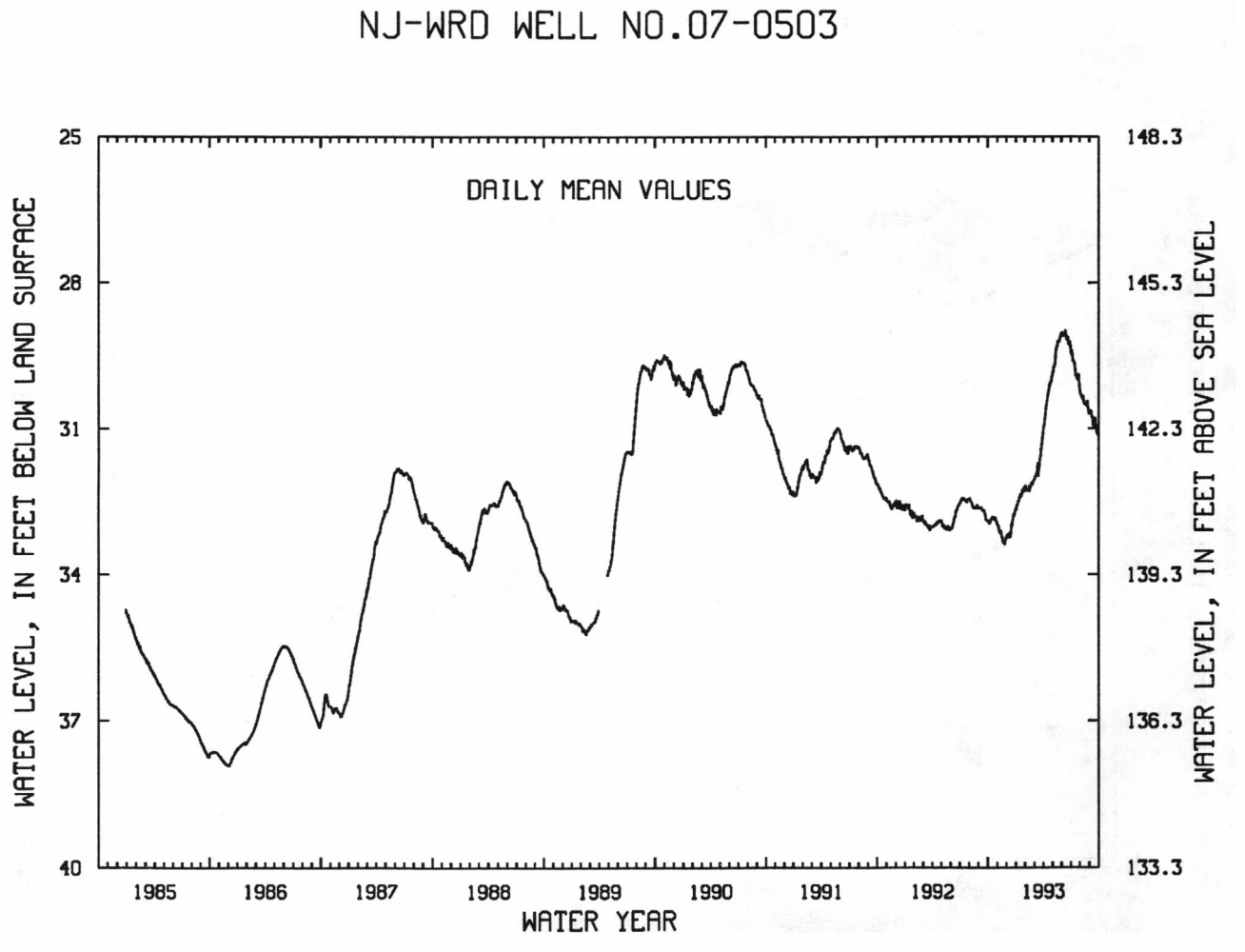
CAMDEN COUNTY

394440074593101. Local I.D., Winslow 5 Obs. NJ-WRD Well Number, 07-0503.
LOCATION.--Lat 39°44'40", long 74°59'31", Hydrologic Unit 02040302, about 1,000 ft east of intersection of Cross Keys-Berlin Rd. and Erial-Williamstown Rd., Winslow Township.
Owner: Winslow Water Company.
AQUIFER.--Kirkwood-Cohansey aquifer system of Miocene age.
WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 6 in., depth 76 ft, screened 71 to 76 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Water-level extremes recorder, Nov. 1977 to Dec. 1984.
DATUM.--Land surface is 173.26 ft above sea level.
Measuring point: Top of recorder shelf, 1.00 ft above land surface.
PERIOD OF RECORD.--Dec. 1972 to current year. Records for 1972 to 1980 are unpublished and are available in files of the New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 26.78 ft below land surface, May 20-21, 1973; lowest, 38.35 ft below land surface, between June 3 and Oct. 6, 1981.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	32.94	33.03	33.17	32.56	32.24	32.00	30.81	29.75	29.09	29.43	30.31	30.62
10	32.89	33.13	33.19	32.48	32.25	31.89	30.51	29.64	29.05	29.61	30.32	30.80
15	32.83	33.22	33.11	32.38	32.29	31.97	30.34	29.33	29.04	29.75	30.48	30.98
20	32.86	33.34	32.88	32.32	32.14	31.63	30.18	29.20	29.17	29.92	30.49	30.82
25	32.86	33.35	32.74	32.31	32.14	31.40	30.05	29.17	29.27	30.00	30.47	31.11
EOM	32.96	33.23	32.63	32.16	32.06	31.06	29.91	29.02	29.31	30.19	30.66	31.16
MEAN	32.88	33.19	33.00	32.39	32.20	31.70	30.38	29.40	29.13	29.77	30.45	30.88

WTR YR 1993 MEAN 31.28 HIGH 28.95 JUN 13 LOW 33.40 NOV 23-24



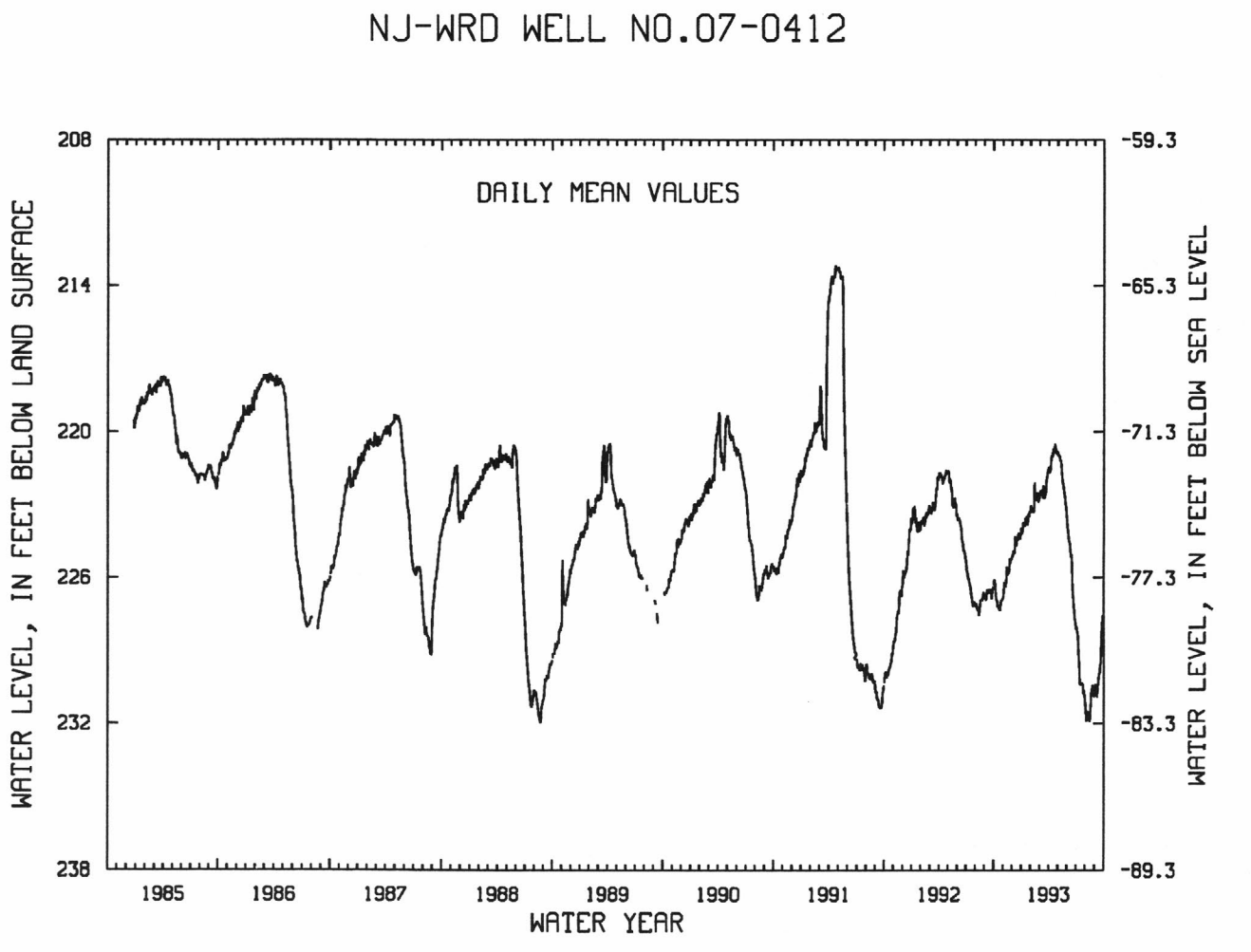
CAMDEN COUNTY

394922074563301. Local I.D., Elm Tree 2 Obs. NJ-WRD Well Number, 07-0412.
LOCATION.--Lat 39°49'22", long 74°56'30", Hydrologic Unit 02040202, about 200 ft northeast of Thomas Rd. and about 2 mi northwest of Berlin, Voorhees Township.
Owner: New Jersey - American Water Company.
AQUIFER.--Lower Potomac-Raritan-Magothy aquifer of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 1,092 ft, screened 1,082 to 1,092 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Water-level extremes recorder, Feb. 1977 to Dec. 1984.
DATUM.--Land surface is 148.68 ft above sea level.
Measuring point: Top of recorder shelf, 2.80 ft above land surface.
REMARKS.--Well was originally screened 1,217 to 1,227 ft; rehabilitated Aug. 1969.
PERIOD OF RECORD.--Mar. 1964 to current year. Records for 1964 to 1978 are unpublished and are available in files of the New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 142.28 ft below land surface, Mar. 3, 1964; lowest, 232.01 ft below land surface, Aug. 22, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	226.19	226.20	224.91	223.74	223.23	222.41	221.66	220.96	224.23	228.20	231.90	230.44
10	226.93	226.32	224.80	223.89	223.27	222.51	220.97	221.21	224.62	229.13	231.50	230.51
15	227.17	225.78	224.63	223.67	222.80	222.72	220.95	221.73	225.17	230.39	231.91	229.94
20	227.33	225.84	224.23	223.79	222.79	222.59	220.74	222.18	226.45	230.33	230.91	229.54
25	226.96	225.38	224.29	223.48	222.89	221.95	220.76	222.66	227.28	230.56	230.50	228.08
EOM	226.87	225.20	223.94	223.04	222.74	221.64	220.80	223.47	227.92	231.10	230.68	227.53
MEAN	226.87	225.86	224.55	223.65	222.90	222.34	221.02	221.90	225.64	229.74	231.28	229.54

WTR YR 1993 MEAN 225.46 HIGH 220.49 APR 22 LOW 231.95 AUG 15



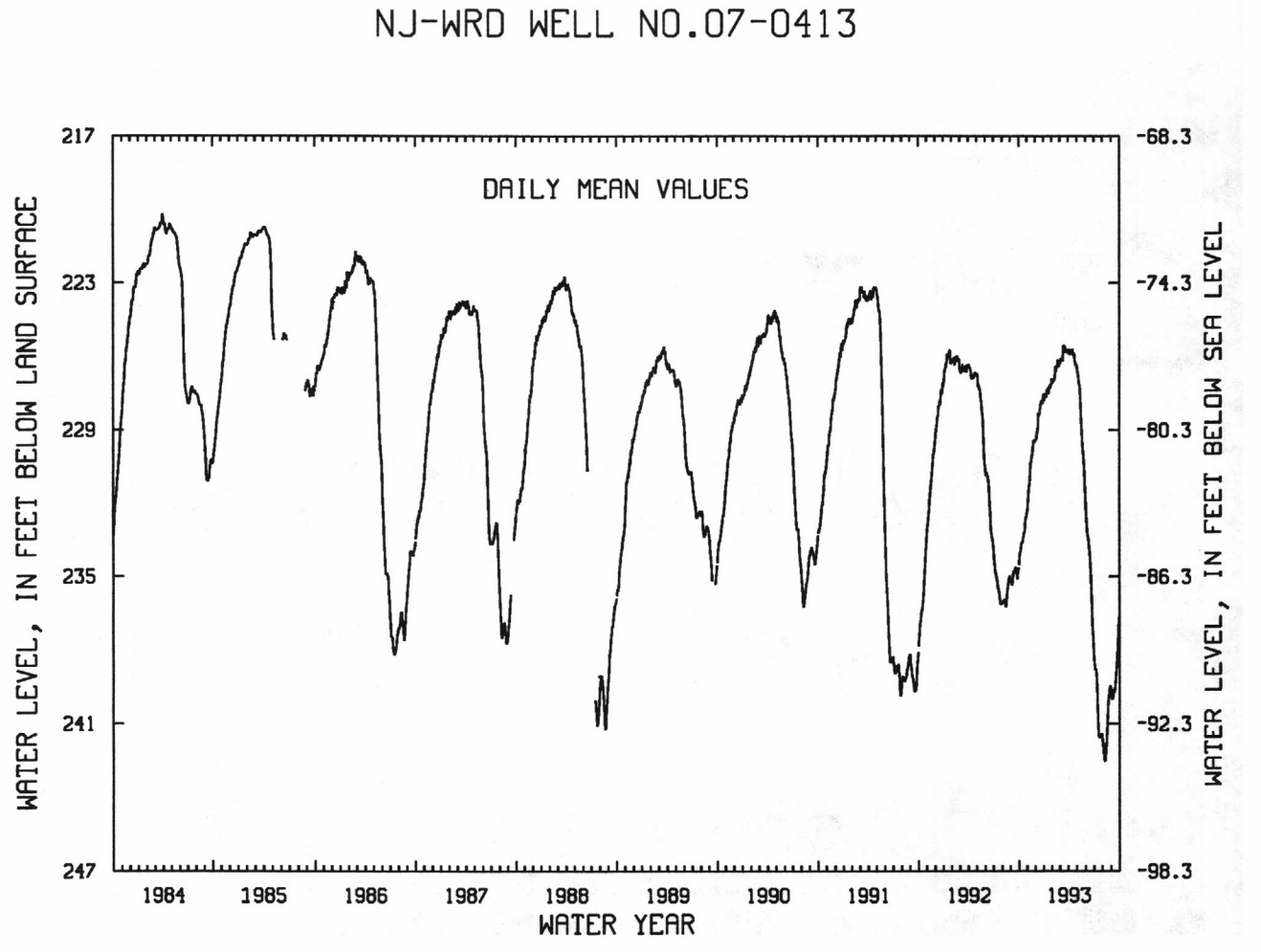
CAMDEN COUNTY

394922074563302. Local I.D., Elm Tree 3 Obs. NJ-WRD Well Number, 07-0413.
LOCATION.--Lat 39°49'22", long 74°56'30", Hydrologic Unit 02040202, about 200 ft northeast of Thomas Rd. and about 2 mi northwest of Berlin, Voorhees Township.
Owner: New Jersey - American Water Company.
AQUIFER.--Middle Potomac-Raritan-Magothy aquifer of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 717 ft, screened 706 to 717 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land surface is 148.73 ft above sea level.
Measuring point: Top of recorder shelf, 0.60 ft above land surface.
PERIOD OF RECORD.--Dec. 1963 to current year. Records for 1963 to 1977 are unpublished and are available in files of the New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 174.21 ft below land surface, Feb. 6, 1964; lowest, 242.54 ft below land surface, Aug. 8-9, 1993.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	234.02	231.61	229.22	227.53	227.05	226.09	225.91	226.70	232.90	238.77	242.17	239.99
10	233.70	231.08	228.82	227.69	226.92	226.14	225.72	227.17	233.44	239.09	242.42	239.60
15	233.59	230.30	228.39	227.46	226.65	225.84	225.91	228.00	234.02	240.77	241.61	239.39
20	233.29	230.03	227.95	227.52	226.42	225.63	225.93	229.19	235.29	241.48	240.23	238.74
25	232.68	229.52	227.85	227.27	226.44	225.79	226.22	230.05	237.12	241.47	239.62	237.67
EOM	232.42	229.47	227.56	226.93	226.34	225.81	226.34	231.53	238.20	241.61	239.77	236.65
MEAN	233.41	230.50	228.41	227.43	226.65	225.89	225.95	228.48	234.72	240.35	241.03	238.91

WTR YR 1993 MEAN 231.85 HIGH 225.26 MAR 13 LOW 242.54 AUG 8-9



CAMDEN COUNTY

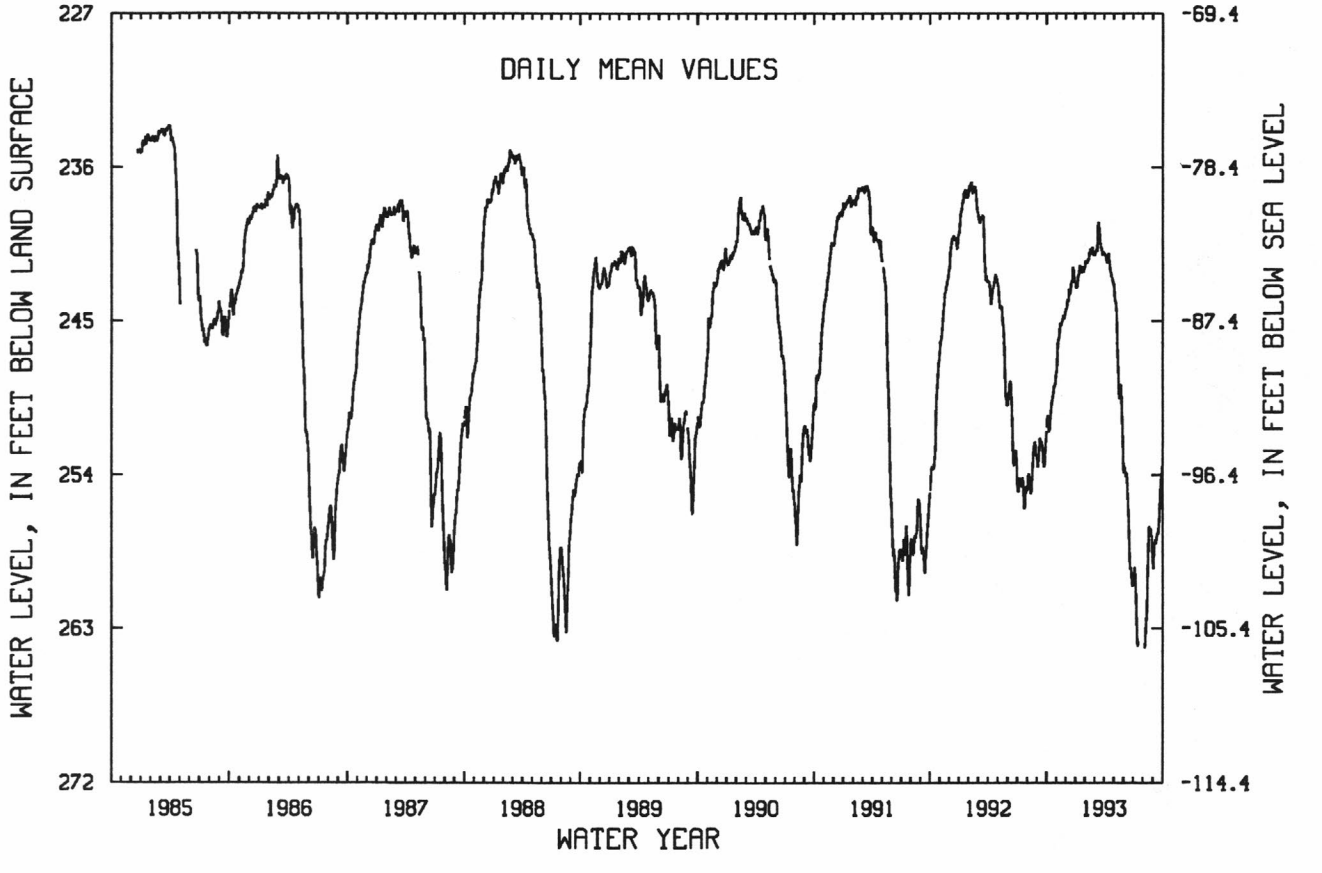
395229074571201. Local I.D., Hutton Hill 1 Obs. NJ-WRD Well Number, 07-0117.
LOCATION.--Lat 39°52'29", long 74°57'12", Hydrologic Unit 02040202, about 800 ft northeast of intersection of Kresson Rd. and Cropwell Rd., Cherry Hill Township.
Owner: New Jersey - American Water Company.
AQUIFER.--Upper Potomac-Raritan-Magothy aquifer of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 562 ft, screened 552 to 562 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Water-level extremes recorder, Feb. 1977 to Dec. 1984.
DATUM.--Land surface is 157.61 ft above sea level.
Measuring point: Top of recorder shelf, 1.60 ft above land surface.
PERIOD OF RECORD.--Aug. 1967 to current year. Records for 1967 to 1978 are unpublished and are available in files of the New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 200.77 ft below land surface, Mar. 23, 1968; lowest, 264.20 ft below land surface, Aug. 5, 1993.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	250.65	246.35	243.89	242.96	241.59	240.89	241.12	243.79	253.79	259.41	264.14	258.04
10	251.23	245.83	243.61	242.28	241.38	240.89	241.48	244.57	253.88	261.42	262.60	257.99
15	250.02	245.26	243.30	241.80	241.09	239.56	241.04	247.85	255.76	264.04	259.21	257.35
20	249.45	245.00	242.59	242.17	240.84	240.44	242.09	249.11	258.94	---	257.12	256.48
25	248.78	244.88	242.24	242.04	241.12	240.95	242.44	249.65	259.56	---	257.35	254.50
EOM	248.03	244.36	242.73	241.48	241.07	241.11	242.77	253.61	260.49	---	259.19	253.48
MEAN	249.88	245.50	243.13	242.19	241.16	240.54	241.74	247.50	256.64	261.33	259.64	256.71

WTR YR 1993 MEAN 248.22 HIGH 238.81 MAR 13 LOW 264.20 AUG 5

NJ-WRD WELL NO.07-0117

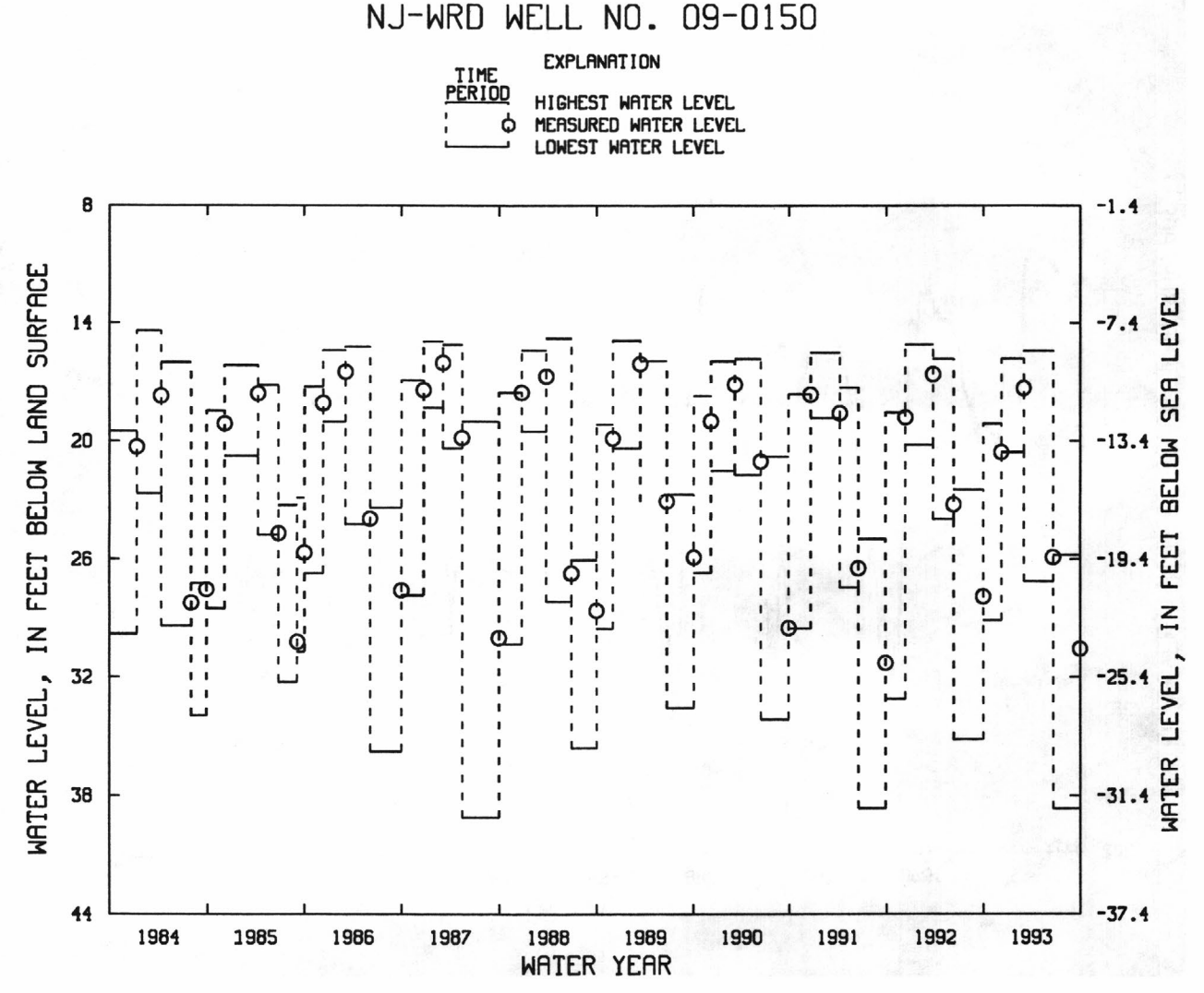


CAPE MAY COUNTY

385607074555201. Local I.D., West Cape May 1 Obs. NJ-WRD Well Number, 09-0150.
LOCATION.--Lat 38°56'07", long 74°55'56", Hydrologic Unit 02040302, on the north side of Sunset Blvd., West Cape May Borough.
Owner: U.S. Geological Survey.
AQUIFER.--Cohansey Sand of Miocene age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 293 ft, screened 283 to 293 ft.
INSTRUMENTATION.--Water-level extremes recorder.
DATUM.--Land surface is 6.60 ft above sea level.
Measuring point: Front edge of cutout in recorder housing, 2.88 ft above land surface.
REMARKS.--Water level affected by tidal fluctuation and nearby pumping.
PERIOD OF RECORD.--July 1957 to current year. Records for 1957 to 1982 are unpublished and are available in files of the New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 14.38 ft below land surface, between Jan. 10 and Apr. 10, 1984; lowest, 41.30 ft below land surface, Sept. 3, 1963.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

WATER-LEVEL EXTREMES			MEASURED WATER LEVEL	
PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 30, 1992 TO DEC. 8, 1992	19.08	29.11	DEC. 8, 1992	20.55
DEC. 8, 1992 TO MAR. 3, 1993	15.80	20.55	MAR. 3, 1993	17.29
MAR. 3, 1993 TO JUNE 22, 1993	15.41	27.13	JUNE 22, 1993	25.90
JUNE 22, 1993 TO SEPT. 30, 1993	25.79	38.65	SEPT. 30, 1993	30.57



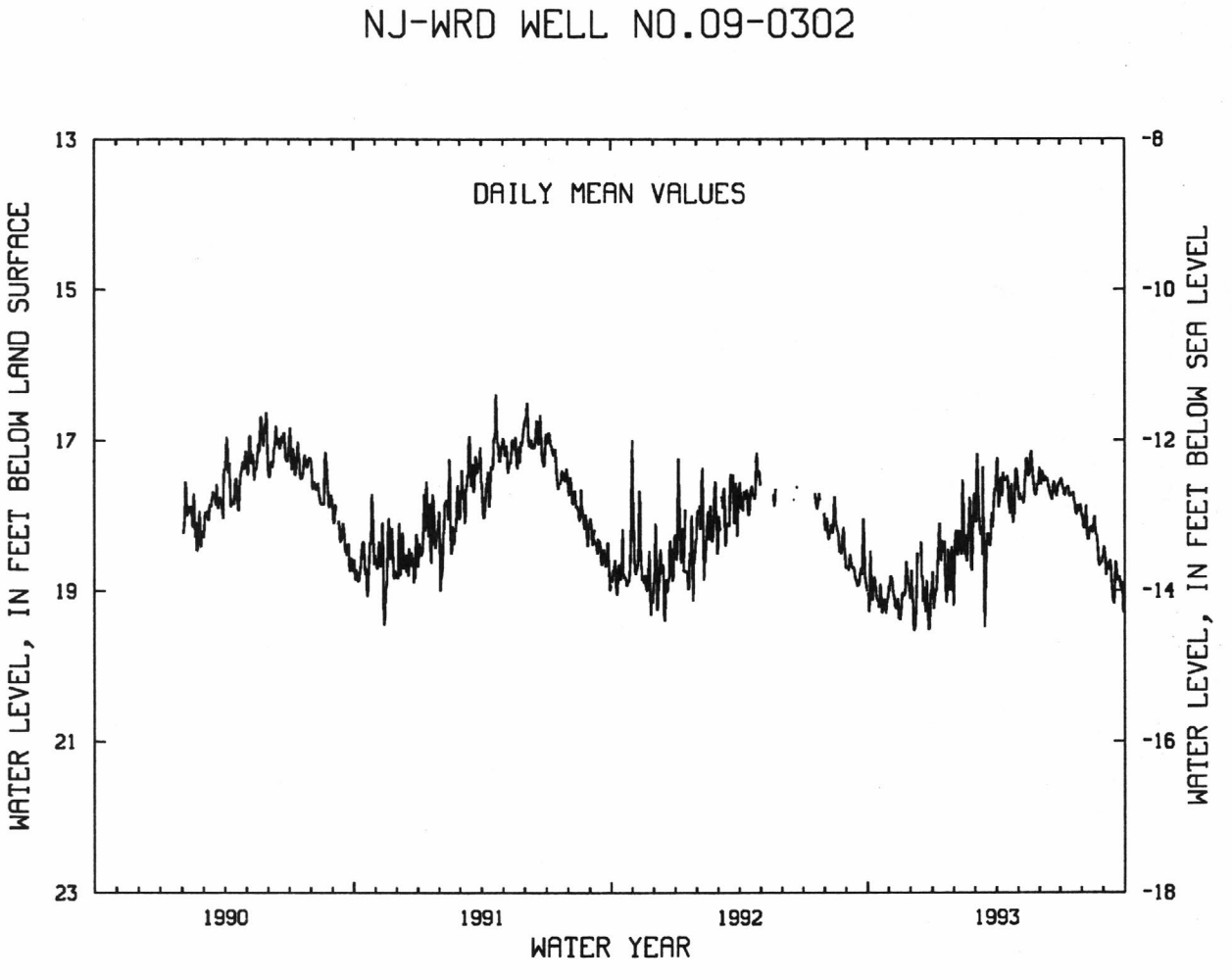
CAPE MAY COUNTY

385709074512801. Local I.D., Coast Guard 800 Obs. NJ-WRD Well Number, 09-0302.
LOCATION.--Lat 38°57'09", long 74°51'28", Hydrologic Unit 02040302, at U.S. Coast Guard Electronics and Engineering Center, Lower Township.
Owner: U. S. Geological Survey.
AQUIFER.--Atlantic City 800-foot sand of the Kirkwood Formation of Miocene age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 903 ft, screened 883 to 893 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land surface is 5 ft above sea level, from topographic map.
Measuring point: Top of recorder shelf, 3.05 ft above land surface.
REMARKS.--Water level affected by tidal fluctuation.
PERIOD OF RECORD.--Feb. 1990 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 16.04 ft below land surface, Apr. 21, 1991; lowest, 20.04 ft below land surface, Dec. 5, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	18.47	18.84	19.53	19.02	18.53	17.18	17.81	17.79	17.41	17.63	18.17	18.67
10	18.90	19.23	18.50	18.11	18.52	18.17	17.43	17.78	17.53	17.64	18.32	18.65
15	19.14	19.27	18.35	18.41	18.52	19.48	17.54	17.33	17.64	17.75	18.16	19.17
20	18.99	19.04	18.96	19.16	18.20	18.25	17.97	17.15	17.70	17.69	18.18	18.81
25	19.12	18.62	19.38	19.00	18.73	17.97	17.99	17.71	17.71	17.98	18.66	18.97
EOM	18.94	19.11	18.75	18.77	17.78	17.66	17.45	17.53	17.56	17.95	18.53	19.12
MEAN	19.06	19.04	19.09	18.72	18.28	18.11	17.65	17.56	17.59	17.74	18.27	18.84

WTR YR 1993 MEAN 18.32 HIGH 16.40 MAR 13 LOW 20.04 DEC 5

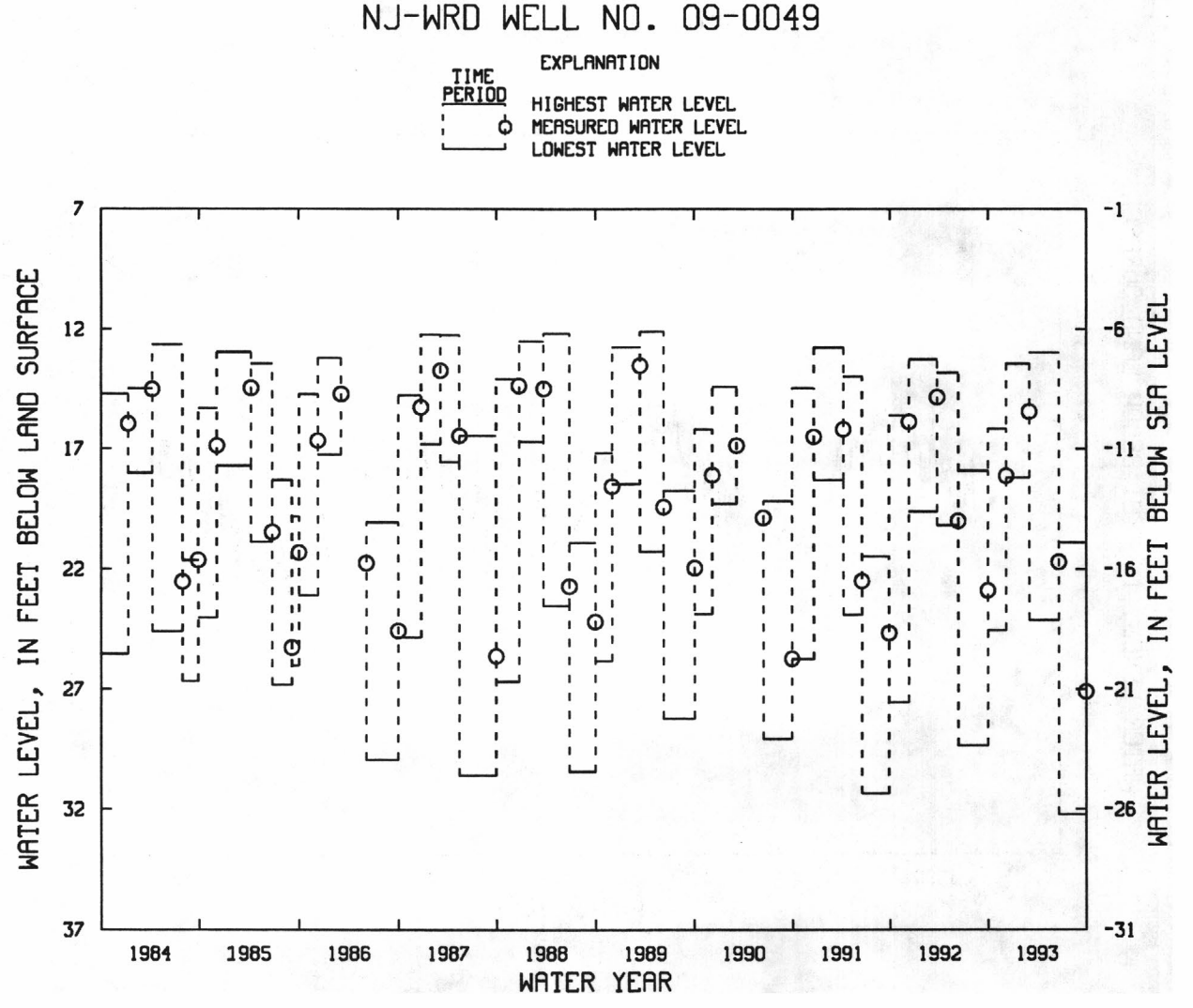


CAPE MAY COUNTY

385804074574201. Local I.D., Higbee Beach 3 Obs. NJ-WRD Well Number, 09-0049.
LOCATION.--Lat 38°58'04", long 74°57'42", Hydrologic Unit 02040206, on the north bank at the west end of the Cape May Canal, Lower Township.
OWNER: U.S. Geological Survey.
AQUIFER.--Cohansey Sand of Miocene age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 250 ft, screened 241 to 250 ft.
INSTRUMENTATION.--Water-level extremes recorder.
DATUM.--Land surface is 6.00 ft above sea level.
Measuring Point: Front edge of cutout in recorder housing, 2.93 ft above land surface.
REMARKS.--Water level affected by tidal fluctuation and nearby pumping.
PERIOD OF RECORD.--June 1965 to current year. Records for 1975 to 1980 are unpublished and are available in files of the New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 12.10 ft below land surface, between Mar. 14 and June 9, 1989; lowest, 34.22 ft below land surface, July 31, 1974.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

WATER-LEVEL EXTREMES			MEASURED WATER LEVEL	
PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 30, 1992 TO DEC. 8, 1992	16.14	24.55	DEC. 8, 1992	18.12
DEC. 8, 1992 TO MAR. 3, 1993	13.43	18.19	MAR. 3, 1993	15.43
MAR. 3, 1993 TO JUNE 22, 1993	12.97	24.12	JUNE 22, 1993	21.70
JUNE 22, 1993 TO SEPT. 30, 1993	20.90	32.23	SEPT. 30, 1993	27.10



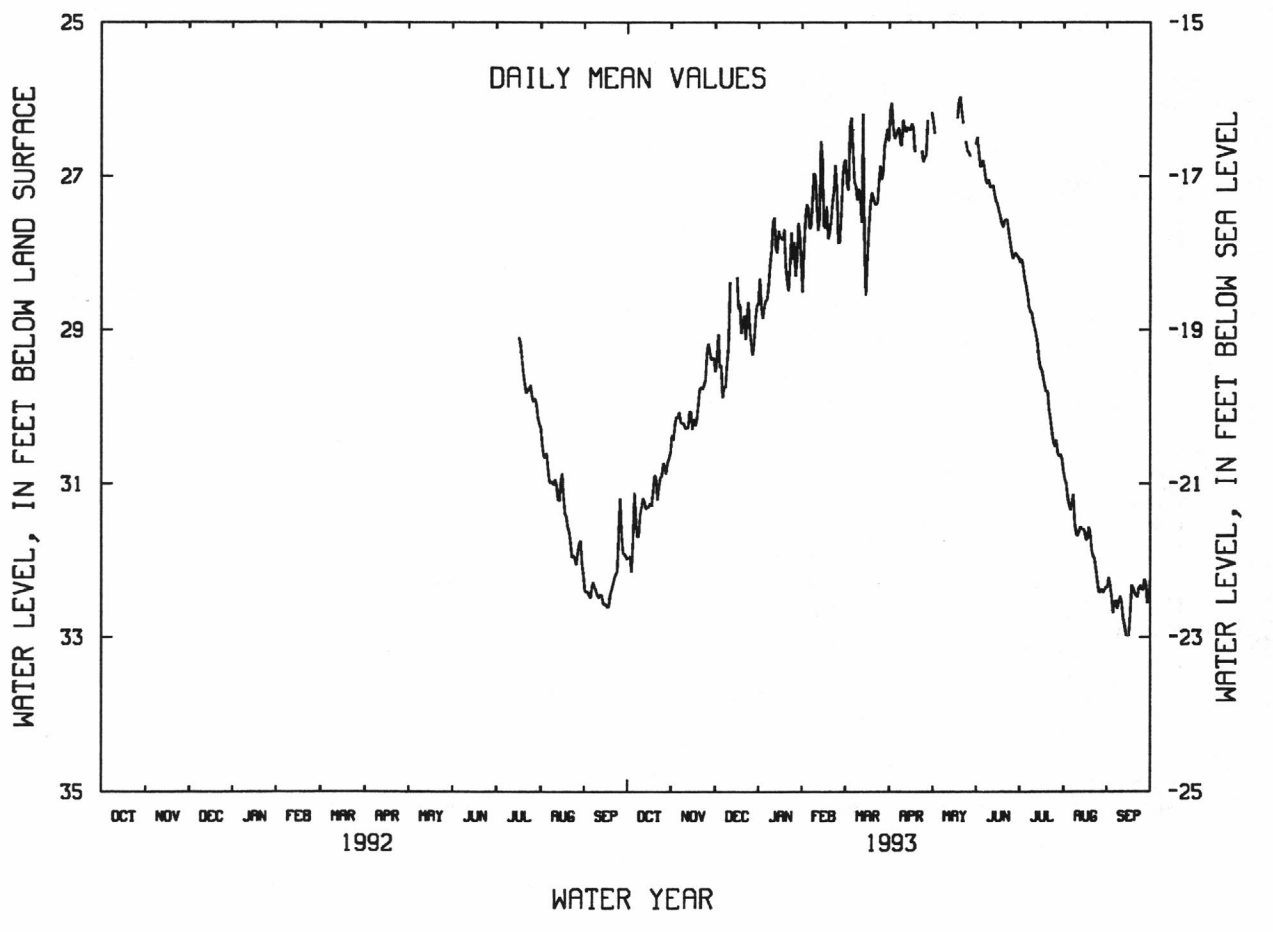
CAPE MAY COUNTY

390012074472001. Local I.D., M-1 N Wildwood 800 Obs. NJ-WRD Well Number, 09-0337.
LOCATION.--Lat 39°00'12", long 74°47'20", Hydrologic Unit 02040302, on the north side of 2nd Ave., between Surf Ave. and Ocean Ave., North Wildwood City.
Owner: U.S. Geological Survey.
AQUIFER.--Atlantic City 800-foot sand of the Kirkwood Formation of Miocene age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 965 ft, screened 910 to 960 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land surface is 10 ft above sea level, from topographic map.
Measuring point: Top of recorder shelf, 4.40 ft above land surface.
REMARKS.--Water level affected by tidal fluctuation and nearby pumping.
PERIOD OF RECORD.--July 1992 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 24.93 ft below land surface, May 20, 1993; lowest, 33.97 ft below land surface, Sept. 15, 1993.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	31.12	30.07	29.88	28.61	27.66	26.24	26.47	---	26.80	28.42	31.34	32.54
10	31.31	30.27	28.38	27.54	27.71	27.17	26.27	---	27.14	28.90	31.68	32.54
15	31.30	30.16	28.32	27.80	27.67	28.55	26.40	26.16	27.35	29.49	31.62	32.98
20	30.92	29.75	28.82	28.49	27.34	27.28	---	25.97	27.58	29.79	31.86	32.45
25	30.73	29.18	29.17	28.30	27.85	26.87	26.75	26.67	27.98	30.51	32.41	32.38
EOM	30.37	29.54	28.33	27.94	26.82	26.54	26.17	26.58	28.06	30.84	32.35	32.26
MEAN	31.19	29.92	28.99	28.10	27.37	27.10	26.44	26.37	27.39	29.50	31.75	32.51

WTR YR 1993 MEAN 29.06 HIGH 24.93 MAY 20 LOW 33.97 SEP 15



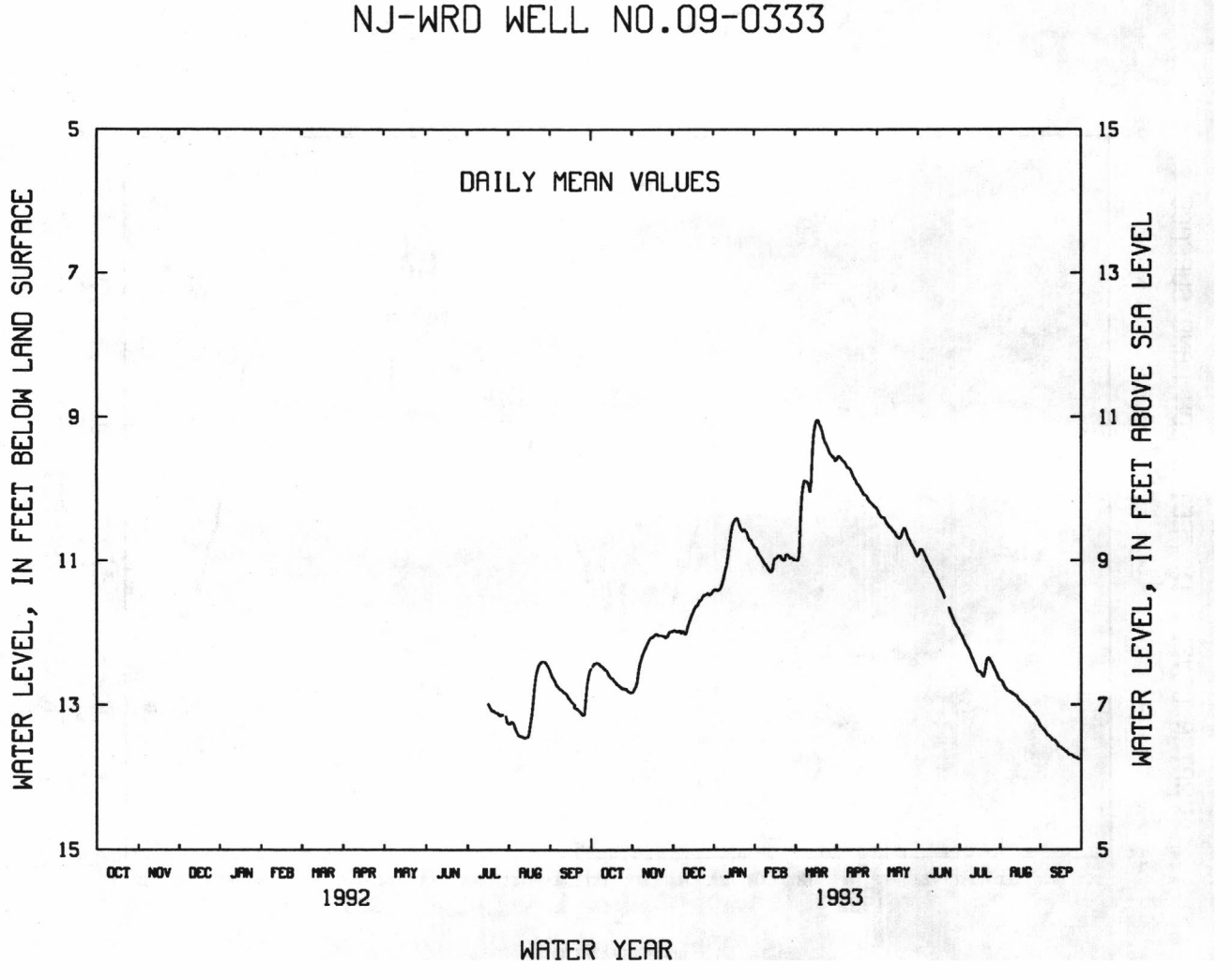
CAPE MAY COUNTY

390156074533401. Local I.D., Pump Pond N. Obs. NJ-WRD Well Number, 09-0333.
LOCATION.--Lat 39°01'56", long 74°53'34", Hydrologic Unit 02040206, on the east side of Rt. 47, about 1,000 ft north of Pumping Station Pond, Middle Township.
Owner: U. S. Geological Survey - Wildwood Water Department.
AQUIFER.--Holly Beach water-bearing zone.
WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 2 in., depth 43 ft, screened 28 to 38 ft.
INSTRUMENTATION.--Digital data logger with differential pressure transducer--60 minute recording interval.
DATUM.--Land surface is 20 ft above sea level, from topographic map.
Measuring point: Top of outer protective casing, 3.60 ft above land surface.
REMARKS.--Water level affected by nearby pumping.
PERIOD OF RECORD.--July 1992 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 9.02 ft below land surface, Mar. 18, 1993; lowest, 13.78 ft below land surface, Sep. 30, 1993.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	12.42	12.43	11.97	11.36	11.00	10.42	9.60	10.40	10.91	12.15	12.78	13.42
10	12.51	12.18	12.00	10.93	11.14	9.90	9.71	10.53	11.11	12.34	12.85	13.49
15	12.63	12.06	11.72	10.44	10.97	9.19	9.88	10.65	11.30	12.54	12.94	13.59
20	12.73	12.04	11.56	10.57	10.99	9.13	10.04	10.58	11.52	12.53	13.02	13.67
25	12.78	12.06	11.47	10.67	10.97	9.41	10.17	10.71	11.76	12.42	13.13	13.72
EOM	12.82	11.98	11.41	10.82	10.99	9.61	10.26	10.94	11.94	12.65	13.30	13.76
MEAN	12.63	12.18	11.72	10.82	10.99	9.73	9.89	10.60	11.33	12.39	12.96	13.58

WTR YR 1993 MEAN 11.57 HIGH 9.02 MAR 18 LOW 13.78 SEP 30



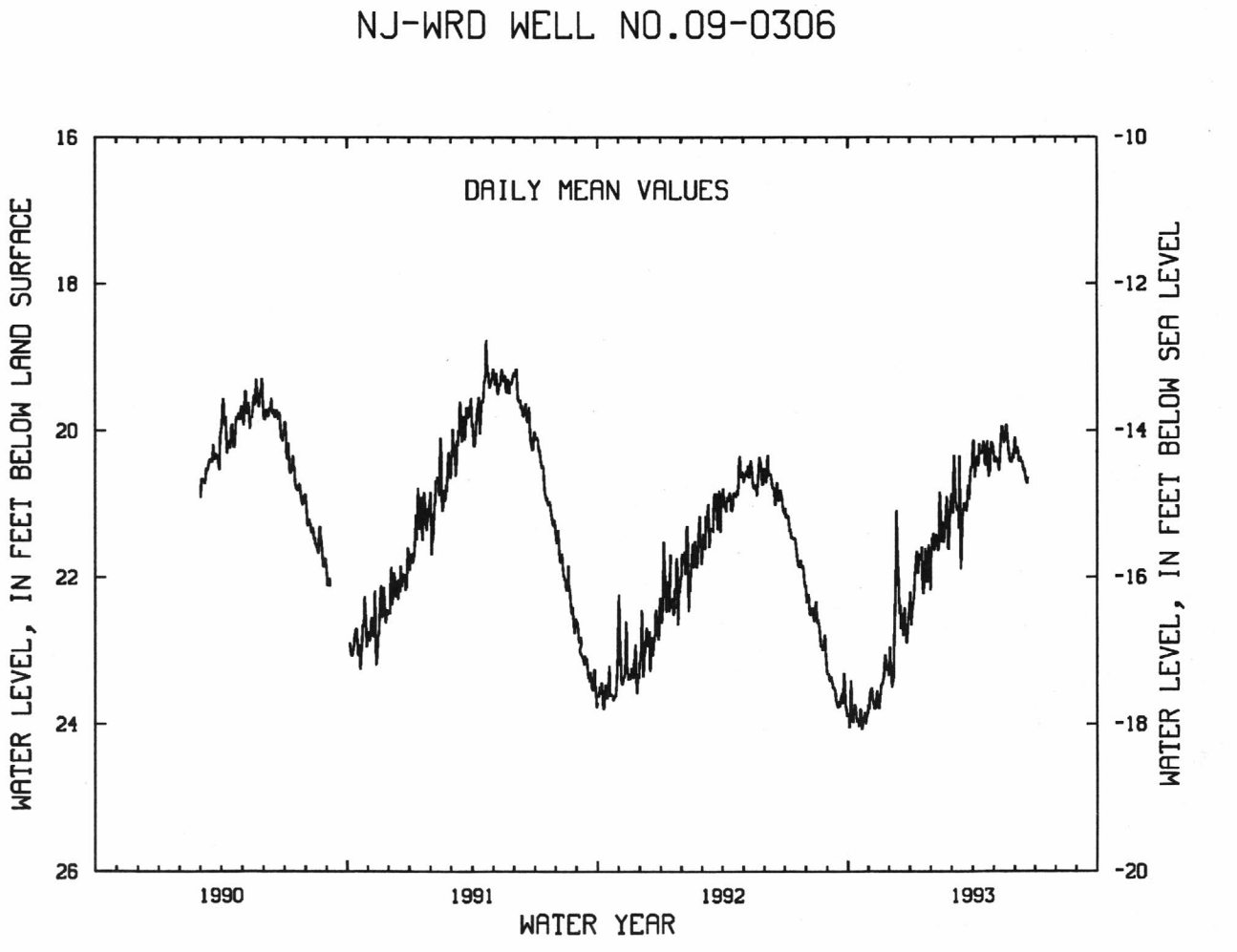
CAPE MAY COUNTY

390422074544701. Local I.D., Oyster 800 Obs. NJ-WRD Well Number, 09-0306.
LOCATION.--Lat 39°04'22", long 74°54'47", Hydrologic Unit 02040206, at the Rutgers Oyster Laboratory near Green Creek, Middle Township.
Owner: U. S. Geological Survey.
AQUIFER.--Atlantic City 800-foot sand of the Kirkwood Formation of Miocene age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 709 ft, screened 656 to 666 ft.
INSTRUMENTATION.--Digital data logger with differential pressure transducer--60 minute recording interval.
Digital water-level recorder--60-minute punch from Mar. 1990 to Dec. 1992.
DATUM.--Land surface is 6 ft above sea level, from topographic map.
Measuring point: Top of PVC casing, 3.05 ft above land surface. Top of recorder shelf, 3.55 ft above land surface from Mar. 1990 to Dec. 1992.
REMARKS.--Water level affected by tidal fluctuation.
PERIOD OF RECORD.--Mar. 1990 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 17.74 ft below land surface, May 15, 1991; lowest, 25.01 ft below land surface, Oct. 22, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	23.42	23.52	23.51	22.33	21.60	20.34	20.53	20.40	20.23	---	---	---
10	23.80	23.79	22.02	21.65	21.64	21.03	20.18	20.46	20.43	---	---	---
15	23.99	23.68	22.28	21.73	21.52	21.89	20.28	20.04	20.52	---	---	---
20	23.84	23.47	22.50	22.23	21.21	21.00	20.48	19.93	20.64	---	---	---
25	23.90	23.07	22.78	22.07	21.62	20.75	20.57	20.43	---	---	---	---
EOM	23.75	23.35	22.21	21.72	20.94	20.51	20.21	20.22	---	---	---	---
MEAN	23.89	23.53	22.61	21.97	21.37	20.94	20.35	20.26	20.44	---	---	---

WTR YR 1993 HIGH 18.72 MAY 20 LOW 25.01 OCT 22

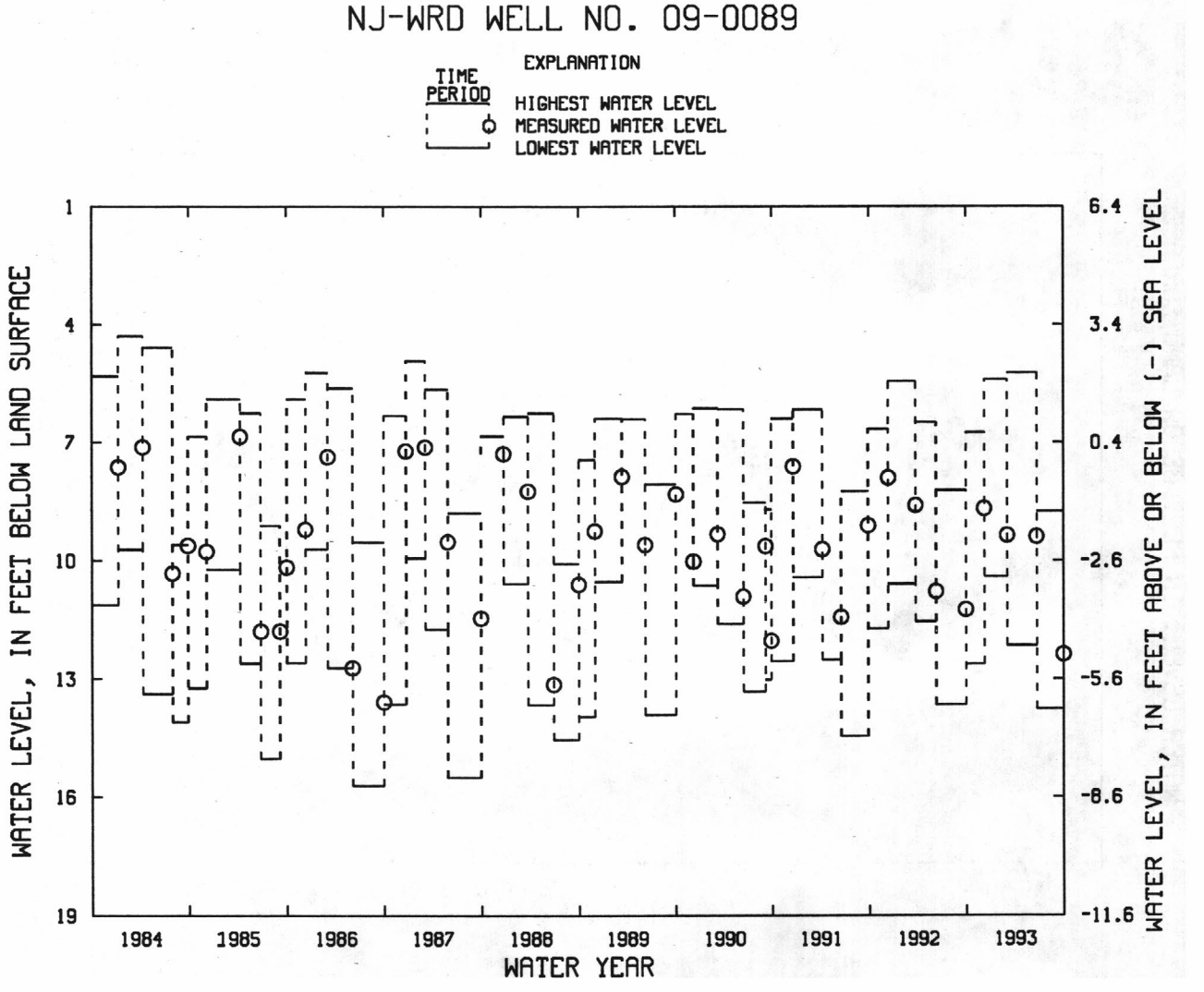


CAPE MAY COUNTY

390425074544601. Local I.D., Oyster Lab 4 Obs. NJ-WRD Well Number, 09-0089.
LOCATION.--Lat 39°04'25", long 74°54'46", Hydrologic Unit 02040206, at the Rutgers Oyster Laboratory near Green Creek, Middle Township.
Owner: U.S. Geological Survey.
AQUIFER.--Cohansey Sand of Miocene age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 210 ft, screened 195 to 210 ft.
INSTRUMENTATION.--Water-level extremes recorder.
DATUM.--Land surface is 7.37 ft above sea level.
Measuring point: Front edge of cutout in recorder housing, 3.90 ft above land surface.
REMARKS.--Water level affected by tidal fluctuation and nearby pumping.
PERIOD OF RECORD.--Aug. 1957 to current year. Records for 1957 to 1982 are unpublished and are available in files of the New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.07 ft below land surface, Apr. 3, 1958; lowest, 15.71 ft below land surface, between June 4 and Sept. 30, 1986.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

WATER-LEVEL EXTREMES			MEASURED WATER LEVEL	
PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 30, 1992 TO DEC. 8, 1992	6.75	12.62	DEC. 8, 1992	8.68
DEC. 8, 1992 TO MAR. 3, 1993	5.39	10.40	MAR. 3, 1993	9.36
MAR. 3, 1993 TO JUNE 22, 1993	5.23	12.15	JUNE 22, 1993	9.39
JUNE 22, 1993 TO SEPT. 30, 1993	8.75	13.76	SEPT. 30, 1993	12.37



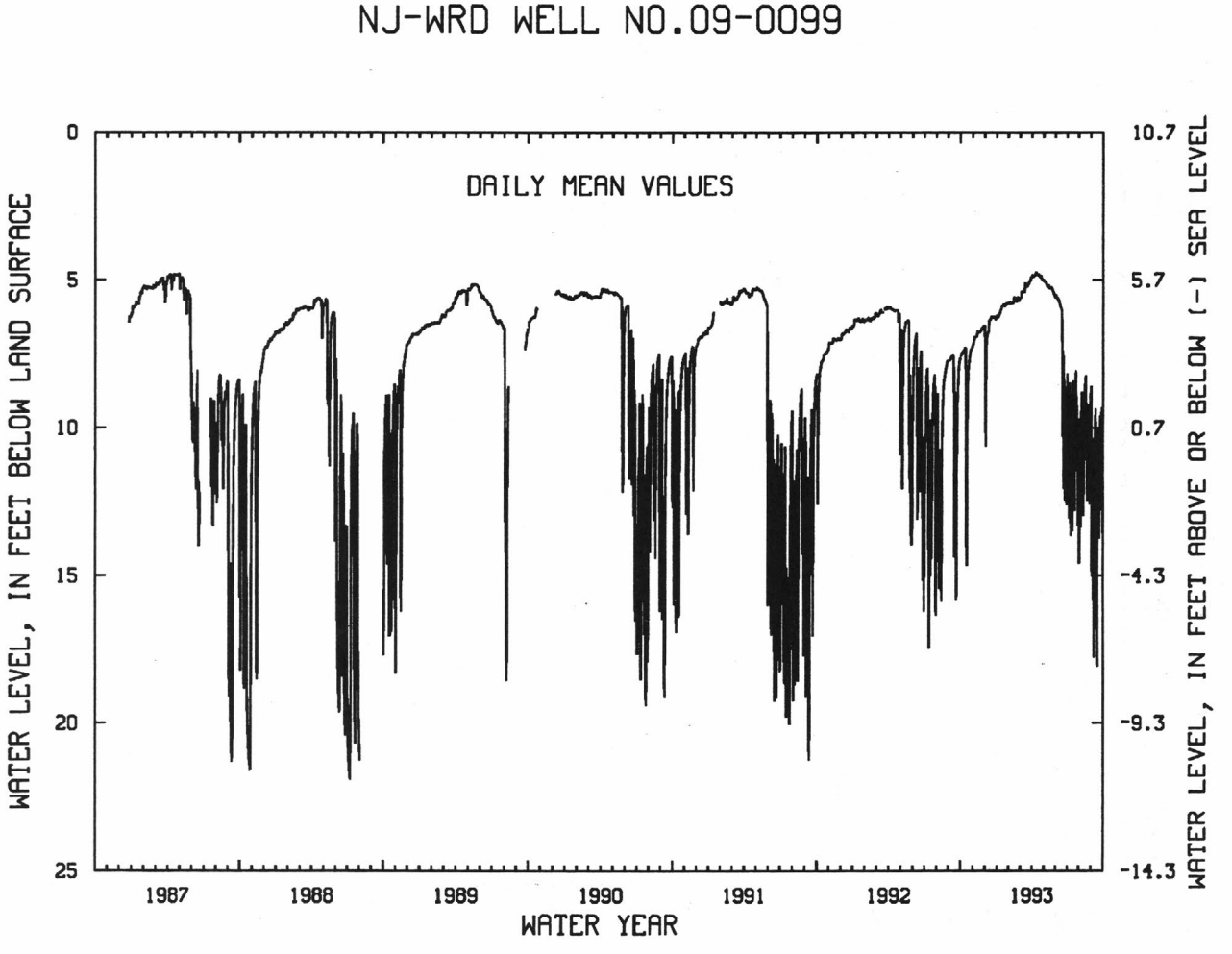
CAPE MAY COUNTY

390608074483801. Local I.D., Cape May County Park 8 Obs. NJ-WRD Well Number, 09-0099.
LOCATION.--Lat 39°06'11", long 74°48'38", Hydrologic Unit 02040302, at the Cape May County Park on Rt. 9, Middle Township.
Owner: U.S. Geological Survey.
AQUIFER.--Cohansey Sand of Miocene age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 230 ft, screened 214 to 230 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Periodic manual measurements, Nov. 1968 to Nov. 1986.
DATUM.--Land surface is 10.73 ft above sea level.
Measuring point: Top of recorder shelf, 2.20 ft above land surface.
REMARKS.--Water level affected by tidal fluctuation and nearby pumping.
PERIOD OF RECORD.--Oct. 1957 to current year. Records from 1957 to 1987 are unpublished and are available in files of the New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.73 ft below land surface, Apr. 5, 1958; lowest, 22.01 ft below land surface, July 9, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.44	6.94	7.00	6.14	5.78	5.38	4.88	5.07	5.61	11.42	13.38	10.36
10	7.37	6.91	6.66	6.01	5.77	5.40	4.74	5.22	5.74	13.65	12.72	10.22
15	14.54	6.76	6.31	5.86	5.69	5.24	4.83	5.24	5.95	9.69	8.71	17.03
20	8.08	6.74	6.23	5.88	5.69	5.20	4.89	5.24	7.39	12.80	10.06	10.58
25	7.42	6.62	6.28	5.79	5.69	5.05	4.96	5.38	12.46	9.78	11.06	12.78
EOM	7.21	6.54	6.19	5.73	5.63	4.91	5.00	5.59	9.01	9.69	8.61	14.18
MEAN	8.17	6.78	6.65	5.93	5.70	5.24	4.87	5.26	7.57	10.47	10.40	12.19

WTR YR 1993 MEAN 7.44 HIGH 4.69 APR 11 LOW 19.31 SEP 16



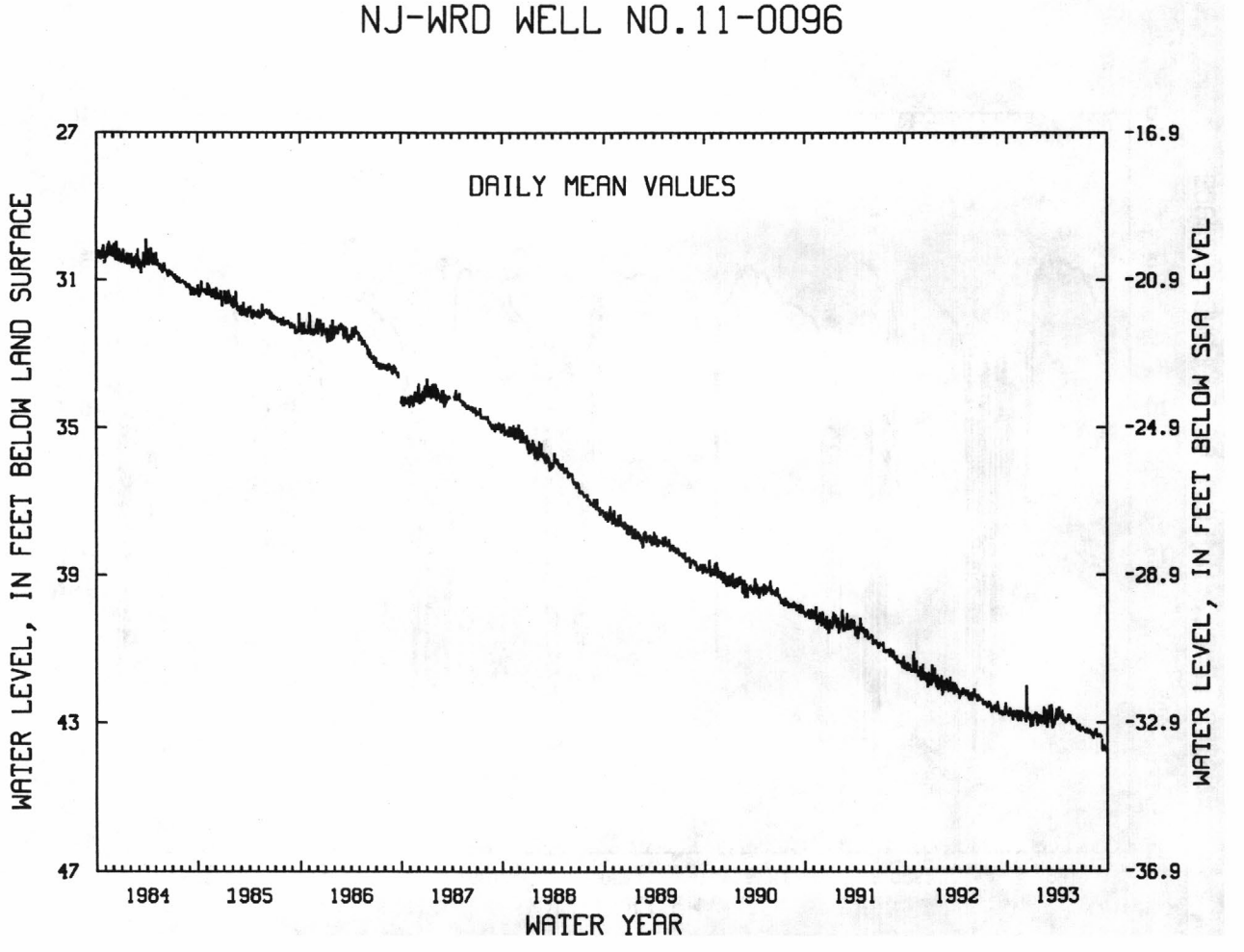
CUMBERLAND COUNTY

391828075120902. Local I.D., Jones Island 2 Obs. NJ-WRD Well Number, 11-0096.
LOCATION.--Lat 39°18'29", long 75°12'08", Hydrologic Unit 02040206, in Nantuxent Wildlife Management Area, about 1.7 mi south of Cedarville, Lawrence Township.
Owner: Cumberland County.
AQUIFER.--Piney Point aquifer of Eocene age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 375 ft, screened 365 to 375 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land surface is 10.10 ft above sea level.
Measuring point: Top of recorder shelf, 1.90 ft above land surface.
REMARKS.--Water level affected by tidal fluctuation. Well was pumped on Sept. 22, 1986. After pumping, the water level did not return to its previous level. Therefore, the screen may have been partially clogged prior to the pumping on Sept. 22, 1986. Water-quality data for 1993 are available elsewhere in this report.
PERIOD OF RECORD.--Mar. 1972 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 12.27 ft below land surface, Apr. 11, 1972; lowest, 43.86 ft below land surface, Sept. 20, 1993.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	42.68	42.67	42.85	42.84	42.96	42.55	42.90	42.92	42.95	43.20	43.35	43.36
10	42.67	42.94	42.75	42.85	42.98	42.85	42.59	42.98	43.04	43.22	43.41	43.45
15	42.76	42.87	42.73	42.84	43.04	43.14	42.81	42.86	43.13	43.22	43.28	43.72
20	42.87	42.96	42.75	43.08	42.92	43.07	42.86	42.80	43.16	43.16	43.17	43.73
25	42.69	42.73	42.94	42.98	43.13	42.95	42.89	42.97	43.22	43.29	43.37	43.77
EOM	42.80	42.83	42.80	42.82	42.91	42.82	42.87	42.95	43.16	43.26	43.34	43.80
MEAN	42.76	42.82	42.81	42.90	42.92	42.89	42.82	42.93	43.10	43.22	43.31	43.60

WTR YR 1993 MEAN 43.00 HIGH 41.67 DEC 11 LOW 43.86 SEP 20



CUMBERLAND COUNTY

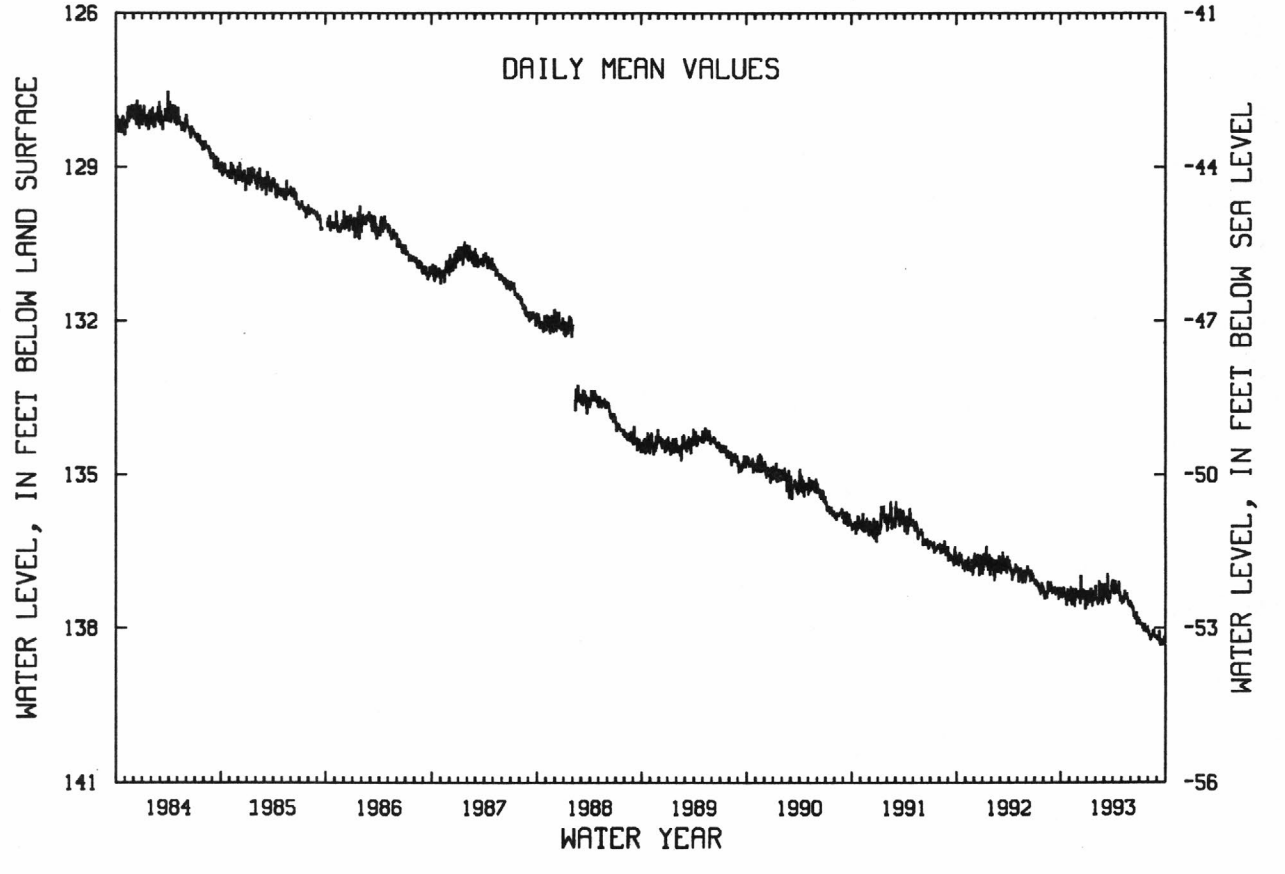
392512074521206. Local I.D., Ragovin 2100 Obs. NJ-WRD Well Number 11-0137.
LOCATION.--Lat 39°25'14", long 74°52'17", Hydrologic Unit 02040302, in wooded area off Harriet Ave., 1.5 mi southeast of Milmay, Maurice River Township.
Owner: Sam DeRosa.
AQUIFER.--Potomac-Raritan-Magothy aquifer system, undifferentiated, of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 5 in., depth 2,093 ft, perforated casing 2,083 to 2,093 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land surface is 85 ft above sea level, by altimeter.
Measuring point: Top of recorder shelf, 2.40 ft above land surface.
REMARKS.--This well is perforated in a saline zone of the aquifer system (Luzier, 1980,p. 8-12). An equivalent freshwater head is obtained by multiplying the column of water in the well by the ratio of density of water in the well to the density of freshwater. In 1974, the density of water was 1.011 grams per milliliter at 20 deg. C and a plus 17 foot correction was needed to obtain the equivalent freshwater head. The well was pumped on Feb. 3, 1988. After pumping, the water-level did not return to its previous level. Therefore, the perforated area may have been partially clogged prior to the pumping on Feb. 3, 1988.
PERIOD OF RECORD.--Oct. 1974 to current year. Records for 1974 to 1977 are unpublished and are available in files of the New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 115.82 ft below land surface, Apr. 3, 1975; lowest, 138.37 ft below land surface, Sept. 30, 1993.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	137.30	137.19	137.29	137.28	137.45	137.14	137.33	137.44	137.53	137.92	138.15	138.17
10	137.27	137.55	137.39	137.51	137.51	137.29	137.08	137.48	137.58	137.94	138.23	138.05
15	137.36	137.41	137.42	137.36	137.49	137.45	137.31	137.36	137.73	137.96	138.14	138.24
20	137.50	137.58	137.25	137.57	137.40	137.45	137.31	137.33	137.80	137.91	138.05	138.33
25	137.24	137.41	137.43	137.42	137.55	137.30	137.35	137.48	137.92	138.06	138.17	138.31
EOM	137.40	137.35	137.27	137.17	137.43	137.19	137.38	137.50	137.84	138.05	138.19	138.33
MEAN	137.34	137.39	137.36	137.39	137.40	137.29	137.27	137.44	137.71	137.97	138.14	138.24

WTR YR 1993 MEAN 137.58 HIGH 136.51 MAR 13 LOW 138.37 SEP 30

NJ-WRD WELL NO.11-0137



CUMBERLAND COUNTY

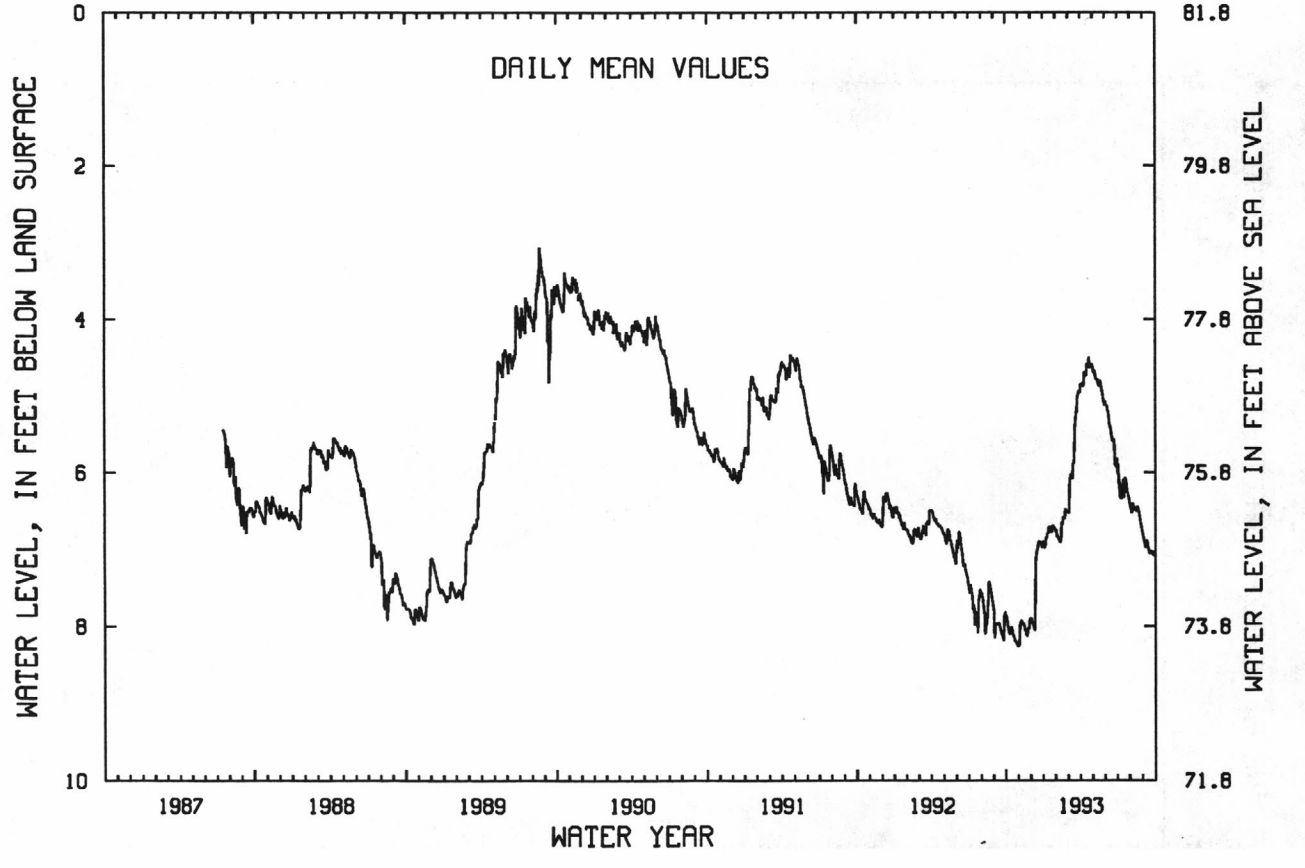
392731075092401. Local I.D., Vocational School 2 Obs. NJ-WRD Well Number, 11-0042.
LOCATION.--Lat 39°27'32", long 75°09'29", Hydrologic Unit 02040206, next to the Cumberland County Vocational and Technical School on Bridgeton Ave., Deerfield Township.
Owner: Cumberland County.
AQUIFER.--Kirkwood-Cohansey aquifer system of Miocene age.
WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 4 in., depth 47 ft, screened 42 to 47 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Periodic manual measurements, Mar. 1972 to June 1987.
DATUM.--Land surface is 81.77 ft above sea level.
Measuring point: Top of recorder shelf, 2.92 ft above land surface.
REMARKS.--Water level is occasionally affected by pumping from nearby irrigation well.
PERIOD OF RECORD.--Mar. 1972 to current year. Records from 1972 to 1987 are unpublished and are available in files of the New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.40 ft below land surface, Apr. 21, 1972; lowest, 8.39 ft below land surface, Sept. 2, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.99	7.97	7.96	6.90	6.85	6.11	4.85	4.67	5.13	6.15	6.53	6.93
10	8.10	7.97	8.04	6.79	6.90	6.03	4.73	4.78	5.26	6.17	6.45	6.88
15	8.03	8.01	7.02	6.72	6.68	5.88	4.74	4.84	5.42	6.10	6.48	7.03
20	8.15	8.12	6.89	6.77	6.60	5.28	4.61	4.80	5.59	6.07	6.48	7.06
25	8.20	8.03	6.93	6.74	6.52	4.99	4.61	4.96	5.83	6.24	6.62	7.08
EOM	8.26	7.90	6.89	6.74	6.51	4.96	4.60	5.10	5.82	6.40	6.81	7.09
MEAN	8.10	8.02	7.30	6.79	6.69	5.64	4.70	4.84	5.46	6.19	6.53	6.99

WTR YR 1993 MEAN 6.44 HIGH 4.47 APR 22 LOW 8.26 OCT 30-31

NJ-WRD WELL NO.11-0042



ESSEX COUNTY

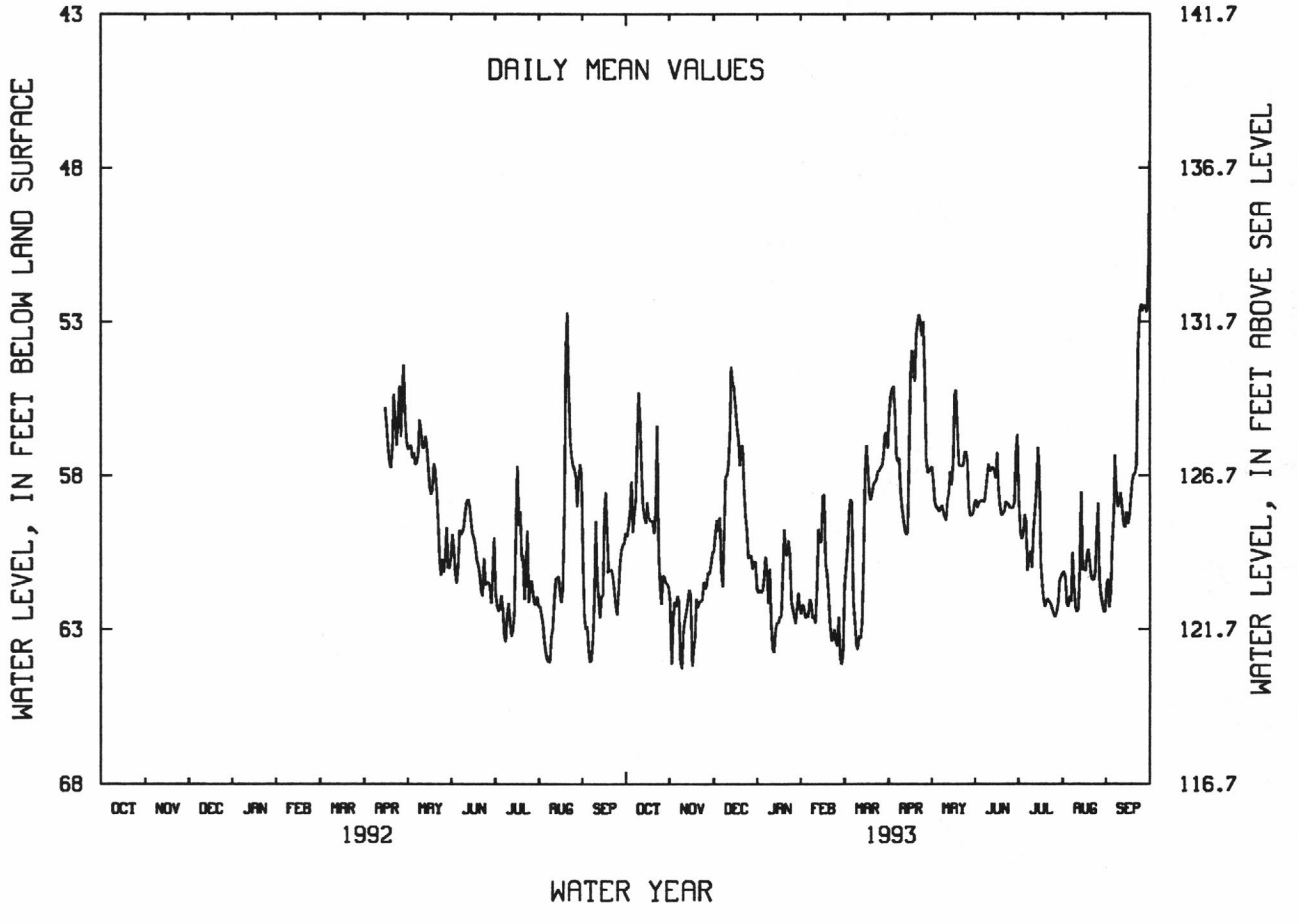
404455074203201. Local I.D., East Orange 28 Obs. NJ-WRD Well Number, 13-0094.
LOCATION.--Lat 40°44'55", long 74°20'32", Hydrologic Unit 02030103, at East Orange Water Company, JFK Blvd. and Parsonage Hill Rd., Millburn Township.
Owner: State of New Jersey - New Jersey Geological Survey.
AQUIFER.--Towaco Formation of Jurassic age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 298 ft, open hole 112 to 298 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Periodic manual measurements, Apr. 1991 to Apr. 1992.
DATUM.--Land surface is 184.7 ft above sea level.
Measuring point: Top of recorder shelf, 2.65 ft above land surface.
REMARKS.-- Water level affected by nearby pumping.
PERIOD OF RECORD.--Apr. 1991 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 46.85 ft below land surface, Sep. 30, 1993; lowest, 64.67 ft below land surface, Nov. 9, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	59.83	61.92	60.98	60.62	62.02	58.78	55.91	59.06	58.82	59.26	61.92	59.28
10	56.30	62.70	57.66	63.60	61.65	63.65	59.03	59.35	57.62	60.98	62.42	58.57
15	58.86	64.19	55.78	62.61	58.63	58.01	57.38	58.31	58.08	57.80	61.00	59.58
20	59.87	62.09	57.05	60.58	63.37	58.58	53.42	57.63	59.23	62.04	61.25	57.93
25	62.17	61.54	60.58	62.58	62.61	57.84	53.00	57.22	59.04	62.51	58.90	52.66
EOM	62.10	60.44	61.80	62.19	63.85	57.10	57.77	58.89	56.67	61.18	61.54	47.61
MEAN	59.49	62.26	58.77	61.90	62.11	59.48	56.21	58.21	58.48	60.76	61.30	57.08

WTR YR 1993 MEAN 59.66 HIGH 46.85 SEP 30 LOW 64.67 NOV 9

NJ-WRD WELL NO.13-0094



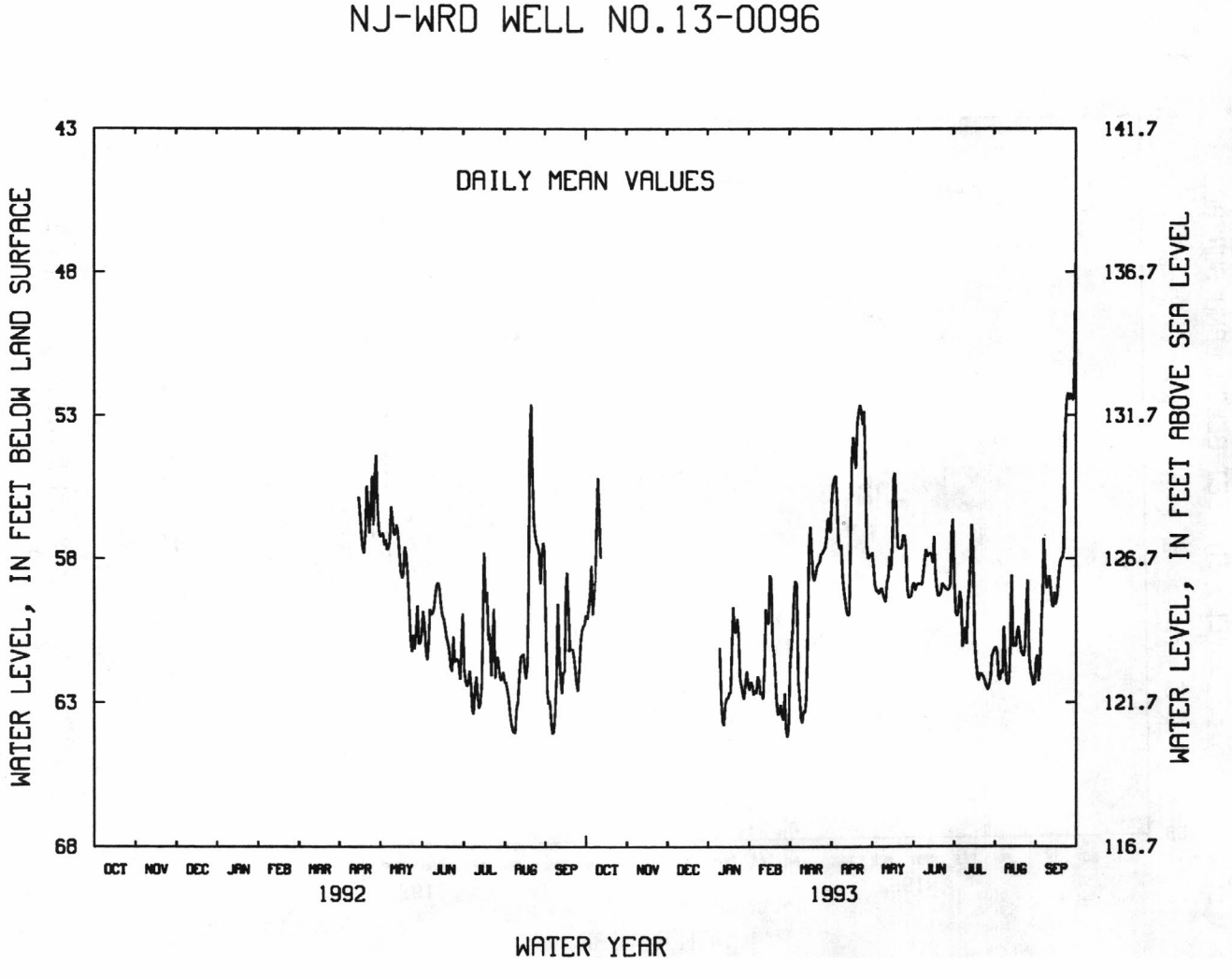
ESSEX COUNTY

404455074203202. Local I.D., East Orange Shallow Obs. NJ-WRD Well Number, 13-0096.
LOCATION.--Lat 40°44'55", long 74°20'32", Hydrologic Unit 02030103, at East Orange Water Company, JFK Blvd. and Parsonage Hill Rd., Millburn Township.
Owner: State of New Jersey - New Jersey Geological Survey.
AQUIFER.--Stratified drift of Pleistocene age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 4 in., depth 84 ft, screened 79 to 84 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Periodic manual measurements, Apr. 1991 to Apr. 1992.
DATUM.--Land surface is 184.7 ft above sea level.
Measuring point: Top of recorder shelf, 2.40 ft above land surface.
REMARKS.-- Water level affected by nearby pumping.
PERIOD OF RECORD.--Apr. 1991 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 46.80 ft below land surface, Sept. 30, 1993; lowest, 64.35 ft below land surface, Sept. 5, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	59.96	---	---	---	62.09	58.80	56.01	59.14	58.88	59.14	61.88	59.26
10	56.37	---	---	63.66	61.67	63.71	59.11	59.39	57.69	60.96	62.37	58.60
15	---	---	---	62.68	58.68	57.78	57.24	58.39	58.14	57.74	60.97	59.59
20	---	---	---	60.56	63.43	58.56	53.25	57.58	59.26	61.99	61.20	57.97
25	---	---	---	62.65	62.69	57.82	52.85	57.18	59.08	62.45	58.76	52.45
EOM	---	---	---	62.27	63.91	57.08	57.86	58.92	56.63	61.14	61.51	47.54
MEAN	---	---	---	62.07	62.18	59.49	56.20	58.22	58.51	60.70	61.24	57.03

WTR YR 1993 HIGH 46.80 SEP 30 LOW 64.26 FEB 28



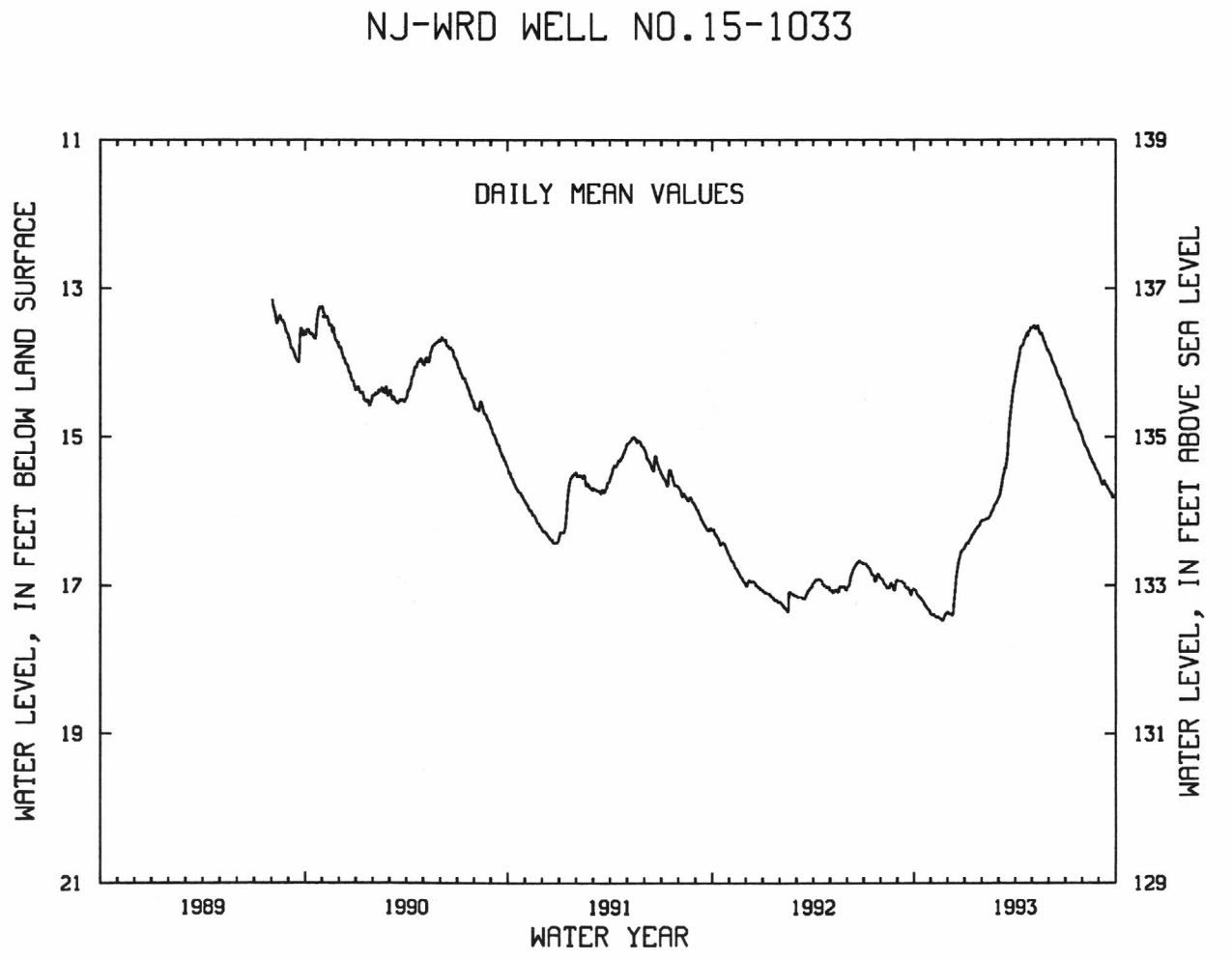
GLOUCESTER COUNTY

394354075025901. Local I.D., WTMUA Monitoring 1 Obs. NJ-WRD Well Number, 15-1033.
LOCATION.--Lat 39°43'54", long 75°02'59", Hydrologic Unit 02040202, next to the Washington Township MUA water tank at the intersection of White Birches Rd. and Rt. 655 (Fries Mill Rd.), Washington Township.
Owner: Washington Township Municipal Utilities Authority.
AQUIFER.--Kirkwood-Cohansey aquifer system of Miocene age.
WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 4 in., depth 54 ft, screened 44 to 54 ft.
INSTRUMENTATION.--Digital data logger with differential pressure transducer--60 minute recording interval.
Daily mean recorded from Aug. 1989 to April 21, 1992; water level recorded hourly April 22, 1992 to present.
DATUM.--Land surface is 150 ft above sea level, from topographic map.
Measuring point: Top of outer protective casing, 2.50 ft above land surface.
PERIOD OF RECORD.--Aug. 1989 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 13.14 ft below land surface, Aug. 2, 1989; lowest, 17.48 ft below land surface, Nov. 21-23, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	17.10	17.39	17.38	16.42	16.11	15.74	14.04	13.51	13.92	14.50	15.10	15.61
10	17.15	17.43	17.41	16.37	16.10	15.53	13.82	13.55	14.02	14.60	15.17	15.58
15	17.19	17.43	16.97	16.30	16.06	15.41	13.76	13.58	14.12	14.71	15.26	15.66
20	17.26	17.46	16.67	16.24	15.97	14.97	13.66	13.62	14.21	14.77	15.34	15.74
25	17.31	17.42	16.54	16.20	15.90	14.57	13.59	13.73	14.31	14.87	15.42	15.82
EOM	17.38	17.36	16.47	16.12	15.85	14.26	13.53	13.83	14.39	14.98	15.50	15.82
MEAN	17.21	17.42	16.95	16.29	16.02	15.16	13.78	13.62	14.12	14.71	15.27	15.69

WTR YR 1993 MEAN 15.52 HIGH 13.48 MAY 6,12 LOW 17.48 NOV 21-23



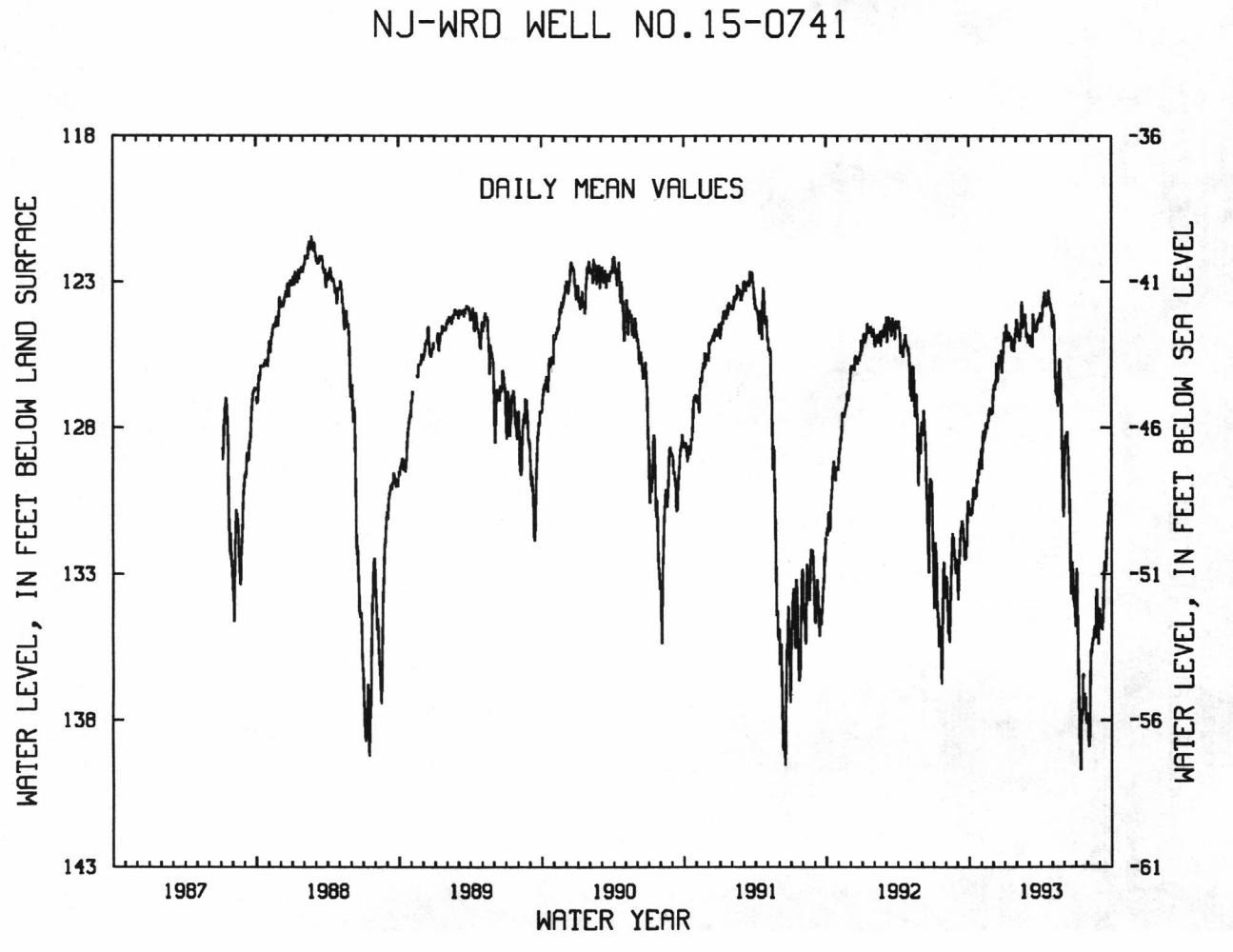
GLOUCESTER COUNTY

394652075100401. Local I.D., Mantua Shallow Obs. NJ-WRD Well Number, 15-0741.
LOCATION.--Lat 39°46'52", long 75°10'04", Hydrologic Unit 02040202, at the Township of Mantua Road Department off Main Street (County Rt. 553), Mantua Township.
Owner: U.S. Geological Survey.
AQUIFER.--Upper Potomac-Raritan-Magothy aquifer of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 313 ft, screened 293 to 313 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land surface is 82 ft above sea level, from topographic map.
Measuring point: Top of recorder shelf, 4.00 ft above land surface.
REMARKS.--Water level affected by nearby pumping. Water-quality data for 1993 are available elsewhere in this report.
PERIOD OF RECORD.--July 1987 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 121.20 ft below land surface, Feb. 20, 1988; lowest, 139.85 ft below land surface, July 14, 1993.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	131.00	128.53	126.52	124.46	124.63	124.83	124.34	124.16	128.35	133.07	138.90	134.38
10	130.47	128.24	126.25	125.04	124.79	125.06	123.52	126.25	128.15	137.83	135.55	133.61
15	130.39	127.99	126.03	124.91	124.55	124.27	123.82	126.62	129.97	138.25	135.16	132.89
20	130.03	127.70	125.59	125.34	124.26	124.70	123.68	126.04	133.50	136.56	135.19	131.79
25	129.47	127.46	126.12	125.39	124.90	124.50	123.63	127.01	133.52	137.63	134.28	130.93
EOM	128.80	127.50	124.73	124.30	124.93	124.39	124.01	131.04	134.32	137.75	134.22	130.29
MEAN	130.13	127.99	125.98	124.91	124.56	124.67	123.79	126.49	131.03	136.87	135.68	132.56

WTR YR 1993 MEAN 128.73 HIGH 123.03 APR 12 LOW 139.85 JUL 14



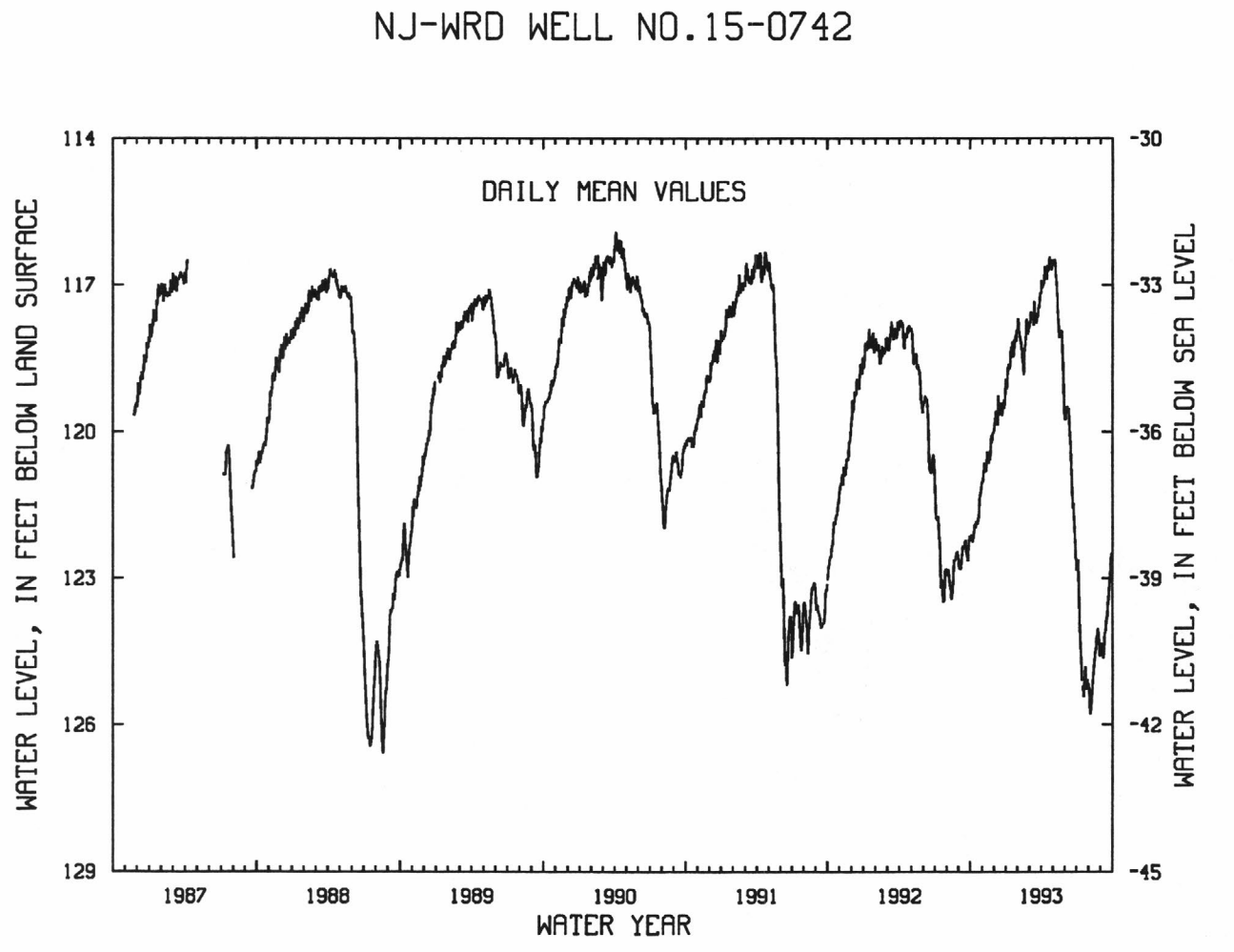
GLOUCESTER COUNTY

394652075100402. Local I.D., Mantua Deep Obs. NJ-WRD Well Number, 15-0742.
LOCATION.--Lat 39°46'52", long 75°10'04", Hydrologic Unit 02040202, at the Township of Mantua Road Department off Main Street (County Rt. 553), Mantua Township.
Owner: U.S. Geological Survey.
AQUIFER.--Lower Potomac-Raritan-Magothy aquifer of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 777 ft, screened 757 to 777 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land surface is 84 ft above sea level, from topographic map.
Measuring point: Top of recorder shelf, 4.20 ft above land surface.
REMARKS.--Water level affected by nearby pumping. Water-quality data for 1993 are available elsewhere in this report.
PERIOD OF RECORD.--Nov. 1986 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 115.89 ft below land surface, Apr. 4, 1990; lowest, 126.62 ft below land surface, Aug. 19, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	122.17	120.64	119.58	118.67	118.06	117.55	117.04	116.49	119.50	122.62	125.79	124.49
10	122.06	120.80	119.73	118.72	118.29	117.70	116.63	116.94	119.53	124.16	125.25	124.11
15	121.93	120.59	119.62	118.32	118.83	117.74	116.88	117.78	120.26	125.10	124.72	123.80
20	121.88	120.57	119.56	118.44	118.10	117.72	116.67	117.94	121.42	125.26	124.29	123.45
25	121.32	120.18	119.40	118.14	118.01	117.47	116.62	118.15	121.90	125.15	124.14	122.92
EOM	121.01	119.96	118.93	117.69	117.89	117.17	116.51	119.70	122.60	125.20	124.40	122.48
MEAN	121.79	120.50	119.54	118.40	118.16	117.58	116.74	117.67	120.68	124.41	124.82	123.68

WTR YR 1993 MEAN 120.34 HIGH 116.38 APR 22 LOW 125.80 AUG 5



GLOUCESTER COUNTY

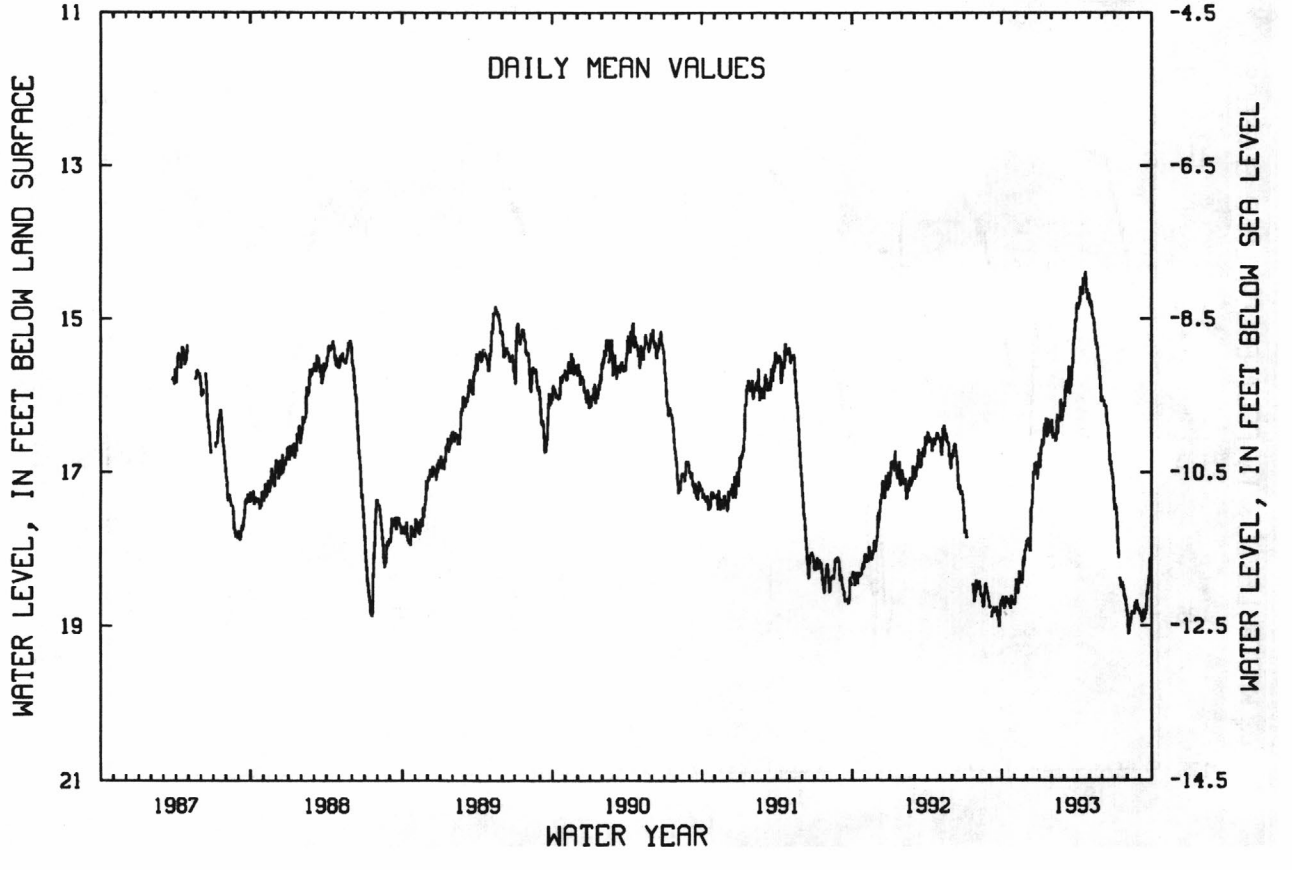
394808075172401. Local I.D., Stefka 1 Obs. NJ-WRD Well Number, 15-0712.
LOCATION.--Lat 39°48'08", long 75°17'24", Hydrologic Unit 02040202, near the intersection of Swedesboro and Tomlin Station roads, next to Pargey Creek, on land owned by Mr. William Stefka, Greenwich Township.
Owner: U.S. Geological Survey.
AQUIFER.--Lower Potomac-Raritan-Magothy aquifer of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 295 ft, screened 275 to 290 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land surface is 6.50 ft above sea level.
Measuring point: Top of recorder shelf, 2.20 ft above land surface.
REMARKS.--Water-quality data for 1993 are available elsewhere in this report.
PERIOD OF RECORD.--Mar. 1987 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 14.36 ft below land surface, Apr. 22, 1993; lowest, 19.14 ft below land surface, Aug. 6, 1993.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	18.72	18.39	17.85	16.66	16.51	15.88	14.86	14.79	16.06	17.46	19.11	18.88
10	18.68	18.55	17.89	16.65	16.55	15.83	14.60	14.98	16.13	17.95	18.94	18.78
15	18.69	18.40	17.25	16.41	16.50	15.95	14.67	15.18	16.39	18.39	18.82	18.80
20	18.75	18.44	16.88	16.52	16.28	15.75	14.53	15.34	16.90	18.43	18.79	18.59
25	18.61	18.15	16.96	16.43	16.32	15.31	14.65	15.58	17.01	18.60	18.67	18.38
EOM	18.72	17.94	16.75	16.31	16.19	15.02	14.66	16.07	17.34	18.80	18.78	18.11
MEAN	18.69	18.35	17.34	16.51	16.37	15.67	14.67	15.26	16.54	18.19	18.85	18.64

WTR YR 1993 MEAN 17.09 HIGH 14.36 APR 22 LOW 19.14 AUG 6

NJ-WRD WELL NO.15-0712



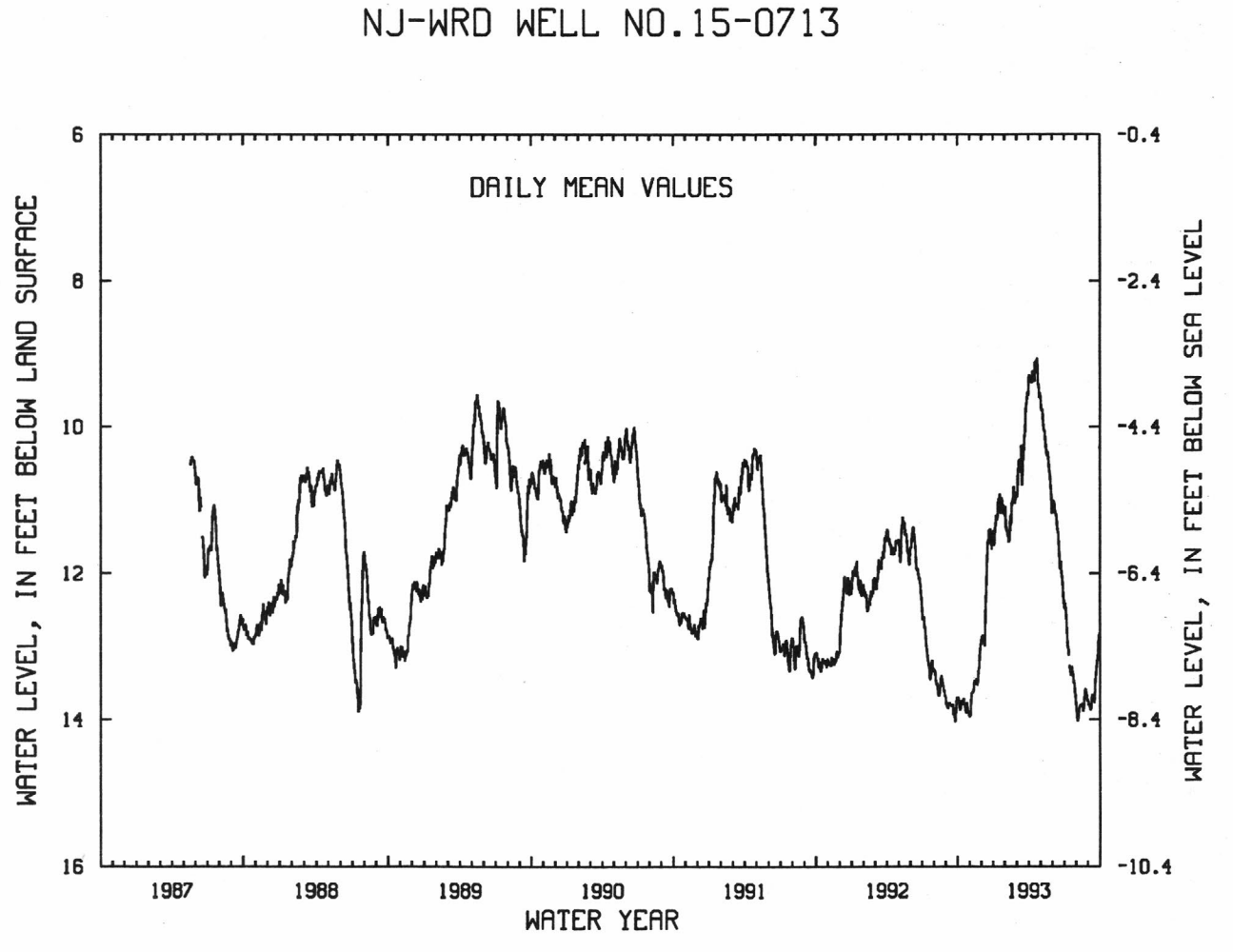
GLOUCESTER COUNTY

394808075172402. Local I.D., Stefka 2 Obs. NJ-WRD Well Number, 15-0713.
LOCATION.--Lat 39°48'08", long 75°17'24", Hydrologic Unit 02040202, near the intersection of Swedesboro and Tomlin Station roads, next to Pargey Creek, on land owned by Mr. William Stefka, Greenwich Township.
Owner: U.S. Geological Survey.
AQUIFER.--Middle Potomac-Raritan-Magothy aquifer of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 8 in., depth 155 ft, screened 125 to 155 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land surface is 5.64 ft above sea level.
Measuring point: Top of recorder shelf, 3.00 ft above land surface.
REMARKS.--Water-quality data for 1993 are available elsewhere in this report.
PERIOD OF RECORD.--May 1987 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 9.04 ft below land surface, Apr. 22, 1993; lowest, 14.07 ft below land surface, Sept. 24, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	13.82	13.63	12.84	11.36	11.42	10.63	9.36	9.76	11.05	12.50	14.02	13.83
10	13.79	13.59	12.89	11.27	11.51	10.50	9.24	10.05	11.20	13.02	13.83	13.66
15	13.76	13.47	11.88	11.03	11.34	10.80	9.38	10.27	11.45	13.25	13.82	13.71
20	13.88	13.53	11.41	11.15	10.99	10.27	9.15	10.38	11.94	13.27	13.85	13.39
25	13.82	13.19	11.50	11.16	11.05	9.74	9.42	10.65	12.03	13.48	13.58	13.15
EOM	13.96	12.91	11.42	11.08	10.96	9.57	9.55	11.13	12.37	13.77	13.75	12.81
MEAN	13.82	13.45	12.08	11.19	11.21	10.31	9.33	10.30	11.58	13.13	13.80	13.50

WTR YR 1993 MEAN 11.98 HIGH 9.04 APR 22 LOW 14.05 AUG 5-6



GLOUCESTER COUNTY

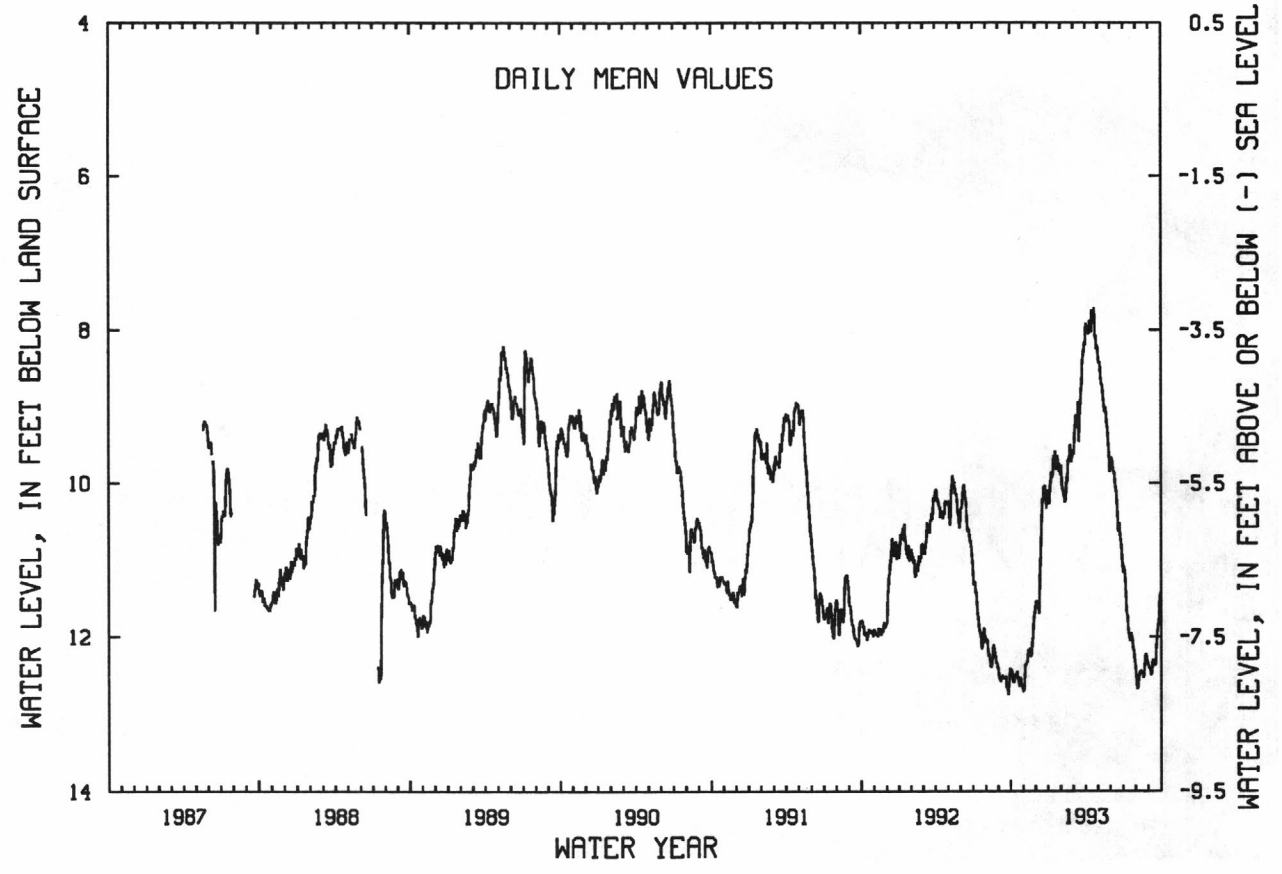
394808075172404. Local I.D., Stefka 4 Obs. NJ-WRD Well Number, 15-0728.
LOCATION.--Lat 39°48'08", long 75°17'24", Hydrologic Unit 02040202, near the intersection of Swedesboro and Tomlin Station roads, next to Pargey Creek, on land owned by Mr. William Stefka, Greenwich Township.
Owner: U.S. Geological Survey.
AQUIFER.--Upper Potomac-Raritan-Magothy aquifer of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 56 ft, screened 46 to 56 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land surface is 4.46 ft above sea level.
Measuring point: Top of recorder shelf, 3.20 ft above land surface.
PERIOD OF RECORD.--May 1987 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.70 ft below land surface, Apr. 22, 1993; lowest, 12.77 ft below land surface, Sept. 24, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	12.54	12.36	11.53	10.01	10.11	9.30	8.01	8.42	9.71	11.17	12.67	12.44
10	12.53	12.32	11.60	9.93	10.21	9.16	7.91	8.71	9.86	11.71	12.47	12.29
15	12.50	12.20	10.54	9.69	10.00	9.46	8.03	8.92	10.12	11.93	12.47	12.33
20	12.61	12.26	10.05	9.81	9.67	8.93	7.80	9.04	10.63	11.95	12.51	12.04
25	12.55	11.91	10.17	9.81	9.72	8.38	8.08	9.32	10.72	12.14	12.22	11.80
EOM	12.69	11.61	10.09	9.77	9.64	8.20	8.20	9.82	11.05	12.39	12.37	11.42
MEAN	12.55	12.18	10.75	9.85	9.89	8.96	7.98	8.96	10.25	11.80	12.44	12.13

WTR YR 1993 MEAN 10.65 HIGH 7.70 APR 22 LOW 12.71 OCT 31- NOV 1-2

NJ-WRD WELL NO.15-0728



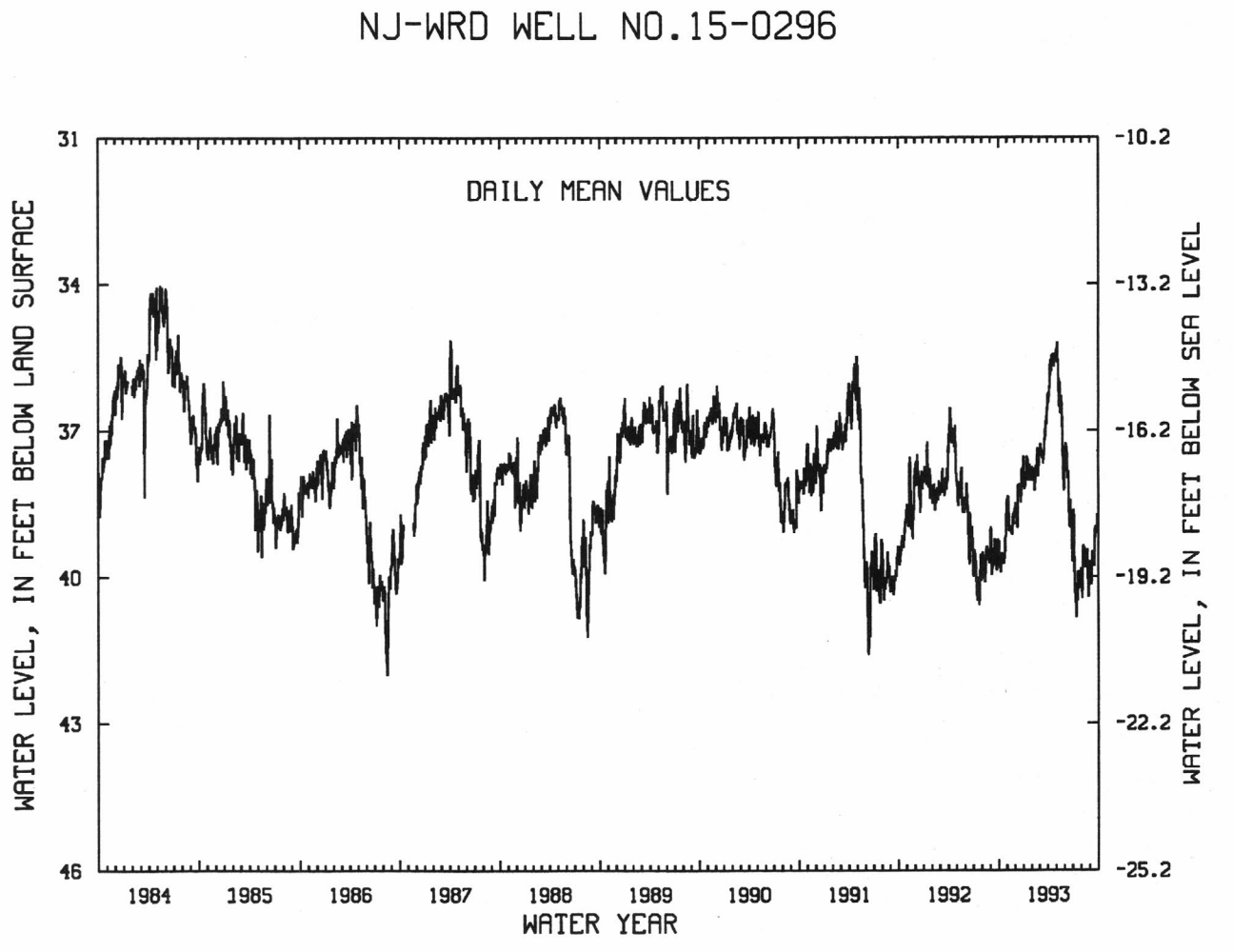
GLOUCESTER COUNTY

394942075131701. Local I.D., Shell Chemical 5 Obs. NJ-WRD Well Number, 15-0296.
LOCATION.--Lat 39°49'42", long 75°13'17", Hydrologic Unit 02040202, near the interchange of Mantua Grove Rd. and I-295, West Deptford Township.
Owner: Huntsman Polypropylene Corp.
AQUIFER.--Lower Potomac-Raritan-Magothy aquifer of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 327 ft, screened 321 to 326 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land surface is 20.76 ft above sea level.
Measuring point: Top of recorder shelf, 2.90 ft above land surface.
REMARKS.--Water level affected by tidal fluctuation and nearby pumping.
PERIOD OF RECORD.-June 1962 to current year. Records for 1962 to 1977 are unpublished and are available in files of the New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 27.75 ft below land surface, Dec. 6, 1962; lowest, 42.50 ft below land surface, Aug. 15, 1986.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	39.74	38.61	38.58	38.12	37.82	37.27	36.32	35.25	37.29	38.78	40.19	40.01
10	39.68	39.05	38.81	37.91	37.96	37.52	35.67	35.85	37.34	40.34	39.44	39.47
15	39.58	39.04	38.20	37.85	38.02	37.68	35.80	36.04	37.84	40.58	39.72	39.47
20	39.73	39.13	38.20	38.01	37.60	37.25	35.63	36.30	38.95	39.94	39.54	39.09
25	39.19	38.81	37.80	37.97	37.95	36.82	35.58	37.11	38.71	40.24	39.98	39.09
EOM	38.44	38.78	37.54	37.75	37.51	36.61	35.47	38.12	39.50	39.86	39.76	38.82
MEAN	39.44	38.85	38.29	37.92	37.81	37.22	35.79	36.40	38.24	39.98	39.78	39.42

WTR YR 1993 MEAN 38.27 HIGH 34.78 MAY 6 LOW 41.10 JUL 14



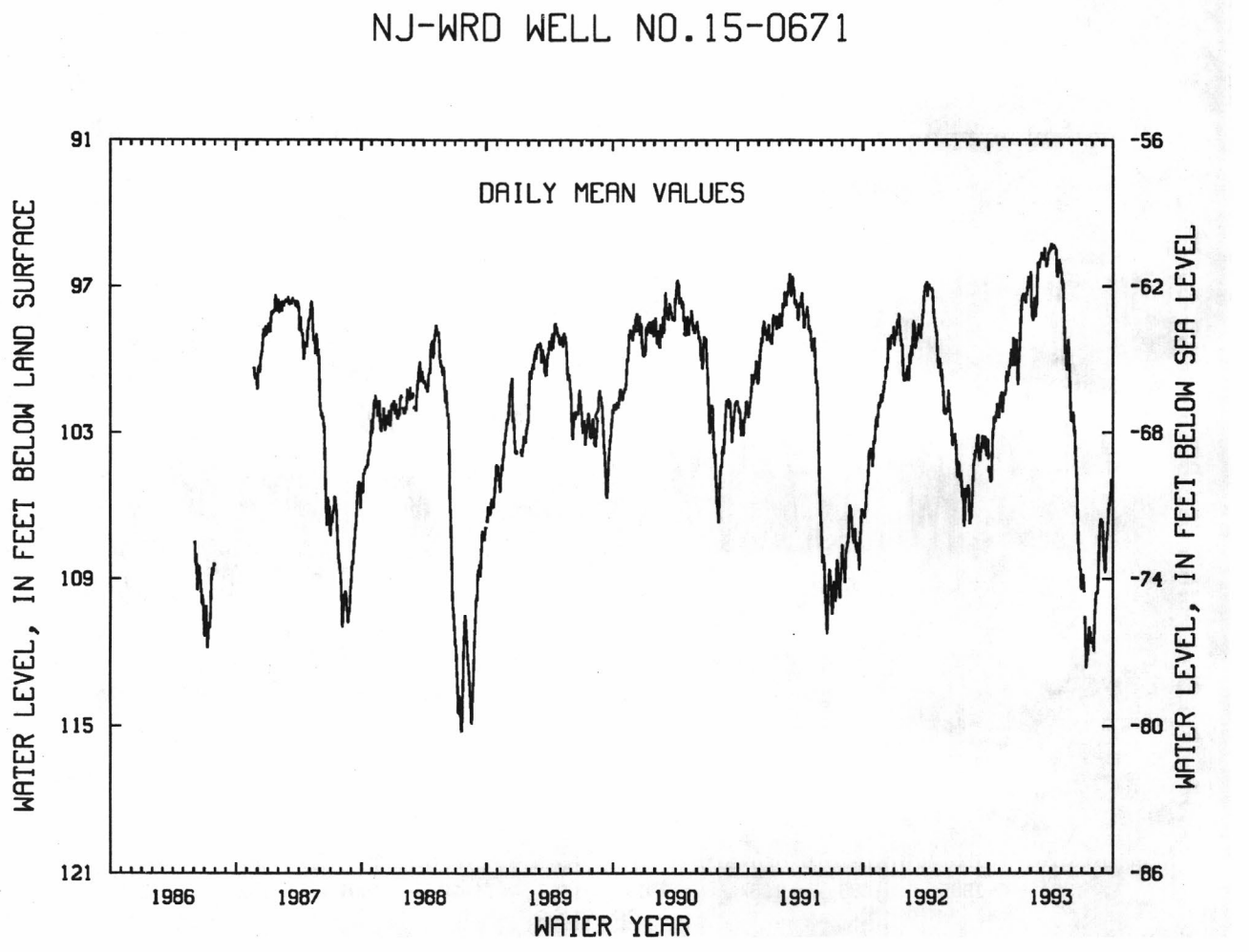
GLOUCESTER COUNTY

394957075053001. Local I.D., Deptford Deep Obs. NJ-WRD Well Number, 15-0671.
LOCATION.--Lat 39°49'57", Long 75°05'30", Hydrologic Unit 02040202, at N.J. Department of Transportation facility, N.J. Rt. 41, Deptford Township.
Owner: U.S. Geological Survey.
AQUIFER.--Lower Potomac-Raritan-Magothy aquifer of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 670 ft, screened 650 to 670 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land surface is 35 ft above sea level, from topographic map.
Measuring point: Top of recorder shelf, 3.55 ft above land surface.
REMARKS.--Water level affected by tidal fluctuation and nearby pumping. Water-quality data for 1993 are available elsewhere in this report.
PERIOD OF RECORD.--June 1986 to current year. Records for 1986 are unpublished and are available in files of the New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level 94.94 ft below land surface datum, Mar. 13, 1993; lowest 115.36 ft below land surface datum, July 19, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	104.74	101.35	99.58	97.44	98.24	95.63	95.30	96.94	102.15	108.85	111.93	108.13
10	104.10	102.15	100.01	97.33	97.59	95.74	95.29	98.39	103.01	110.53	110.18	107.73
15	102.80	101.42	100.05	97.52	98.18	95.91	95.48	99.68	104.66	112.37	109.55	106.72
20	102.50	100.89	99.17	97.34	96.73	96.13	96.61	99.40	106.93	111.46	107.87	105.99
25	101.79	100.59	101.01	96.73	96.24	95.63	95.92	100.30	108.54	111.13	106.54	105.59
EOM	102.02	100.34	98.96	96.39	96.00	95.53	96.28	102.53	109.42	111.45	106.63	105.07
MEAN	103.15	101.22	99.89	97.28	97.33	95.76	95.76	99.23	105.34	110.89	109.02	106.69

WTR YR 1993 MEAN 101.81 HIGH 94.94 MAR 13 LOW 112.85 JUL 14



GLOUCESTER COUNTY

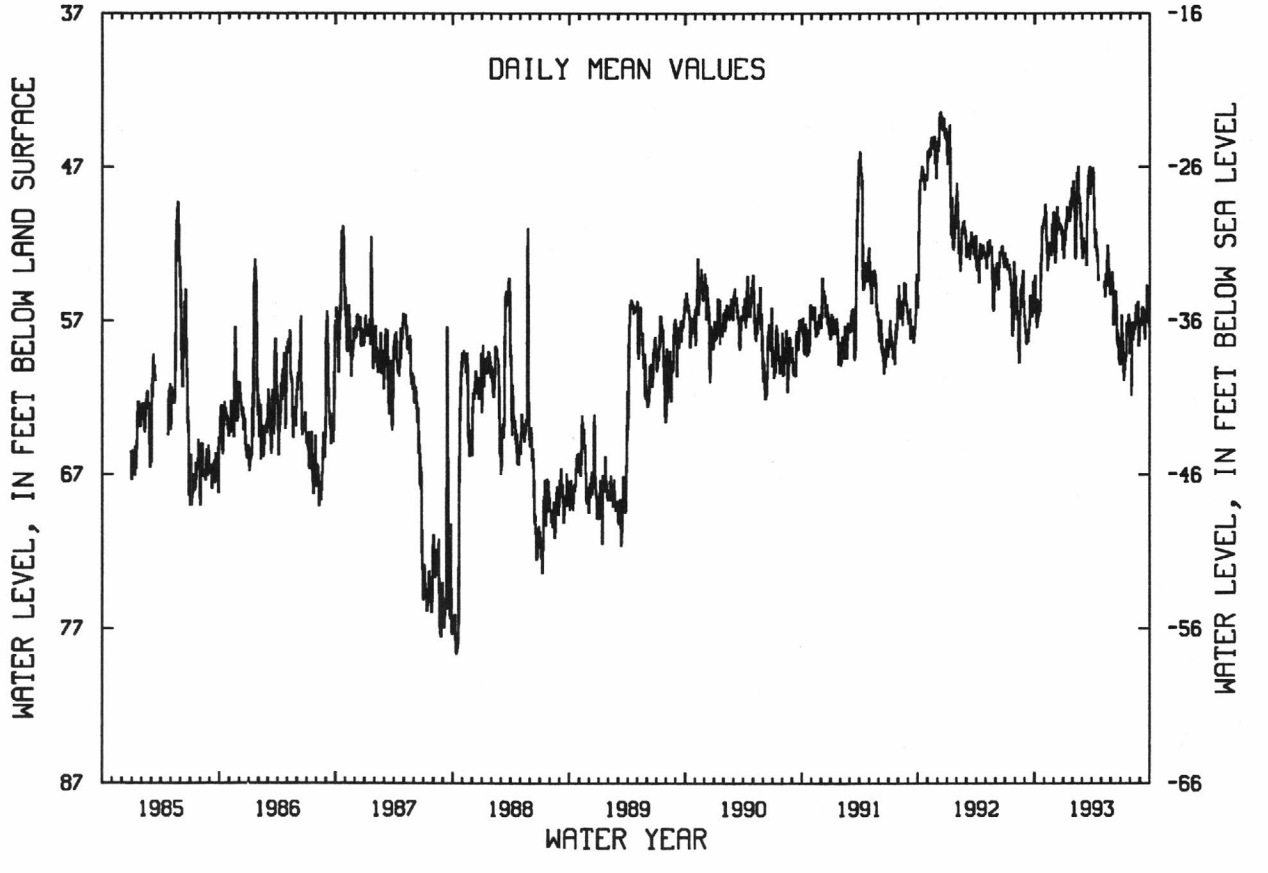
395232075094201. Local I.D., Eagle Point 3 Obs. NJ-WRD Well Number, 15-0323.
LOCATION.--Lat 39°52'35", long 75°09'50", Hydrologic Unit 02040202, at the Coastal Eagle Point Oil Company, West Deptford Township.
Owner: Coastal Eagle Point Oil Company.
AQUIFER.--Lower Potomac-Raritan-Magothy aquifer of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 276 ft, screened 255 to 275 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Water-level extremes recorder, Apr. 1981 to Dec. 1984.
DATUM.--Land surface is 20.96 ft above sea level.
Measuring point: Top of casing, 3.00 ft above land surface.
REMARKS.--Water level affected by tidal fluctuation and nearby pumping.
PERIOD OF RECORD.--Nov. 1949 to current year. Records for 1975 to 1981 are unpublished and are available in files of the New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 37.70 ft below land surface, Nov. 25, 1950; lowest, 87.30 ft below land surface, June 28, 1963.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	56.44	50.39	53.26	51.90	50.00	51.64	47.43	---	53.97	57.55	59.53	56.36
10	57.02	53.74	50.91	50.41	50.55	52.28	51.35	---	57.19	60.25	57.96	56.64
15	56.60	52.57	50.47	50.52	47.32	52.78	52.49	53.90	55.33	59.02	57.57	58.15
20	53.33	52.16	50.77	50.42	48.95	47.65	53.33	52.60	58.21	57.12	56.65	57.04
25	51.19	51.32	50.86	49.64	51.02	46.98	---	53.96	59.36	57.07	55.76	56.69
EOM	50.81	49.93	52.38	47.90	52.06	47.39	---	54.67	59.78	58.45	57.00	57.47
MEAN	54.38	51.64	51.32	50.25	49.73	50.13	50.83	54.10	56.76	58.43	57.43	56.89

WTR YR 1993 MEAN 53.55 HIGH 45.13 MAR 26 LOW 62.77 AUG 4

NJ-WRD WELL NO.15-0323



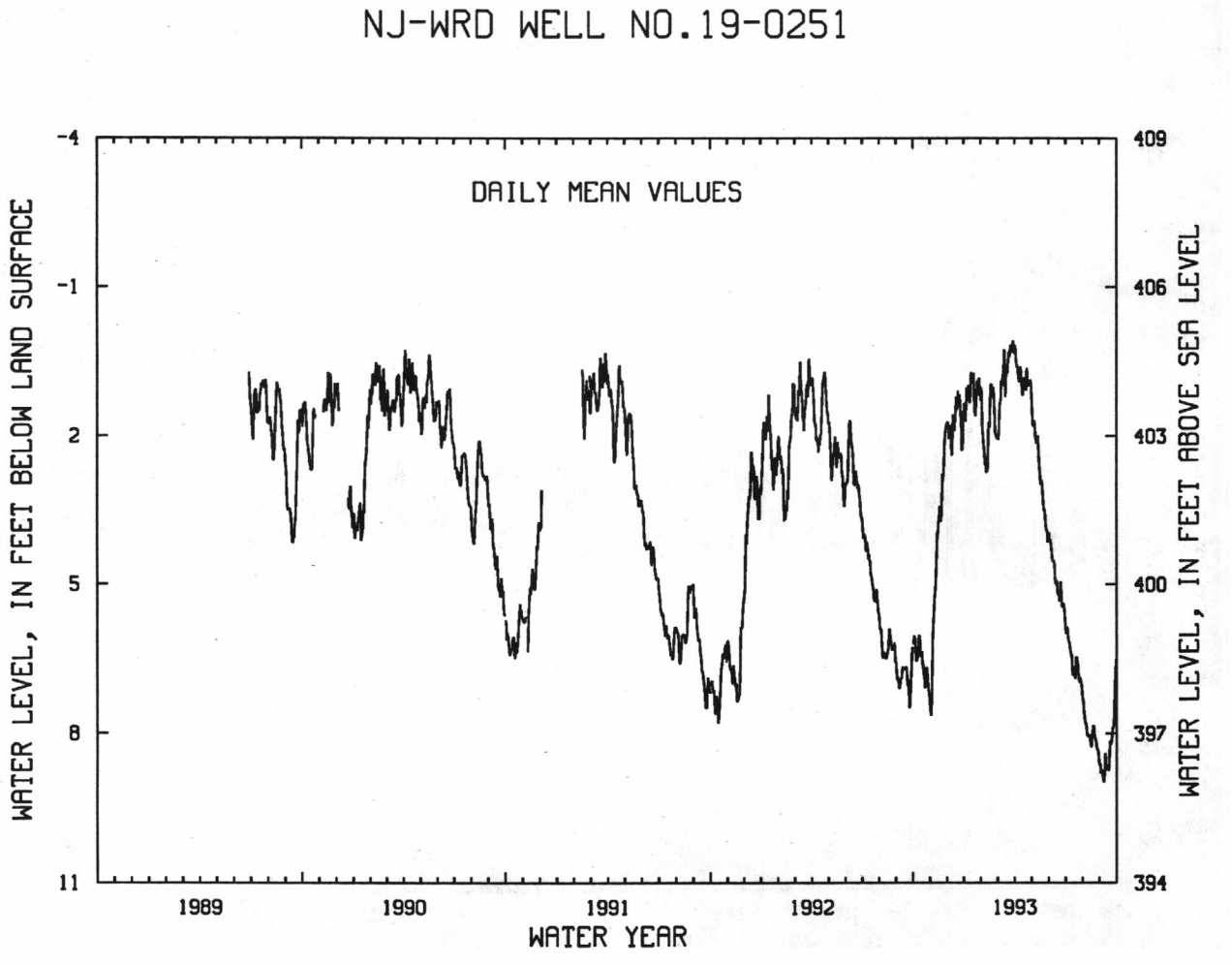
HUNTERDON COUNTY

402151074525301. Local I.D., Corsalo Rd TB 1 Obs. NJ-WRD Well Number, 19-0251.
LOCATION.--Lat 40°21'51", long 74°52'53", Hydrologic Unit 02040105, 1,100 ft east of the intersection of County Rt. 518 and Corsalo Rd., West Amwell Township.
Owner: U.S. Geological Survey.
AQUIFER.--Passaic Formation of Triassic-Jurassic age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 3 in., depth 299 ft, open hole 21.5 to 299 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land surface is 405 ft above sea level, from topographic map.
Measuring point: Top of recorder shelf, 2.60 ft above land surface.
PERIOD OF RECORD.--June 1989 to current year. Records for 1989 are unpublished and are available in files of the New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.51 ft above land surface, Mar. 13, 1993; lowest, 9.00 ft below land surface, Sep. 8, 1993.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	6.29	6.04	1.79	1.04	2.25	1.42	.60	1.77	4.24	6.04	7.76	8.79
10	6.23	5.02	2.27	1.34	2.67	.89	.68	2.15	4.52	6.36	8.05	8.40
15	6.46	3.74	1.65	.94	1.82	1.21	1.18	2.60	4.93	6.67	8.19	8.67
20	6.88	3.73	1.10	1.55	1.12	.49	1.00	2.97	5.34	6.47	7.84	8.22
25	6.68	2.56	1.59	1.09	1.93	.27	.95	3.56	5.46	6.87	8.19	7.86
EOM	7.45	1.75	1.35	1.02	2.04	.33	.94	4.04	5.72	7.22	8.62	6.50
MEAN	6.59	4.17	1.73	1.16	1.83	.79	.81	2.71	4.90	6.54	8.03	8.24

WTR YR 1993 MEAN 3.97 HIGH -.51 MAR 13 LOW 9.00 SEP 8



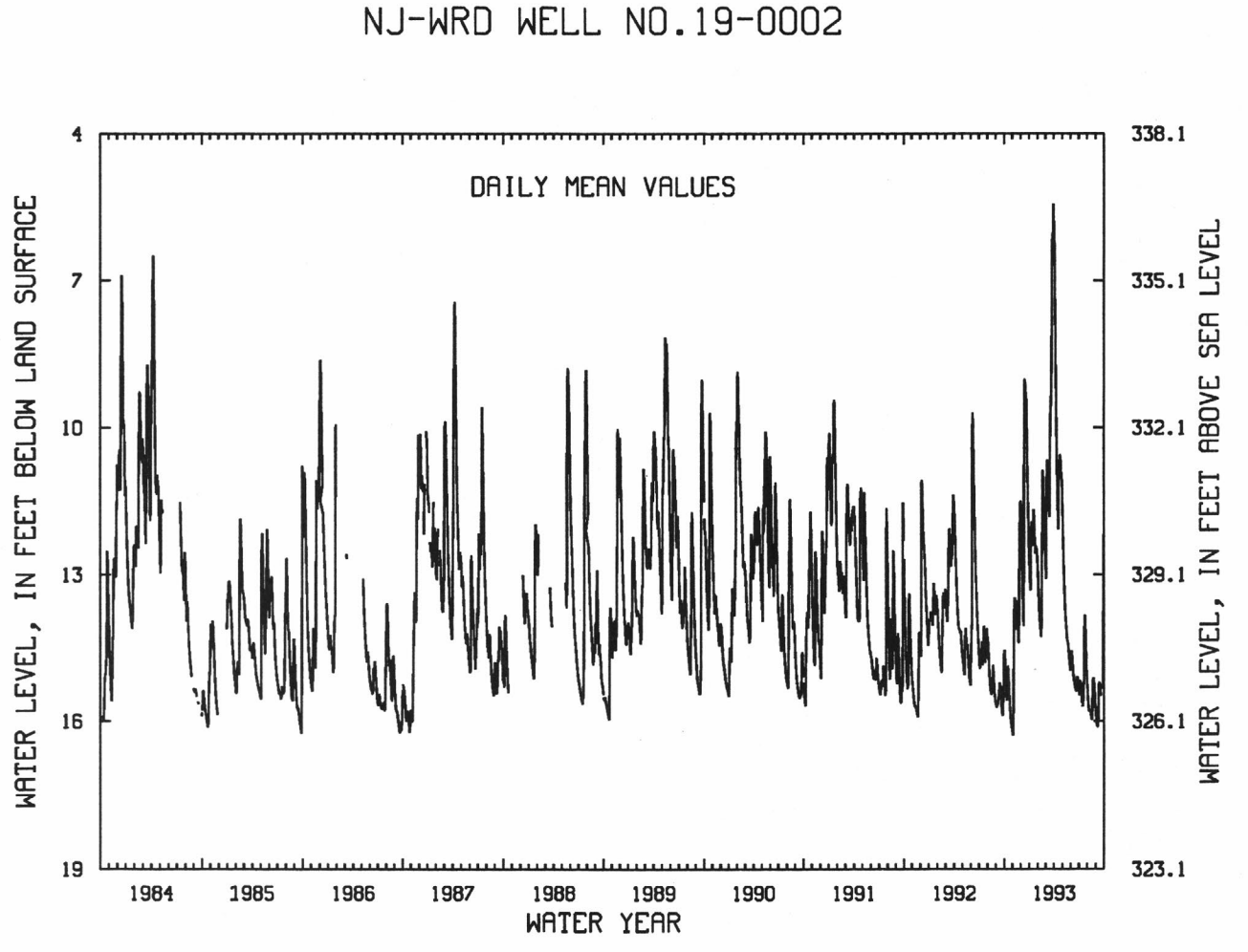
HUNTERDON COUNTY

402644074563601. Local I.D., Bird Obs. NJ-WRD Well Number, 19-0002.
LOCATION.--Lat 40°26'44", long 74°56'36", Hydrologic Unit 02040105, near U.S. Post Office, Sergeantsville, Delaware Township
Owner: Phillip Fleming.
AQUIFER.--Stockton Formation of Triassic age.
WELL CHARACTERISTICS.--Dug water-table observation well, diameter 36 in., depth 21 ft, lined with stone.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land surface is 342.08 ft above sea level.
Measuring point: Top of recorder shelf, 1.50 ft above land surface.
PERIOD OF RECORD.--June 1965 to current year. Records for 1965 to 1976 are unpublished and are available in files of the New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 5.27 ft below land surface, Mar. 29, 1993; lowest, 17.04 ft below land surface, Jan. 26-28, 1981.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	14.99	14.19	12.90	13.27	13.75	11.63	7.43	12.61	14.61	15.18	15.70	16.10
10	15.45	13.70	14.05	12.12	14.15	10.78	10.11	13.56	15.02	15.48	15.78	15.67
15	14.99	13.62	9.02	11.76	12.66	11.58	11.79	14.07	15.24	15.68	15.91	15.27
20	15.62	14.06	9.46	12.29	11.05	9.63	10.88	14.36	15.38	14.60	15.23	15.44
25	15.99	12.24	11.10	12.44	12.08	6.50	10.68	14.62	15.09	14.21	15.26	15.26
EOM	16.22	11.61	12.71	12.97	12.66	5.82	11.19	14.96	15.33	15.22	15.83	12.22
MEAN	15.43	13.69	11.34	12.43	12.79	9.77	9.94	13.82	15.07	15.03	15.60	15.25

WTR YR 1993 MEAN 13.34 HIGH 5.27 MAR 29 LOW 16.30 NOV 2-3



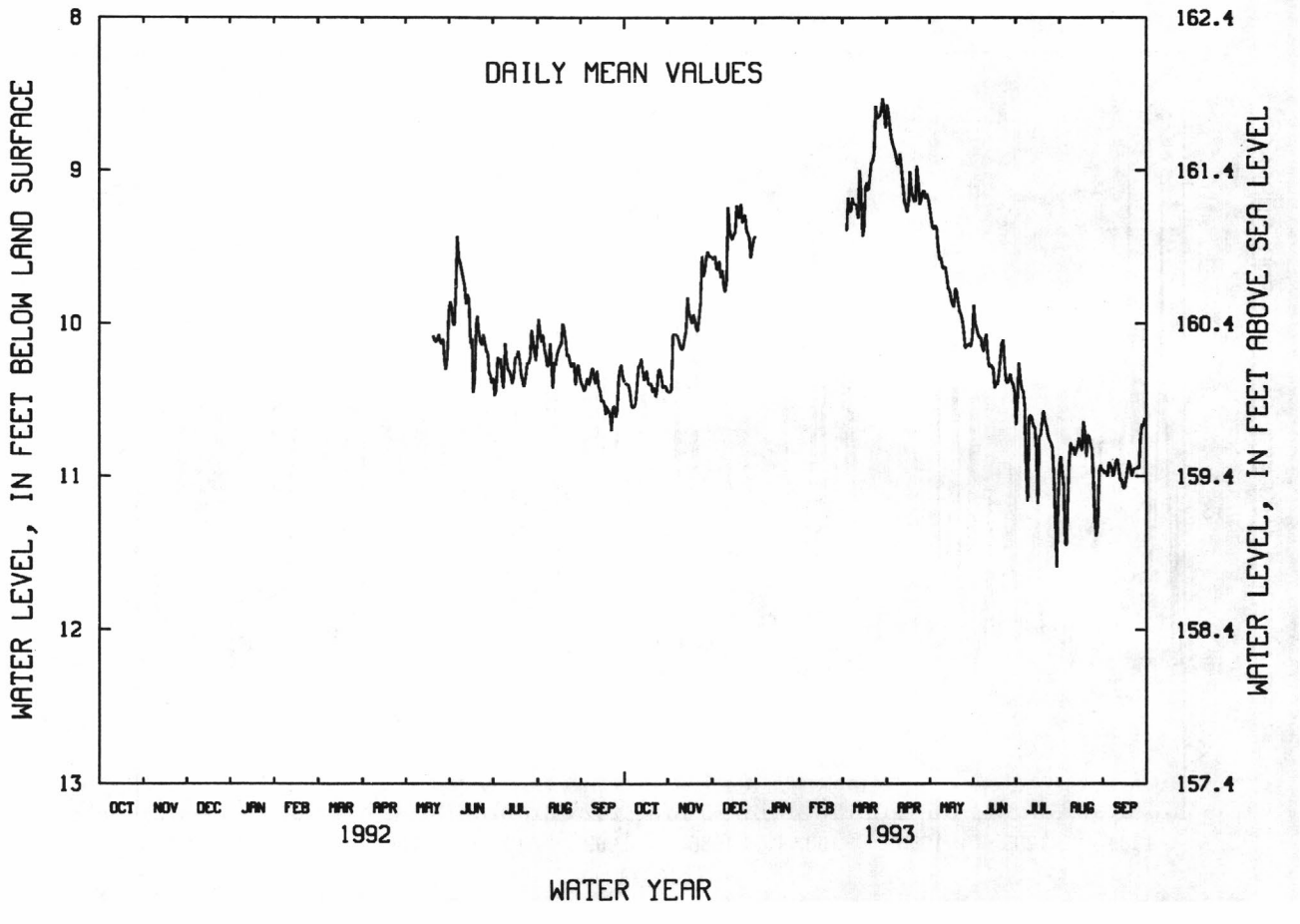
HUNTERDON COUNTY

403455074514801. Local I.D., Environmental Ctr 1 Obs. NJ-WRD Well Number, 19-0276.
LOCATION.--Lat 40°34'38", long 74°51'39", Hydrologic Unit 02030105, at the Hunterdon County Arboretum, Rt. 31, Clinton Township.
Owner: State of New Jersey - New Jersey Geological Survey.
AQUIFER.--Stockton Formation of Triassic age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 175 ft, open hole 55 to 175 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Periodic manual measurements, Mar. 1991 to May 1992.
DATUM.--Land surface is 170.4 ft above sea level.
Measuring point: Top of recorder shelf, 1.45 ft above land surface.
REMARKS.--Water level affected by nearby pumping.
PERIOD OF RECORD.--Mar. 1991 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.51 ft below land surface, Mar. 28-29, Apr. 1, 1993; lowest, 12.16 ft below land surface, Aug. 5, 1993.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.53	10.07	9.59	---	---	9.18	8.83	9.36	10.09	10.43	11.45	10.93
10	10.28	10.16	9.72	---	---	9.22	8.89	9.63	10.07	10.61	10.81	10.89
15	10.33	9.96	9.42	---	---	9.43	9.27	9.78	10.30	10.81	10.80	11.08
20	10.45	10.05	9.22	---	---	9.04	9.20	9.79	10.22	10.57	10.73	11.00
25	10.30	9.66	9.41	---	---	8.66	9.19	10.06	10.39	10.78	11.29	10.95
EOM	10.45	9.57	---	---	---	8.72	9.19	10.09	10.45	10.93	10.96	10.67
MEAN	10.40	9.94	9.47	---	---	9.01	9.03	9.76	10.23	10.76	10.94	10.92

WTR YR 1993 MEAN 10.06 HIGH 8.51 MAR 28-29, APR 1 LOW 12.16 AUG 5



HUNTERDON COUNTY

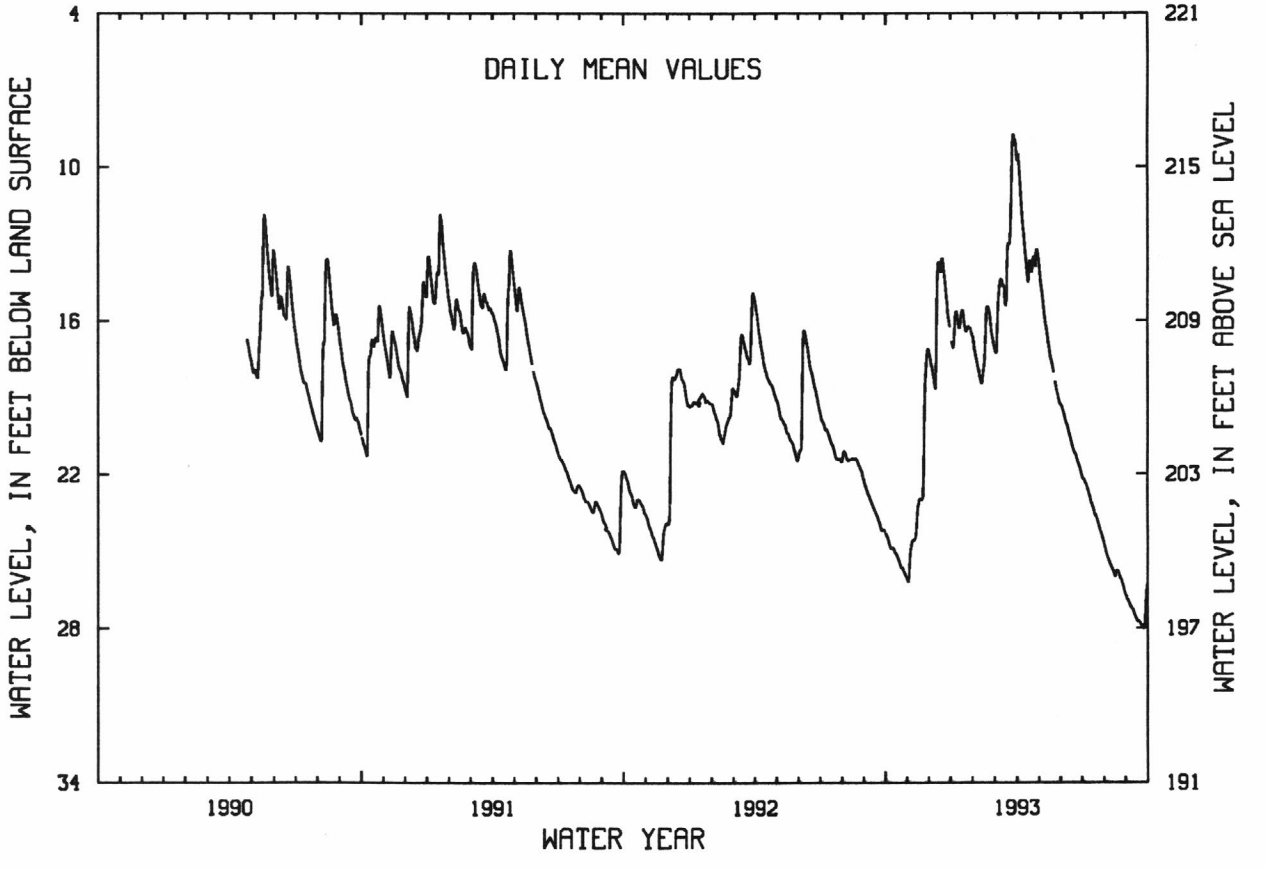
403517074452501. Local I.D., Readington School 11 Obs. NJ-WRD Well Number, 19-0270.
LOCATION.--Lat 40°35'17", long 74°45'25", Hydrologic Unit 02030105, behind Readington School, on Readington Rd. (County Rd. 620), Readington Township.
Owner: State of New Jersey.
AQUIFER.--Passaic Formation of Triassic-Jurassic age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 101 ft, open hole 50 to 101 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land surface is 224.99 ft above sea level.
Measuring point: Top of recorder shelf, 2.20 ft above land surface.
PERIOD OF RECORD.--Apr. 1990 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.64 ft below land surface, Mar. 26, 1993; lowest, 28.05 ft below land surface, Sept. 25-26, 1993.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	24.63	24.99	17.82	16.82	17.56	16.21	10.72	14.85	19.58	22.29	25.19	27.01
10	24.90	24.60	18.67	16.00	18.28	14.38	12.61	16.03	20.08	22.70	25.55	27.28
15	25.09	23.29	13.81	15.68	17.79	15.21	14.32	16.93	20.62	23.19	25.94	27.65
20	25.45	23.02	13.60	16.28	15.44	12.99	13.92	17.72	21.15	23.62	25.79	27.82
25	25.70	18.50	15.07	16.28	16.43	9.23	13.75	18.51	21.53	24.09	26.15	28.03
EOM	26.09	17.16	---	16.63	16.90	9.71	13.49	19.25	21.98	24.67	26.68	26.32
MEAN	25.21	22.68	15.81	16.23	17.07	13.40	12.80	16.87	20.63	23.29	25.77	27.39

WTR YR 1993 MEAN 19.80 HIGH 8.64 MAR 26 LOW 28.05 SEP 25-26

NJ-WRD WELL NO.19-0270



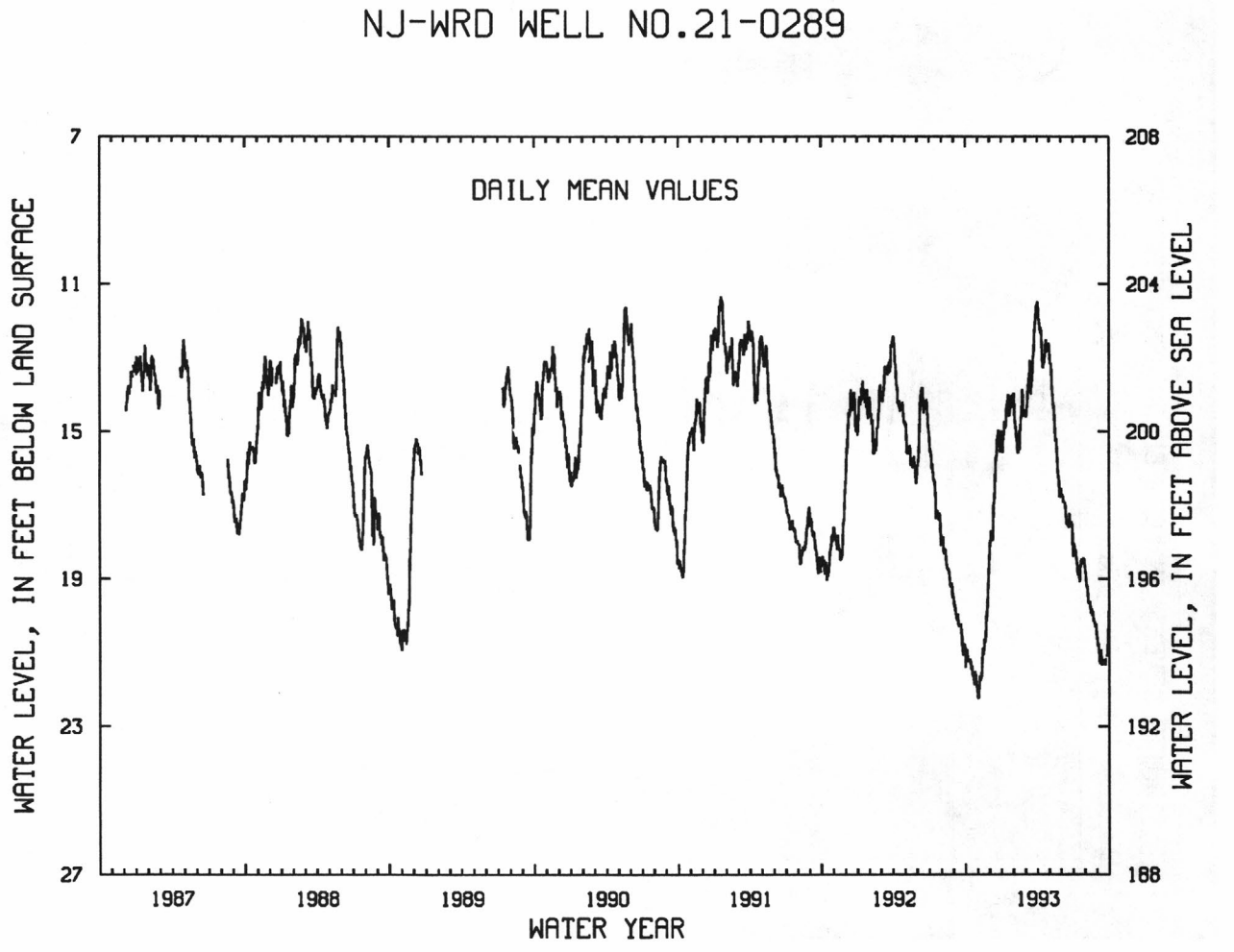
MERCER COUNTY

401753074483501. Local I.D., Bristol-Myers 100 Obs. NJ-WRD Well Number, 21-0289.
LOCATION.--Lat 40°17'53", long 74°48'35", Hydrologic Unit 02040105, near Scotch Rd., about 1.1 mi north of I-95, interchange 3, Hopewell Township.
Owner: Bristol-Myers Squibb Company.
AQUIFER.--Passaic Formation of Triassic-Jurassic age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 8 in., depth 300 ft, open hole 12 to 300 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land surface is 215 ft above sea level, from topographic map.
Measuring point: Top of recorder shelf, 1.65 ft above land surface.
REMARKS.--Water level occasionally affected by pumping of nearby irrigation well.
PERIOD OF RECORD.--Dec. 1986 to current year. Records for 1986 to 1989 are unpublished and are available in files of the New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 11.22 ft below land surface, Jan. 17, 1991; lowest, 22.29 ft below land surface, Nov. 1-2, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	21.08	21.64	17.70	15.02	14.93	14.41	12.00	13.15	16.76	18.17	19.19	21.00
10	21.18	21.58	17.74	14.91	15.48	13.69	12.18	14.01	16.93	18.48	19.66	20.92
15	21.44	20.95	16.43	14.30	15.52	13.92	13.24	14.69	17.53	18.81	19.89	21.18
20	21.75	20.70	15.22	14.58	14.38	13.28	12.94	15.31	17.62	18.67	19.89	21.33
25	21.57	19.80	15.18	14.23	14.59	12.22	12.81	16.20	17.59	18.58	20.19	21.10
EOM	22.13	18.42	14.99	13.96	14.51	11.69	12.60	16.60	17.80	18.64	20.60	19.83
MEAN	21.46	20.74	16.41	14.55	14.82	13.29	12.55	14.84	17.23	18.54	19.78	21.00

WTR YR 1993 MEAN 17.10 HIGH 11.40 APR 2 LOW 22.29 NOV 1-2



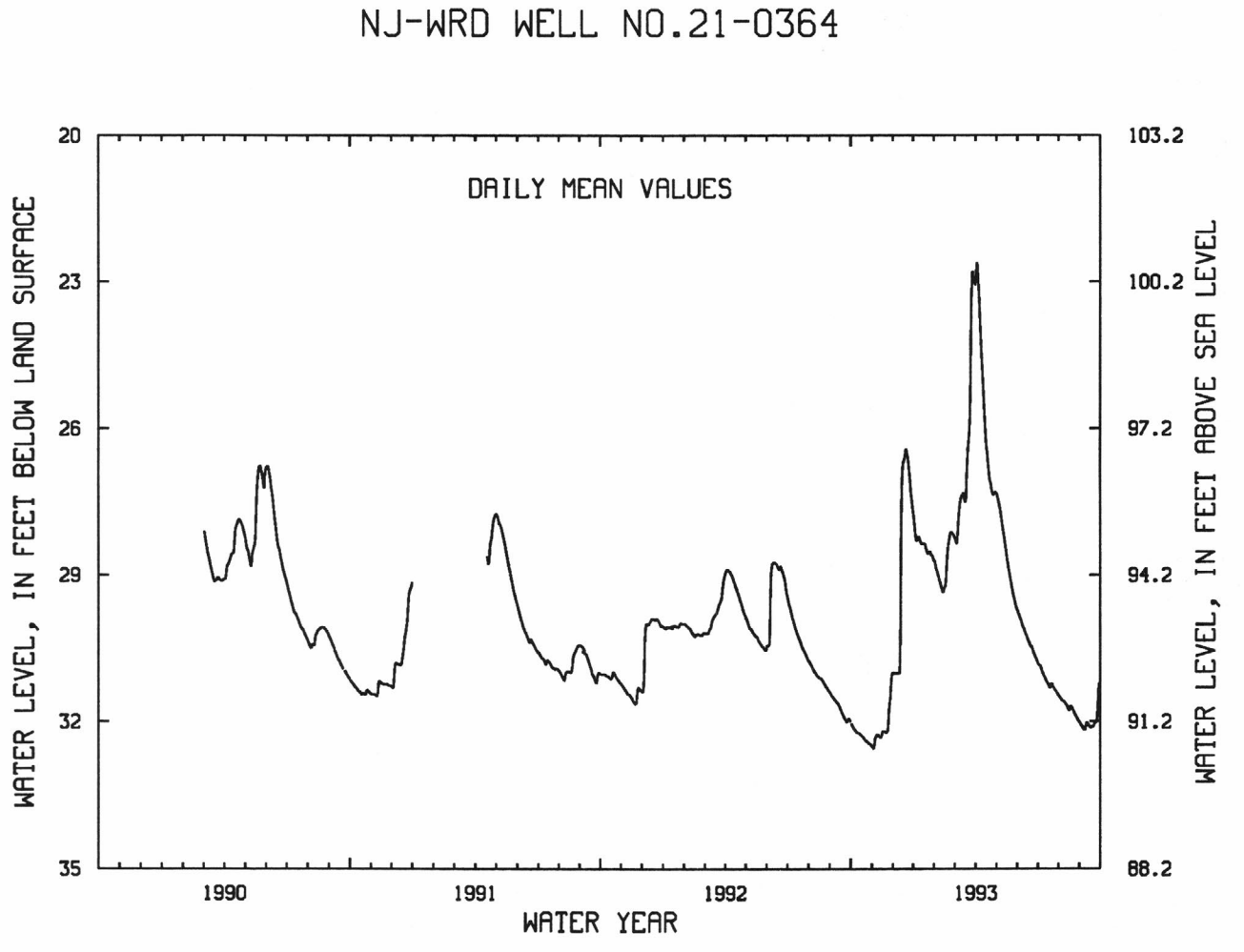
MERCER COUNTY

401804074432601. Local I.D., Cranston Farms 15 Obs. NJ-WRD Well Number, 21-0364.
LOCATION.--Lat 40°18'04", long 74°43'26", Hydrologic Unit 02040105, 1,200 ft north of intersection of Cold Soil Rd. and Rt. 206, Lawrenceville, Lawrence Township.
Owner: State of New Jersey.
AQUIFER.--Stockton Formation of Triassic age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 200 ft, open hole 50 to 200 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land surface is 123.2 ft above sea level.
Measuring point: Top of recorder shelf, 2.30 ft above land surface.
PERIOD OF RECORD.--Mar. 1990 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 22.58 ft below land surface, Apr. 2-3, 1993; lowest, 32.55 ft below land surface, Nov. 2, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	32.15	32.31	31.00	28.29	29.00	28.13	23.15	27.57	29.90	30.90	31.57	32.14
10	32.23	32.31	30.99	28.31	29.27	27.40	24.70	28.05	30.09	31.07	31.63	32.04
15	32.28	32.20	26.69	28.35	29.23	27.46	26.15	28.53	30.28	31.21	31.76	32.11
20	32.36	32.22	26.42	28.53	28.31	26.41	26.93	28.97	30.45	31.23	31.72	32.11
25	32.43	31.62	26.94	28.56	28.15	23.36	27.32	29.35	30.61	31.33	31.88	32.02
EOM	32.51	30.99	27.78	28.72	28.21	23.07	27.30	29.70	30.78	31.46	32.02	31.22
MEAN	32.30	32.05	28.39	28.41	28.77	26.29	25.61	28.57	30.28	31.17	31.73	31.99

WTR YR 1993 MEAN 29.63 HIGH 22.58 APR 2-3 LOW 32.55 NOV 2



MERCER COUNTY

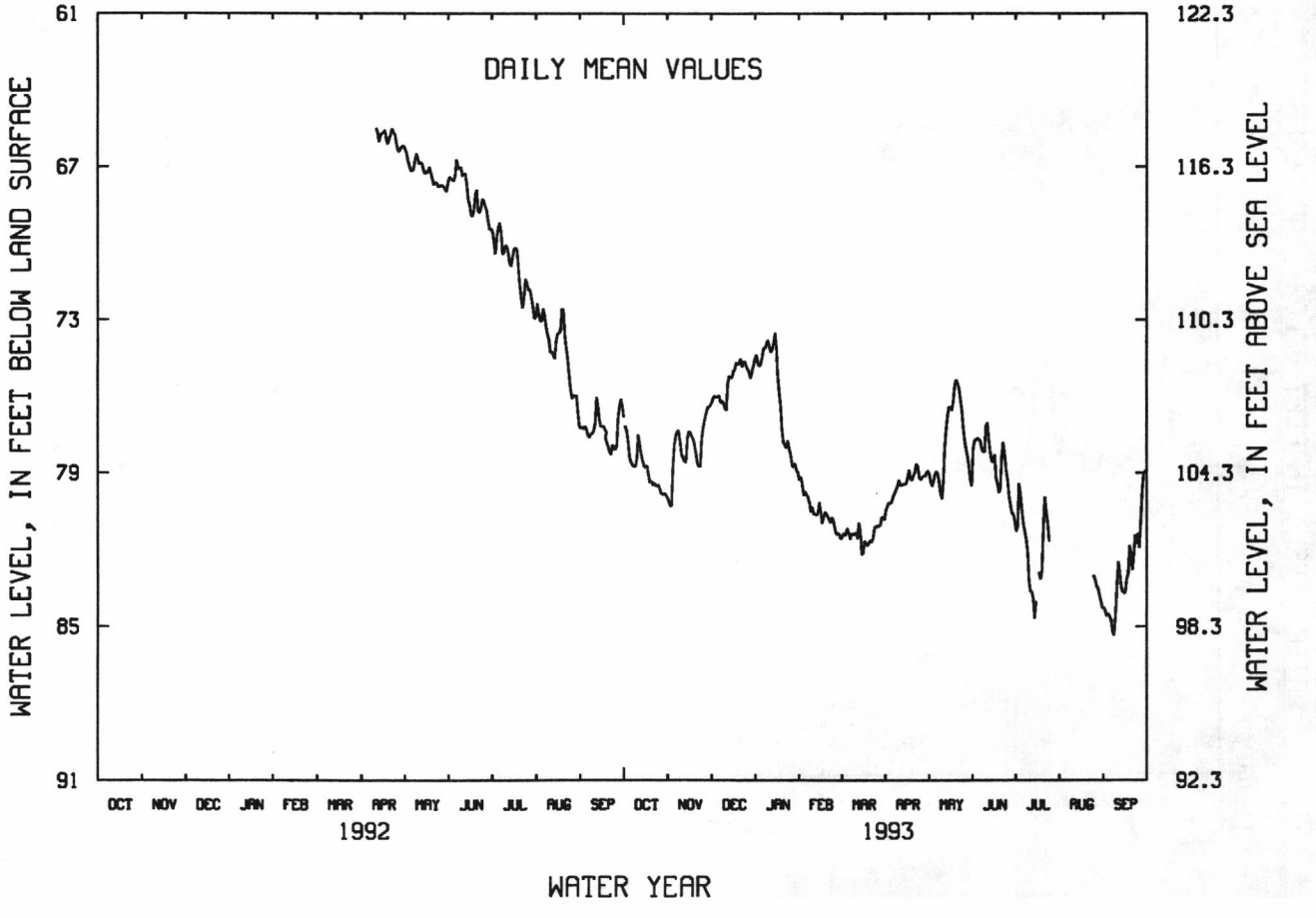
401834074515501. Local I.D., Washington Crossing Park 14 Obs. NJ-WRD Well Number, 21-0366.
LOCATION.--Lat 40°18'37", long 74°51'15", Hydrologic Unit 02040105, off Brick Yard Rd., in Washington Crossing State Park, Hopewell Township.
Owner: State of New Jersey - New Jersey Geological Survey.
AQUIFER.--Passaic Formation of Triassic-Jurassic age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 225 ft, open hole 50 to 225 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Periodic manual measurements, Apr. 1991 to Apr. 1992.
DATUM.--Land surface is 183.3 ft above sea level.
Measuring point: Top of recorder shelf, 2.10 ft above land surface.
REMARKS.--Water level affected by nearby pumping.
PERIOD OF RECORD.--Apr. 1991 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 65.07 ft below land surface, Apr. 17, 1992; lowest, 85.68 ft below land surface, Sept. 6, 1993.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	78.60	77.60	75.98	74.10	79.93	81.17	80.13	79.05	77.69	80.43	---	84.75
10	77.52	78.44	76.54	74.27	80.60	81.42	79.28	79.99	77.16	83.22	---	82.47
15	78.80	77.43	75.02	75.16	80.96	82.16	79.41	76.40	78.56	84.03	---	83.70
20	79.48	78.64	74.53	77.89	80.83	81.74	79.10	75.35	79.63	81.06	---	82.79
25	79.63	76.95	74.95	78.70	81.40	81.14	79.25	77.21	79.25	---	83.17	81.92
EOM	80.10	76.25	74.38	79.15	81.57	80.83	78.92	79.49	80.87	---	84.26	78.92
MEAN	78.92	77.85	75.31	76.24	80.60	81.39	79.41	77.87	78.64	81.92	---	82.67

WTR YR 1993 MEAN 79.19 HIGH 73.37 JAN 13 LOW 85.68 SEP 6

NJ-WRD WELL NO.21-0366



MERCER COUNTY

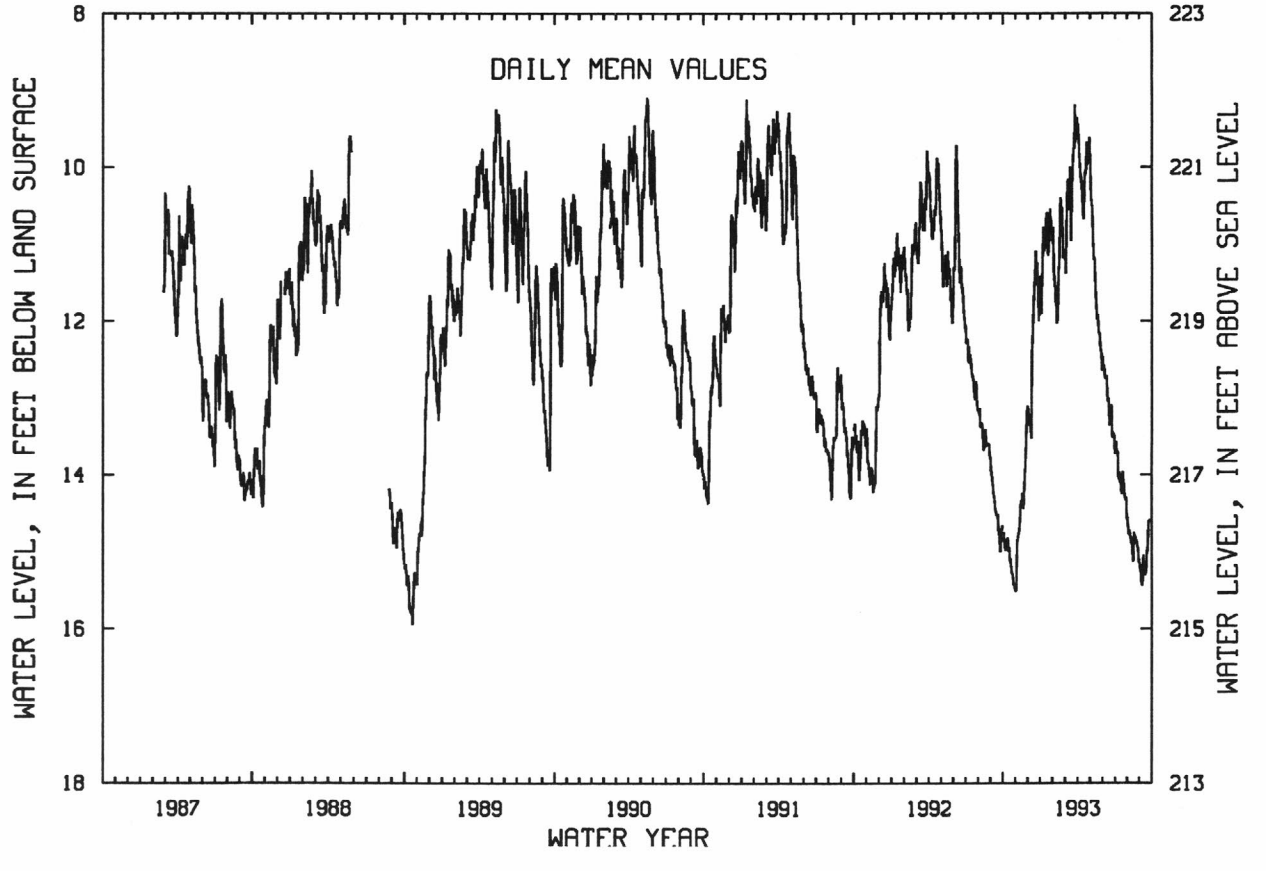
402138074435801. Local I.D., AT&T North Obs. NJ-WRD Well Number, 21-0365.
LOCATION.--Lat 40°21'38", long 74°43'58", Hydrologic Unit 02030105, AT&T, Carter Rd., Hopewell Township.
Owner: AT&T.
AQUIFER.--Passaic Formation of Triassic-Jurassic age.
WELL CHARACTERISTICS.--Drilled well, depth 99 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land surface is 231 ft above sea level, by altimeter.
Measuring point: Top of recorder shelf, 3.00 ft above land surface.
REMARKS.--Water level affected by nearby pumping.
PERIOD OF RECORD.--Feb. 1987 to current year. Records for 1987 to 1989 are unpublished and are available in files of the New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.90 ft below land surface, May 17, 1990; lowest, 16.07 ft below land surface, Oct. 21, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	14.91	14.85	13.21	11.35	11.54	10.59	9.90	10.50	12.62	13.69	14.77	15.39
10	14.94	14.70	13.41	11.09	11.94	10.27	10.13	11.20	12.71	14.05	14.81	15.04
15	14.99	14.33	11.75	10.63	11.24	10.96	10.67	11.70	13.00	14.03	15.11	15.28
20	15.18	14.44	11.09	11.08	10.55	9.86	10.08	11.94	13.19	13.96	14.81	14.99
25	15.33	13.79	11.54	10.77	11.18	9.67	9.92	12.24	13.51	14.26	14.87	14.59
EOM	15.50	13.10	11.42	10.78	11.15	9.64	9.77	12.48	13.61	14.54	15.14	---
MEAN	15.09	14.35	12.19	10.99	11.22	10.18	10.02	11.54	13.05	14.04	14.86	15.12

WTR YR 1993 MEAN 12.69 HIGH 9.12 MAR 24 LOW 15.58 NOV 1

NJ-WRD WELL NO.21-0365

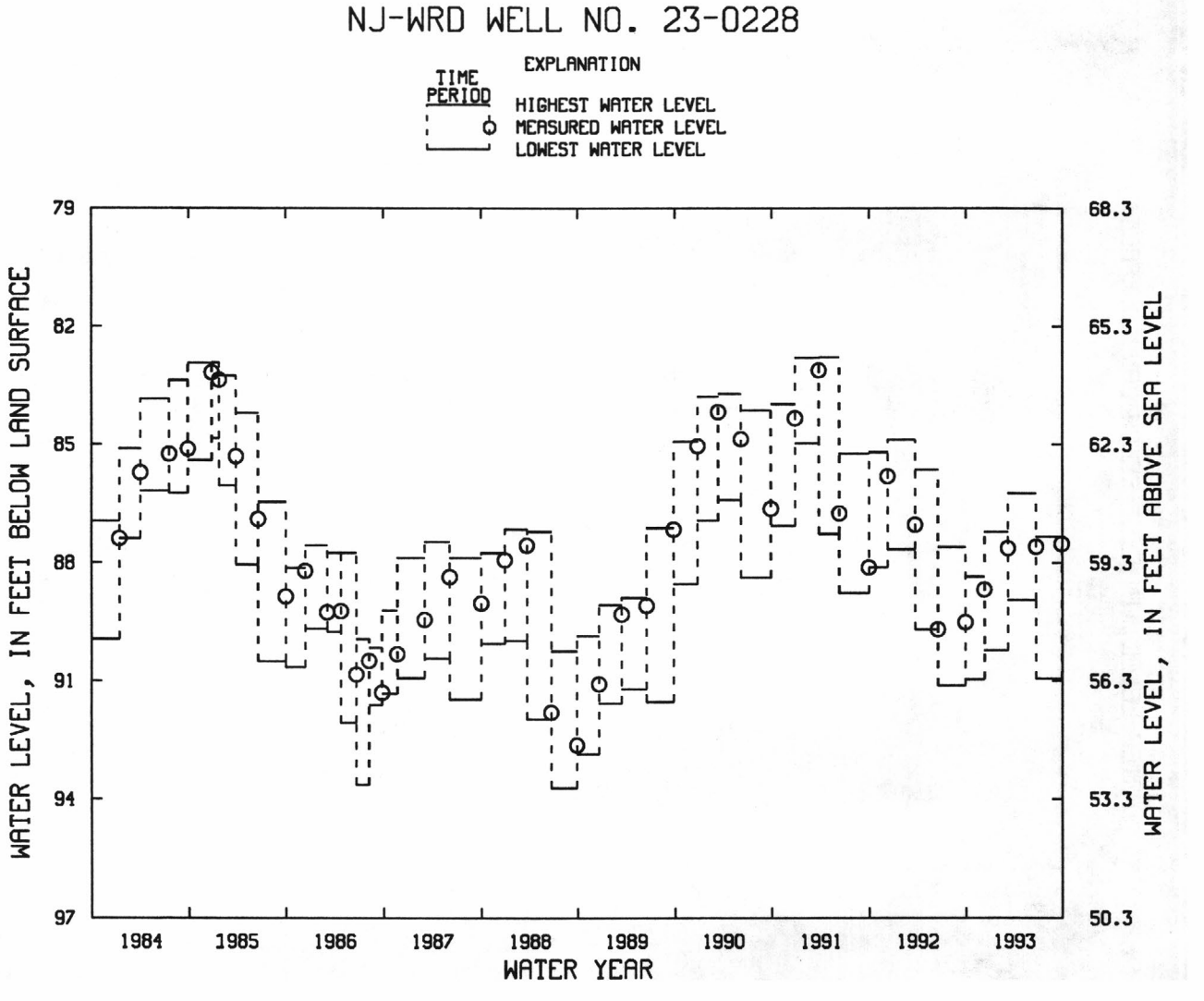


MIDDLESEX COUNTY

402015074275701. Local I.D., Forsgate 3 Obs. NJ-WRD Well Number, 23-0228.
LOCATION.--Lat 40°20'15", long 74°27'57", Hydrologic Unit 02030105, Hanover Lane at Rossmoor, Monroe Township.
Owner: Monroe Township Municipal Utilities Authority.
AQUIFER.--Old Bridge aquifer, Potomac-Raritan-Magothy aquifer system of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 138 ft, screened 128 to 138 ft.
INSTRUMENTATION.--Water-level extremes recorder
DATUM.--Land surface is 147.34 ft above sea level.
Measuring point: Front edge of cutout in recorder housing, 1.40 ft below land surface.
REMARKS.--Water level affected by nearby pumping.
PERIOD OF RECORD.--Oct. 1961 to current year. Records for 1961 to 1976 are unpublished and are available in files of the New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 70.32 ft below land surface, May 6, 1962; lowest, 93.72 ft below land surface, between June 22 and Sept. 28, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

WATER-LEVEL EXTREMES			MEASURED WATER LEVEL	
PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 28, 1992 TO DEC. 9, 1992	88.35	90.96	DEC. 9, 1992	88.68
DEC. 9, 1992 TO MAR. 8, 1993	87.22	90.22	MAR. 8, 1993	87.63
MAR. 8, 1993 TO JUNE 23, 1993	86.24	88.94	JUNE 23, 1993	87.59
JUNE 23, 1993 TO SEPT. 28, 1993	87.34	90.94	SEPT. 28, 1993	87.52

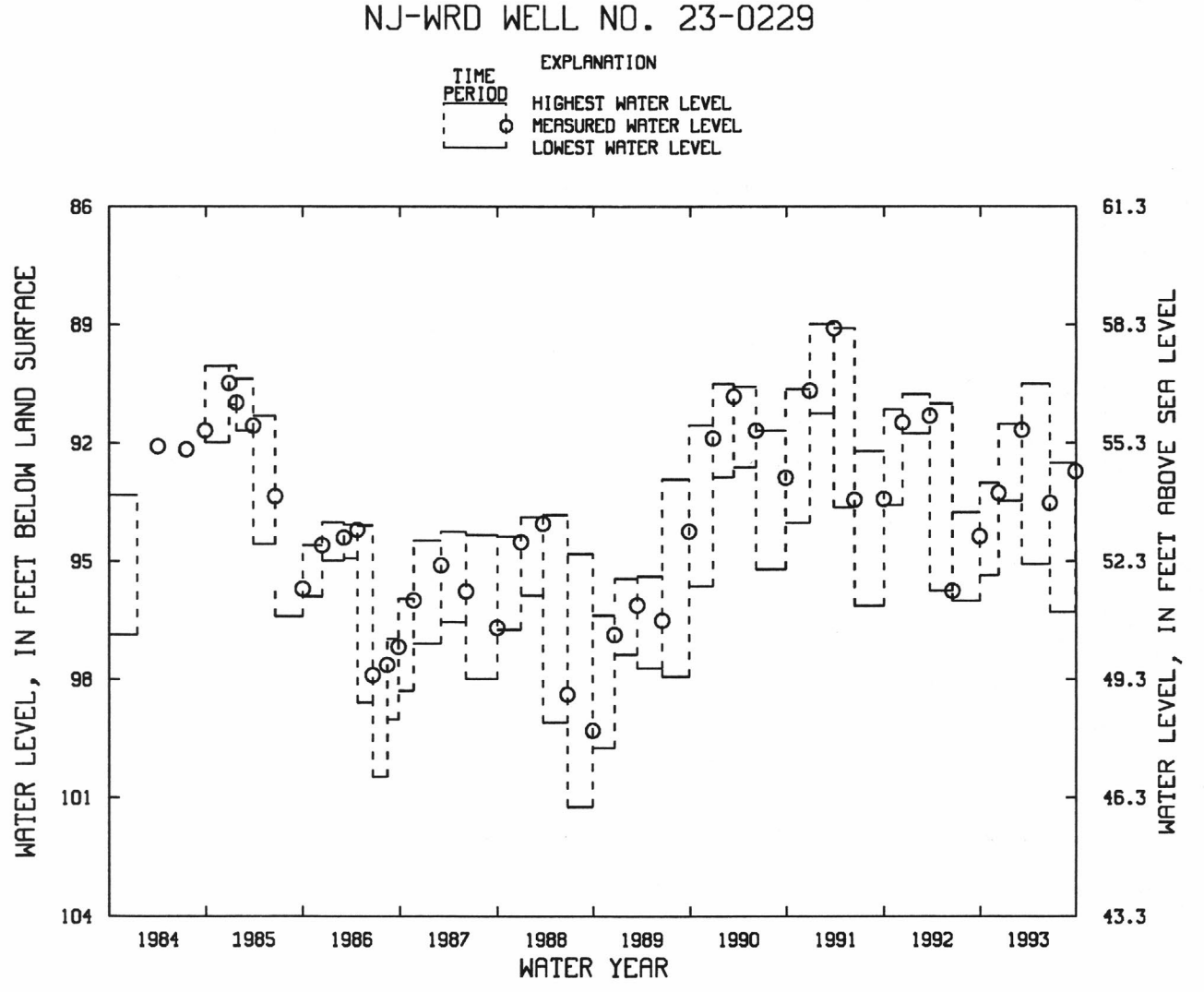


MIDDLESEX COUNTY

402015074275702. Local I.D., Forsgate 4 Obs. NJ-WRD Well Number, 23-0229.
LOCATION.--Lat 40°20'15", long 74°27'57", Hydrologic Unit 02030105, Hanover Lane at Rossmoor, Monroe Township.
Owner: Monroe Township Municipal Utilities Authority.
AQUIFER.--Farrington aquifer, Potomac-Raritan-Magothy aquifer system of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 330 ft screened 319 to 330 ft.
INSTRUMENTATION.--Water-level extremes recorder.
DATUM.--Land surface is 147.34 ft above sea level.
Measuring point: Front edge of cutout in recorder housing, 1.50 ft below land surface.
REMARKS.--Water level affected by nearby pumping.
PERIOD OF RECORD.--Apr. 1965 to current year. Records for 1965 to 1976 are unpublished and are available in files of the New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 80.09 ft below land surface, July 16, 1973; lowest, 101.23 ft below land surface, between June 22 and Sept. 28, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

WATER-LEVEL EXTREMES			MEASURED WATER LEVEL	
PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 28, 1992 TO DEC. 9, 1992	93.01	95.36	DEC. 9, 1992	93.27
DEC. 9, 1992 TO MAR. 8, 1993	91.52	93.47	MAR. 8, 1993	91.67
MAR. 8, 1993 TO JUNE 23, 1993	90.50	95.07	JUNE 23, 1993	93.52
JUNE 23, 1993 TO SEPT. 28, 1993	92.51	96.29	SEPT. 28, 1993	92.72



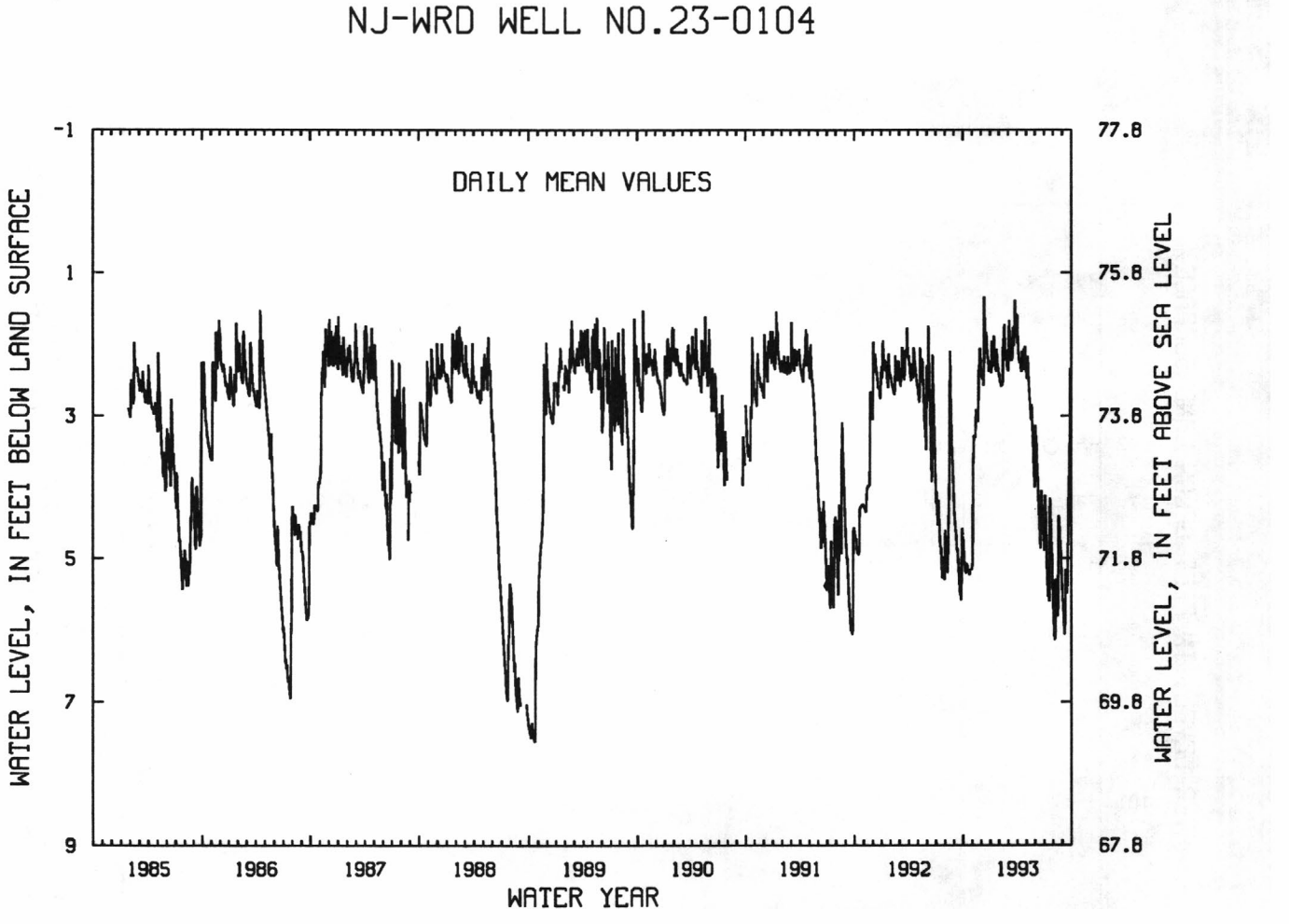
MIDDLESEX COUNTY

402143074185201. Local I.D., Morrell 1 Obs. NJ-WRD Well Number 23-0104.
LOCATION.--Lat 40°21'43", long 74°18'49", Hydrologic Unit 02030105, on the north side of Texas Rd., about 0.4 mi east of Rt. 9, Old Bridge Township.
OWNER: Olympia and York Bridge Development Corp.
AQUIFER.--Englishtown aquifer system of Cretaceous age.
WELL CHARACTERISTICS.--Dug water-table observation well, diameter 17 in., depth 11 ft, cased with precast concrete rings.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Periodic manual measurements Aug. 1975 to Dec. 1984.
DATUM.--Land surface is 76.75 ft above sea level.
Measuring point: Top of concrete ring, 0.20 ft above land surface.
REMARKS.--Well depth was 6 ft before deepening in Sept. 1932.
PERIOD OF RECORD.--Oct. 1923 to current year. Records for 1973 to 1985 are unpublished and are available in files of the New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.97 ft below land surface, Sept. 19, 1989; lowest, 10.40 ft below land surface datum, Oct. 13, 1953. Well was dry, Aug. to Sept. 1932, before deepening.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.01	3.59	2.44	1.96	2.54	1.67	2.12	2.33	3.37	4.31	6.08	5.82
10	5.19	3.30	2.55	2.29	2.56	2.12	2.25	2.56	3.88	5.13	5.33	5.55
15	5.08	2.93	2.02	2.07	2.10	2.22	2.38	2.88	4.46	5.30	5.70	5.42
20	5.20	3.08	2.06	2.36	2.17	2.02	2.32	2.84	4.40	4.29	4.42	4.79
25	5.17	2.33	2.27	2.27	2.25	1.58	2.30	3.39	4.50	4.74	4.82	3.91
EOM	5.14	2.32	2.23	2.41	2.34	1.98	2.30	4.00	4.72	5.59	5.45	2.79
MEAN	5.11	3.10	2.20	2.23	2.29	1.94	2.18	2.94	4.13	4.93	5.30	4.78

WTR YR 1993 MEAN 3.43 HIGH 1.06 DEC 11 LOW 6.17 AUG 6



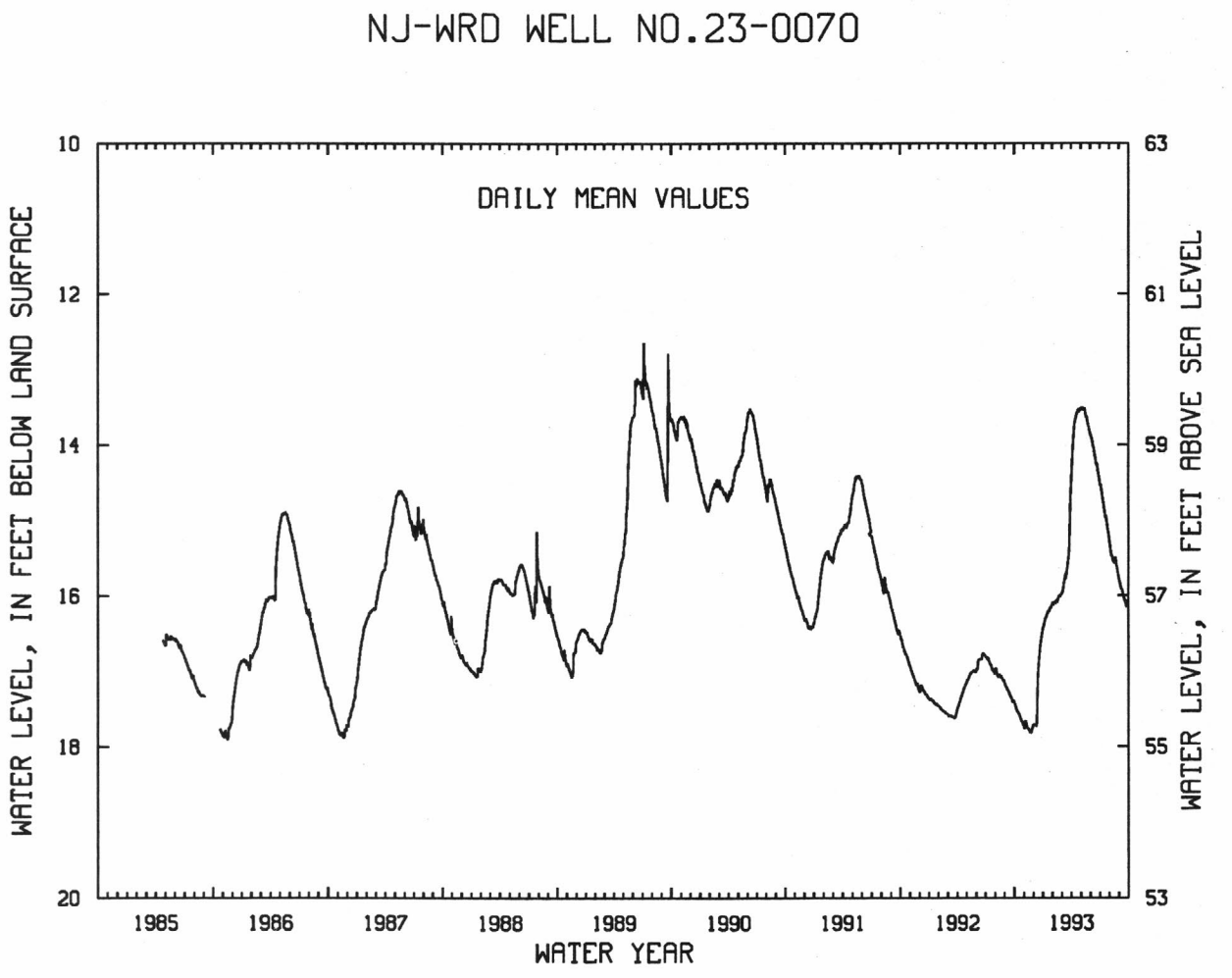
MIDDLESEX COUNTY

402553074271701. Local I.D., Fischer Obs. NJ-WRD Well Number, 23-0070.
LOCATION.--Lat 40°25'55", long 74°27'19", Hydrologic Unit 02030105, 32 Beaver Dam Dr. and Hardenburg Lane, East Brunswick Township.
Owner: Abe Weiss.
AQUIFER.--Farrington aquifer, Potomac-Raritan-Magothy aquifer system of Cretaceous age.
WELL CHARACTERISTICS.--Dug water-table observation well, diameter 54 in., depth 21 ft, lined with concrete blocks.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Water-level extremes recorder, Jan. 1977 to Apr. 1985.
DATUM.--Land surface is 73.00 ft above sea level.
Measuring point: Top of angle iron at bottom of shelter doors, 1.70 ft above land surface.
REMARKS.--Well deepened on Oct. 29, 1965 from 17 to 21 ft.
PERIOD OF RECORD.--June 1936 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.88 ft below land surface, Apr. 26-27, 1939; lowest, 19.11 ft below land surface, between July 24 and Oct. 6, 1981. Well was dry many times from 1963 to 1965, before deepening.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	17.48	17.66	17.71	16.35	16.09	15.93	14.05	13.51	13.94	14.58	15.43	15.87
10	17.54	17.75	17.73	16.29	16.09	15.80	13.73	13.54	14.03	14.72	15.50	15.92
15	17.57	17.78	17.02	16.23	16.10	15.77	13.63	13.58	14.16	14.86	15.55	16.01
20	17.63	17.81	16.76	16.20	16.02	15.58	13.56	13.65	14.26	14.93	15.53	16.09
25	17.67	17.77	16.59	16.17	16.02	15.33	13.55	13.75	14.36	15.10	15.65	16.15
EOM	17.73	17.71	16.43	16.09	15.98	14.55	13.51	13.87	14.47	15.27	15.78	16.09
MEAN	17.59	17.76	17.10	16.24	16.06	15.55	13.74	13.63	14.16	14.87	15.55	16.00

WTR YR 1993 MEAN 15.69 HIGH 13.49 MAY 6 LOW 17.82 NOV 20-23



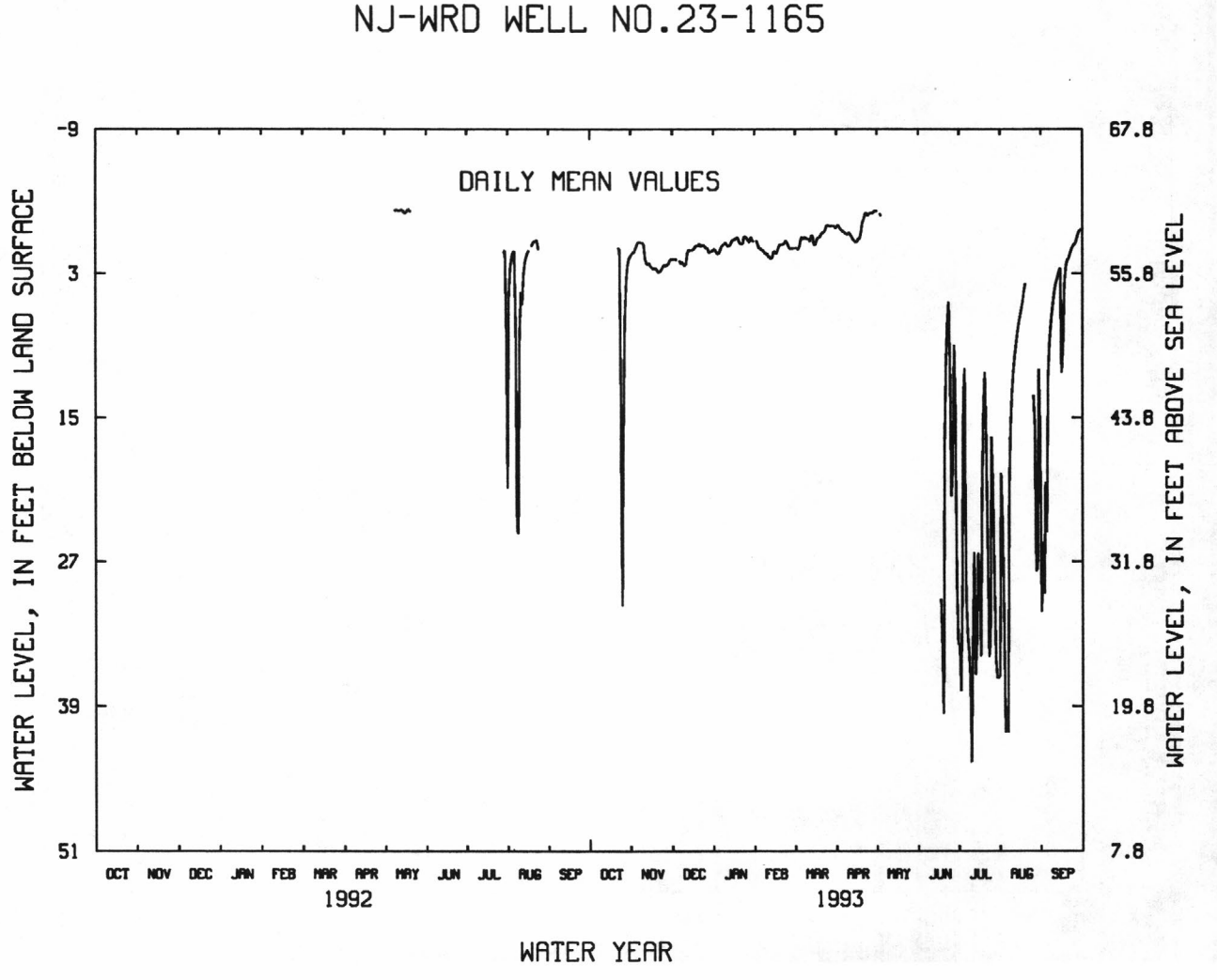
MIDDLESEX COUNTY

403119074290301. Local I.D., Rutgers Golf 13 Obs. NJ-WRD Well Number, 23-1165.
LOCATION.--Lat 40°31'08", long 74°28'12", Hydrologic Unit 02030105, at the Rutgers University Golf Course, Piscataway Township.
Owner: State of New Jersey.
AQUIFER.--Passaic Formation of Triassic-Jurassic age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 200 ft, open hole 50 to 200 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Periodic manual measurements, June 1991 to May 1992.
DATUM.--Land surface is 58.8 ft above sea level.
Measuring point: Top of recorder shelf, 3.85 ft above land surface.
REMARKS.--Water level affected by pumping of nearby irrigation well.
PERIOD OF RECORD.--June 1991 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.40 ft above land surface, May 18, 1992; lowest, 49.87 ft below land surface, Aug. 6, 1993.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	.40	1.94	.80	1.07	.31	-.54	---	---	10.89	39.07	11.51
10	---	1.76	2.24	.73	1.63	.14	-.38	---	---	43.62	11.13	4.20
15	---	2.47	1.01	.18	1.36	.62	.40	---	---	26.29	6.52	11.26
20	---	2.89	.51	.54	.56	-.18	-1.23	---	16.64	11.23	---	1.77
25	15.18	2.38	.89	.25	.94	-.98	-1.94	---	21.56	16.61	13.16	.48
EOM	1.40	1.81	.96	.26	.90	-.75	-2.22	---	33.86	36.42	31.13	-.61
MEAN	---	1.85	1.26	.50	.99	-.09	-.86	---	---	28.73	17.69	6.28

WTR YR 1993 MEAN 6.80 HIGH -2.24 APR 30 LOW 49.87 AUG 6



MONMOUTH COUNTY

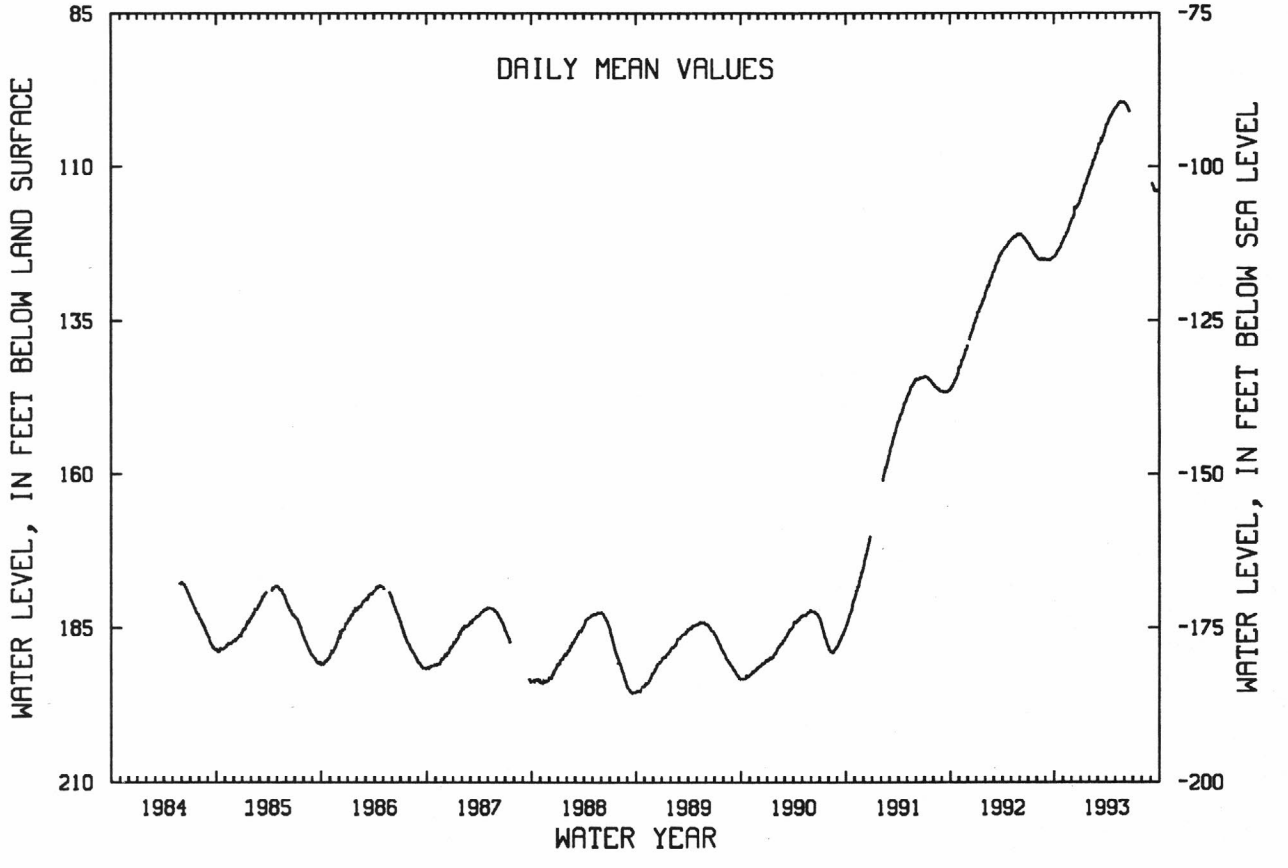
400711074020201. Local I.D., DOE - Sea Girt Obs. NJ-WRD Well Number, 25-0486.
LOCATION.--Lat 40°07'11", long 74°02'02", Hydrologic Unit 02040301, at the National Guard Camp, Sea Girt, Sea Girt Borough.
Owner: State of New Jersey.
AQUIFER.--Wenonah-Mount Laurel aquifer of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 614 ft, perforated casing 604 to 614 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land surface is 10 ft above sea level, from topographic map.
Measuring point: Top of recorder shelf, 3.20 ft above land surface.
REMARKS.--Water level affected by tidal fluctuation and nearby pumping.
PERIOD OF RECORD.--May 1984 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 99.34 ft below land surface, May 20, June 1, 1993; lowest, 195.60 ft below land surface, Sept. 17, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	124.40	121.50	118.34	114.63	110.45	106.37	103.07	100.37	99.70	---	---	112.76
10	124.03	121.30	117.73	113.75	109.84	106.21	102.38	100.08	100.00	---	---	113.19
15	123.67	120.70	116.72	113.02	109.09	105.86	101.91	99.63	100.48	---	---	113.92
20	123.18	120.19	116.47	112.78	108.47	105.21	101.55	99.43	101.07	---	---	114.01
25	122.68	119.33	116.14	111.88	108.02	104.47	101.13	99.52	---	---	---	114.02
EOM	122.17	118.84	115.13	111.15	107.36	103.50	100.54	99.54	---	---	---	113.87
MEAN	123.53	120.53	116.91	113.08	109.14	105.50	101.91	99.82	100.20	---	---	113.65

WTR YR 1993 HIGH 99.34 MAY 20, JUNE 1 LOW 124.82 OCT 1

NJ-WRD WELL NO.25-0486

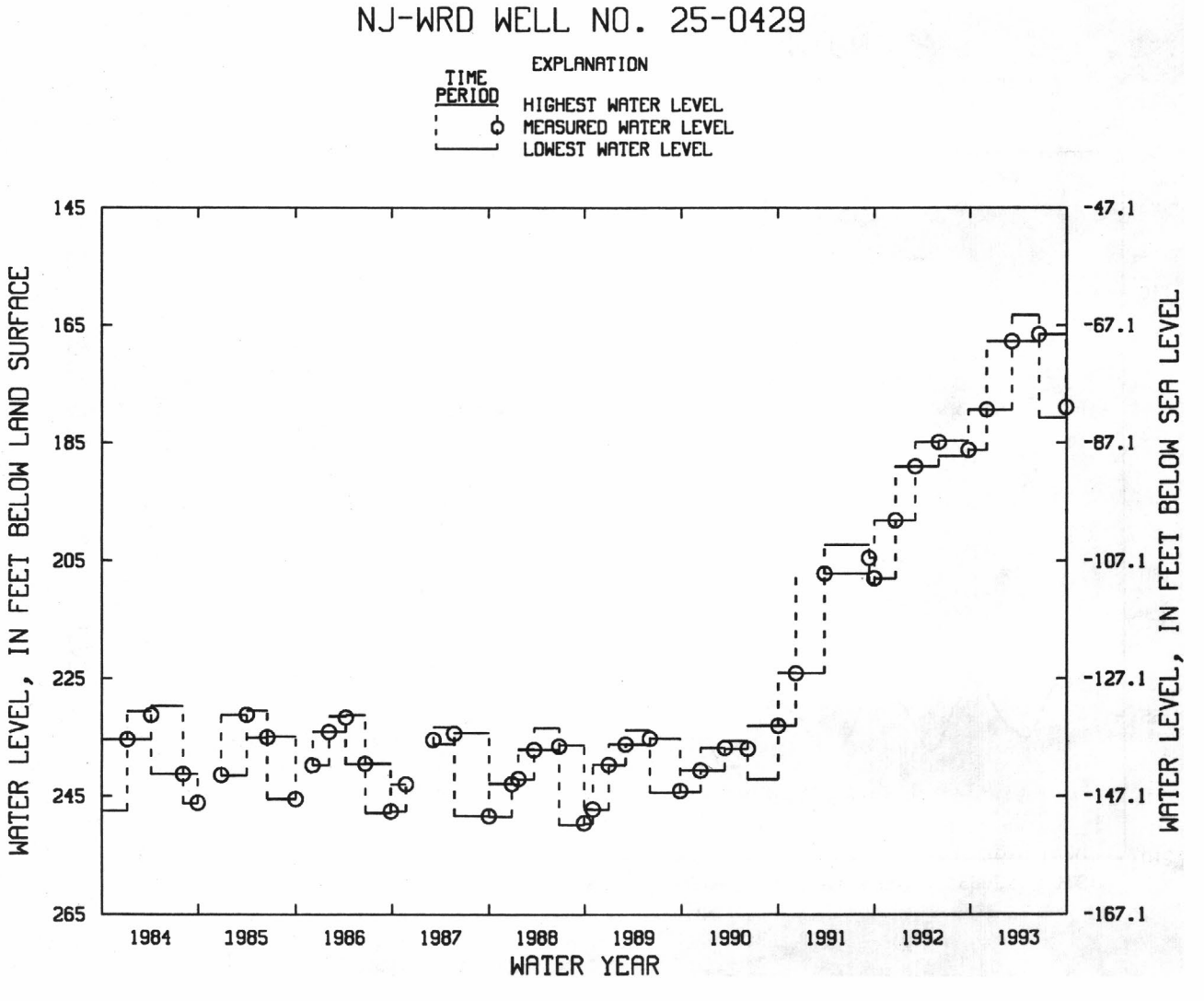


MONMOUTH COUNTY

400832074082101. Local I.D., Allaire State Park C Obs. NJ-WRD Well Number, 25-0429.
LOCATION.--Lat 40°08'34", long 74°08'34", Hydrologic Unit 02040301, about 1.3 mi southeast of Lower Squankum off County Rt. 21, in Allaire State Park, Howell Township.
Owner: U.S. Geological Survey.
AQUIFER.--Englishtown aquifer system of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 633 ft, screened 623 to 633 ft.
INSTRUMENTATION.--Water-level extremes recorder.
DATUM.--Land surface is 97.93 ft above sea level.
Measuring point: Front edge of cutout in recorder housing, 1.64 ft above land surface.
PERIOD OF RECORD.--Jan. 1964 to current year. Records for 1964 to 1976 are unpublished and are available in files of the New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 141.05 ft below land surface, Apr. 8, 1964; lowest, 249.89 ft below land surface, between June 24 and Sept. 28, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

WATER-LEVEL EXTREMES			MEASURED WATER LEVEL	
PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 24, 1992 TO DEC. 3, 1992	179.32	186.29	DEC. 3, 1992	179.32
DEC. 3, 1992 TO MAR. 8, 1993	167.69	179.37	MAR. 8, 1993	167.69
MAR. 8, 1993 TO JUNE 18, 1993	163.25	167.71	JUNE 18, 1993	166.53
JUNE 18, 1993 TO SEPT. 29, 1993	166.53	180.66	SEPT. 29, 1993	178.91



MONMOUTH COUNTY

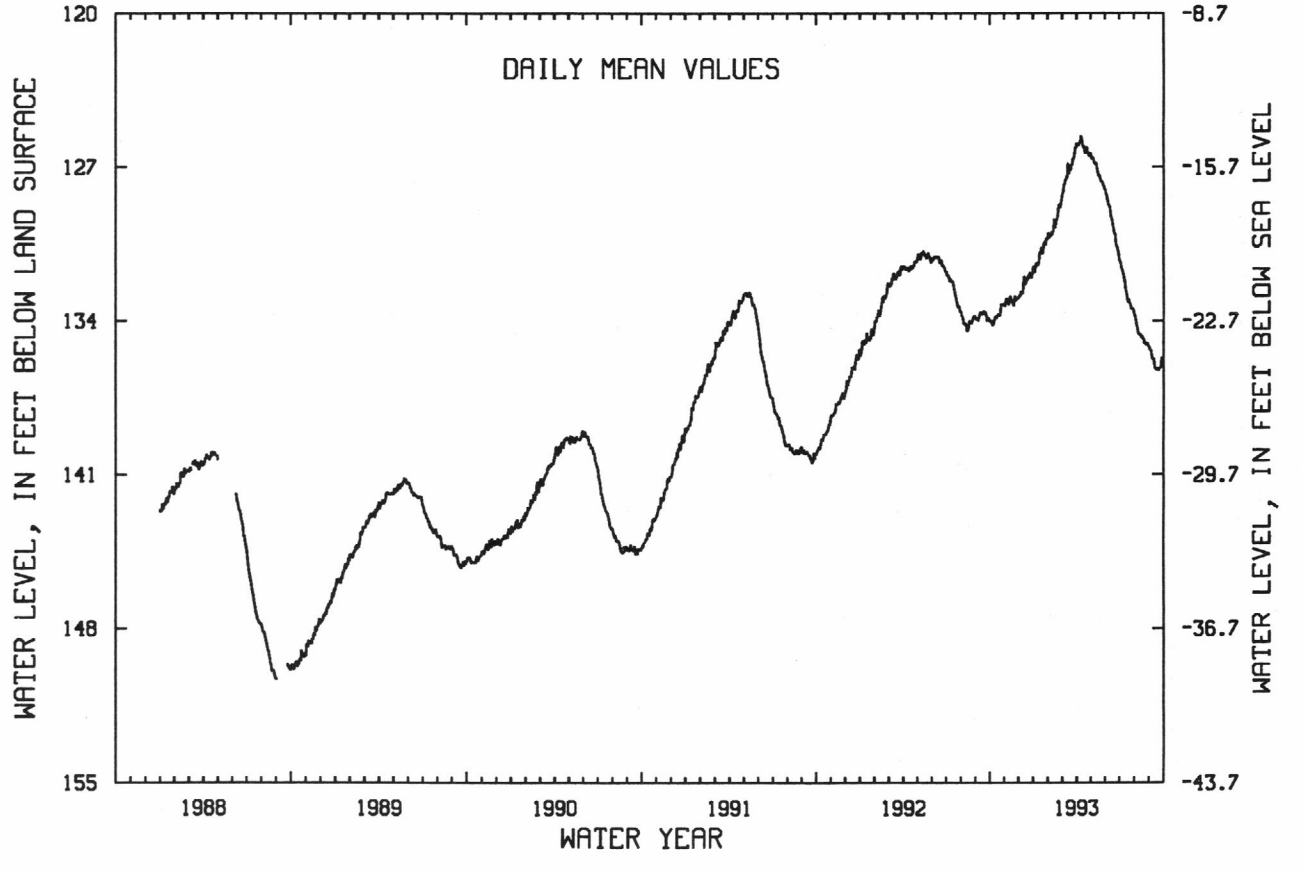
401105074120201. Local I.D., Howell Twp 1 Obs. NJ-WRD Well Number, 25-0635.
LOCATION.--Lat 40°11'05", long 74°12'02", Hydrologic Unit 02040301, on the south side of Peskin Rd., about 5,000 ft east of the intersection of Georgia Tavern Rd. and Peskin Rd., Howell Township.
Owner: U.S. Geological Survey.
AQUIFER.--Potomac-Raritan-Magothy aquifer system, undifferentiated, of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 2 in., depth 1,360 ft, screened 1,226 to 1,240, and 1,280 to 1,290 and 1,320 to 1,330 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land surface is 111.3 ft above sea level.
Measuring point: Top of recorder shelf, 2.10 ft above land surface.
PERIOD OF RECORD.--Dec. 1987 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 125.54 ft below land surface, Apr. 10-11, 1993; lowest, 150.32 ft below land surface, Sept. 2, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	134.09	132.97	132.66	131.39	130.15	127.81	126.03	126.60	128.43	131.52	134.13	135.45
10	133.98	133.27	132.54	131.48	129.95	127.53	125.60	126.87	128.79	131.95	134.60	135.73
15	133.86	133.07	132.30	130.90	129.75	127.29	126.11	127.14	129.34	132.66	134.71	136.13
20	133.79	133.32	131.93	130.90	129.21	127.05	126.38	127.44	129.96	133.03	134.82	136.26
25	133.25	133.08	131.88	130.49	128.86	126.63	126.39	127.66	130.59	133.39	135.05	136.09
EOM	133.28	132.96	131.52	129.99	128.50	126.15	126.38	128.01	131.02	133.64	135.16	135.69
MEAN	133.74	133.10	132.24	130.94	129.51	127.17	126.10	127.20	129.48	132.56	134.65	135.86

WTR YR 1993 MEAN 131.06 HIGH 125.54 APR 10-11 LOW 136.27 SEP 20

NJ-WRD WELL NO.25-0635



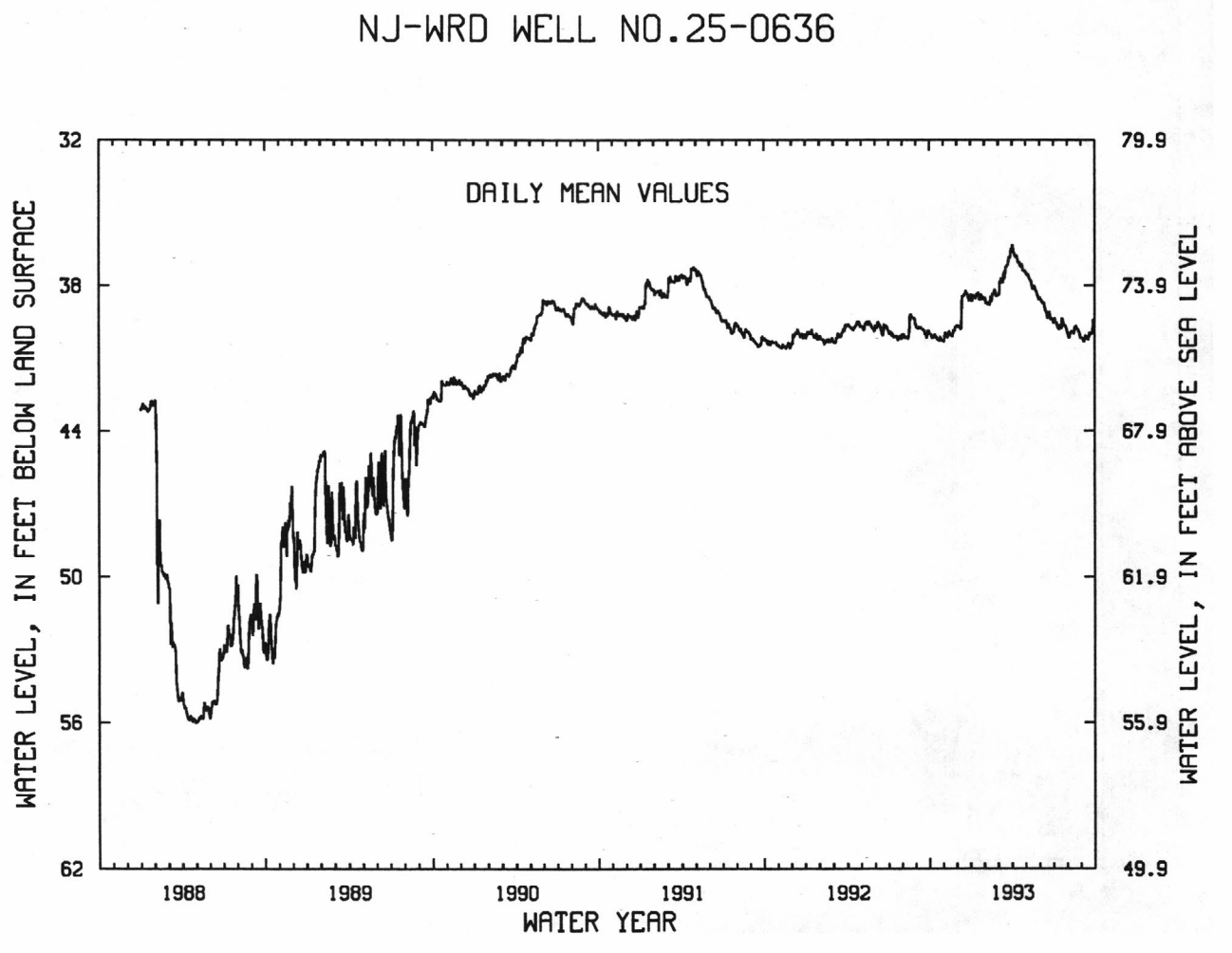
MONMOUTH COUNTY

401105074120202. Local I.D., Howell Twp 2 Obs. NJ-WRD Well Number, 25-0636.
LOCATION.--Lat 40°11'05", long 74°12'02", Hydrologic Unit 02040301, on the south side of Peskin Rd., about 5,000 ft east of the intersection of Georgia Tavern Rd. and Peskin Rd., Howell Township.
Owner: U.S. Geological Survey.
AQUIFER.--Vincentown aquifer of Paleocene age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 100 ft, screened 85 to 95 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land surface is 111.9 ft above sea level.
Measuring point: Top of recorder shelf, 1.20 ft above land surface.
REMARKS.--Water level affected by stage of Manasquan Reservoir and by nearby pumping.
PERIOD OF RECORD.--Dec. 1987 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 36.27 ft below land surface, Apr. 2, 1993; lowest, 56.09 ft below land surface, Apr. 29, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	40.09	39.94	39.65	38.38	38.71	37.89	36.68	37.52	38.65	39.48	40.16	40.22
10	40.07	40.13	39.76	38.55	38.77	37.80	36.76	37.74	38.71	39.71	39.92	40.06
15	40.14	40.00	38.44	38.39	38.66	37.71	37.06	38.01	39.05	39.62	39.96	40.20
20	40.27	40.11	38.21	38.59	38.37	37.22	37.22	38.03	39.21	39.36	39.68	40.05
25	40.12	39.89	38.49	38.48	38.44	36.82	37.38	38.26	39.41	39.63	39.83	40.00
EOM	40.27	39.65	38.35	38.48	38.42	36.57	37.41	38.59	39.39	39.89	40.18	39.48
MEAN	40.15	39.98	38.86	38.47	38.53	37.45	37.00	37.98	39.02	39.62	39.93	40.02

WTR YR 1993 MEAN 38.92 HIGH 36.27 APR 2 LOW 40.35 NOV 1, SEP 6-7



MONMOUTH COUNTY

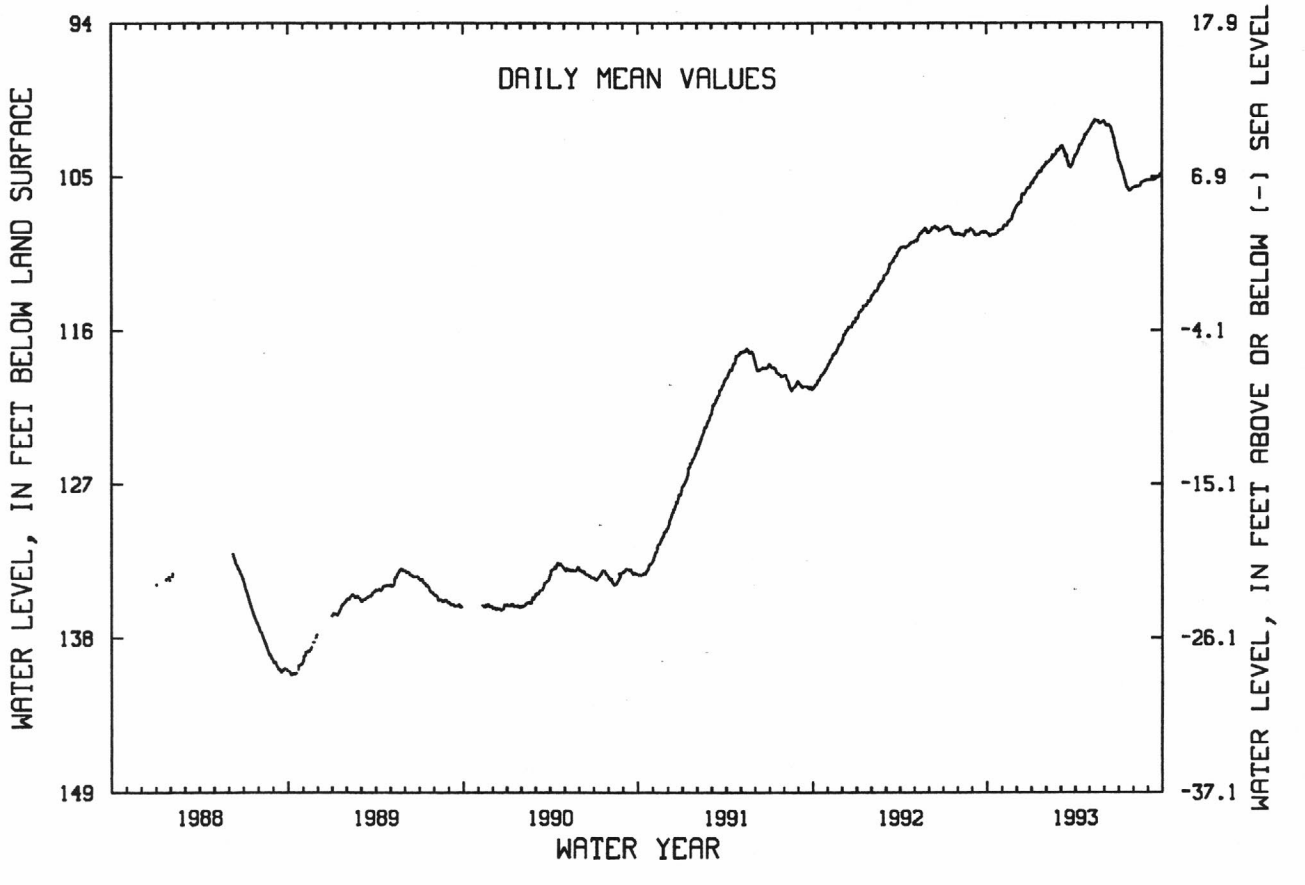
401105074120203. Local I.D., Howell Twp 3 Obs. NJ-WRD Well Number, 25-0637.
LOCATION.--Lat 40°11'05", long 74°12'02", Hydrologic Unit 02040301, on the south side of Peskin Rd., about 5,000 ft east of the intersection of Georgia Tavern Rd. and Peskin Rd., Howell Township.
Owner: U.S. Geological Survey.
AQUIFER.--Wenonah-Mount Laurel aquifer of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 324 ft, screened 307 to 317 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land surface is 111.9 ft above sea level.
Measuring point: Top of recorder shelf, 1.80 ft above land surface.
PERIOD OF RECORD.--Dec. 1987 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 100.91 ft below land surface, May 13, 1993; lowest, 140.65 ft below land surface, Oct. 6-7, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	109.16	108.46	106.93	105.17	103.93	102.75	103.36	101.39	101.29	104.15	105.77	105.23
10	109.17	108.53	106.59	105.06	103.78	103.26	102.83	101.14	101.27	104.65	105.71	105.11
15	109.17	108.20	106.32	104.72	103.61	103.77	102.66	100.95	101.49	105.29	105.66	105.19
20	109.09	108.04	105.91	104.64	103.36	104.29	102.28	101.01	102.07	105.73	105.38	105.11
25	108.83	107.55	105.80	104.33	103.16	104.19	101.96	101.15	102.87	106.00	105.31	105.04
EOM	108.77	107.14	105.42	103.97	102.98	103.67	101.68	101.02	103.60	105.82	105.25	104.89
MEAN	109.04	108.08	106.27	104.73	103.53	103.61	102.57	101.15	101.92	105.18	105.53	105.11

WTR YR 1993 MEAN 104.74 HIGH 100.91 MAY 13 LOW 109.25 OCT 6-7

NJ-WRD WELL NO.25-0637



MONMOUTH COUNTY

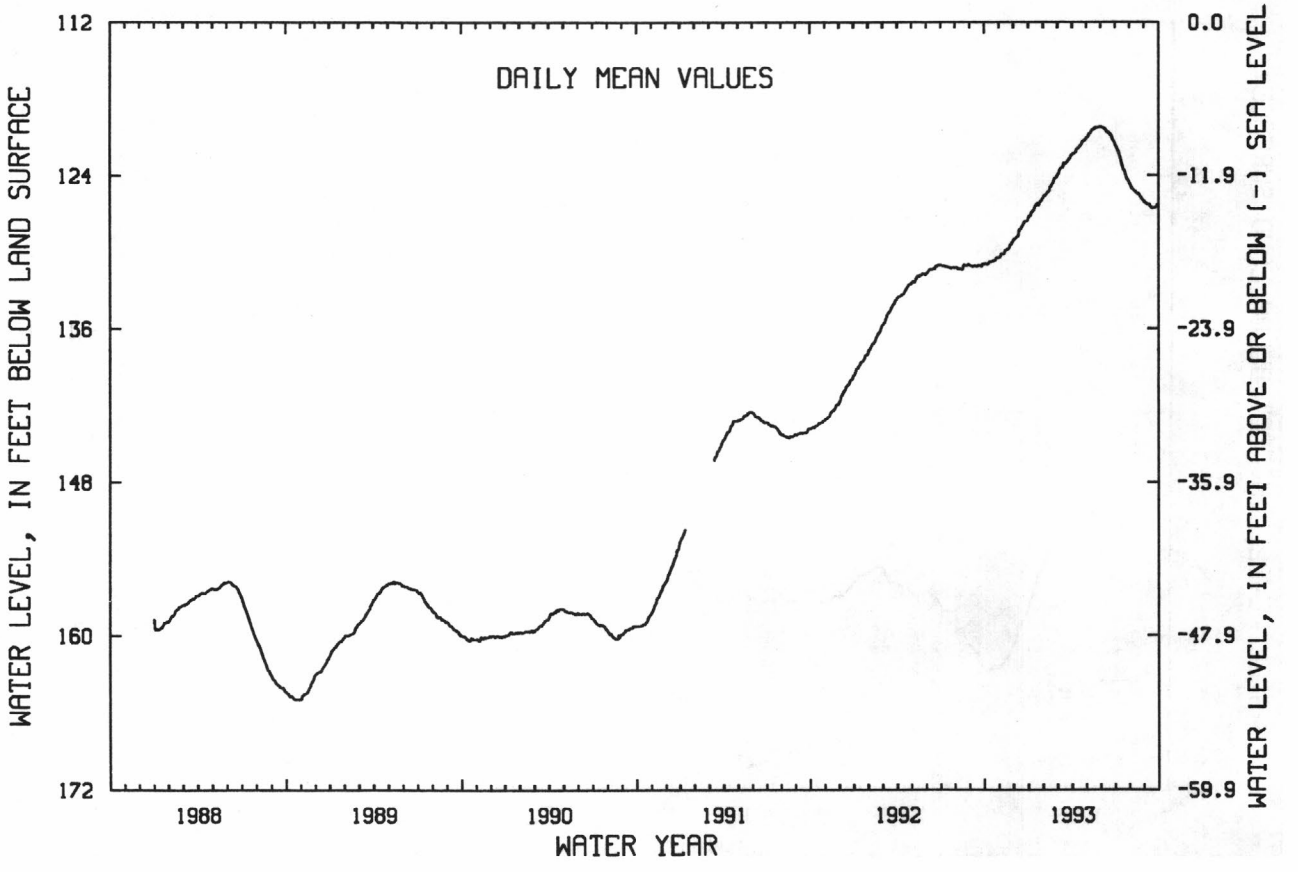
401105074120204. Local I.D., Howell Twp 4 Obs. NJ-WRD Well Number, 25-0638.
LOCATION.--Lat 40°11'05", long 74°12'02", Hydrologic Unit 02040301, on the south side of Peskin Rd., about 5,000 ft east of the intersection of Georgia Tavern Rd. and Peskin Rd., Howell Township.
Owner: U.S. Geological Survey.
AQUIFER.--Englishtown aquifer system of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 499 ft, screened 483 to 493 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land surface is 112.1 ft above sea level.
Measuring point: Top of recorder shelf, 1.80 ft above land surface.
PERIOD OF RECORD.--Dec. 1987 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 120.18 ft below land surface, June 1-2, 1993; lowest, 165.02 ft below land surface, Oct. 21, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	130.94	130.18	128.91	126.99	125.50	123.62	122.30	120.91	120.28	121.89	124.97	126.18
10	130.88	130.17	128.76	126.76	125.29	123.42	122.00	120.67	120.39	122.38	125.15	126.24
15	130.78	129.87	128.20	126.38	124.92	123.12	121.84	120.42	120.58	123.07	125.35	126.48
20	130.70	129.78	127.82	126.36	124.59	123.01	121.61	120.27	120.78	123.56	125.47	126.54
25	130.50	129.44	127.60	126.01	124.25	122.73	121.35	120.23	121.14	124.12	125.72	126.53
EOM	130.46	129.10	127.25	125.67	124.09	122.42	121.12	120.23	121.48	124.57	126.02	126.34
MEAN	130.74	129.84	128.17	126.44	124.91	123.15	121.77	120.50	120.68	123.10	125.37	126.37

WTR YR 1993 MEAN 125.09 HIGH 120.18 JUN 1-2 LOW 130.98 OCT 6-8

NJ-WRD WELL NO.25-0638



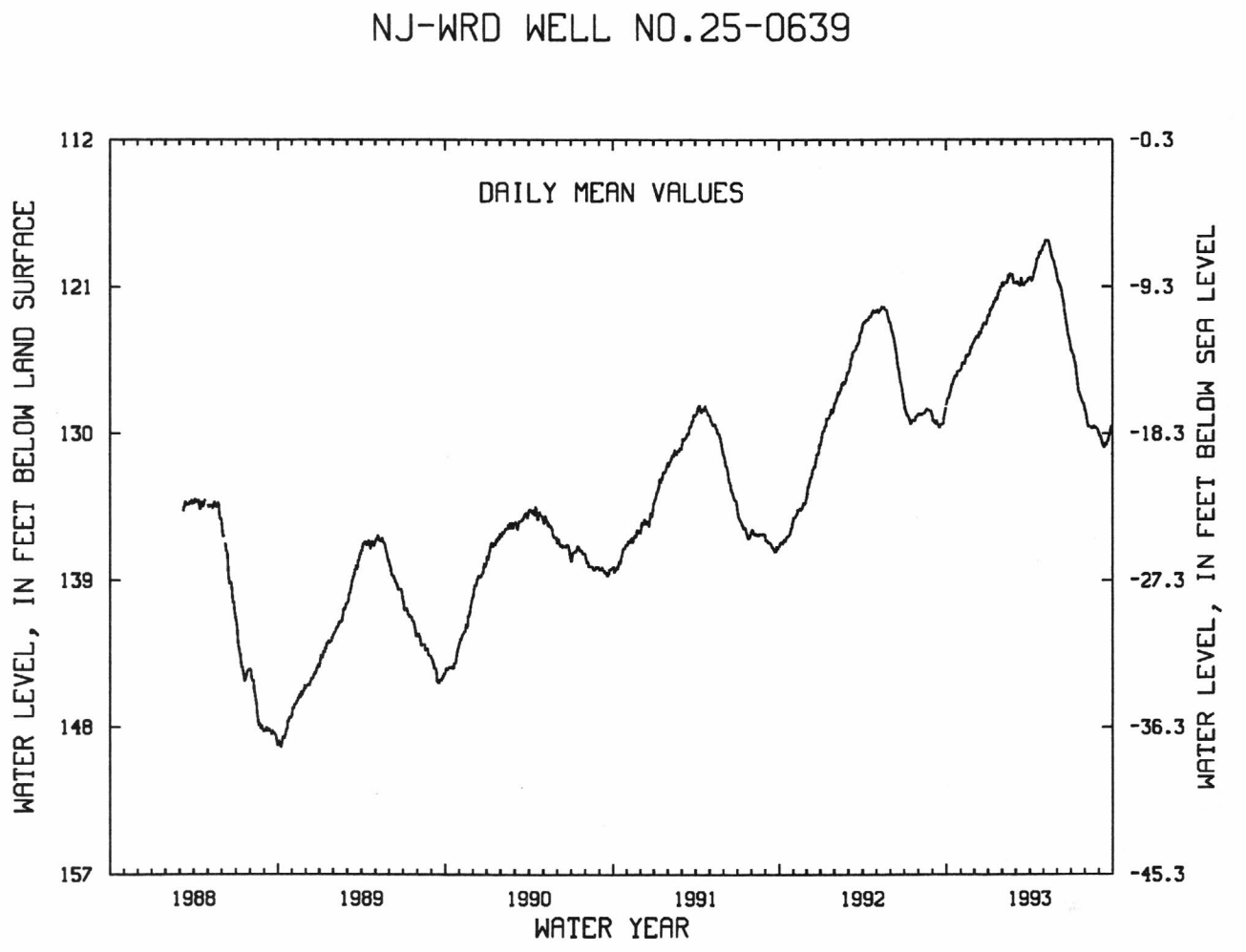
MONMOUTH COUNTY

401105074120205. Local I.D., Howell Twp 5 Obs. NJ-WRD Well Number, 25-0639.
LOCATION.--Lat 40°11'05", long 74°12'02", Hydrologic Unit 02040301, on the south side of Peskin Rd., about 5,000 ft east of the intersection of Georgia Tavern Rd. and Peskin Rd., Howell Township.
Owner: U.S. Geological Survey.
AQUIFER.--Upper Potomac-Raritan-Magothy aquifer of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 907 ft, screened 891 to 901 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land surface is 111.7 ft above sea level.
Measuring point: Top of recorder shelf, 2.40 ft above land surface.
PERIOD OF RECORD.--Mar. 1988 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 118.15 ft below land surface, May 6, 1993; lowest, 149.23 ft below land surface, Oct. 6-7, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	127.84	125.65	124.04	122.33	120.80	120.66	120.60	118.26	120.79	125.07	129.12	130.28
10	127.38	125.71	124.11	122.25	120.75	120.91	120.17	118.22	121.20	125.61	129.58	130.78
15	126.92	125.27	123.84	121.92	120.51	120.84	119.70	118.45	122.02	126.71	129.62	130.58
20	126.53	125.19	123.29	121.75	120.32	120.87	119.26	119.15	123.07	127.50	129.57	130.48
25	126.21	124.75	123.30	121.25	120.73	120.69	118.96	119.47	123.97	127.97	129.67	129.99
EOM	126.13	124.37	122.72	120.72	120.76	120.55	118.59	120.22	124.57	128.43	129.97	129.53
MEAN	126.96	125.24	123.65	121.81	120.59	120.75	119.65	118.88	122.32	126.69	129.50	130.31

WTR YR 1993 MEAN 123.88 HIGH 118.15 MAY 6 LOW 130.89 SEP 12



MONMOUTH COUNTY

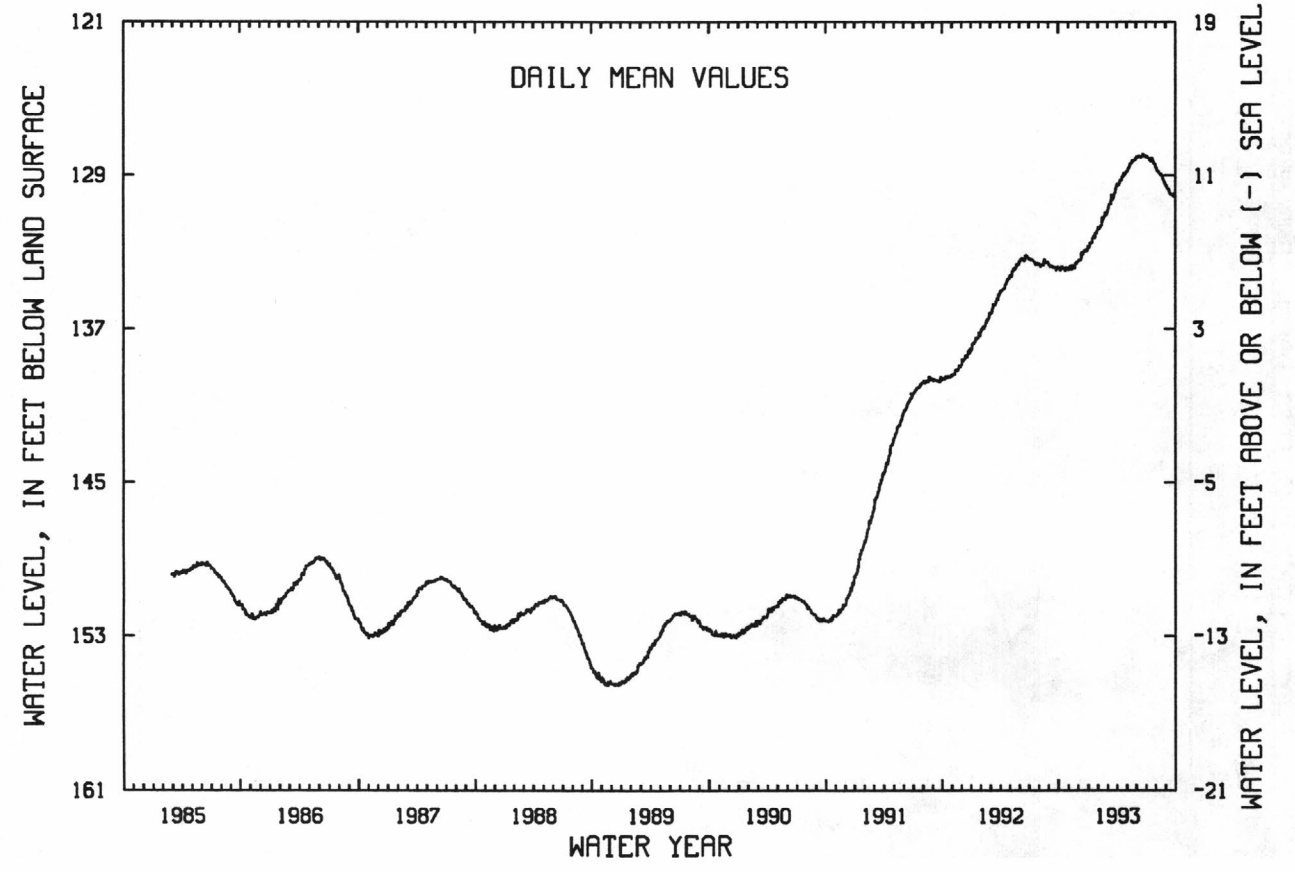
401542074053001. Local I.D., Fort Monmouth 1-NCO Obs. NJ-WRD Well Number, 25-0353.
LOCATION.--Lat 40°15'42", long 74°05'30", Hydrologic Unit 02030104, at Training Center, Wyckoff Rd. and Wayside Rd., Tinton Falls Borough.
Owner: U.S. Army.
AQUIFER.--Wenonah-Mount Laurel aquifer of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 3.5 in., depth 327 ft, screened 321 to 327 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land surface is 140 ft above sea level, from topographic map.
Measuring point: Top of recorder shelf, 1.50 ft above land surface.
PERIOD OF RECORD.--Feb. 1985 to current year. Records for 1985 are unpublished and are available in files of the New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level 127.88 ft below land surface datum, June 22, 1993; lowest, 155.63 ft below land surface datum Dec. 22-23, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	133.86	133.73	133.37	132.53	131.73	130.58	129.55	128.70	128.04	128.03	128.76	129.63
10	133.85	133.95	133.40	132.56	131.62	130.50	129.28	128.56	127.98	128.12	128.83	129.68
15	133.86	133.79	133.12	132.30	131.36	130.28	129.26	128.38	128.03	128.16	128.95	129.94
20	133.92	133.87	132.90	132.28	131.16	130.21	129.09	128.23	128.02	128.07	129.02	130.05
25	133.78	133.66	132.91	131.99	131.07	129.93	128.98	128.21	128.04	128.33	129.26	130.11
EOM	133.92	133.50	132.67	131.71	130.94	129.60	128.81	128.13	128.00	128.51	129.49	130.08
MEAN	133.86	133.76	133.10	132.28	131.35	130.24	129.19	128.41	128.02	128.19	129.00	129.87

WTR YR 1993 MEAN 130.60 HIGH 127.88 JUN 22 LOW 133.99 OCT 22-23

NJ-WRD WELL NO.25-0353



MONMOUTH COUNTY

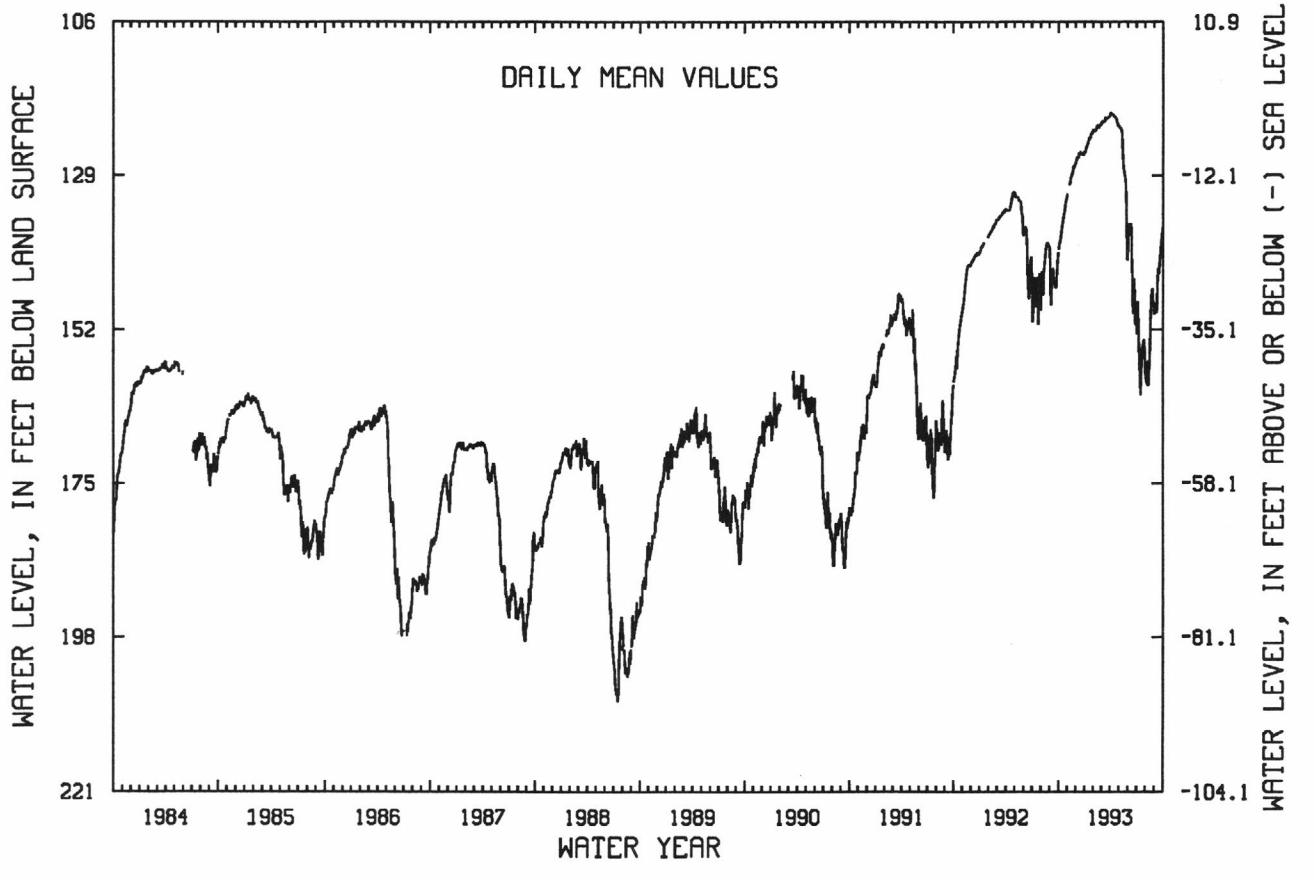
402208074145201. Local I.D., Marlboro 1 Obs. NJ-WRD Well Number, 25-0272.
LOCATION.--Lat 40°22'08", long 74°14'52", Hydrologic Unit 02030105, on the west side of NJ Rt. 79, 0.9 mi south of Morganville, Marlboro Township.
Owner: Marlboro Township Municipal Utilities Authority.
AQUIFER.--Farrington aquifer, Potomac-Raritan-Magothy aquifer system of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 680 ft, screened 670 to 680 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land surface is 116.93 ft above sea level.
Measuring point: Top of recorder shelf, 2.50 ft above land surface.
REMARKS.--Water level affected by nearby pumping.
PERIOD OF RECORD.--Jan. 1973 to current year. Records for 1973 to 1977 are unpublished and are available in files of the New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 119.51 ft below land surface, Apr. 3, 1993; lowest, 207.78 ft below land surface, July 16, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	138.91	---	126.26	124.75	122.23	120.84	119.69	121.78	136.83	147.64	158.91	149.13
10	137.49	130.00	126.04	124.32	122.05	120.87	119.71	122.15	136.13	155.36	159.53	146.32
15	135.86	128.97	125.59	123.60	121.66	120.54	120.06	126.04	142.34	161.62	155.42	143.45
20	134.59	128.23	125.48	123.24	121.74	120.29	120.32	128.49	146.52	154.96	147.64	141.24
25	132.98	127.63	125.79	122.68	121.50	120.22	120.93	130.22	150.01	153.77	145.74	138.68
EOM	131.83	126.99	125.24	122.01	121.12	119.99	121.42	141.45	150.47	157.81	149.61	136.66
MEAN	135.71	128.63	125.86	123.61	121.76	120.51	120.24	127.27	142.80	154.69	153.24	143.48

WTR YR 1993 MEAN 133.30 HIGH 119.51 APR 3 LOW 162.21 JUL 15

NJ-WRD WELL NO.25-0272



MONMOUTH COUNTY

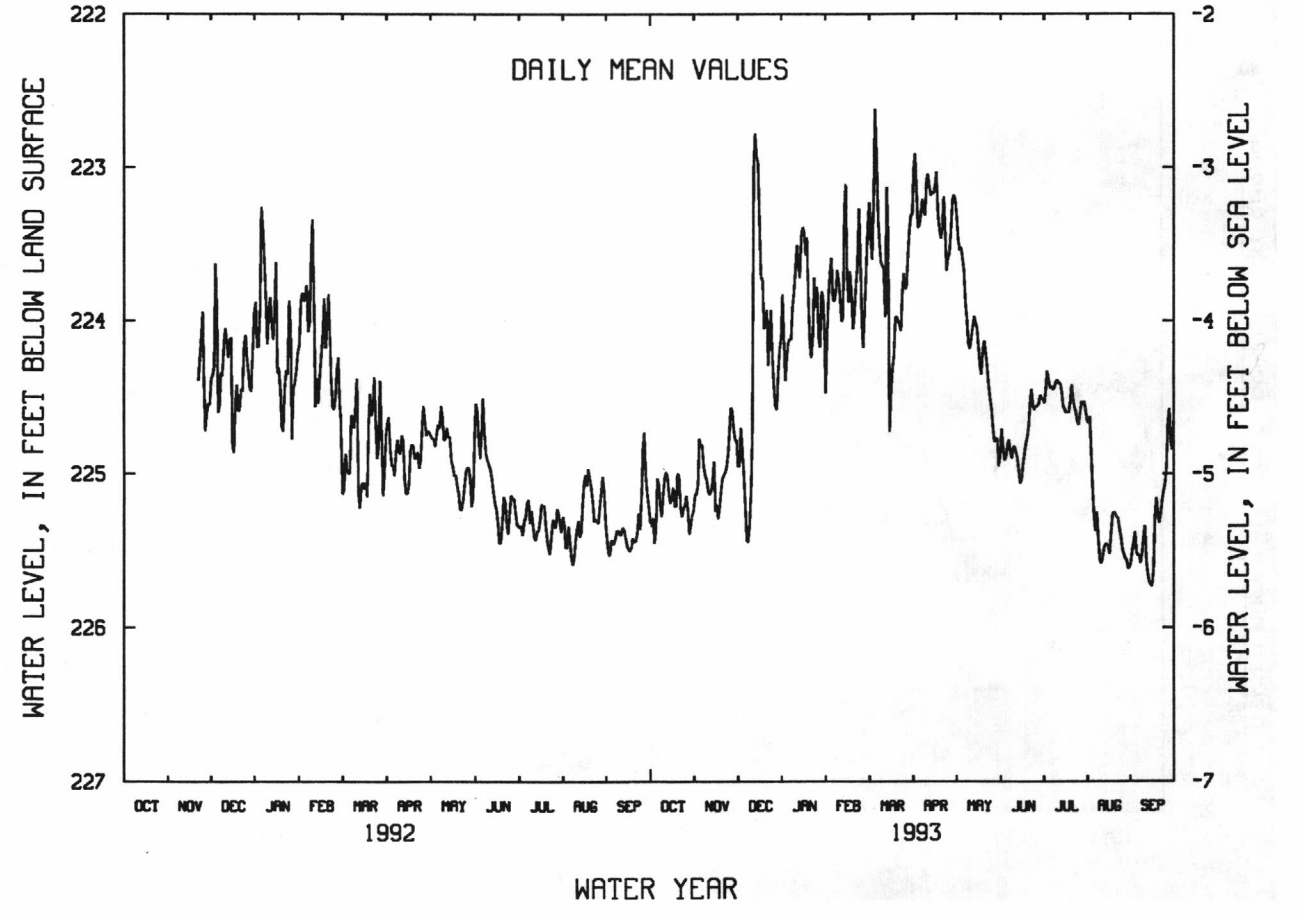
402426074001901. Local I.D., AHWD B Obs. NJ-WRD Well Number, 25-0715.
LOCATION.--Lat 40°24'26", long 74°00'19", Hydrologic Unit 02030104, near the intersection of Highland Ave. and Beverot Pl., Atlantic Highlands Borough.
Owner: Atlantic Highlands Water Department.
AQUIFER.--Englishtown aquifer system of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 360 ft, screened 350 to 360 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land surface is 220 ft above sea level, from topographic map.
Measuring point: Top of recorder shelf, 2.90 ft above land surface.
REMARKS.--Water level affected by tidal fluctuation and nearby pumping.
PERIOD OF RECORD.--Aug. 1991 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 221.79 ft below land surface, Mar. 14, 1993; lowest, 226.20 ft below land surface, Sept. 16, 1993.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	225.03	224.81	225.22	224.12	223.87	222.62	223.38	223.59	224.81	224.44	225.29	225.53
10	225.03	225.13	224.72	223.51	224.00	223.64	223.09	224.18	224.82	224.39	225.58	225.34
15	225.15	225.20	223.37	223.43	223.88	224.72	223.17	224.05	225.04	224.58	225.47	225.73
20	225.01	225.01	223.93	224.24	223.76	223.97	223.46	224.13	224.69	224.42	225.26	225.32
25	225.14	224.57	224.42	224.10	224.17	223.69	223.59	224.58	224.56	224.68	225.49	224.96
EOM	225.14	224.95	223.83	224.10	223.39	223.31	223.21	224.88	224.51	224.65	225.58	224.65
MEAN	225.19	224.96	224.25	223.90	223.74	223.67	223.26	224.18	224.75	224.51	225.36	225.30

WTR YR 1993 MEAN 224.43 HIGH 221.79 MAR 14 LOW 226.20 SEP 16

NJ-WRD WELL NO.25-0715

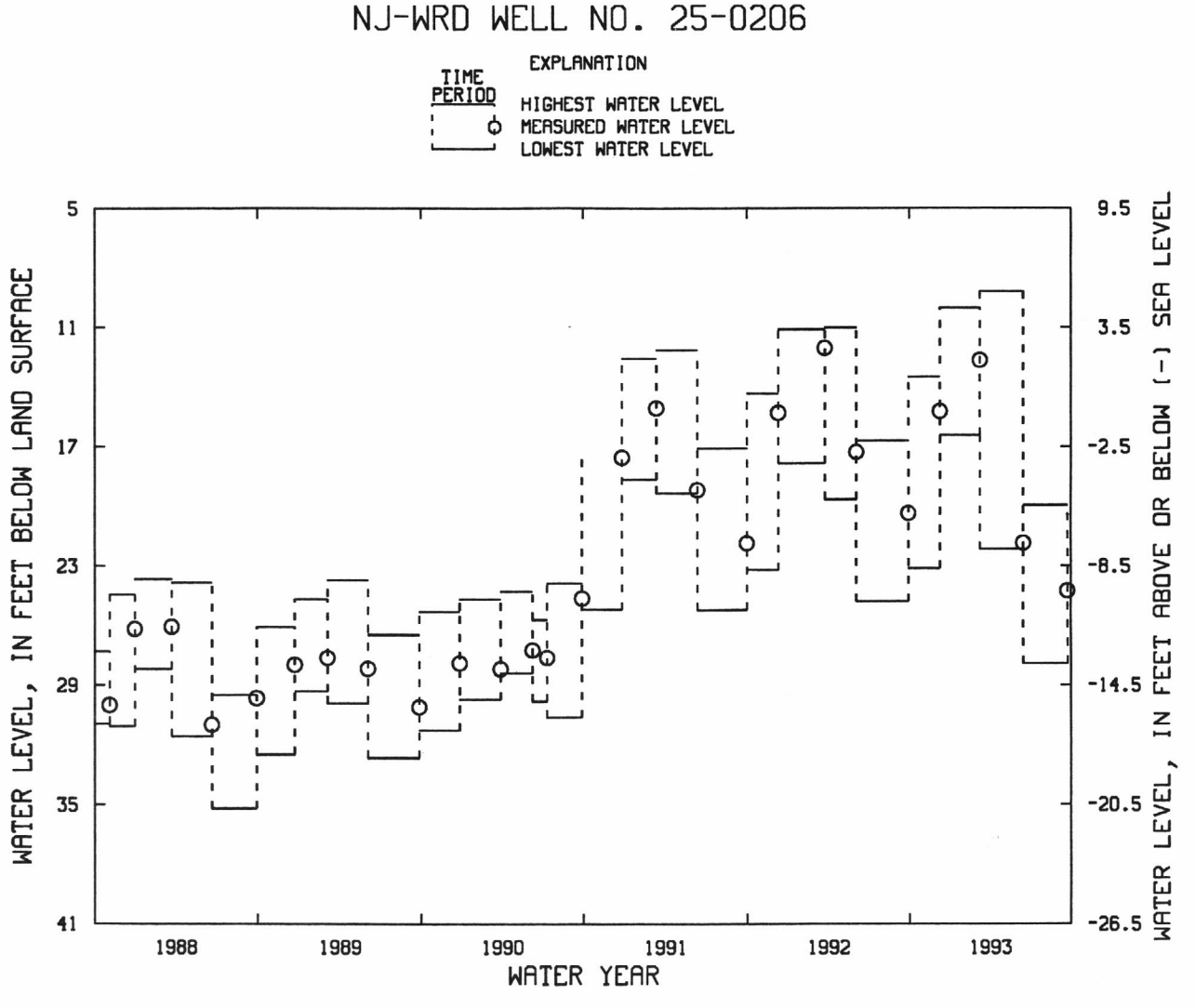


MONMOUTH COUNTY

402626074114204. Local I.D., Keyport 4 Obs. NJ-WRD Well Number, 25-0206.
LOCATION.--Lat 40°26'25", long 74°11'45", Hydrologic Unit 02030104, at the Benjamin C. Terry Park, Myrtle Ave., Keyport Borough.
Owner: Keyport Borough Water Department.
AQUIFER.--Old Bridge aquifer, Potomac-Raritan-Magothy aquifer system of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 8 in., depth 249 ft, screened 225 to 249 ft.
INSTRUMENTATION.--Water-level extremes recorder, Nov. 1987 to current year. Water-level recorder, June 1978 to Nov. 1987.
DATUM.--Land surface is 14.47 ft above sea level.
Measuring point: Front edge of cutout in recorder housing, 2.47 ft above land surface.
REMARKS.--Water level affected by tidal fluctuation and nearby pumping. Water-quality data for 1993 are available elsewhere in this report.
PERIOD OF RECORD.--June 1978 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 9.20 ft below land surface, between Mar. 8 and June 14, 1993; lowest, 35.22 ft below land surface, between June 20 and Sept. 28, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

WATER-LEVEL EXTREMES			MEASURED WATER LEVEL	
PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 28, 1992 TO DEC. 9, 1992	13.48	23.13	DEC. 9, 1992	15.22
DEC. 9, 1992 TO MAR. 8, 1993	10.02	16.42	MAR. 8, 1993	12.65
MAR. 8, 1993 TO JUNE 14, 1993	9.20	22.15	JUNE 14, 1993	21.85
JUNE 14, 1993 TO SEPT. 22, 1993	19.95	27.91	SEPT. 22, 1993	24.26



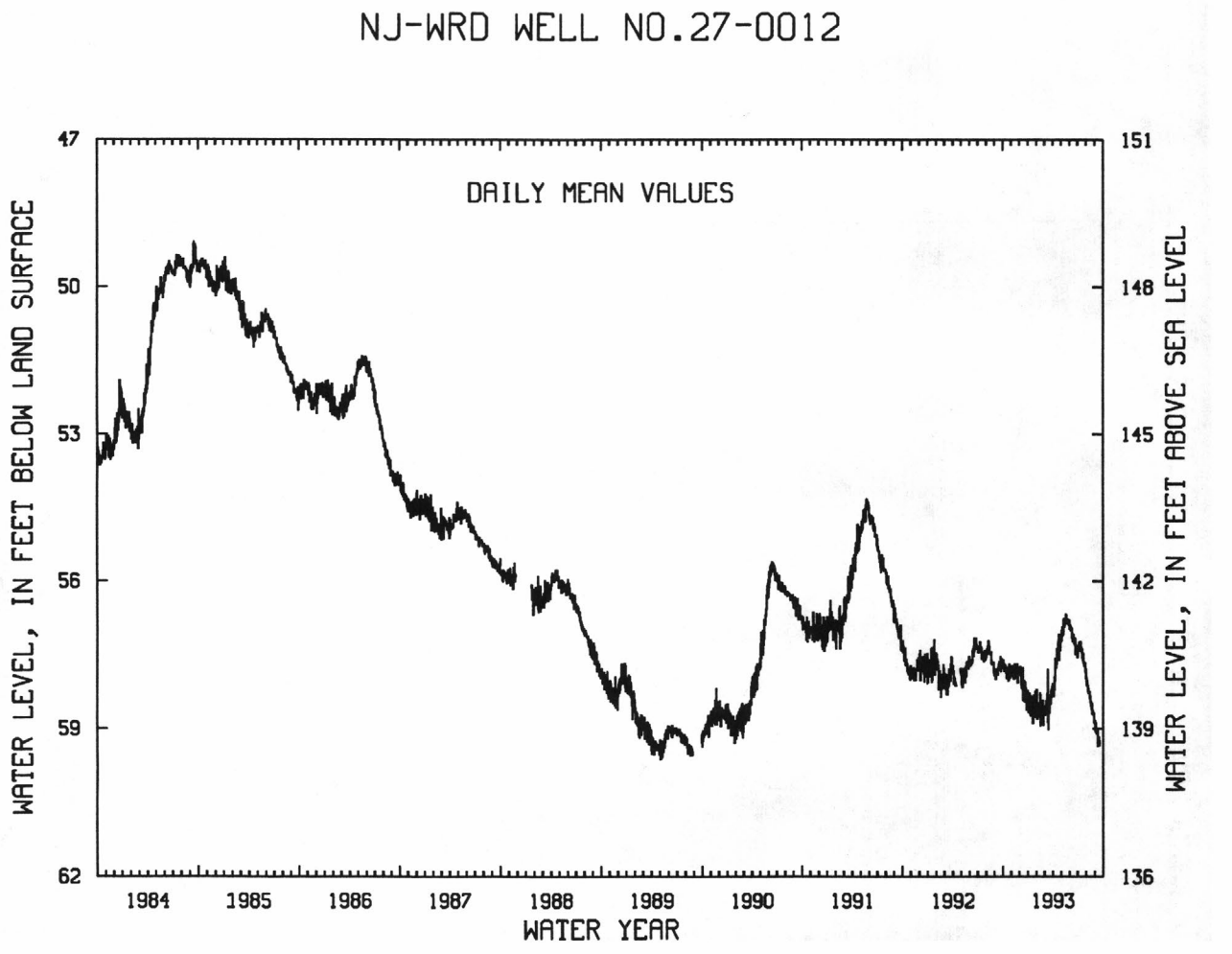
MORRIS COUNTY

404639074230001. Local I.D., Briarwood School Obs. NJ-WRD Well Number, 27-0012.
LOCATION.--Lat 40°46'39", long 74°23'00", Hydrologic Unit 02030103, at Briarwood School, Florham Park Borough.
Owner: U.S. Geological Survey.
AQUIFER.--Stratified drift of Pleistocene age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 110 ft, screened 100 to 110 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land surface is 198 ft above sea level, by altimeter.
Measuring point: Top of recorder shelf, 3.00 ft above land surface.
REMARKS.--Water level affected by nearby pumping.
PERIOD OF RECORD.--Mar. 1967 to current year. Records for 1967 to 1976 are unpublished and are available in files of the New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 34.17 ft below land surface, June 3, 1968; lowest, 59.71 ft below land surface, May 4, 1989.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	57.80	57.72	57.81	58.31	58.48	58.53	58.22	56.94	56.95	57.42	58.13	59.06
10	57.74	57.92	57.94	58.73	58.53	58.54	57.56	56.98	57.01	57.23	58.24	59.07
15	57.83	57.89	58.13	58.64	58.95	59.03	57.57	56.84	57.08	57.34	58.43	59.16
20	58.03	57.95	58.04	58.65	58.63	58.40	57.36	56.74	57.28	57.45	58.46	---
25	57.86	57.86	58.30	58.77	58.94	58.37	57.26	56.79	57.37	57.72	58.68	---
EOM	57.91	57.76	---	58.20	58.61	58.35	57.10	56.77	57.50	57.98	58.83	---
MEAN	57.83	57.84	58.15	58.55	58.64	58.47	57.63	56.89	57.16	57.50	58.43	59.12

WTR YR 1993 MEAN 57.97 HIGH 56.58 MAY 19 LOW 59.42 SEP 11-12



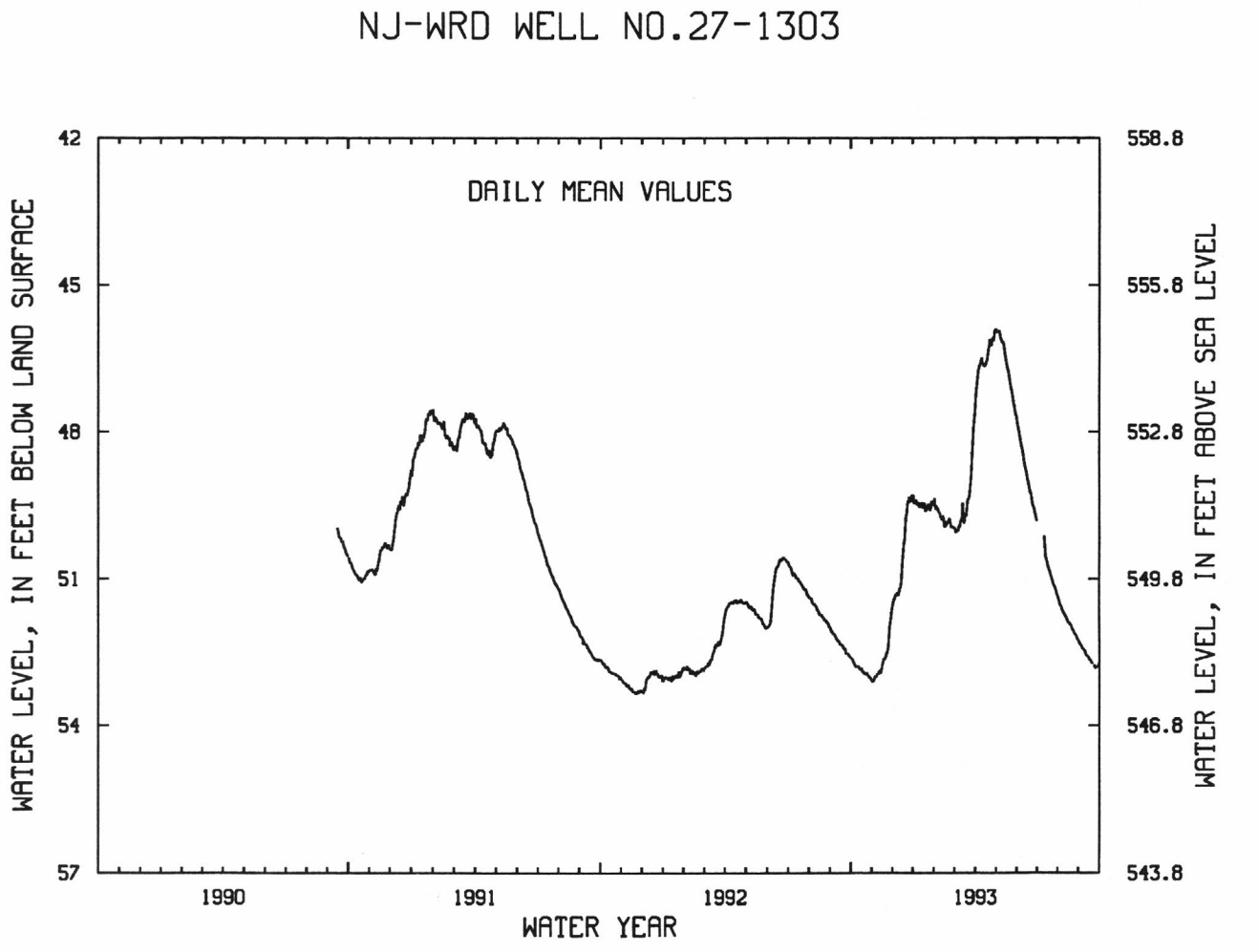
MORRIS COUNTY

404712074454701. Local I.D., Drew University Farm Obs. NJ-WRD Well Number, 27-1303.
LOCATION.--Lat 40°47'12", long 74°45'47", Hydrologic Unit 02030105, near the intersection of Bartley Rd. and Rt. 24, Long Valley, Washington Township.
Owner: State of New Jersey - New Jersey Geological Survey.
AQUIFER.--Leithsville Formation of Cambrian age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 118 ft, open hole 97.6 to 118 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land surface is 600.8 ft above sea level.
Measuring point: Top of recorder shelf, 1.50 ft above land surface.
PERIOD OF RECORD.--Sept. 1990 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 45.88 ft below land surface, Apr. 30-May 1, 1993; lowest, 53.37 ft below land surface, Nov. 22-23, Dec. 2, 1991

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	52.71	52.99	51.32	49.42	49.55	50.02	46.76	45.93	48.09	---	51.55	52.39
10	52.80	52.92	51.25	49.54	49.72	49.82	46.49	46.18	48.44	---	51.71	52.49
15	52.84	52.77	50.59	49.52	49.95	49.87	46.66	46.48	48.83	50.64	51.86	52.61
20	52.93	52.60	49.72	49.57	49.84	49.43	46.32	46.85	49.21	50.87	51.94	52.72
25	52.97	52.15	49.34	49.61	49.96	49.01	46.12	47.25	49.52	51.10	52.11	52.82
EOM	53.08	51.55	49.30	49.36	49.96	47.59	45.91	47.68	49.82	51.34	52.26	52.73
MEAN	52.86	52.61	50.40	49.50	49.78	49.40	46.49	46.64	48.85	50.89	51.86	52.60

WTR YR 1993 MEAN 50.13 HIGH 45.88 APR 30, MAY 1 LOW 53.11 NOV 1-3



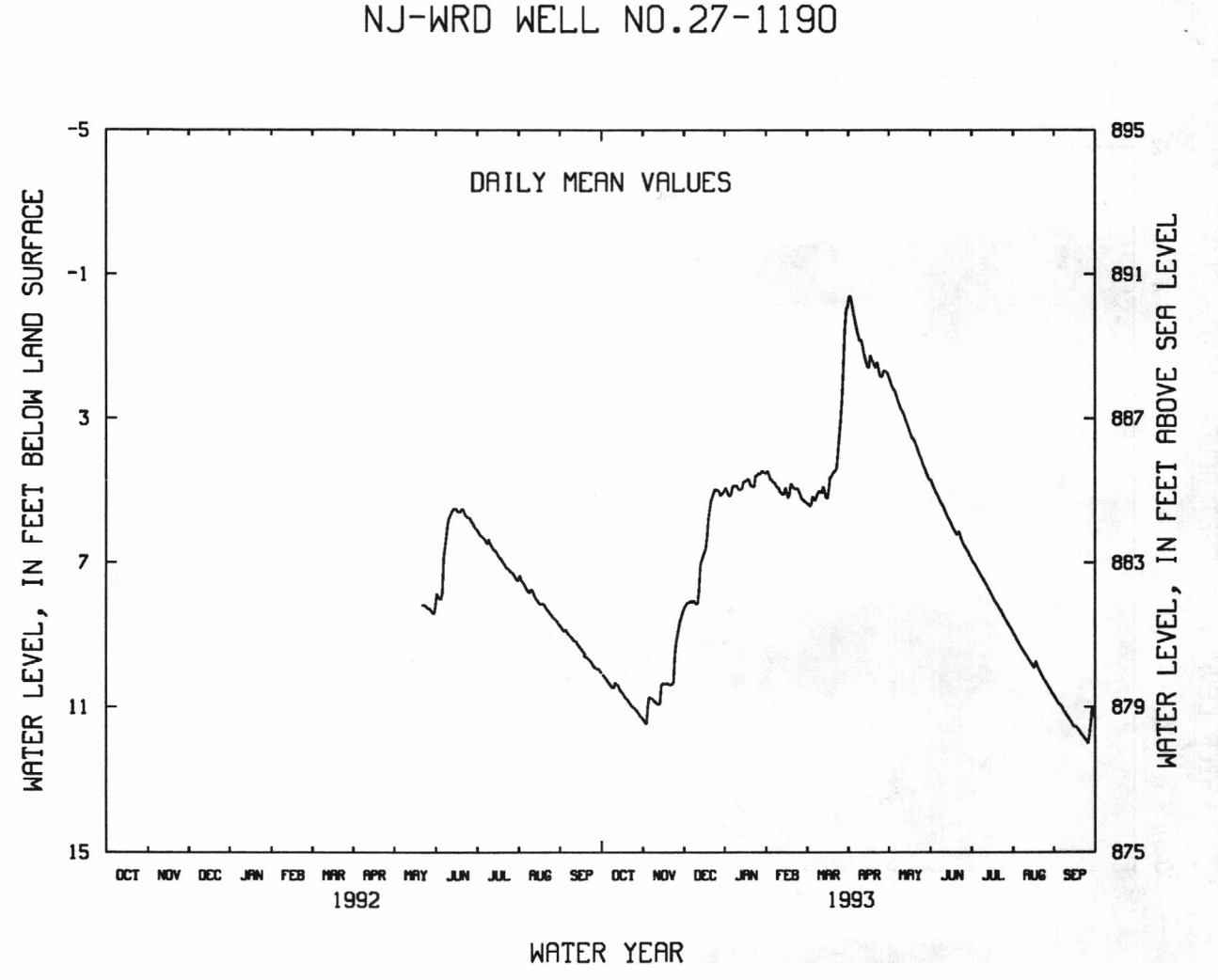
MORRIS COUNTY

404934074400501. Local I.D., Black River 10 Obs. NJ-WRD Well Number, 27-1190.
LOCATION.--Lat 40°49'04", long 74°40'53", Hydrologic Unit 02030105, at the Black River Wildlife Management Area, Pleasant Hill Rd., Chester Township.
Owner: State of New Jersey.
AQUIFER.--Precambrian Erathem
WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 200 ft, open hole 87 to 200 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Periodic manual measurements, Apr. 1991 to May 1992.
DATUM.--Land surface is 890 ft above sea level, from topographic map.
Measuring point: Top of recorder shelf, 1.90 ft above land surface.
PERIOD OF RECORD.--Apr. 1991 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.46 ft above land surface, Apr. 2, 1993; lowest, 12.02 ft below land surface, Sept. 25-26, 1993.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.32	10.77	8.06	4.89	4.77	5.17	.19	2.22	5.08	7.18	9.28	10.96
10	10.33	10.91	8.13	4.98	5.05	5.01	.82	2.75	5.45	7.51	9.57	11.26
15	10.60	10.36	6.72	4.73	5.20	5.20	1.58	3.21	5.85	7.85	9.87	11.55
20	10.86	10.39	5.29	4.88	4.94	4.53	1.52	3.64	6.23	8.18	10.00	11.74
25	11.07	9.01	4.98	4.55	5.22	3.44	1.85	4.13	6.49	8.54	10.34	12.00
EOM	11.36	8.27	4.93	4.45	5.32	-.10	1.76	4.69	6.84	8.92	10.70	11.31
MEAN	10.70	10.18	6.50	4.78	4.98	4.18	1.10	3.29	5.83	7.92	9.85	11.38

WTR YR 1993 MEAN 6.73 HIGH -.46 APR 2 LOW 12.02 SEP 25-26

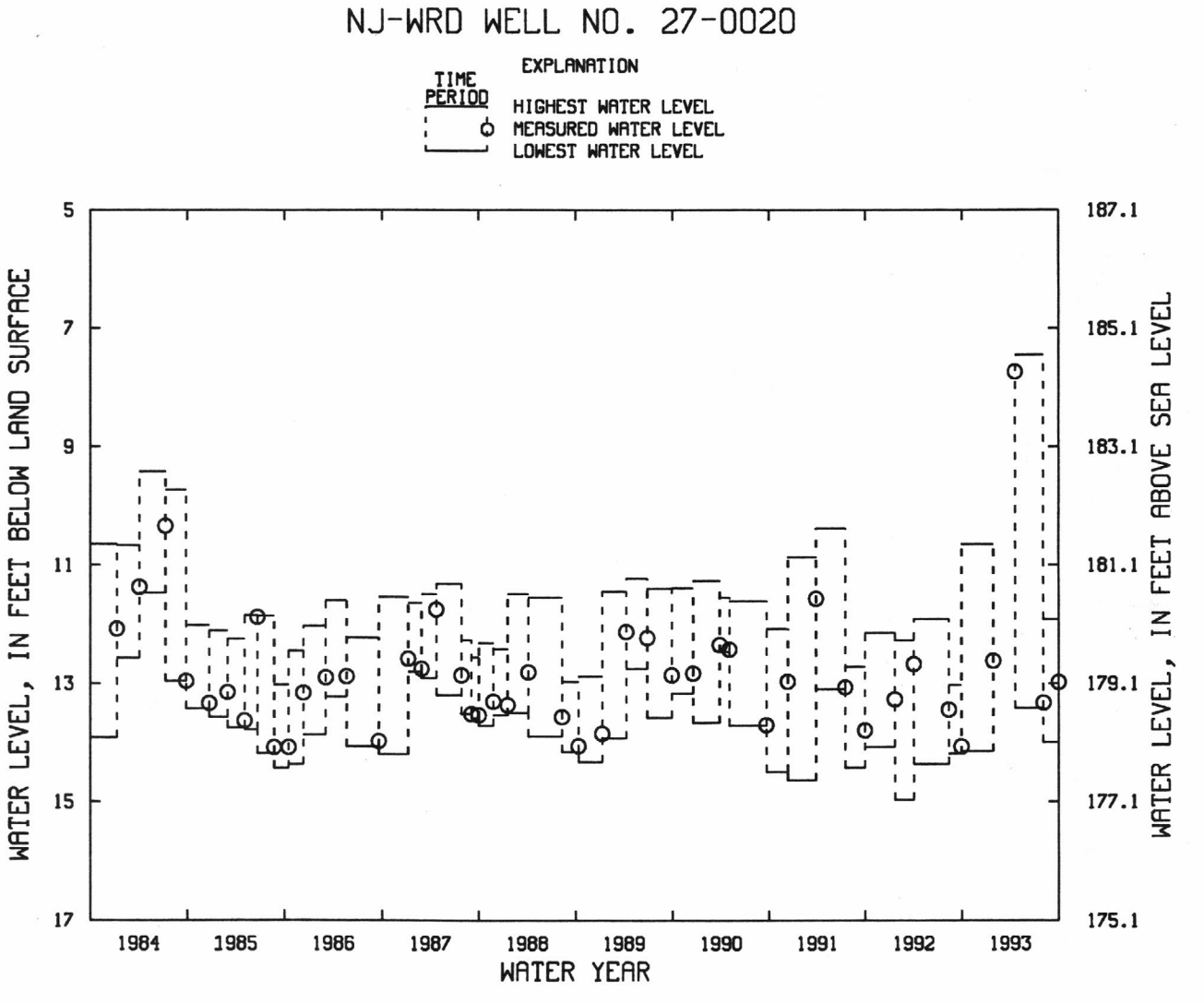


MORRIS COUNTY

405027074232301. Local I.D., Troy Meadows 1 Obs. NJ-WRD Well Number, 27-0020.
LOCATION.--Lat 40°50'27", long 74°23'23", Hydrologic Unit 02030103, on the east side of Beverwyck Rd., 0.8 mi north of intersection with Troy Rd., Parsippany-Troy Hills Township.
Owner: U.S. Geological Survey.
AQUIFER.--Stratified drift of Pleistocene age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 89 ft, screened 79 to 89 ft.
INSTRUMENTATION.--Water-level extremes recorder.
DATUM.--Land surface is 192.07 ft above sea level.
Measuring point: Front edge of cutout in recorder housing, 3.32 ft above land surface.
PERIOD OF RECORD.--Dec. 1965 to current year. Records for 1965 to 1981 are unpublished and are available in files of the New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.00 ft below land surface, Mar. 15-16, 1967 and June 15, 1968; lowest, 15.77 ft below land surface, between Feb. 10 and May 31, 1978.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

WATER-LEVEL EXTREMES			MEASURED WATER LEVEL	
PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 29, 1992 TO JAN. 27, 1993	10.65	14.15	JAN. 27, 1993	12.62
JAN. 27, 1993 TO APR. 19, 1993	---	---	APR. 19, 1993	7.73
APR. 19, 1993 TO AUG. 4, 1993	7.45	13.42	AUG. 4, 1993	13.33
AUG. 4, 1993 TO SEPT. 30, 1993	11.92	14.00	SEPT. 30, 1993	12.98



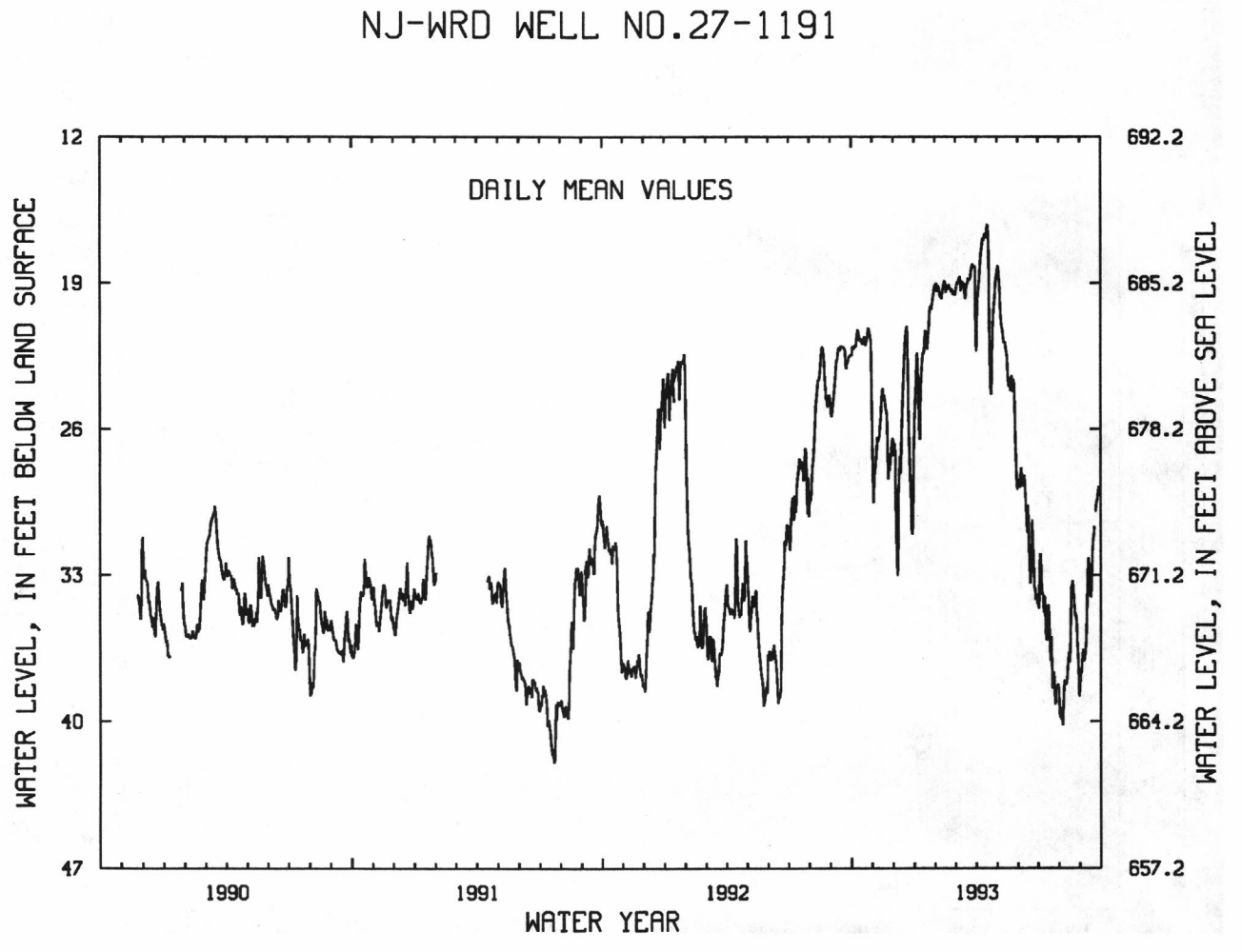
MORRIS COUNTY

405123074375701. Local I.D., Roxbury 1 Obs. NJ-WRD Well Number, 27-1191.
LOCATION.--Lat 40°51'23", long 74°37'57", Hydrologic Unit 02030105, 600 ft south of Horseshoe Lake, between the Roxbury Municipal Building and the Lamington River, Roxbury Township.
Owner: State of New Jersey.
AQUIFER.--Stratified drift of Pleistocene age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 4 in., depth 154 ft, screened 134 to 154 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land surface is 704.2 ft above sea level.
REMARKS.--Water level affected by nearby pumping.
Measuring point: Top of recorder shelf, 2.20 ft above land surface.
PERIOD OF RECORD.--Nov. 1989 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 16.14 ft below land surface, Apr. 17, 1993; lowest, 42.08 ft below land surface, July 23, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	22.03	27.59	31.79	23.01	19.31	18.96	18.92	19.27	28.18	32.61	39.61	36.55
10	21.24	26.34	27.32	23.54	19.43	19.16	16.86	21.57	28.22	33.98	38.26	34.72
15	21.79	24.04	23.37	21.81	19.46	19.63	16.83	22.34	30.97	34.48	36.69	34.05
20	21.87	25.13	21.06	21.52	19.12	18.76	21.15	23.96	32.75	35.95	33.25	31.13
25	21.17	28.01	28.35	20.25	19.36	18.27	21.10	23.62	33.62	38.36	34.88	29.47
EOM	27.10	26.59	25.45	19.08	19.53	21.69	18.70	28.91	34.39	38.52	38.34	29.22
MEAN	22.01	26.45	26.82	21.97	19.31	18.98	19.09	22.73	30.78	35.90	37.02	33.06

WTR YR 1993 MEAN 26.20 HIGH 16.14 APR 17 LOW 40.57 AUG 6



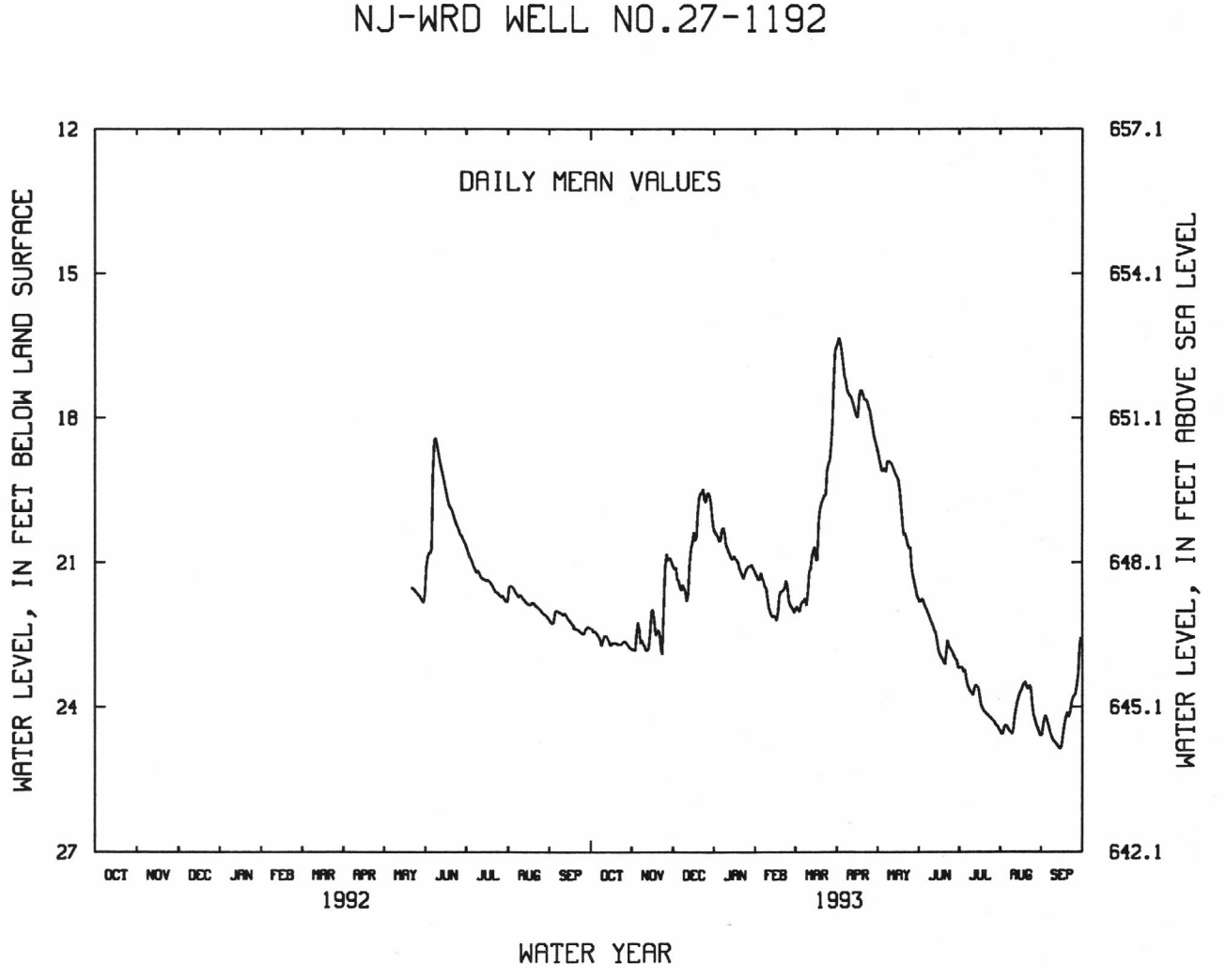
MORRIS COUNTY

405414074354201. Local I.D., Morris Maint Yd 22 Obs. NJ-WRD Well Number, 27-1192.
LOCATION.--Lat 40°54'13", long 74°35'33", Hydrologic Unit 02030103, about 600 ft north of the Rockaway River, at the Morris County Maintenance Yard, Dewey Ave., Wharton Borough.
Owner: State of New Jersey.
AQUIFER.--Stratified drift of Pleistocene age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 4 in., depth 100 ft, screened 80 to 100 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Periodic manual measurements, Apr. 1991 to May 1992.
DATUM.--Land surface is 669.1 ft above sea level.
Measuring point: Top of recorder shelf, 2.10 ft above land surface.
REMARKS.--Water level affected by nearby pumping.
PERIOD OF RECORD.--April 1991 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 16.33 ft below land surface, Apr. 2, 1993; lowest, 24.89 ft below land surface, Sept. 14-15, 1993.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	22.49	22.38	21.50	20.33	21.39	21.86	16.88	19.08	21.91	23.22	24.39	24.37
10	22.53	22.82	21.80	20.77	22.01	21.62	17.53	18.92	22.25	23.70	24.46	24.72
15	22.72	21.97	20.38	20.92	22.20	20.68	17.95	19.22	22.80	23.60	23.70	24.80
20	22.69	22.47	19.57	21.26	21.57	19.77	17.52	20.43	23.11	24.10	23.59	24.21
25	22.63	20.83	19.57	21.07	21.87	18.96	17.85	20.69	22.82	24.26	24.16	23.73
EOM	22.80	21.09	20.37	21.28	22.04	16.52	18.58	21.76	23.19	24.49	24.59	22.73
MEAN	22.62	22.16	20.54	20.90	21.73	20.25	17.55	19.86	22.54	23.85	24.12	24.15

WTR YR 1993 MEAN 21.69 HIGH 16.33 APR 2 LOW 24.89 SEP 14-15



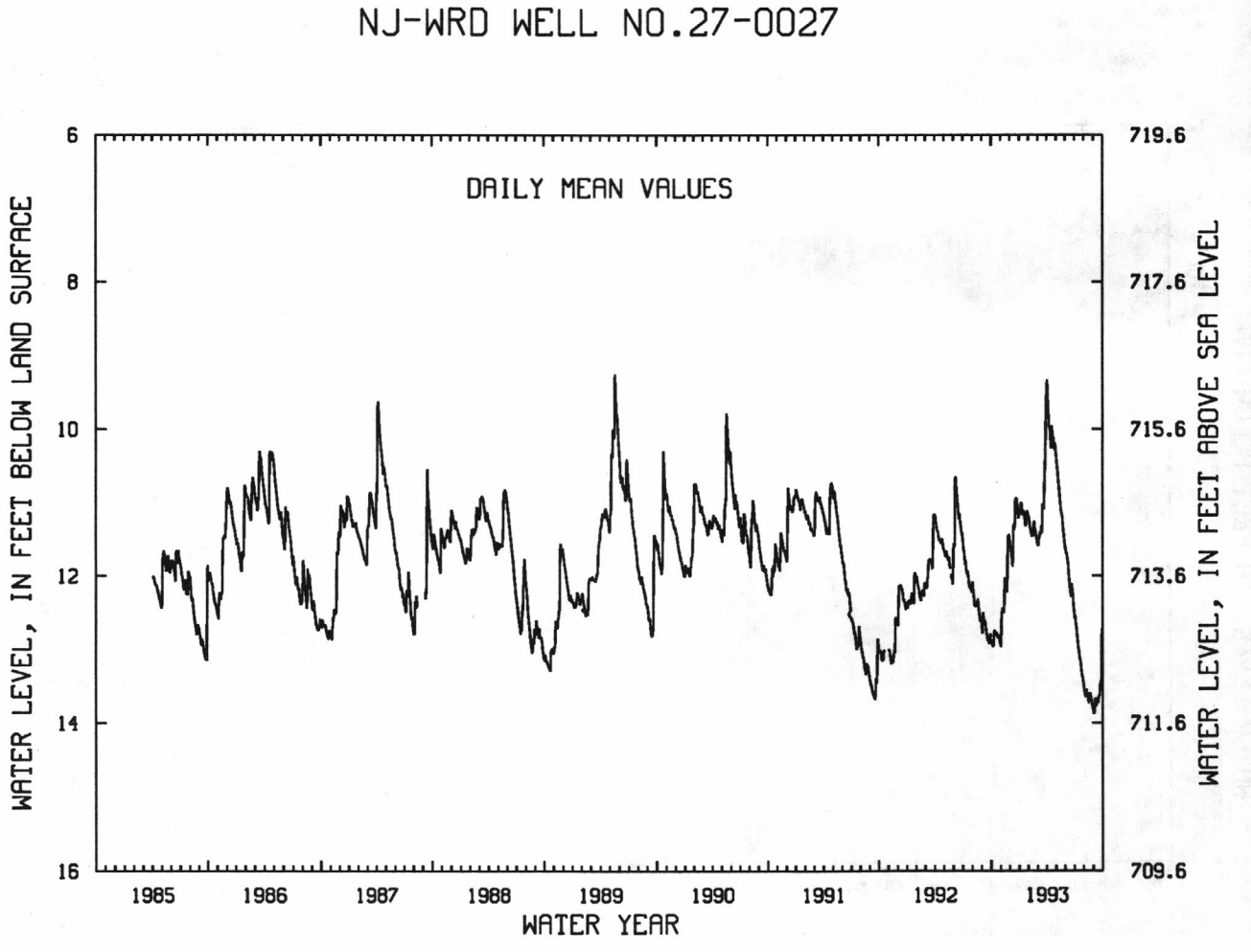
MORRIS COUNTY

405531074361901. Local I.D., Berkshire Valley 9 Obs. NJ-WRD Well Number, 27-0027.
LOCATION.--Lat 40°55'31", long 74°36'19", Hydrologic Unit 02030103, about 1,000 ft east of the intersection of Lower Berkshire Valley Rd. and Minnisink Rd., Jefferson Township.
Owner: State of New Jersey.
AQUIFER.--Stratified drift of Pleistocene age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 98 ft, screened 78 to 98 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Periodic manual measurements Nov. 1981 to Mar. 1985.
DATUM.--Land surface is 725.64 ft above sea level (levels by Woodward-Clyde Consultants).
Measuring point: Top of casing, 2.25 ft above land surface.
PERIOD OF RECORD.--Nov. 1981 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 9.25 ft below land surface, May 18, 1989; lowest, 13.88 ft below land surface, Sept. 3-4, 1993.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	12.96	12.51	11.67	11.06	11.34	11.45	9.64	10.52	11.70	12.63	13.62	13.67
10	12.76	12.48	11.87	11.13	11.45	11.40	9.97	10.76	11.82	12.82	13.59	13.68
15	12.77	12.03	11.35	11.13	11.45	11.36	10.24	11.00	12.11	13.00	13.70	13.73
20	12.82	12.20	10.94	11.30	11.35	11.05	10.09	11.16	12.28	13.14	13.60	13.62
25	12.80	11.47	11.06	11.12	11.47	10.66	10.25	11.37	12.22	13.34	13.70	13.56
EOM	12.94	11.52	11.11	11.20	11.53	9.53	10.30	11.62	12.49	13.48	13.84	12.77
MEAN	12.85	12.14	11.34	11.14	11.39	11.04	9.99	11.00	12.03	13.02	13.65	13.55

WTR YR 1993 MEAN 11.93 HIGH 9.32 APR 2 LOW 13.88 SEP 3-4



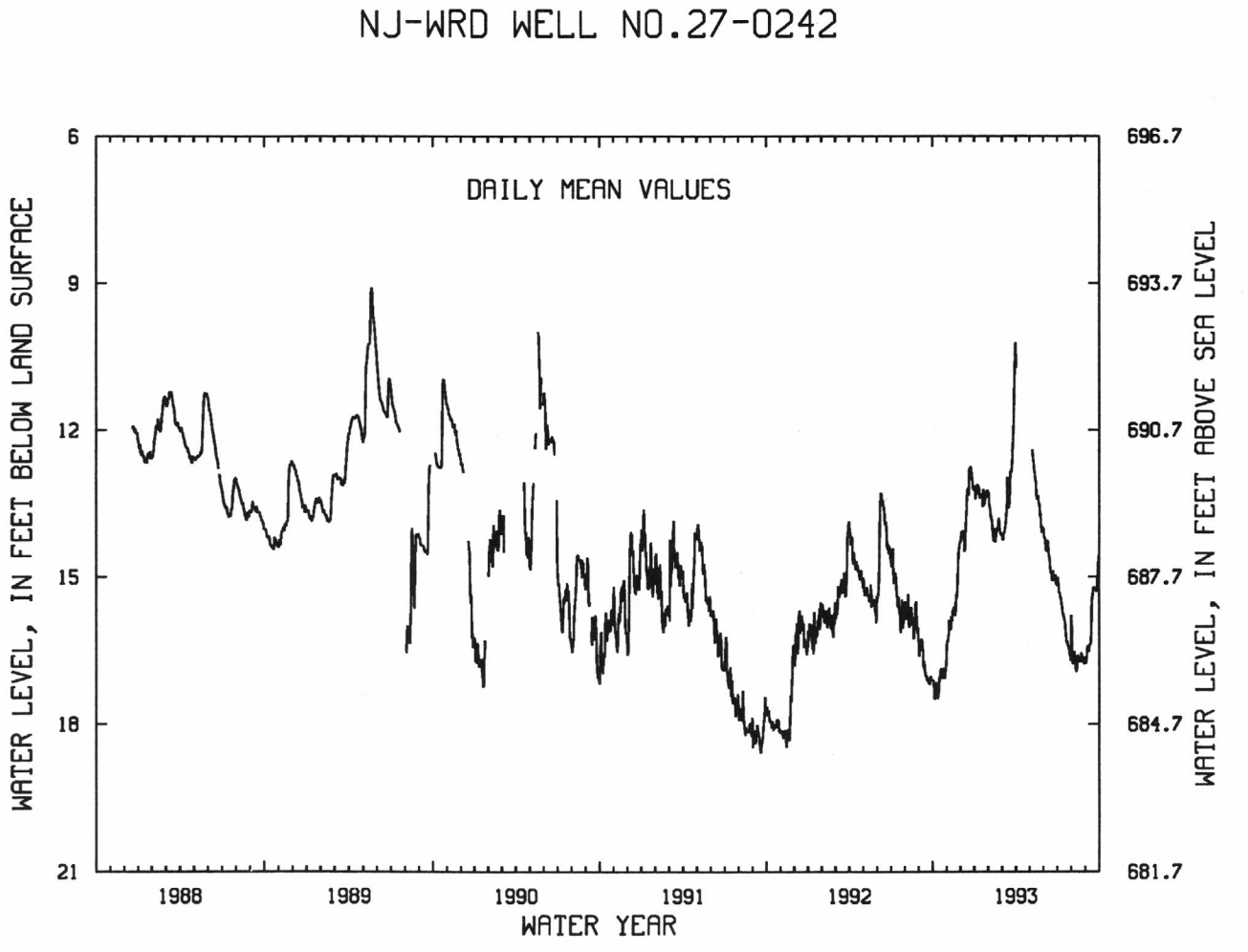
MORRIS COUNTY

405623074341301. Local I.D., Picatinny Caf 1 Obs. NJ-WRD Well Number, 27-0242.
LOCATION.--Lat 40°56'23", long 74°34'13", Hydrologic Unit 02030103, Picatinny Arsenal, Rockaway Township.
Owner: US Army - Picatinny Arsenal.
AQUIFER.--Hardyston Quartzite of Cambrian age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 4 in., depth 268 ft, screened 253 to 268 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land surface is 702.72 ft above sea level.
Measuring point: Top of recorder shelf, 2.70 ft above land surface.
REMARKS.--Water level affected by nearby pumping.
PERIOD OF RECORD.--Jan. 1983 to May 1984, Dec. 1987 to Oct. 1993 (discontinued). Records for 1983 to 1984 and 1987 to 1989 are unpublished and are available in files of the New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.59 ft below land surface, Apr. 18, 1983; lowest, 18.68 ft below land surface, Sept. 17, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	17.49	16.18	14.06	13.21	13.76	14.10	---	---	14.32	15.31	16.63	16.40
10	17.15	16.01	14.43	13.18	14.15	13.79	---	12.69	14.28	15.50	16.85	16.38
15	17.17	15.68	13.22	13.37	14.29	13.59	---	13.06	14.77	15.80	16.59	15.43
20	16.88	15.72	12.77	13.47	13.99	12.85	---	13.34	15.08	16.19	16.63	15.27
25	16.91	14.73	12.89	13.33	14.11	12.35	---	13.71	15.02	16.41	16.62	15.30
EOM	16.54	14.25	13.15	13.30	14.14	10.21	---	14.07	15.01	16.64	16.70	14.55
MEAN	17.10	15.56	13.52	13.32	13.98	13.04	---	13.36	14.69	15.88	16.64	15.73

WTR YR 1993 MEAN 14.82 HIGH 10.10 APR 1 LOW 17.66 OCT 6



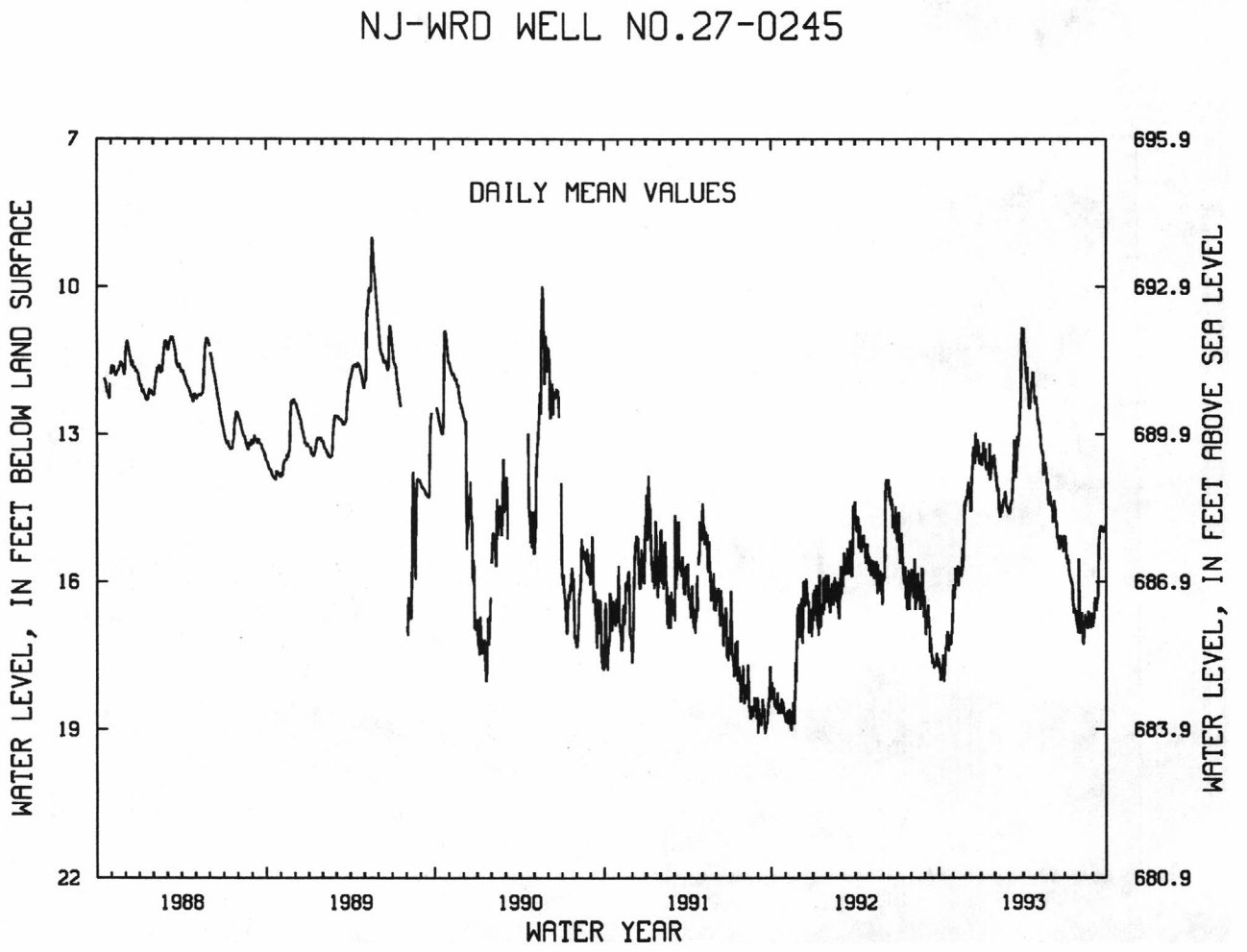
MORRIS COUNTY

405623074341304. Local I.D., Picatinny Caf 4 Obs. NJ-WRD Well Number, 27-0245.
LOCATION.--Lat 40°56'23", long 74°34'13", Hydrologic Unit 02030103, Picatinny Arsenal, Rockaway Township.
Owner: US Army - Picatinny Arsenal.
AQUIFER.--Stratified drift of Pleistocene age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 4 in., depth 173 ft, screened 168 to 173 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land surface is 702.91 ft above sea level.
Measuring point: Top of recorder shelf, 3.10 ft above land surface.
REMARKS.--Water level affected by nearby pumping.
PERIOD OF RECORD.--Oct. 1982 to Aug. 1984, Oct. 1987 to Oct. 1993 (discontinued). Records for 1983 to 1984 and 1987 to 1989 are unpublished and are available in files of the New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.82 ft below land surface, Apr. 18, 1983; lowest, 19.41 ft below land surface, Sept. 19, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	18.00	16.12	14.19	13.36	14.13	14.41	11.39	12.79	14.54	15.54	16.85	16.33
10	17.49	16.00	14.55	13.30	14.58	13.99	11.64	13.15	14.53	15.72	17.19	16.45
15	17.39	15.73	13.26	13.61	14.58	13.77	12.48	13.39	15.03	15.98	16.66	15.12
20	17.07	15.79	12.98	13.93	14.40	13.05	11.93	13.58	15.32	16.46	16.84	14.96
25	17.16	14.76	13.17	13.57	14.48	12.68	12.07	13.91	15.20	16.69	16.71	14.98
EOM	16.40	14.26	13.47	13.68	14.57	10.93	12.24	14.41	15.06	16.76	16.77	---
MEAN	17.42	15.56	13.69	13.56	14.35	13.36	11.90	13.47	14.90	16.08	16.82	15.73

WTR YR 1993 MEAN 14.73 HIGH 10.27 MAR 31 LOW 18.39 OCT 6



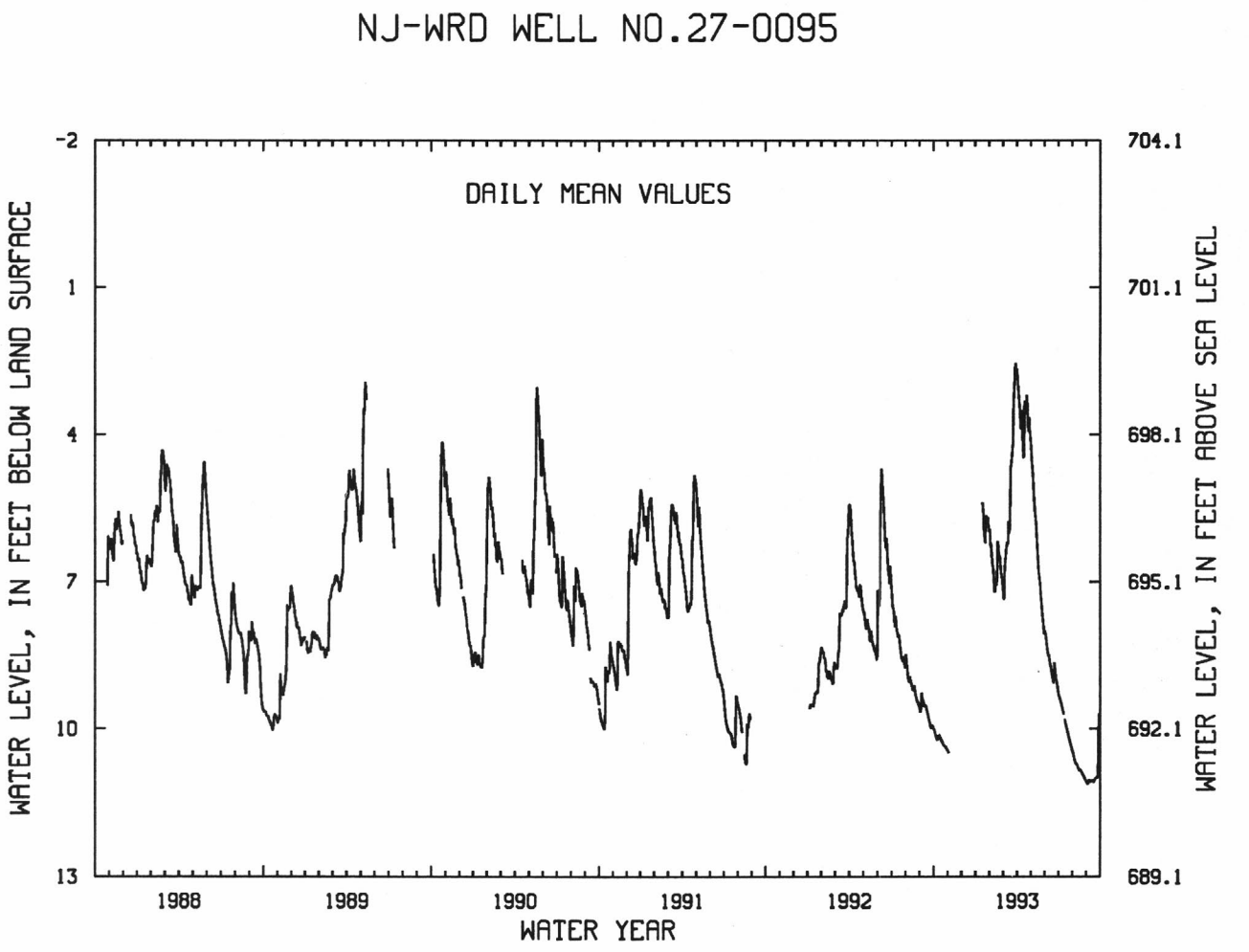
MORRIS COUNTY

405628074341801. Local I.D., Picatinny 9C Obs. NJ-WRD Well Number, 27-0095.
LOCATION.--Lat 40°56'28", long 74°34'18", Hydrologic Unit 02030103, Picatinny Arsenal, Rockaway Township.
Owner: US Army - Picatinny Arsenal.
AQUIFER.--Stratified drift of Pleistocene age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 4 in., depth 20.3 ft, screened 10 to 20.3 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land surface is 702.11 ft above sea level.
Measuring point: Top of recorder shelf, 2.20 ft above land surface.
REMARKS.--Water level affected by nearby pumping.
PERIOD OF RECORD.--Oct. 1987 to Oct. 1993 (discontinued). Records for 1987 to 1989 are unpublished and are available in files of the New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.47 ft below land surface, Apr. 1, 1993; lowest, 11.15 ft below land surface, Sept. 3-4, 1993.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.13	---	---	---	6.53	6.74	3.27	4.78	8.28	9.43	10.63	11.06
10	10.21	---	---	---	7.03	6.20	3.68	5.64	8.49	9.60	10.72	11.05
15	10.18	---	---	5.39	7.07	6.01	4.47	6.35	8.77	9.81	10.82	11.07
20	10.29	---	---	6.12	6.43	4.53	3.52	6.94	9.07	10.01	10.85	11.02
25	10.36	---	---	5.76	6.84	3.23	3.87	7.50	8.93	10.22	10.95	11.00
EOM	10.45	---	---	5.92	7.03	2.88	4.09	8.06	9.24	10.44	11.07	10.20
MEAN	10.24	---	---	5.81	6.69	5.14	3.63	6.34	8.69	9.86	10.81	10.90

WTR YR 1993 HIGH 2.47 APR 1 LOW 11.15 SEP 3-4



MORRIS COUNTY

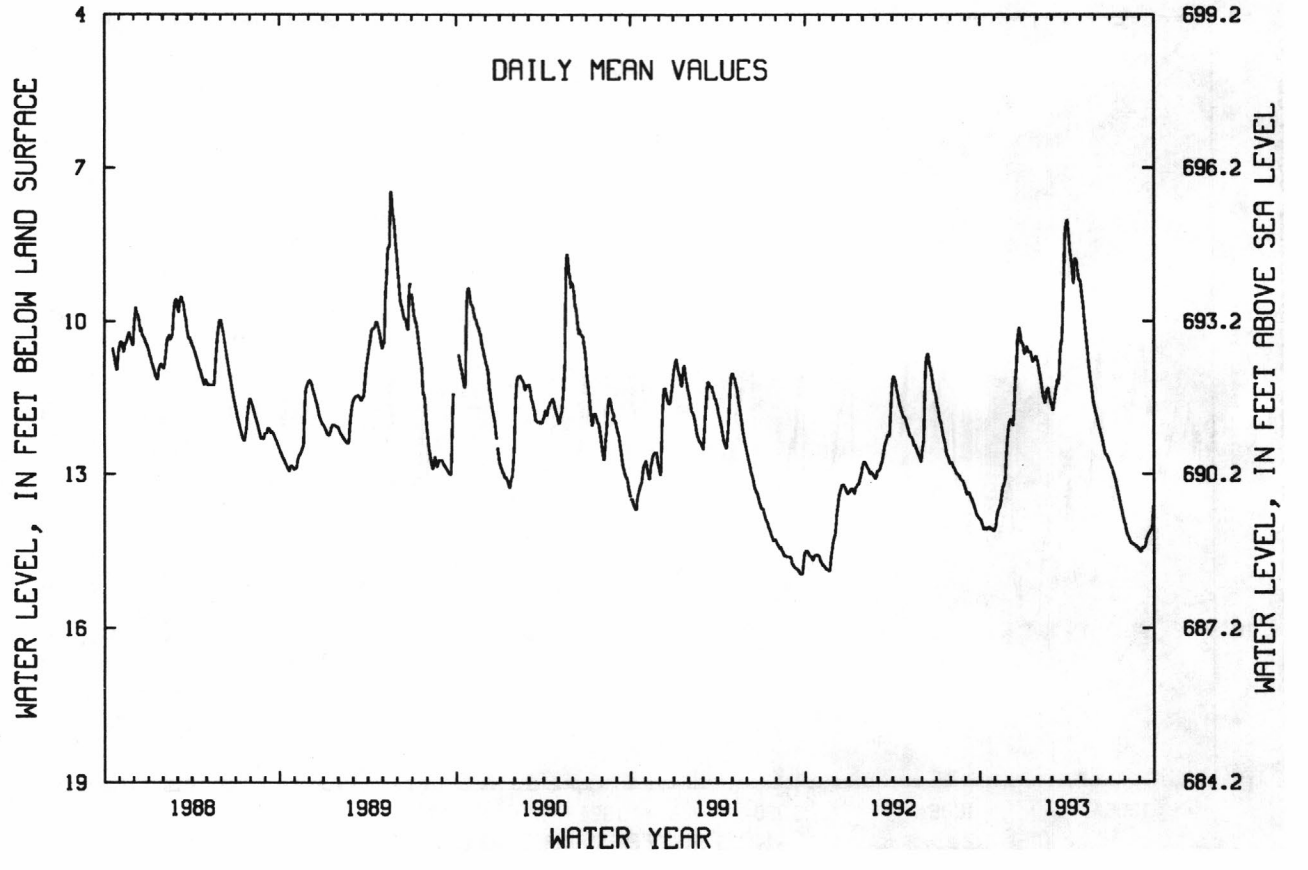
405629074340901. Local I.D., Picatinny Caf 5 Obs. NJ-WRD Well Number, 27-0304.
LOCATION.--Lat 40°56'29", long 74°34'09", Hydrologic Unit 02030103, Picatinny Arsenal, Rockaway Township.
Owner: US Army - Picatinny Arsenal.
AQUIFER.--Stratified drift of Pleistocene age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 4 in., depth 29 ft, screened 24 to 29 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land surface is 703.24 ft above sea level.
Measuring point: Top of recorder shelf, 3.35 ft above land surface.
REMARKS.--Water level affected by nearby pumping.
PERIOD OF RECORD.--June to Sept. 1984, Oct. 1987 to Oct. 1993 (discontinued). Records for 1984 and for 1987 to 1989 are unpublished and are available in files of the New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.47 ft below land surface, May 18-20, 1989; lowest, 14.95 ft below land surface, Sept. 24-25, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	13.97	13.83	11.92	10.62	11.04	11.72	8.22	9.60	11.92	12.88	14.12	14.47
10	14.06	13.66	12.05	10.56	11.35	11.37	8.70	10.08	12.12	13.04	14.23	14.43
15	14.07	13.42	11.19	10.60	11.58	11.23	9.17	10.55	12.33	13.24	14.33	14.26
20	14.03	13.21	10.32	10.75	11.35	10.55	8.77	11.01	12.57	13.46	14.36	14.15
25	14.05	12.69	10.21	10.74	11.48	9.75	9.02	11.37	12.65	13.69	14.40	14.09
EOM	14.09	12.10	10.45	10.77	11.59	8.15	9.21	11.72	12.76	13.94	14.47	13.61
MEAN	14.04	13.30	11.12	10.65	11.33	10.63	8.77	10.59	12.32	13.31	14.29	14.24

WTR YR 1993 MEAN 12.05 HIGH 8.02 APR 2-3 LOW 14.51 SEP 3-4

NJ-WRD WELL NO.27-0304



MORRIS COUNTY

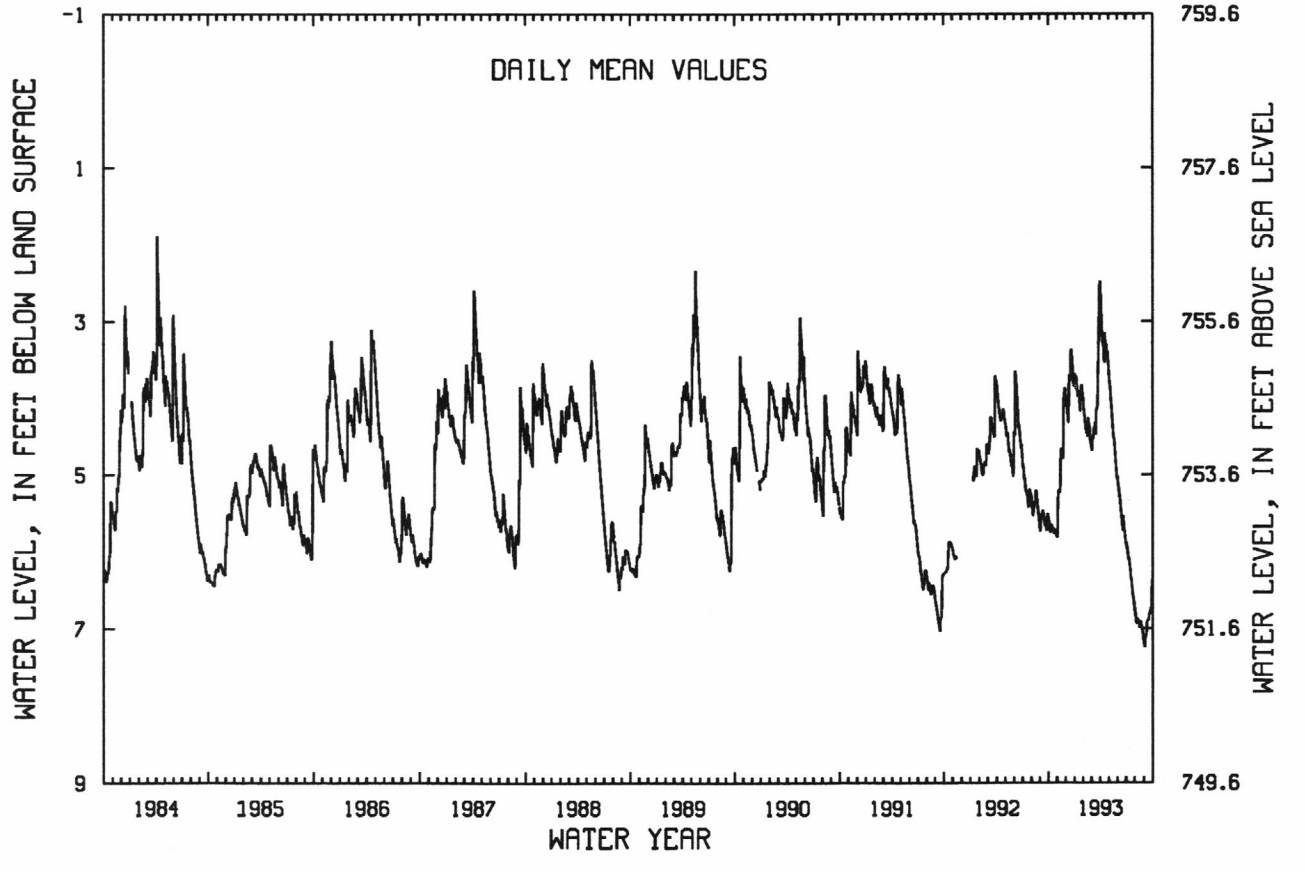
410207074270001. Local I.D., Green Pond 5 Obs. NJ-WRD Well Number, 27-0028.
LOCATION.--Lat 41°02'07", long 74°27'00", Hydrologic Unit 02030103, about 500 ft east of County Rt. 513 and 1.1 mi south of the intersection with Rt. 23, Rockaway Township.
Owner: State of New Jersey.
AQUIFER.--Stratified drift of Pleistocene age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 120 ft, screened 80 to 120 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land surface is 758.56 ft above sea level (levels by Woodward-Clyde Consultants).
Measuring point: Top of recorder shelf, 1.20 ft above land surface.
PERIOD OF RECORD.--Nov. 1981 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.35 ft below land surface, Apr. 5, 1984; lowest, 7.24 ft below land surface, Sept. 2-4, 1993.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.67	5.25	4.10	3.75	4.23	4.54	2.92	3.82	5.16	5.94	6.90	7.09
10	5.66	5.23	4.32	3.93	4.42	4.40	3.25	4.08	5.31	6.09	6.88	6.91
15	5.68	4.67	3.74	3.93	4.50	4.45	3.53	4.36	5.53	6.19	6.95	6.89
20	5.74	4.79	3.37	4.14	4.34	4.14	3.38	4.53	5.72	6.35	6.91	6.81
25	5.71	3.98	3.63	3.83	4.55	3.66	3.47	4.77	5.69	6.54	7.01	6.76
EOM	5.80	3.97	3.68	3.99	4.61	2.60	3.55	5.04	5.86	6.73	7.17	6.37
MEAN	5.70	4.77	3.81	3.91	4.37	4.06	3.23	4.36	5.47	6.26	6.95	6.86

WTR YR 1993 MEAN 4.98 HIGH 2.41 APR 1 LOW 7.24 SEP 2-4

NJ-WRD WELL NO.27-0028

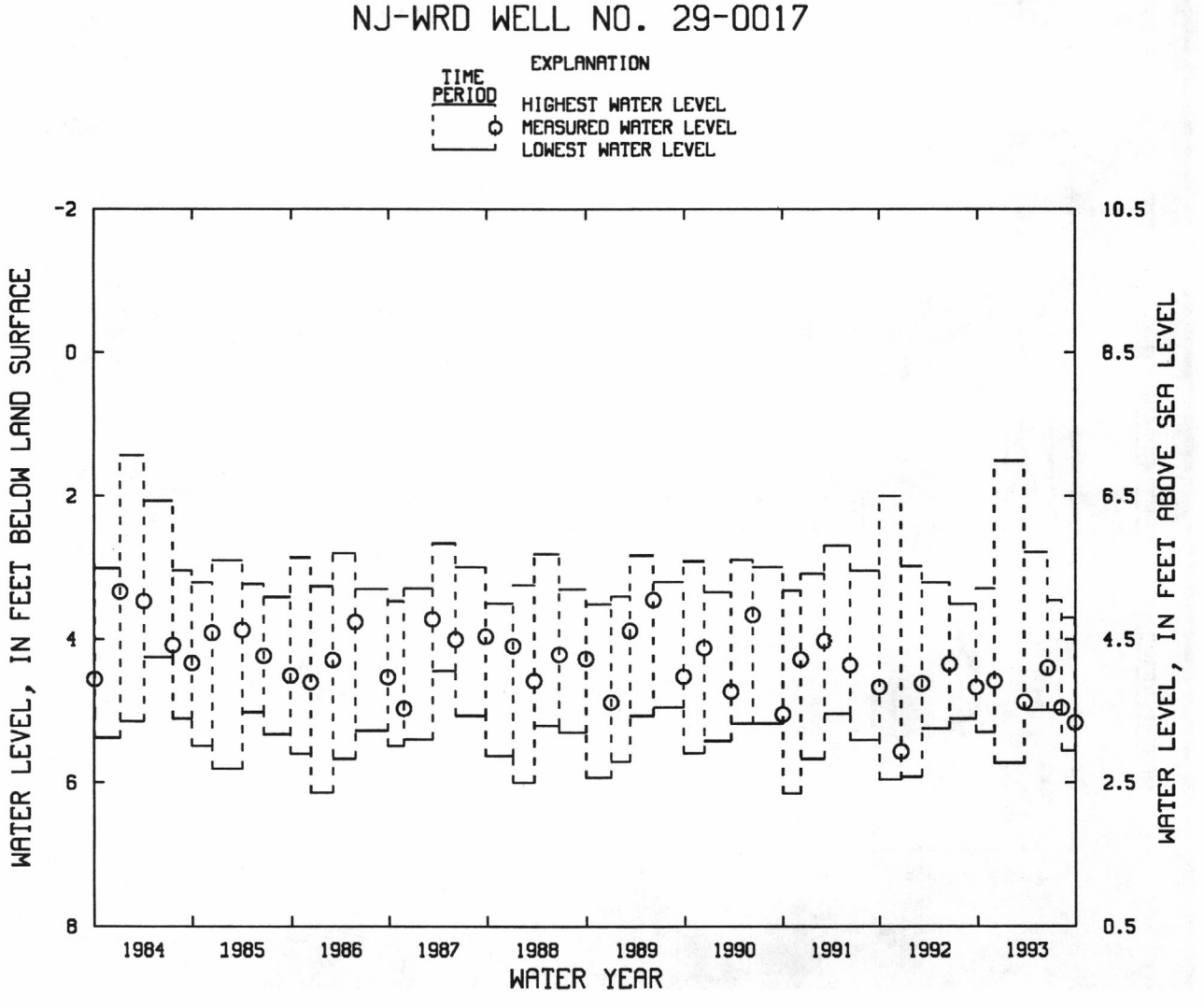


OCEAN COUNTY

394829074053501. Local I.D., Island Beach 1 Obs. NJ-WRD Well Number, 29-0017.
LOCATION.--Lat 39°48'29", long 74°05'35", Hydrologic Unit 02040301, in Island Beach State Park, about 6.6 mi south of the main entrance, Lacey Township.
Owner: U.S. Geological Survey.
AQUIFER.--Kirkwood-Cohansey aquifer system of Miocene age.
WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 6 in., depth 397 ft, screened 377 to 397 ft.
INSTRUMENTATION.--Water-level extremes recorder.
DATUM.--Land surface is 8.50 ft above sea level.
Measuring point: Front edge of cutout in recorder housing, 3.40 ft above land surface.
REMARKS.--Water level affected by tidal fluctuation. Water-quality data for 1993 are available elsewhere in this report.
PERIOD OF RECORD.--July 1962 to current year. Records for 1962 to 1976 are unpublished and are available in files of the New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.05 ft below land surface, Dec. 6, 1962; lowest, 6.15 ft below land surface, between Oct. 1 and Dec. 7, 1990.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

WATER-LEVEL EXTREMES		MEASURED WATER LEVEL	
PERIOD	HIGHEST WATER LEVEL / LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 24, 1992 TO DEC. 3, 1992	3.29 / 5.30	DEC. 3, 1992	4.58
DEC. 3, 1992 TO MAR. 23, 1993	1.51 / 5.73	MAR. 23, 1993	4.88
MAR. 23, 1993 TO JUNE 18, 1993	2.78 / 4.99	JUNE 18, 1993	4.40
JUNE 18, 1993 TO AUG. 10, 1993	3.46 / 4.99	AUG. 10, 1993	4.96
AUG. 10, 1993 TO SEPT. 29, 1993	3.70 / 5.56	SEPT. 29, 1993	5.17

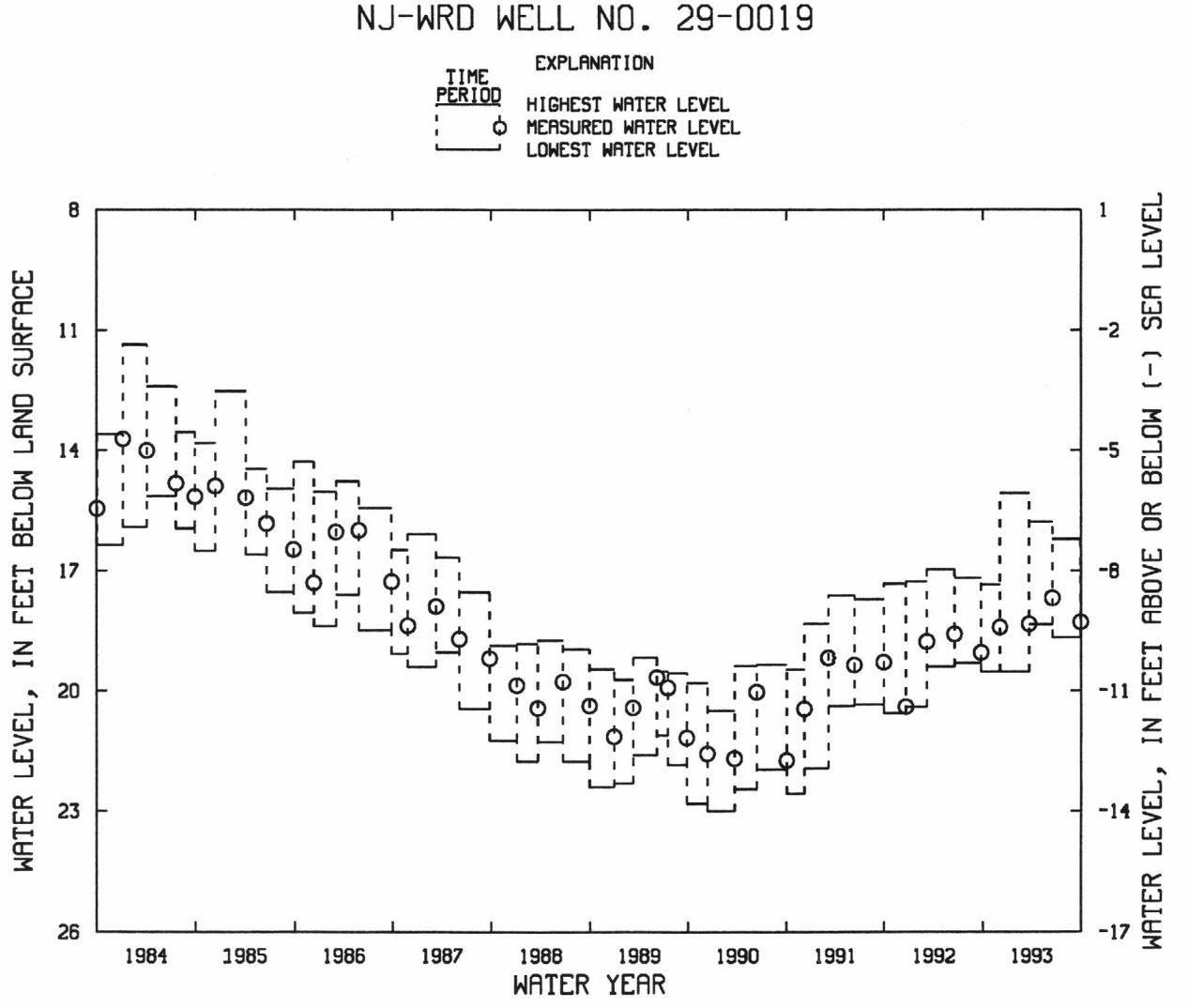


OCEAN COUNTY

394829074053503. Local I.D., Island Beach 3 Obs. NJ-WRD Well Number, 29-0019.
LOCATION.--Lat 39°48'29", long 74°05'35", Hydrologic Unit 02040301, in Island Beach State Park, about 6.6 mi south of the main entrance, Lacey Township.
Owner: U.S. Geological Survey.
AQUIFER.--Potomac-Raritan-Magothy aquifer system, undifferentiated, of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 2,756 ft, screened 2,736 to 2,756 ft.
INSTRUMENTATION.--Water-level extremes recorder.
DATUM.--Land surface is 9.02 ft above sea level.
Measuring point: Front edge of cutout in recorder housing, 5.11 ft above land surface.
REMARKS.--Water level affected by tidal fluctuation.
PERIOD OF RECORD.--Nov. 1968 to current year. Records for 1968 to 1976 are unpublished and are available in files of the New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 5.95 ft above land surface, Apr. 23, 1969; lowest, 23.00 ft below land surface, between Dec. 12, 1989 and Mar. 22, 1990.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

WATER-LEVEL EXTREMES			MEASURED WATER LEVEL	
PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 24, 1992 TO DEC. 3, 1992	17.34	19.52	DEC. 3, 1992	18.41
DEC. 3, 1992 TO MAR. 23, 1993	15.07	19.52	MAR. 23, 1993	18.33
MAR. 23, 1993 TO JUNE 18, 1993	15.78	18.34	JUNE 18, 1993	17.68
JUNE 18, 1993 TO SEPT. 29, 1993	16.21	18.66	SEPT. 29, 1993	18.28



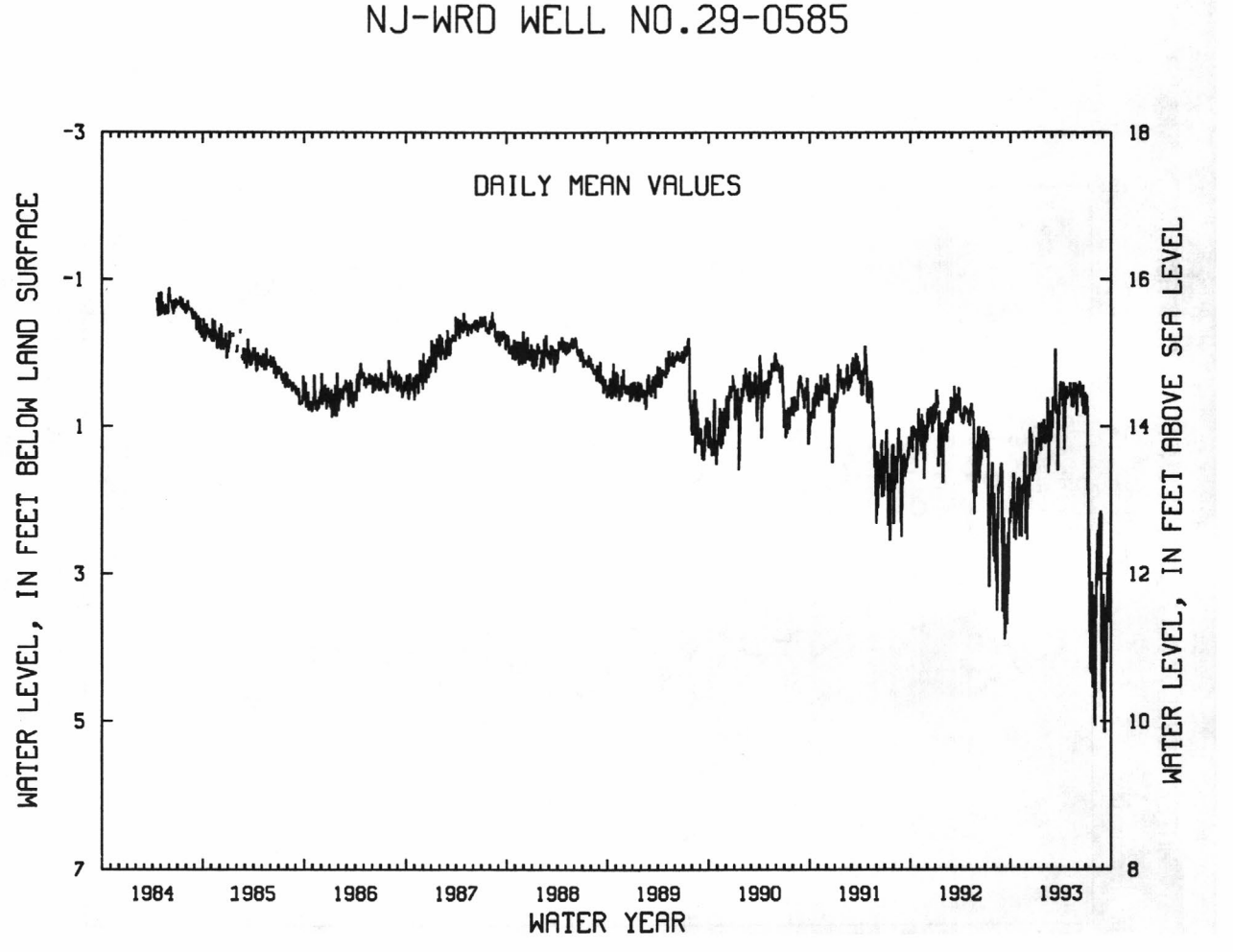
OCEAN COUNTY

395028074104401. Local I.D., DOE-Forked River Obs. NJ-WRD Well Number, 29-0585.
LOCATION.--Lat 39°50'28", long 74°10'44", Hydrologic Unit 02040301, at the Forked River Game Farm, Forked River, Lacey Township.
Owner: State of New Jersey.
AQUIFER.--Piney Point aquifer of Eocene age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 422 ft, perforated casing 412 to 422 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land surface is 15 ft above sea level, from topographic map.
Measuring point: Top of recorder shelf, 3.80 ft above land surface.
REMARKS.--Water level affected by nearby pumping. Water-quality data for 1993 are available elsewhere in this report.
PERIOD OF RECORD.--Apr. 1984 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.83 ft above land surface, June 1, 1984; lowest, 5.25 ft below land surface, Sept. 7, 1993.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	1.99	1.86	1.70	1.16	1.23	.62	.55	.49	.54	.59	4.40	4.49
10	1.83	1.86	1.71	1.27	1.15	.69	.46	.61	.39	1.89	3.00	3.61
15	2.51	1.79	1.13	1.13	.96	.32	1.31	.55	.52	3.28	2.41	3.81
20	2.53	1.77	1.52	1.32	1.16	.78	.64	.41	.72	4.30	2.32	3.00
25	1.88	2.45	1.53	1.02	1.17	1.02	.60	.41	.76	4.25	2.21	3.32
EOM	1.70	1.82	1.33	.91	.97	.57	.53	.64	.84	4.02	3.95	2.84
MEAN	2.00	1.87	1.56	1.17	1.07	.73	.59	.55	.56	2.65	3.28	3.50

WTR YR 1993 MEAN 1.63 HIGH -.05 MAR 13-15 LOW 5.25 SEP 7



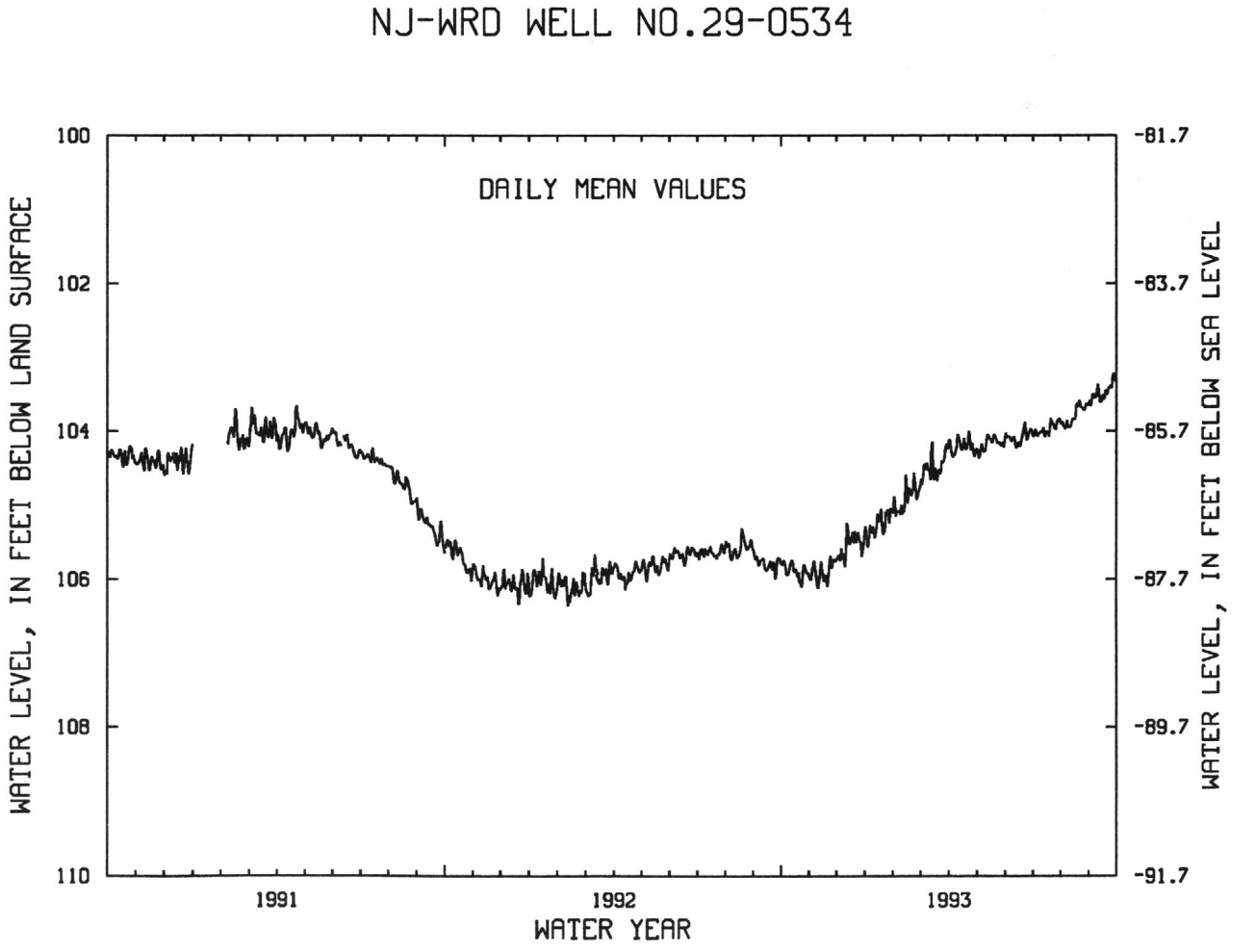
OCEAN COUNTY

395609074124001. Local I.D., Toms River 2 Obs. NJ-WRD Well Number, 29-0534.
LOCATION.--Lat 39°56'09", long 74°12'40", Hydrologic Unit 02040301, about 200 ft east of Double Trouble Rd. on the north side of Jakes Branch, South Toms River Borough.
Owner: U.S. Geological Survey.
AQUIFER.--Englishtown aquifer system of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 1,146 ft, screened 1,080 to 1,146 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Water-level extremes recorder, Feb. 1977 to Sept. 1990.
DATUM.--Land surface is 18.34 ft above sea level.
Measuring point: Top of coupling, 2.44 ft above land surface.
REMARKS.--The well was pumped on Feb. 5, 1988. After pumping, the water level did not return to its previous level. Therefore, the screen may have been partially clogged prior to the pumping on Feb. 5, 1988.
PERIOD OF RECORD.--Dec. 1965 to current year. Records for 1965 to 1976 and 1989 are unpublished and are available in files of the New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 48.37 ft below land surface, May 28, 1966; lowest, 106.41 ft below land surface, Dec. 19-20, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	105.85	105.75	105.58	105.27	105.08	104.45	104.35	104.25	104.08	104.06	103.97	103.51
10	105.81	106.12	105.71	105.44	105.08	104.54	104.05	104.27	104.08	104.01	103.95	103.37
15	105.90	105.94	105.50	105.22	104.97	104.60	104.26	104.11	104.15	104.00	103.83	103.51
20	106.05	106.10	105.35	105.37	104.84	104.60	104.23	104.05	104.03	103.83	103.60	103.51
25	105.80	105.84	105.50	105.18	104.92	104.43	104.23	104.15	104.11	103.96	103.71	103.42
EOM	105.97	105.73	105.28	104.88	104.79	104.25	104.25	104.12	104.03	103.89	103.62	103.33
MEAN	105.89	105.90	105.53	105.25	104.91	104.48	104.21	104.18	104.08	103.97	103.78	103.47

WTR YR 1993 MEAN 104.64 HIGH 103.15 SEP 27 LOW 106.17 OCT 22



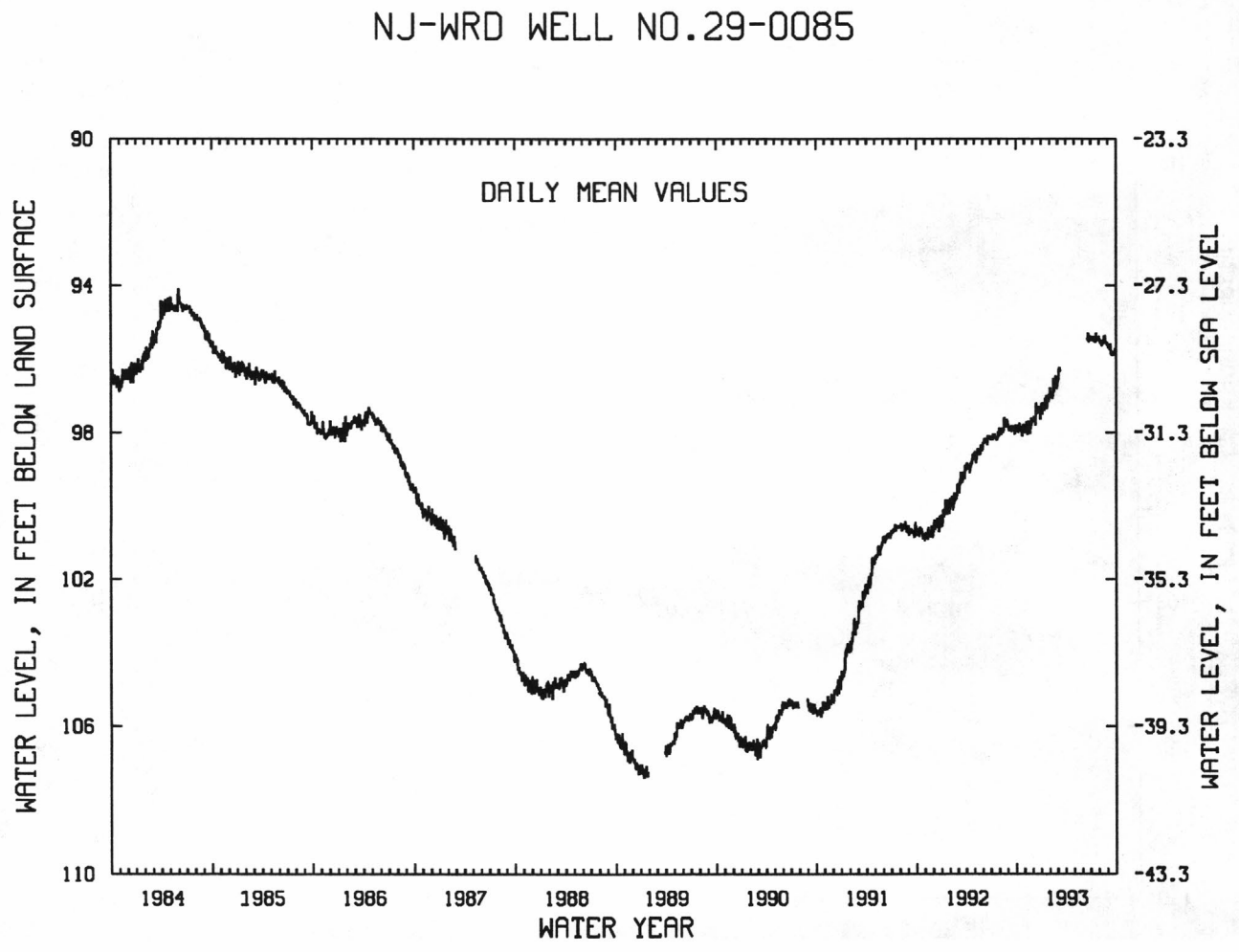
OCEAN COUNTY

395930074142101. Local I.D., Toms River Chem 84 Obs. NJ-WRD Well Number, 29-0085.
LOCATION.--Lat 39°59'29", long 74°14'20", Hydrologic Unit 02040301, at Toms River Plant, Ciba-Geigy Corporation, Dover Township.
Owner: Ciba-Geigy Corporation.
AQUIFER.--Potomac-Raritan-Magothy aquifer system, undifferentiated, of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 8 in., depth 1,480 ft, screened 1,460 to 1,480 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land surface is 66.71 ft above sea level.
Measuring point: Top of recorder shelf, 2.70 ft above land surface.
PERIOD OF RECORD.--July 1968 to current year. Records for 1968 to 1976 are unpublished and are available in files of the New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 62.32 ft below land surface, July 19, 1968 and Feb. 9, 1969; lowest, 107.45 ft below land surface, Jan. 11, 1989.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	97.88	97.70	97.55	97.18	97.01	96.29	---	---	---	95.48	95.58	95.66
10	97.82	98.05	97.67	97.39	97.01	96.34	---	---	---	95.45	95.62	95.58
15	97.90	97.87	97.46	97.17	96.91	---	---	---	---	95.44	95.56	95.82
20	98.03	98.03	97.28	97.31	96.74	---	---	---	95.46	95.30	95.36	95.91
25	97.76	97.77	97.42	97.11	96.82	---	---	---	95.53	95.48	95.56	95.90
EOM	97.93	97.66	97.20	96.79	96.66	---	---	---	95.43	95.46	95.63	95.90
MEAN	97.89	97.83	97.47	97.18	96.82	---	---	---	---	95.44	95.53	95.78

WTR YR 1993 HIGH 95.27 JUL 20 LOW 98.13 OCT 22



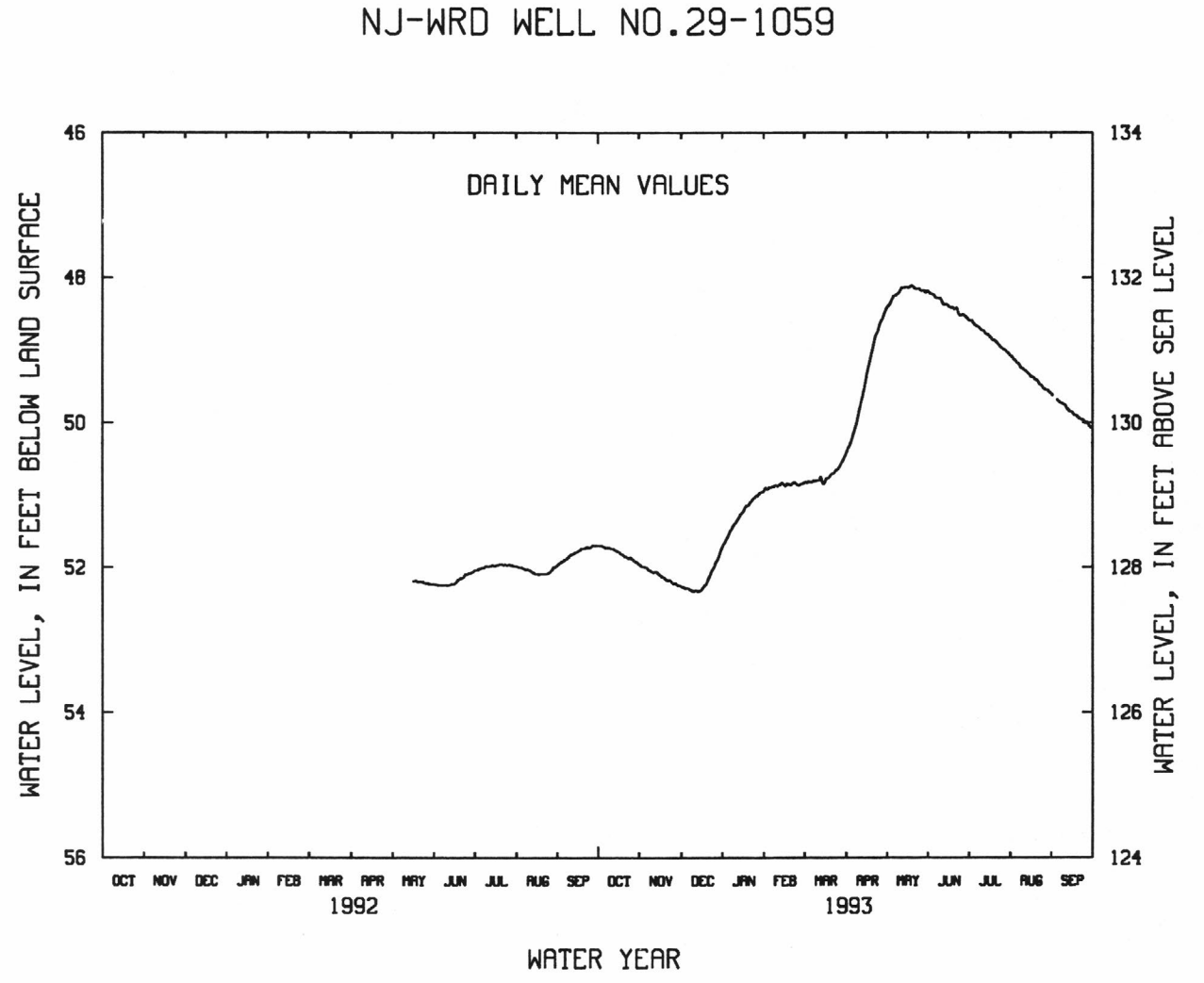
OCEAN COUNTY

400120074265401. Local I.D., Fort Dix RLF-30 Obs. NJ-WRD Well Number, 29-1059.
LOCATION.--Lat 40°01'20", long 74°26'54", Hydrologic Unit 02040301, at the Fort Dix Military Reservation, Plumsted Township.
Owner: US Army - Fort Dix.
AQUIFER.--Kirkwood-Cohansey aquifer system of Miocene age.
WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 4 in., depth 75 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land surface is 180 ft above sea level, from topographic map.
Measuring point: Top of recorder shelf, 2.15 ft above land surface.
PERIOD OF RECORD.--May 1992 to current year. Records for 1992 are unpublished and are available in files of the New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 48.10 ft below land surface, May 18-19, 1993; lowest, 52.34 ft below land surface, Dec. 9, 12-13, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	51.72	52.00	52.29	51.50	50.88	50.82	50.22	48.29	48.24	48.65	49.17	49.70
10	51.74	52.07	52.32	51.36	50.86	50.80	49.84	48.21	48.29	48.72	49.26	49.76
15	51.78	52.11	52.30	51.22	50.88	50.85	49.43	48.13	48.37	48.79	49.35	49.85
20	51.85	52.18	52.15	51.10	50.84	50.73	49.01	48.11	48.44	48.87	49.41	49.94
25	51.88	52.22	51.94	51.02	50.87	50.65	48.68	48.15	48.52	48.97	49.53	50.01
EOM	51.96	52.26	51.69	50.90	50.84	50.45	48.45	48.18	48.57	49.07	49.61	50.08
MEAN	51.81	52.12	52.15	51.23	50.86	50.73	49.41	48.20	48.38	48.82	49.36	49.87

WTR YR 1993 MEAN 50.24 HIGH 48.10 MAY 18-19 LOW 52.34 DEC 9, 12-13



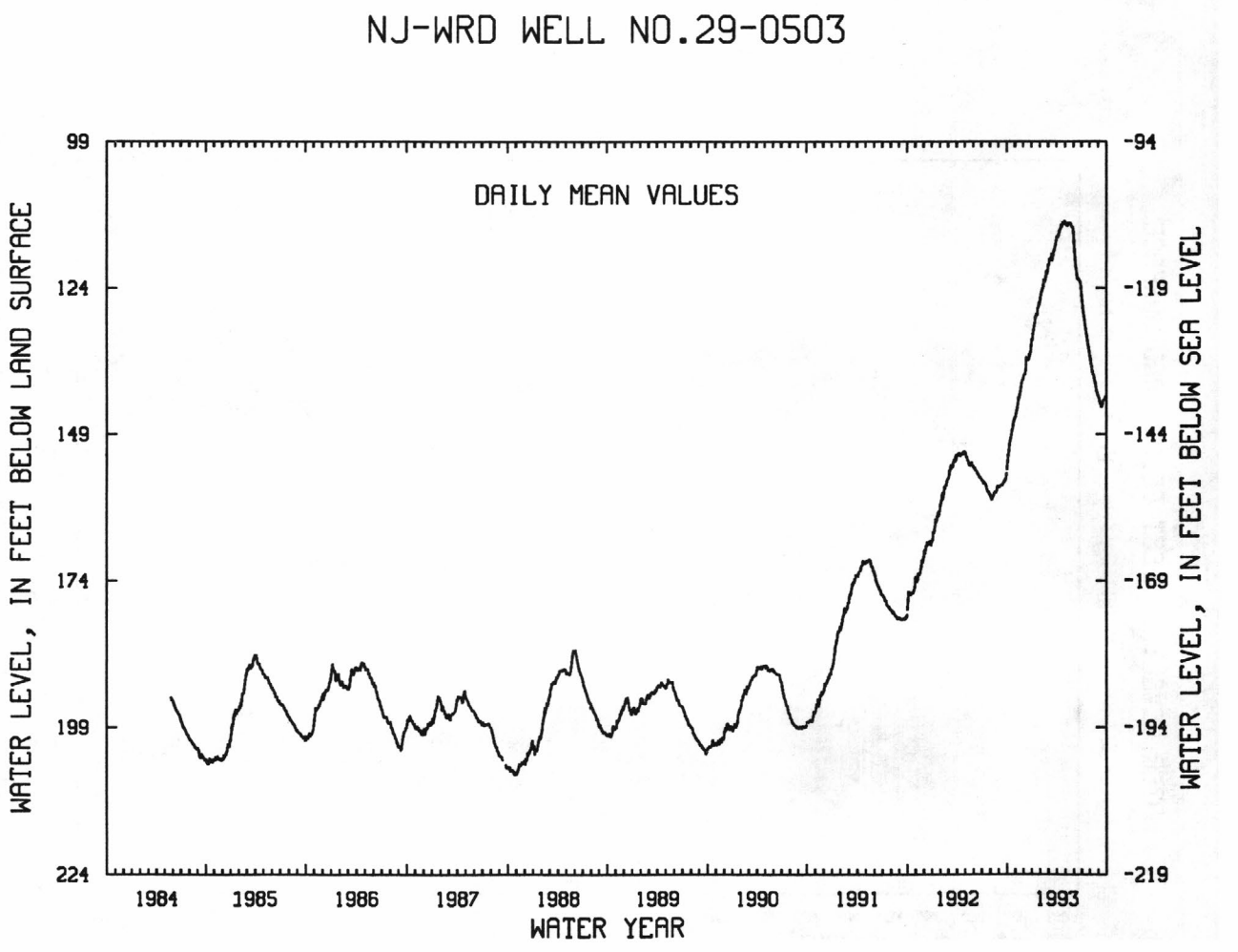
OCEAN COUNTY

400210074031001. Local I.D., Mantoloking 6 Obs. NJ-WRD Well Number, 29-0503.
LOCATION.--Lat 40°02'10", long 74°03'10", Hydrologic Unit 02040301, at the Bay Ave. water treatment plant, Mantoloking Borough.
Owner: New Jersey - American Water Company.
AQUIFER.--Englishtown aquifer system of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 8 in., depth 906 ft, screened 845 to 906 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land surface is 5 ft above sea level, from topographic map.
Measuring point: Top of recorder shelf, 2.40 ft above land surface.
REMARKS.--Water level affected by tidal fluctuation and nearby pumping.
PERIOD OF RECORD.--May 1984 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 112.25 ft below land surface, Apr. 22, 29, 1993; lowest, 207.49 ft below land surface, Oct. 31, 1987.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	152.86	145.10	138.86	131.69	124.82	118.94	115.25	113.11	118.16	127.27	137.02	143.36
10	150.88	143.97	137.55	130.28	123.96	119.08	114.12	113.30	120.53	129.02	138.50	143.85
15	149.60	142.62	136.26	128.88	123.12	119.42	113.67	112.76	122.30	130.67	139.14	144.06
20	148.22	141.53	135.98	128.60	122.02	117.88	113.22	112.82	122.47	131.99	140.16	143.28
25	146.92	140.01	135.24	127.25	121.72	116.98	112.78	113.37	122.85	133.77	141.56	143.00
EOM	146.12	139.50	132.79	125.85	120.40	115.68	112.56	114.58	124.85	135.44	142.52	142.71
MEAN	149.65	142.56	136.47	129.12	123.04	118.23	113.78	113.20	121.19	130.79	139.43	143.37

WTR YR 1993 MEAN 130.12 HIGH 112.25 APR 22,29 LOW 155.50 OCT 1



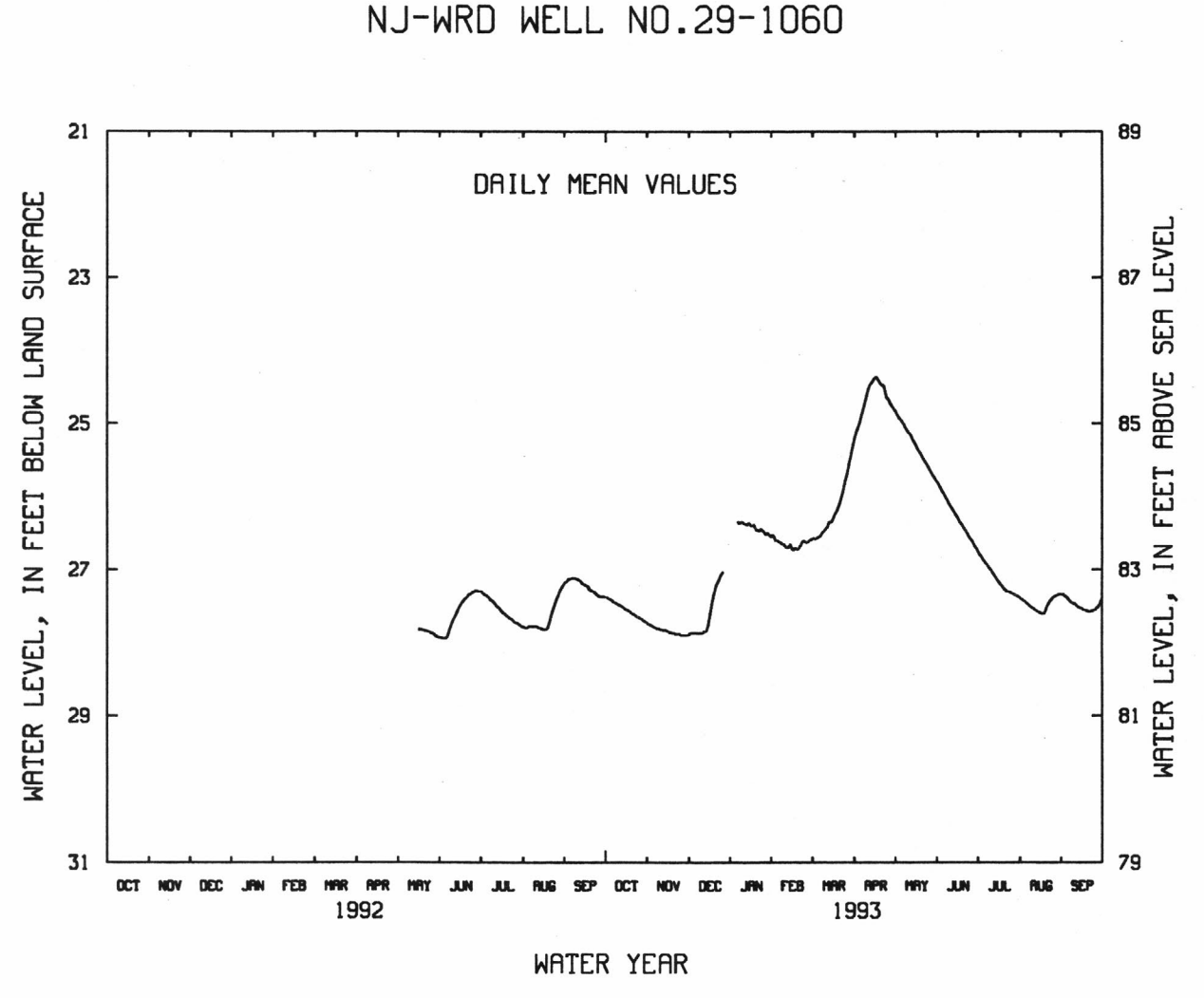
OCEAN COUNTY

400232074213201. Local I.D., LNAS-EC Obs. NJ-WRD Well Number, 29-1060.
LOCATION.--Lat 40°02'37", long 74°21'28", Hydrologic Unit 02040301, at Lakehurst Naval Air Station, Jackson Township.
Owner: Lakehurst Naval Air Station.
AQUIFER.--Kirkwood-Cohansey aquifer system of Miocene age.
WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 4 in., depth 38 ft, screened 23 to 38 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land surface is 110 ft above sea level, from topographic map.
Measuring point: Top of recorder shelf, 3.70 ft above land surface.
PERIOD OF RECORD.--May 1992 to current year. Records for 1992 are unpublished and are available in files of the New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 24.36 ft below land surface, Apr. 16-17, 1993; lowest, 27.94 ft below land surface, June 3-6, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	27.42	27.79	27.87	26.34	26.62	26.56	24.94	24.95	25.94	26.87	27.46	27.41
10	27.48	27.82	27.87	26.37	26.69	26.46	24.58	25.11	26.11	27.00	27.53	27.47
15	27.54	27.85	27.65	26.40	26.73	26.34	24.39	25.26	26.26	27.15	27.59	27.53
20	27.61	27.88	27.21	26.46	26.68	26.14	24.46	25.43	26.42	27.27	27.52	27.58
25	27.66	27.90	27.03	26.50	26.63	25.78	24.66	25.59	26.57	27.32	27.38	27.56
EOM	27.74	27.89	---	26.52	26.59	25.27	24.81	25.78	26.72	27.38	27.34	27.41
MEAN	27.55	27.85	27.60	26.43	26.65	26.16	24.66	25.30	26.27	27.13	27.47	27.49

WTR YR 1993 MEAN 26.70 HIGH 24.36 APR 16-17 LOW 27.90 NOV 24-29



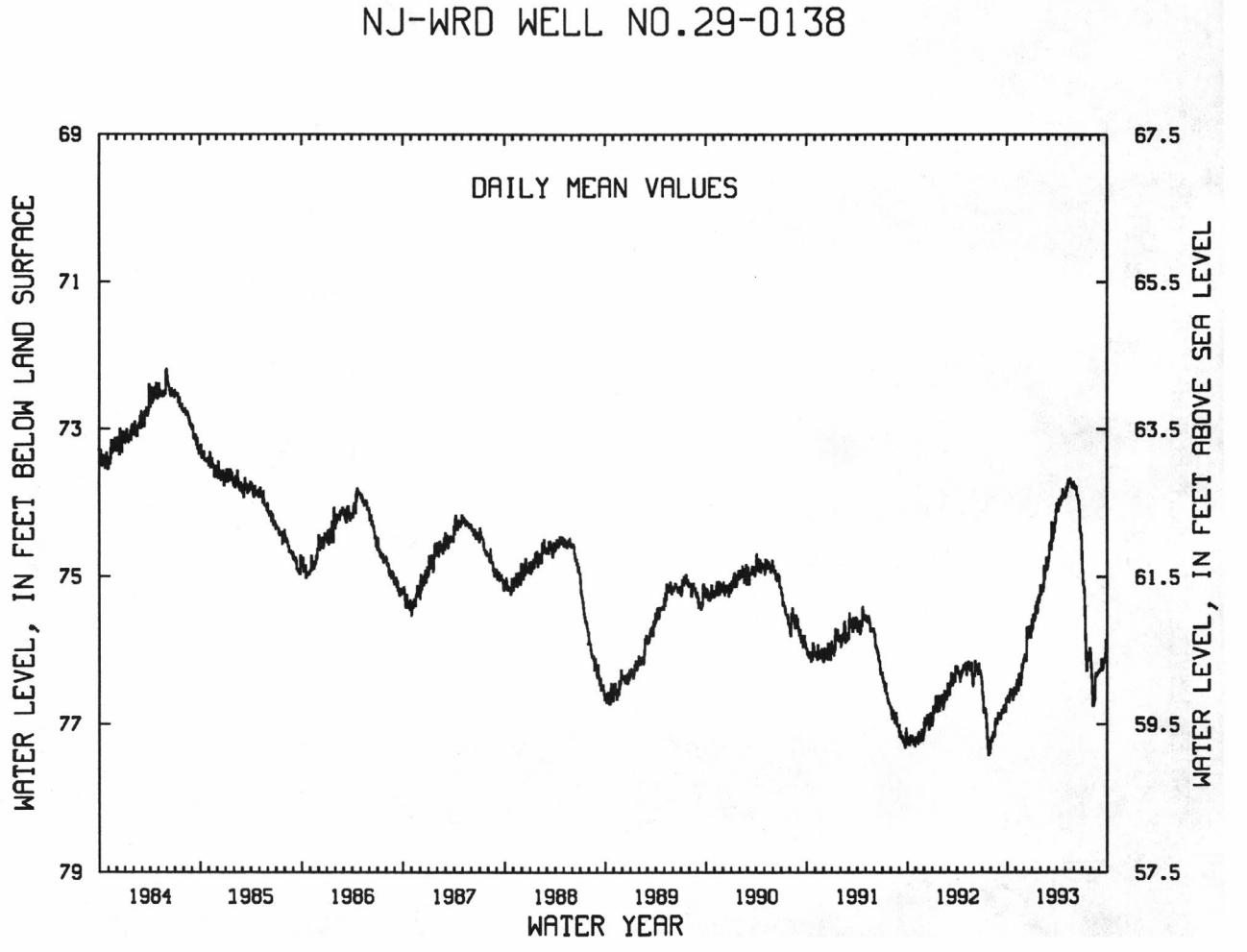
OCEAN COUNTY

400416074270101. Local I.D., Colliers Mills 1 Obs. NJ-WRD Well Number, 29-0138.
LOCATION.--Lat 40°04'14", long 74°27'02", Hydrologic Unit 02040301, along western shore of Colliers Mills Pond, Jackson Township.
Owner: U.S. Geological Survey.
AQUIFER.--Englishtown aquifer system of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 427 ft, screened 417 to 427 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land surface is 136.52 ft above sea level.
Measuring point: Top of coupling, 2.20 ft above land surface.
PERIOD OF RECORD.--Feb. 1964 to current year. Records for 1964 to 1976 are unpublished and are available in files of the New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 52.02 ft below land surface, Feb. 19, 1964; lowest, 77.43 ft below land surface, July 25, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	76.66	76.39	76.05	75.51	75.20	74.56	74.12	73.84	73.77	75.08	76.35	76.26
10	76.60	76.54	76.07	75.60	75.16	74.58	73.95	73.81	73.77	75.23	76.76	76.11
15	76.59	76.40	75.81	75.44	75.05	74.50	74.03	73.72	73.89	75.91	76.69	76.22
20	76.64	76.47	75.67	75.48	74.91	74.44	73.96	73.67	74.02	76.11	76.32	76.18
25	76.50	76.26	75.72	75.34	74.91	74.29	73.92	73.75	74.41	76.12	76.33	76.10
EOM	76.58	76.14	75.57	75.11	74.82	74.13	73.87	73.76	74.61	76.01	76.29	75.95
MEAN	76.60	76.38	75.85	75.44	75.01	74.44	73.98	73.77	74.01	75.69	76.43	76.15

WTR YR 1993 MEAN 75.32 HIGH 73.66 MAY 12-13, 19-20 LOW 76.77 AUG 10-11

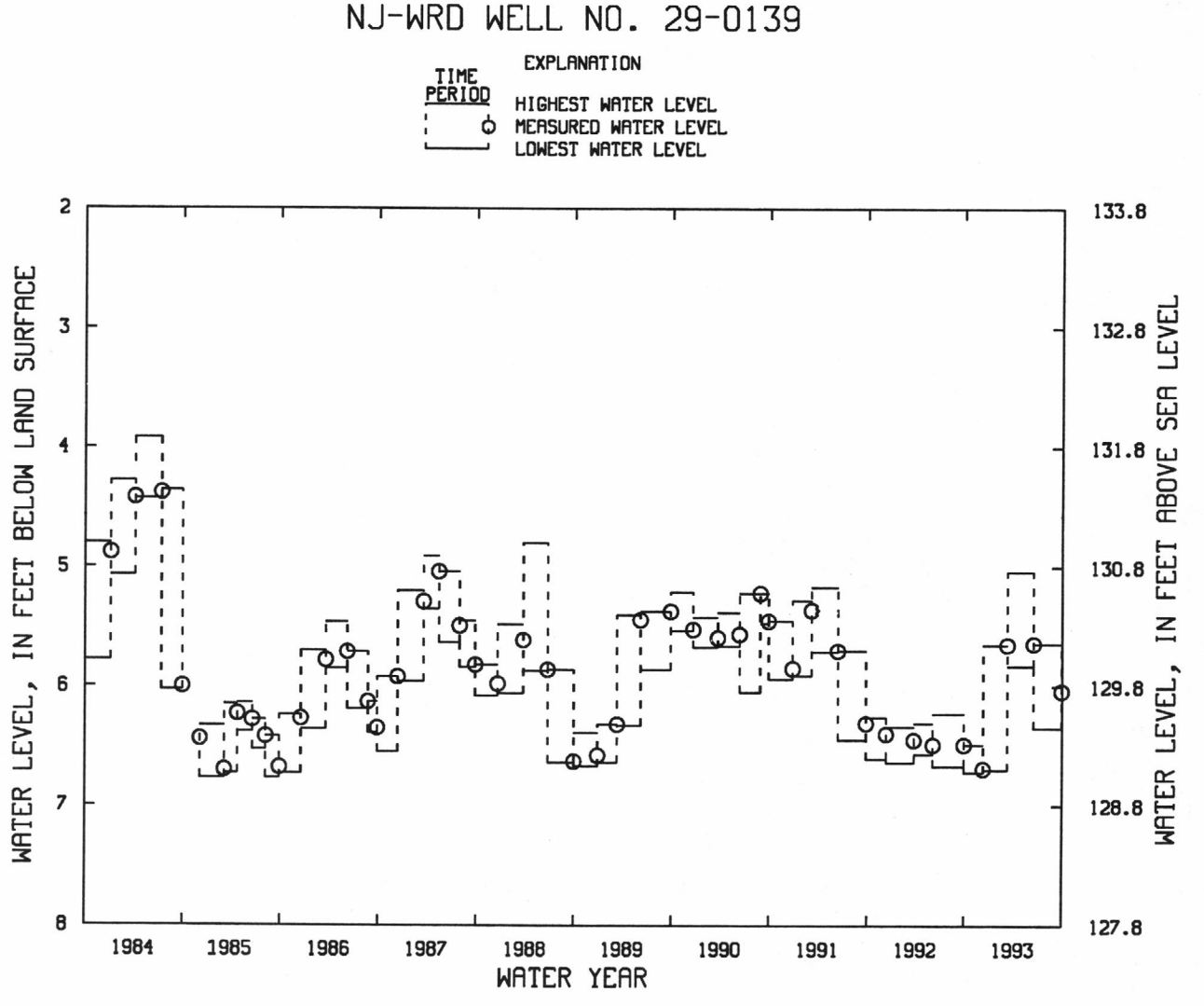


OCEAN COUNTY

400416074270102. Local I.D., Colliers Mills 2 Obs. NJ-WRD Well Number, 29-0139.
LOCATION.--Lat 40°04'14", long 74°27'02", Hydrologic Unit 02040301, along western shore of Colliers Mills Pond, Jackson Township.
Owner: U.S. Geological Survey.
AQUIFER.--Vincentown aquifer of Paleocene age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 171 ft, screened 161 to 171 ft.
INSTRUMENTATION.--Water-level extremes recorder.
DATUM.--Land surface is 135.76 ft above sea level.
Measuring point: Front edge of cutout in recorder housing, 3.25 ft above land surface.
PERIOD OF RECORD.--Jan. 1964 to current year. Records for 1964 to 1981 are unpublished and are available in files of the New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.92 ft below land surface, between Apr. 3 and July 11, 1984; lowest, 6.77 ft below land surface, between Dec. 4, 1984 and Mar. 6, 1985 and between Aug. 6 and Sept. 26, 1985.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

WATER-LEVEL EXTREMES			MEASURED WATER LEVEL	
PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 28, 1992 TO DEC. 9, 1992	6.49	6.72	DEC. 9, 1992	6.69
DEC. 9, 1992 TO MAR. 8, 1993	5.65	6.70	MAR. 8, 1993	5.65
MAR. 8, 1993 TO JUNE 14, 1993	5.04	5.83	JUNE 14, 1993	5.64
JUNE 14, 1993 TO SEPT. 28, 1993	5.64	6.35	SEPT. 28, 1993	6.04

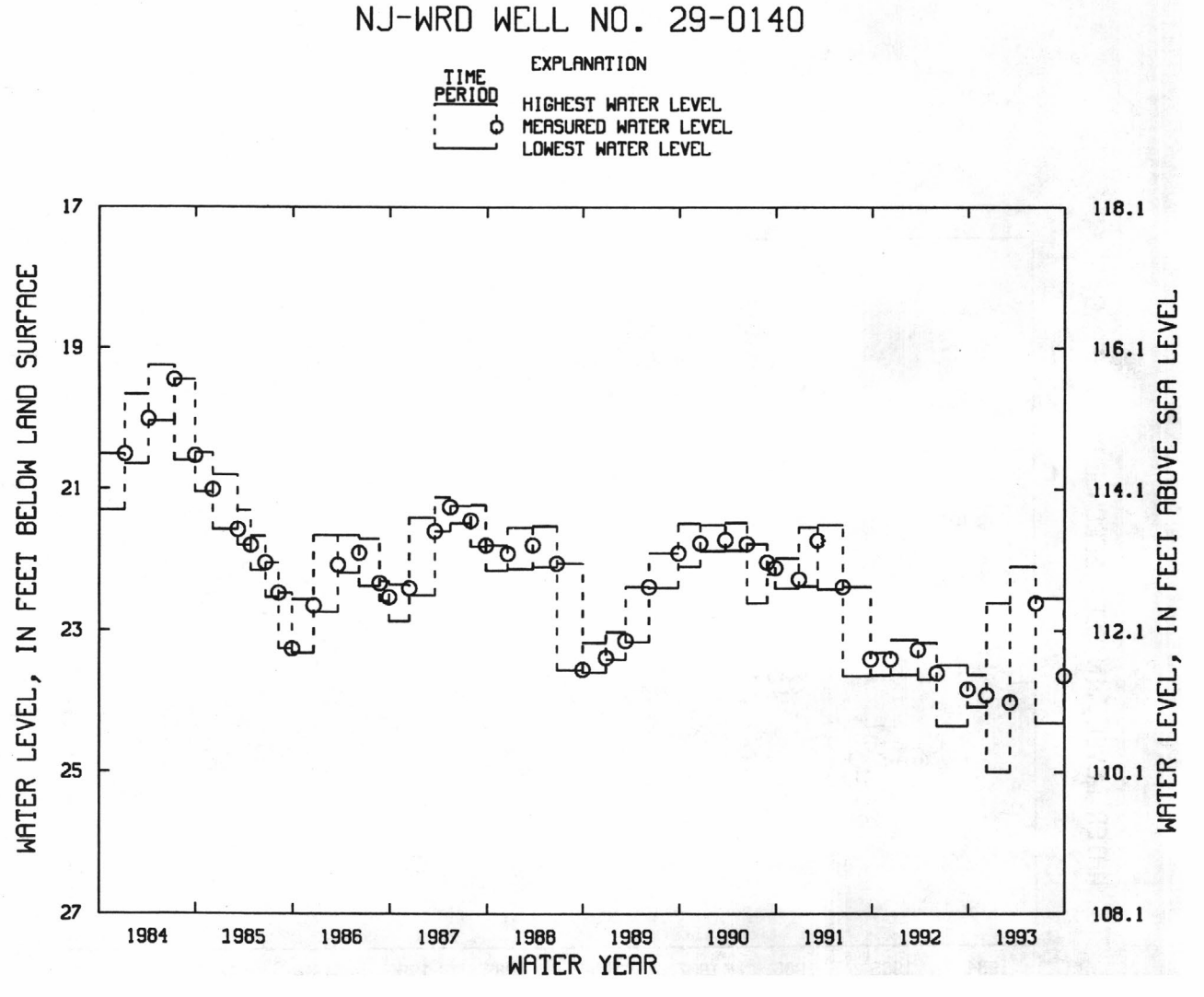


OCEAN COUNTY

400416074270103. Local I.D., Colliers Mills 3 Obs. NJ-WRD Well Number, 29-0140.
LOCATION.--Lat 40°04'14", long 74°27'02", Hydrologic Unit 02040301, along western shore of Colliers Mills Pond, Jackson Township.
Owner: U.S. Geological Survey.
AQUIFER.--Wenonah-Mount Laurel aquifer of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 267 ft, screened 257 to 267 ft.
INSTRUMENTATION.--Water-level extremes recorder.
DATUM.--Land surface is 135.15 ft above sea level.
Measuring point: Front edge of cutout in recorder housing, 3.49 ft above land surface.
PERIOD OF RECORD.--Jan. 1964 to current year. Records for 1964 to 1976 are unpublished and are available in files of the New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 15.72 ft below land surface, May 9, 1964; lowest, 25.00 ft below land surface, between Dec. 9, 1992 and Mar. 8, 1993.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

WATER-LEVEL EXTREMES			MEASURED WATER LEVEL	
PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 28, 1992 TO DEC. 9, 1992	23.62	24.08	DEC. 9, 1992	23.91
DEC. 9, 1992 TO MAR. 8, 1993	22.61	25.00	MAR. 8, 1993	24.01
MAR. 8, 1993 TO JUNE 14, 1993	22.09	---	JUNE 14, 1993	22.61
JUNE 14, 1993 TO SEPT. 28, 1993	22.54	24.31	SEPT. 28, 1993	23.64

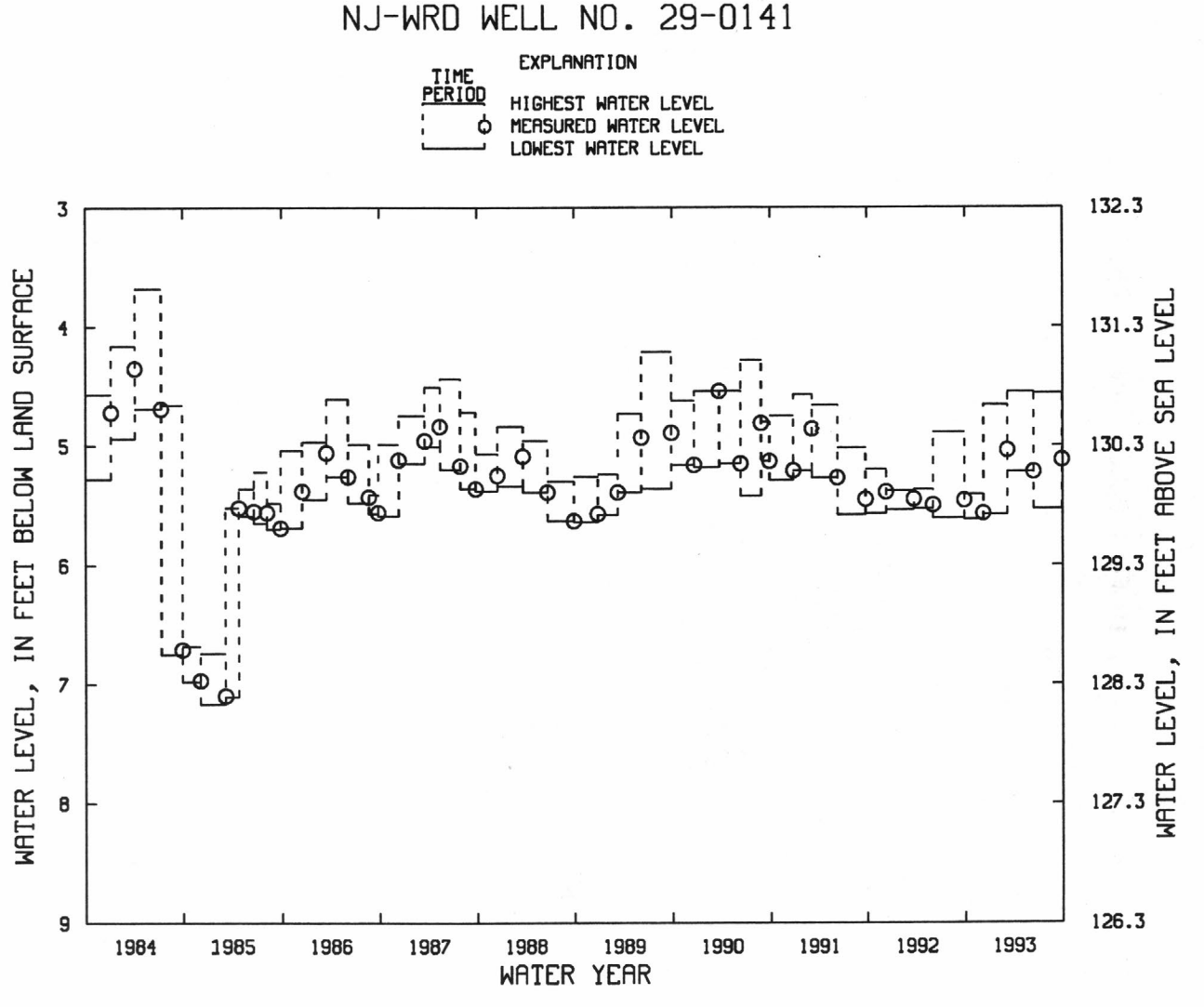


OCEAN COUNTY

400416074270104. Local I.D., Colliers Mills 4 Obs. NJ-WRD Well Number, 29-0141.
LOCATION.--Lat 40°04'14", long 74°27'02", Hydrologic Unit 02040301, along western shore of Colliers Mills Pond, Jackson Township.
Owner: U.S. Geological Survey.
AQUIFER.--Kirkwood-Cohansey aquifer system of Miocene age.
WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 6 in., depth 71 ft, gravel-filled hole 46 to 71 ft.
INSTRUMENTATION.--Water-level extremes recorder.
DATUM.--Land surface is 135.31 ft above sea level.
Measuring point: Front edge of cutout in recorder housing, 2.86 ft above land surface.
REMARKS.--Water level affected by stage of Colliers Mills Pond.
PERIOD OF RECORD.--Mar. 1964 to current year. Records for 1964 to 1981 are unpublished and are available in files of the New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.68 ft below land surface, between Apr. 3 and July 11, 1984; lowest, 7.17 ft below land surface, between Dec. 4, 1984 and Mar. 6, 1985.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

WATER-LEVEL EXTREMES			MEASURED WATER LEVEL	
PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 28, 1992 TO DEC. 9, 1992	5.41	5.62	DEC. 9, 1992	5.57
DEC. 9, 1992 TO MAR. 8, 1993	4.66	5.58	MAR. 8, 1993	5.04
MAR. 8, 1993 TO JUNE 14, 1993	4.55	5.22	JUNE 14, 1993	5.22
JUNE 14, 1993 TO SEPT. 28, 1993	4.56	5.53	SEPT. 28, 1993	5.12

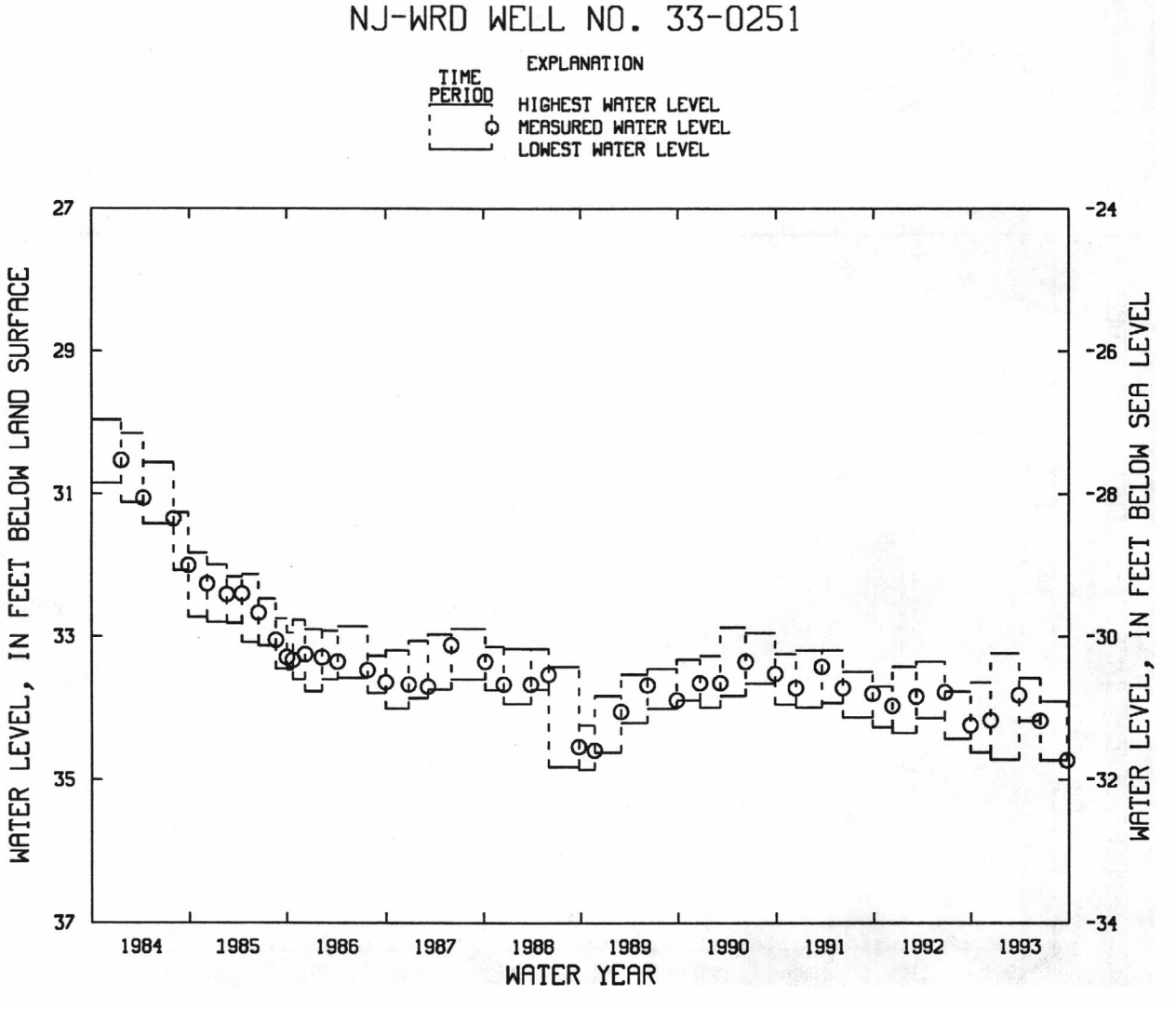


SALEM COUNTY

393348075275701. Local I.D., Salem 1 Obs. NJ-WRD Well Number, 33-0251.
LOCATION.--Lat 39°33'48", long 75°27'55", Hydrologic Unit 02040206, about 300 ft south of the intersection of Elm and Magnolia Streets, Salem City.
Owner: U.S. Geological Survey.
AQUIFER.--Middle Potomac-Raritan-Magothy aquifer of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 709 ft, screened 699 to 709 ft.
INSTRUMENTATION.--Water-level extremes recorder.
DATUM.--Land surface is 3.00 ft above sea level.
Measuring point: Front edge of cutout in recorder housing, 2.87 ft above land surface.
PERIOD OF RECORD.--Dec. 1965 to July 1970, Oct. 1972 to current year. Records for 1965 to 1970 and for 1972 to 1980 are unpublished and are available in files of the New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 14.97 ft below land surface, Dec. 13, 1965; lowest, 34.86 ft below land surface, between Sept. 23 and Nov. 22, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

WATER-LEVEL EXTREMES			MEASURED WATER LEVEL	
PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 29, 1992 TO DEC. 14, 1992	33.64	34.62	DEC. 14, 1992	34.17
DEC. 14, 1992 TO MAR. 30, 1993	33.23	34.72	MAR. 30, 1993	33.82
MAR. 30, 1993 TO JUNE 17, 1993	33.58	34.18	JUNE 17, 1993	34.18
JUNE 17, 1993 TO SEPT. 24, 1993	33.91	34.73	SEPT. 24, 1993	34.73

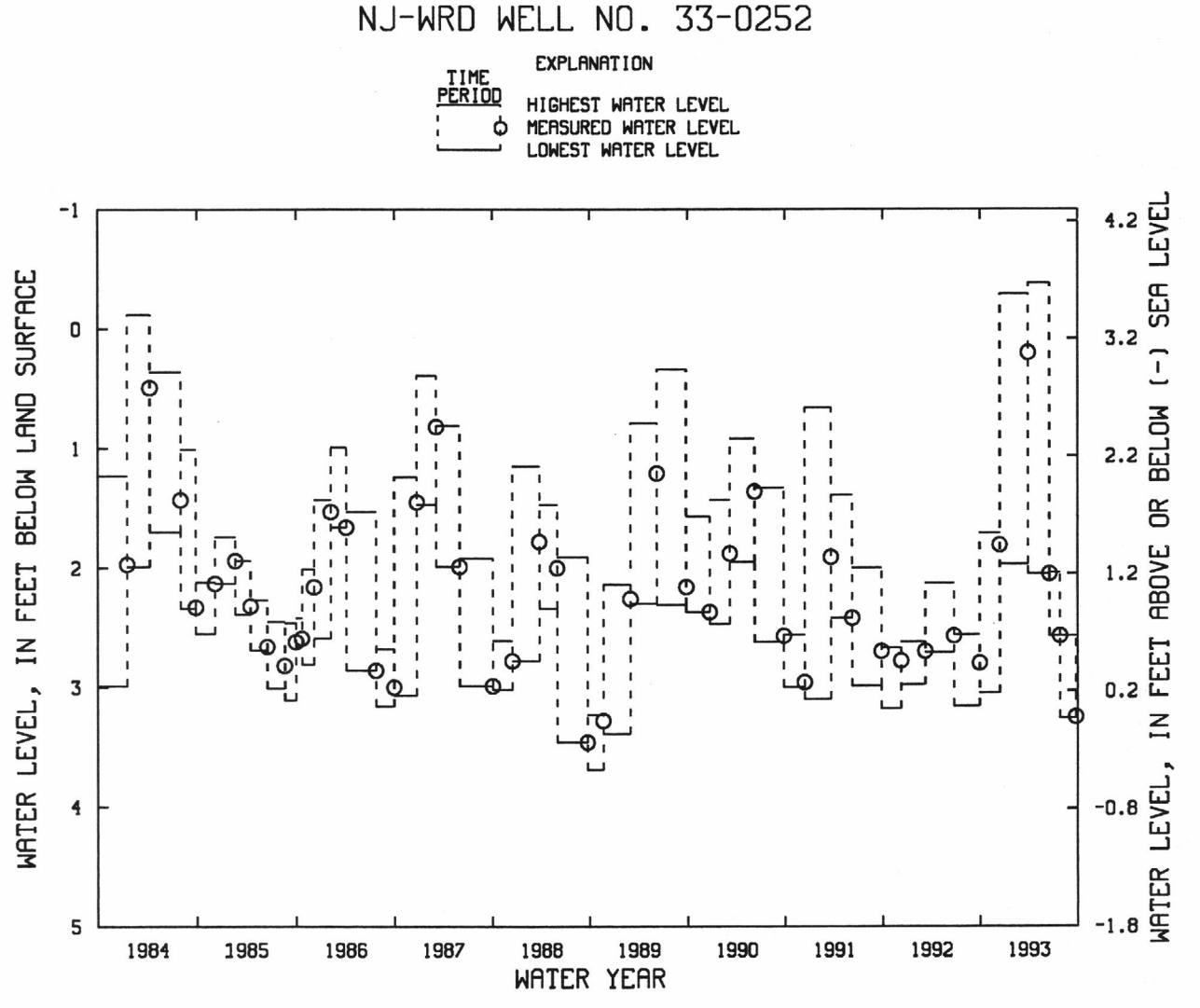


SALEM COUNTY

393348075275702. Local I.D., Salem 2 Obs. NJ-WRD Well Number, 33-0252.
LOCATION.--Lat 39°33'48", long 75°27'55", Hydrologic Unit 02040206, about 300 ft south of the intersection of Elm and Magnolia Streets, Salem City.
Owner: U.S. Geological Survey.
AQUIFER.--Wenonah-Mount Laurel aquifer of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 96 ft, screened 91 to 96 ft.
INSTRUMENTATION.--Water-level extremes recorder.
DATUM.--Land surface is 3.25 ft above sea level.
Measuring point: Front edge of cutout in recorder housing, 2.77 ft above land surface.
REMARKS.--Water-quality data for 1993 are available elsewhere in this report.
PERIOD OF RECORD.--Nov. 1965 to current year. Records for 1965 to 1981 are unpublished and are available in files of the New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.51 ft above land surface, between Jan. 12 and Apr. 27, 1983; lowest, 6.45 ft below land surface, Sept. 9, 1966.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

WATER-LEVEL EXTREMES			MEASURED WATER LEVEL	
PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 29, 1992 TO DEC. 14, 1992	1.71	3.05	DEC. 14, 1992	1.81
DEC. 14, 1992 TO MAR. 30, 1993	-0.29	1.97	MAR. 30, 1993	0.20
MAR. 30, 1993 TO JUNE 17, 1993	-0.38	2.05	JUNE 17, 1993	2.05
JUNE 17, 1993 TO JULY 26, 1993	2.04	2.57	JULY 26, 1993	2.57
JULY 26, 1993 TO SEPT. 24, 1993	2.57	3.26	SEPT. 24, 1993	3.25

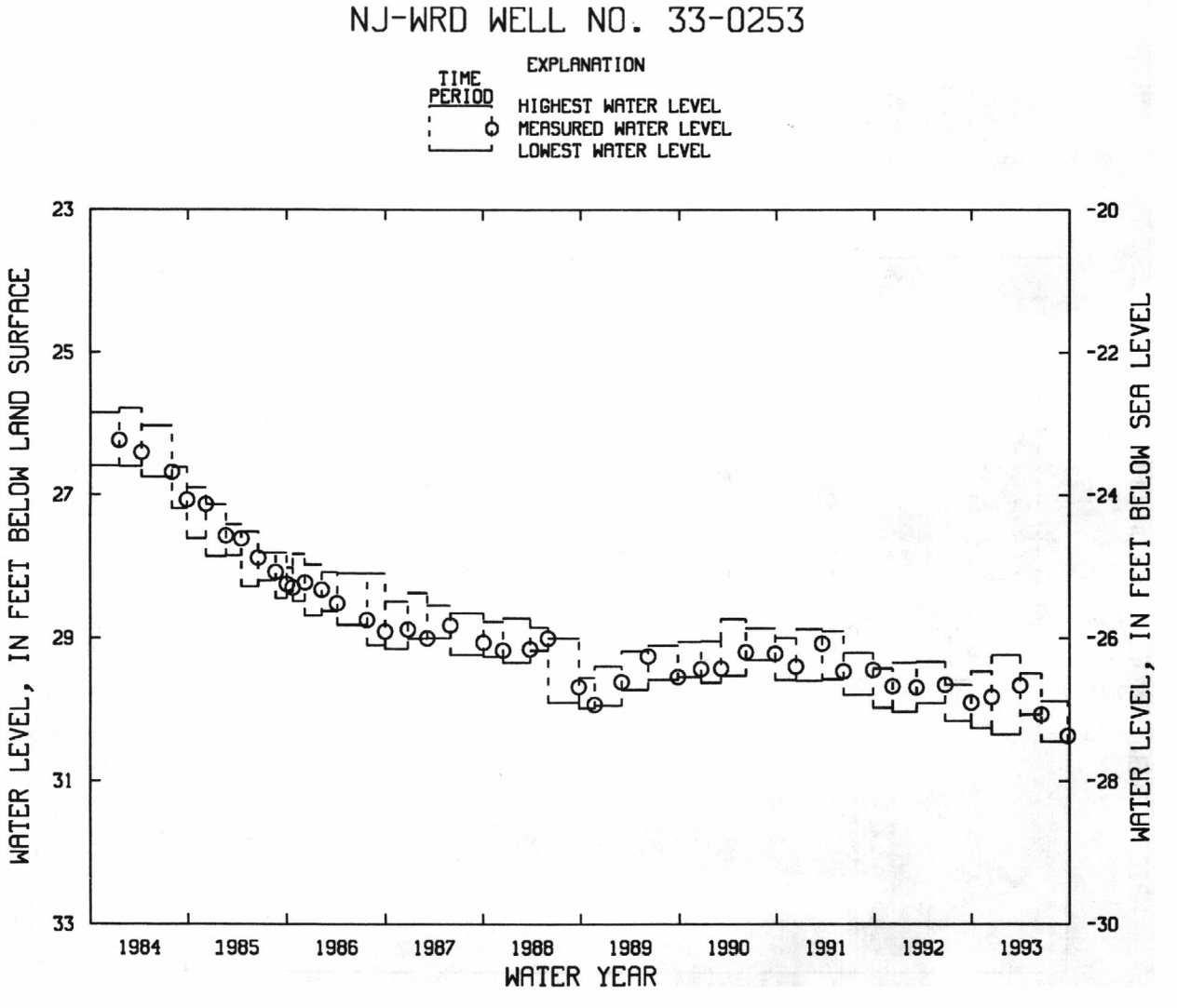


SALEM COUNTY

393348075275703. Local I.D., Salem 3 Obs. NJ-WRD Well Number, 33-0253.
LOCATION.--Lat 39°33'48", long 75°27'55", Hydrologic Unit 02040206, about 300 ft south of the intersection of Elm and Magnolia Streets, Salem City.
Owner: U.S. Geological Survey.
AQUIFER.--Upper Potomac-Raritan-Magothy aquifer of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 340 ft, screened 335 to 340 ft.
INSTRUMENTATION.--Water-level extremes recorder.
DATUM.--Land surface is 3.00 ft above sea level.
Measuring point: Front edge of cutout in recorder housing, 2.30 ft above land surface.
REMARKS.-- Water-quality data for 1993 are available elsewhere in this report.
PERIOD OF RECORD.--Nov. 1965 to current year. Records for 1965 to 1981 are unpublished and are available in files of the New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 12.28 ft below land surface, Feb. 13, 1966; lowest, 30.45 ft below land surface, between June 17 and Sept. 24, 1993.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

WATER-LEVEL EXTREMES			MEASURED WATER LEVEL	
PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 29, 1992 TO DEC. 14, 1992	29.46	30.26	DEC. 14, 1992	29.82
DEC. 14, 1992 TO MAR. 30, 1993	29.23	30.35	MAR. 30, 1993	29.66
MAR. 30, 1993 TO JUNE 17, 1993	29.49	30.07	JUNE 17, 1993	30.07
JUNE 17, 1993 TO SEPT. 24, 1993	29.88	30.45	SEPT. 24, 1993	30.37



SALEM COUNTY

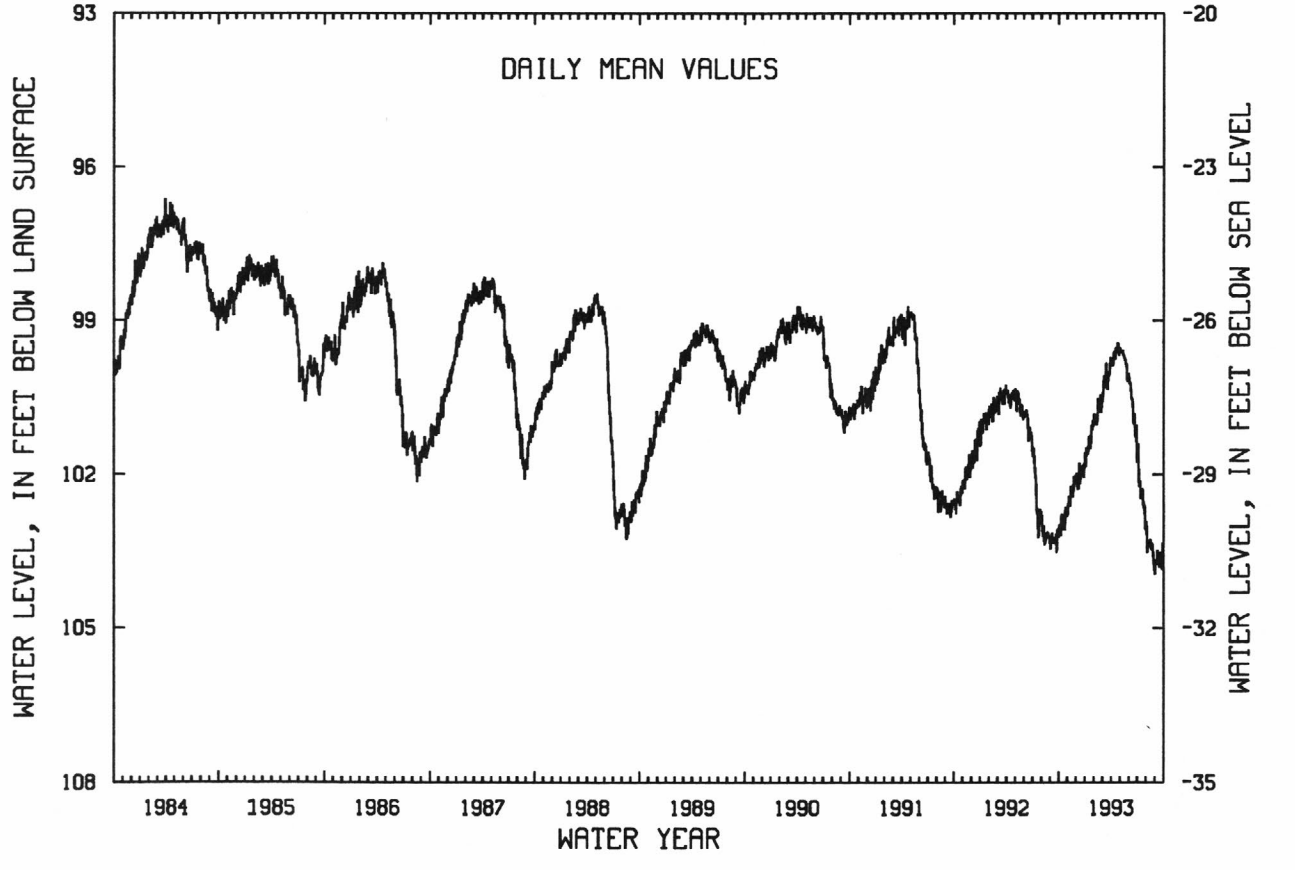
394037075191501. Local I.D., Point Airy Obs. NJ-WRD Well Number, 33-0187.
LOCATION.--Lat 39°40'37", long 75°19'14", Hydrologic Unit 02040206, near the intersection of Point Airy Rd. and Woodstown-Swedesboro Rd., 1 mi north of Woodstown Borough boundary, Pilesgrove Township.
Owner: U.S. Geological Survey.
AQUIFER.--Lower Potomac-Raritan-Magothy aquifer of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 672 ft, screened 664 to 672 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land surface is 72.97 ft above sea level.
Measuring point: Top of casing, 1.80 ft above land surface.
PERIOD OF RECORD.--Feb. 1959 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 78.55 ft below land surface, Mar. 6, 1959; lowest, 104.08 ft below land surface, Aug. 31, 1993.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	103.04	102.43	102.10	101.48	100.96	100.17	99.81	99.62	100.19	101.41	103.52	103.71
10	102.92	102.61	102.13	101.61	100.97	100.21	99.62	99.62	100.50	102.21	103.32	103.47
15	103.09	102.37	102.12	101.36	100.80	100.19	99.76	99.69	100.61	102.38	103.26	103.71
20	102.95	102.45	101.86	101.36	100.66	100.23	99.52	99.77	100.90	102.28	103.40	103.55
25	102.64	102.16	101.96	101.13	100.80	100.06	99.53	99.96	101.27	102.59	103.55	103.84
EOM	102.75	102.04	101.58	100.83	100.64	99.87	99.55	100.07	101.67	102.97	103.95	103.64
MEAN	102.94	102.37	102.00	101.33	100.78	100.12	99.65	99.77	100.71	102.28	103.42	103.65

WTR YR 1993 MEAN 101.59 HIGH 99.38 APR 22 LOW 104.08 AUG 31

NJ-WRD WELL NO.33-0187



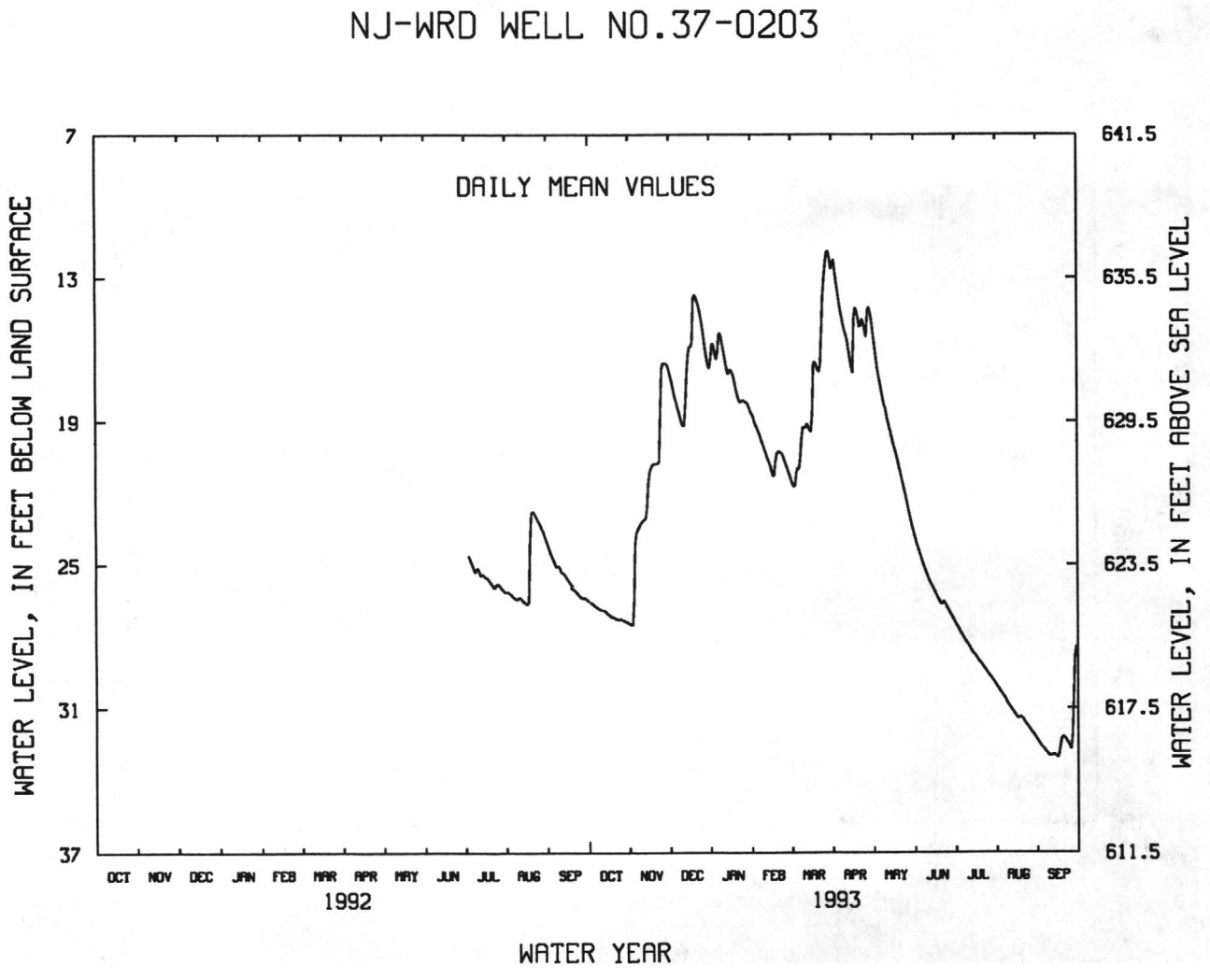
SUSSEX COUNTY

410005074473801. Local I.D., Whittingham 19 Obs. NJ-WRD Well Number, 37-0203.
LOCATION.--Lat 41°00'13", long 74°47'26", Hydrologic Unit 02040105, in Whittingham Wildlife Refuge, County Rt. 611 (Springdale-Grendell Rd.), Fredon Township.
Owner: State of New Jersey.
AQUIFER.--Allentown Dolomite of Cambrian-Ordovician age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 500 ft, open hole 50 to 500 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Periodic manual measurements Apr. 1991 to July 1992.
DATUM.--Land surface is 648.5 ft above sea level.
Measuring point: Top of recorder shelf, 2.30 ft above land surface.
REMARKS.--Water level affected by nearby pumping.
PERIOD OF RECORD.--Apr. 1991 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 11.74 ft below land surface, Mar. 28, 1993; lowest, 33.24 ft below land surface, Sep. 15, 1993.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	26.73	23.68	18.18	16.24	19.53	21.15	13.57	17.05	24.65	27.90	30.46	32.71
10	26.90	23.16	19.18	16.21	20.35	19.24	15.21	18.56	25.46	28.34	30.93	32.98
15	27.08	21.12	15.89	16.86	21.24	19.36	16.71	19.74	26.09	28.76	31.33	33.05
20	27.24	20.77	13.81	17.91	20.26	16.66	14.69	20.88	26.65	29.16	31.45	32.22
25	27.30	16.59	15.10	18.15	20.82	13.76	15.19	22.16	26.87	29.56	31.87	32.70
EOM	27.47	16.98	16.34	18.75	21.31	12.63	14.82	23.66	27.38	30.04	32.35	28.42
MEAN	27.06	21.29	16.53	17.14	20.35	17.63	14.69	19.86	25.93	28.82	31.27	32.18

WTR YR 1993 MEAN 22.74 HIGH 11.74 MAR 28 LOW 33.24 SEP 15



SUSSEX COUNTY

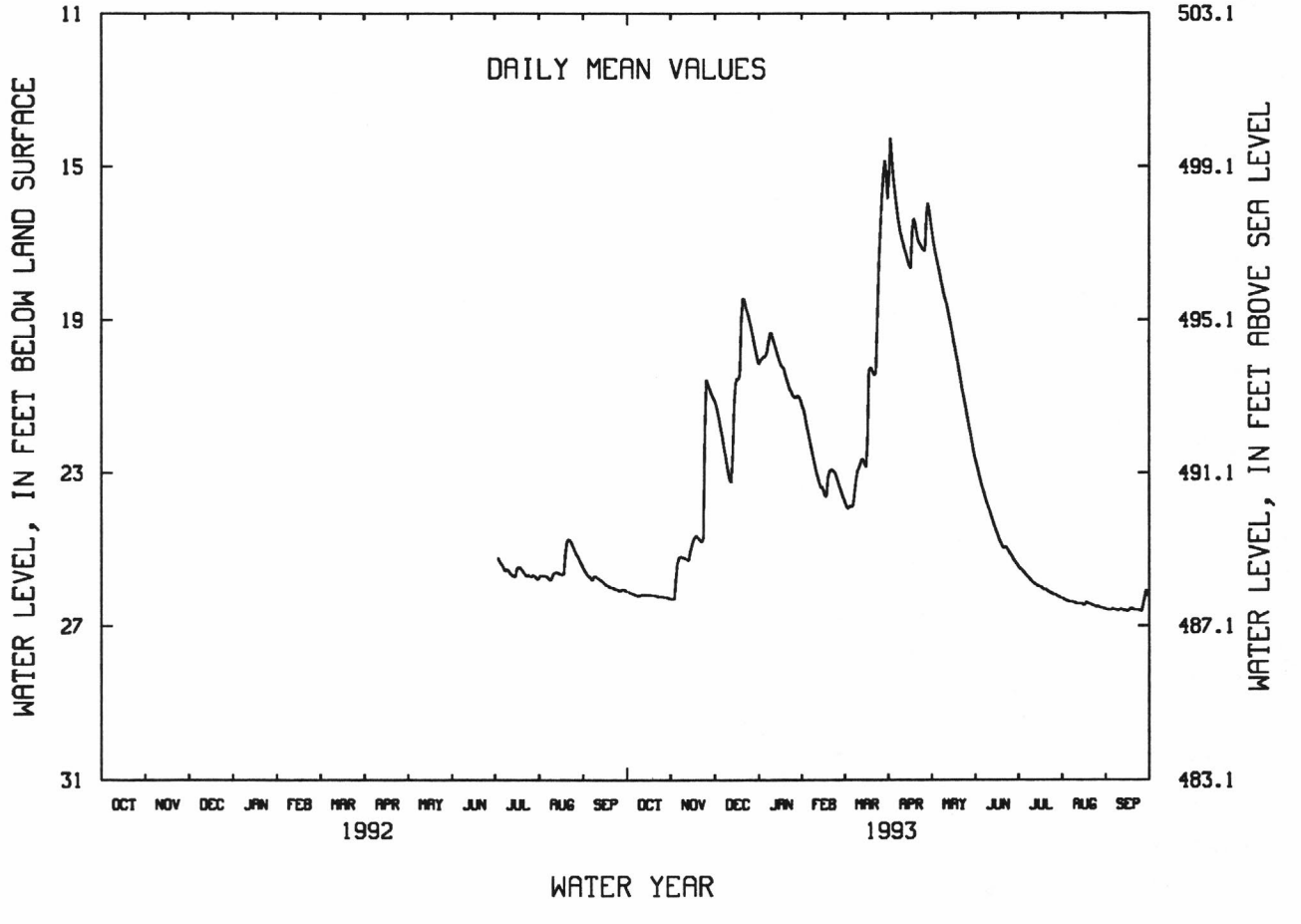
410449074483301. Local I.D., Swartswood Park 5 Obs. NJ-WRD Well Number, 37-0205.
LOCATION.--Lat 41°04'49", long 74°48'37", Hydrologic Unit 02040105, in Swartswood State Park, 700 ft from the intersection of County Rt. 622 and Chandler Rd., Hampton Township.
Owner: State of New Jersey.
AQUIFER.--Allentown Dolomite of Cambrian-Ordovician age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 148 ft, open hole 50 to 148 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Periodic manual measurements Apr. 1991 to July 1992.
DATUM.--Land surface is 514.1 ft above sea level.
Measuring point: Top of recorder shelf, 2.55 ft above land surface.
PERIOD OF RECORD.--Apr. 1991 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 14.13 ft below land surface, Apr. 2, 1993; lowest, 26.62 ft below land surface, Sept. 12, 15, 25, 1993.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	26.17	25.24	22.06	19.80	22.28	23.86	15.67	17.53	23.35	25.61	26.36	26.56
10	26.19	25.24	23.18	19.62	23.13	22.95	16.90	18.44	23.95	25.82	26.41	26.56
15	26.19	24.76	20.53	20.19	23.60	22.78	17.58	19.28	24.52	25.96	26.44	26.61
20	26.21	24.77	18.47	20.67	22.92	20.27	16.71	20.29	24.96	26.05	26.43	26.58
25	26.23	20.66	19.24	21.03	23.34	17.51	17.17	21.36	25.12	26.17	26.49	26.61
EOM	26.29	21.14	20.07	21.34	23.66	15.84	16.46	22.60	25.40	26.27	26.56	26.24
MEAN	26.21	24.04	20.68	20.34	22.95	20.88	16.52	19.60	24.36	25.94	26.43	26.52

WTR YR 1993 MEAN 22.87 HIGH 14.13 APR 2 LOW 26.62 SEP 12,15,25

NJ-WRD WELL NO.37-0205



SUSSEX COUNTY

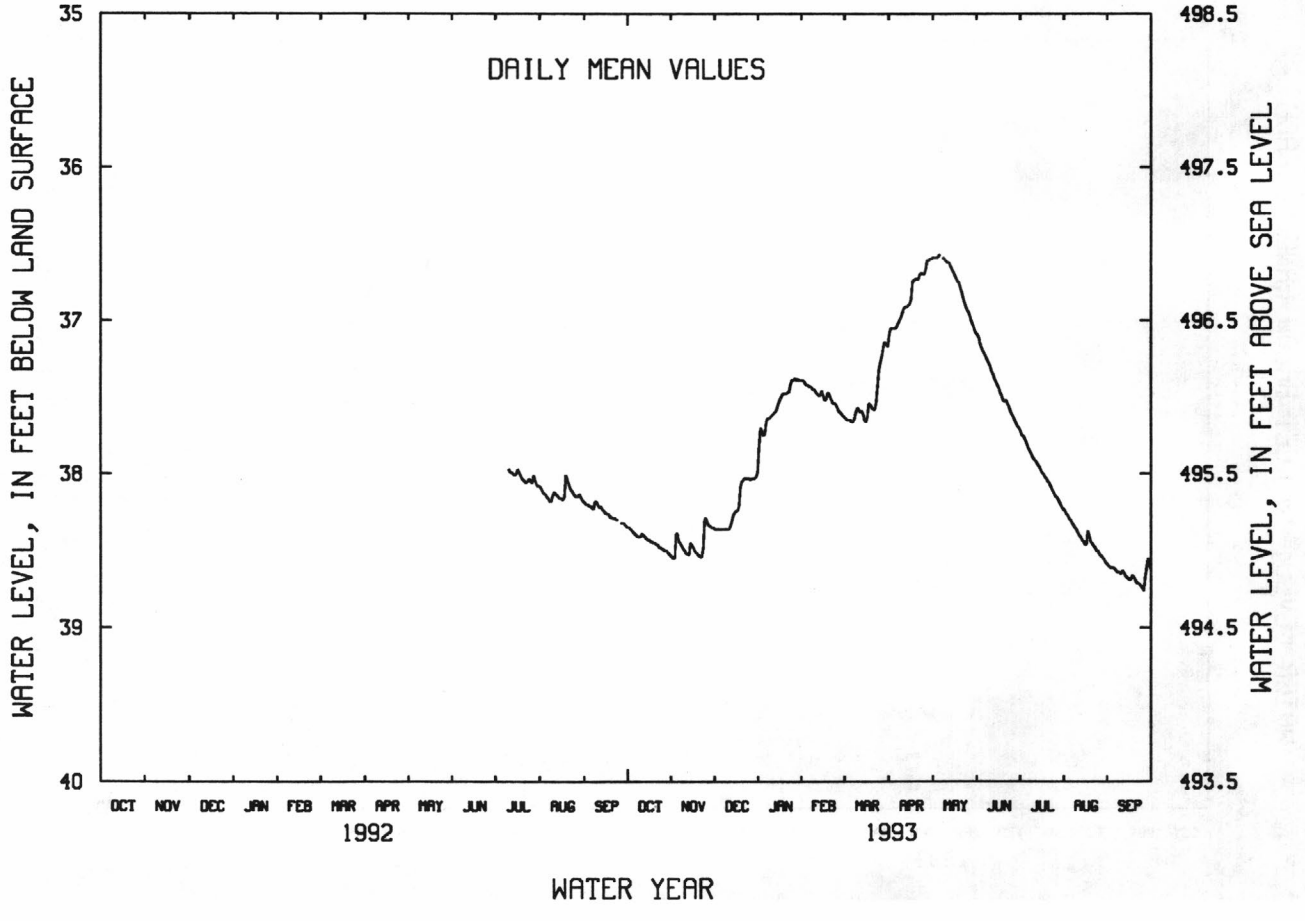
410804074424401. Local I.D., Fairgrounds 7 Obs. NJ-WRD Well Number, 37-0206.
LOCATION.--Lat 41°08'04", long 74°42'44", Hydrologic Unit 02020007, at Sussex County Fairgrounds, Frankford Township.
Owner: State of New Jersey.
AQUIFER.--Stratified drift of Pleistocene age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 4 in., depth 84 ft, screened 64 to 84 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Periodic manual measurements Apr. 1991 to July 1992.
DATUM.--Land surface is 533.5 ft above sea level.
Measuring point: Top of recorder shelf, 3.90 ft above land surface.
PERIOD OF RECORD.--Apr. 1991 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 36.57 ft below land surface, May. 5-6, 1993; lowest, 38.76 ft below land surface, Sept. 25, 1993.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	38.39	38.44	38.36	37.66	37.43	37.65	37.05	36.58	37.20	37.79	38.30	38.62
10	38.39	38.52	38.36	37.61	37.48	37.57	36.95	36.61	37.30	37.90	38.38	38.63
15	38.43	38.48	38.24	37.51	37.52	37.65	36.89	36.68	37.42	37.97	38.46	38.69
20	38.46	38.54	38.04	37.47	37.52	37.57	36.73	36.78	37.53	38.05	38.45	38.71
25	38.49	38.32	38.04	37.38	37.59	37.32	36.70	36.93	37.61	38.14	38.52	38.76
EOM	38.54	38.36	37.82	37.39	37.62	37.17	36.60	37.08	37.70	38.23	38.59	38.62
MEAN	38.44	38.45	38.20	37.52	37.50	37.51	36.84	36.76	37.42	37.98	38.43	38.66

WTR YR 1993 MEAN 37.81 HIGH 36.57 MAY 5-6 LOW 38.76 SEP 25

NJ-WRD WELL NO.37-0206



SUSSEX COUNTY

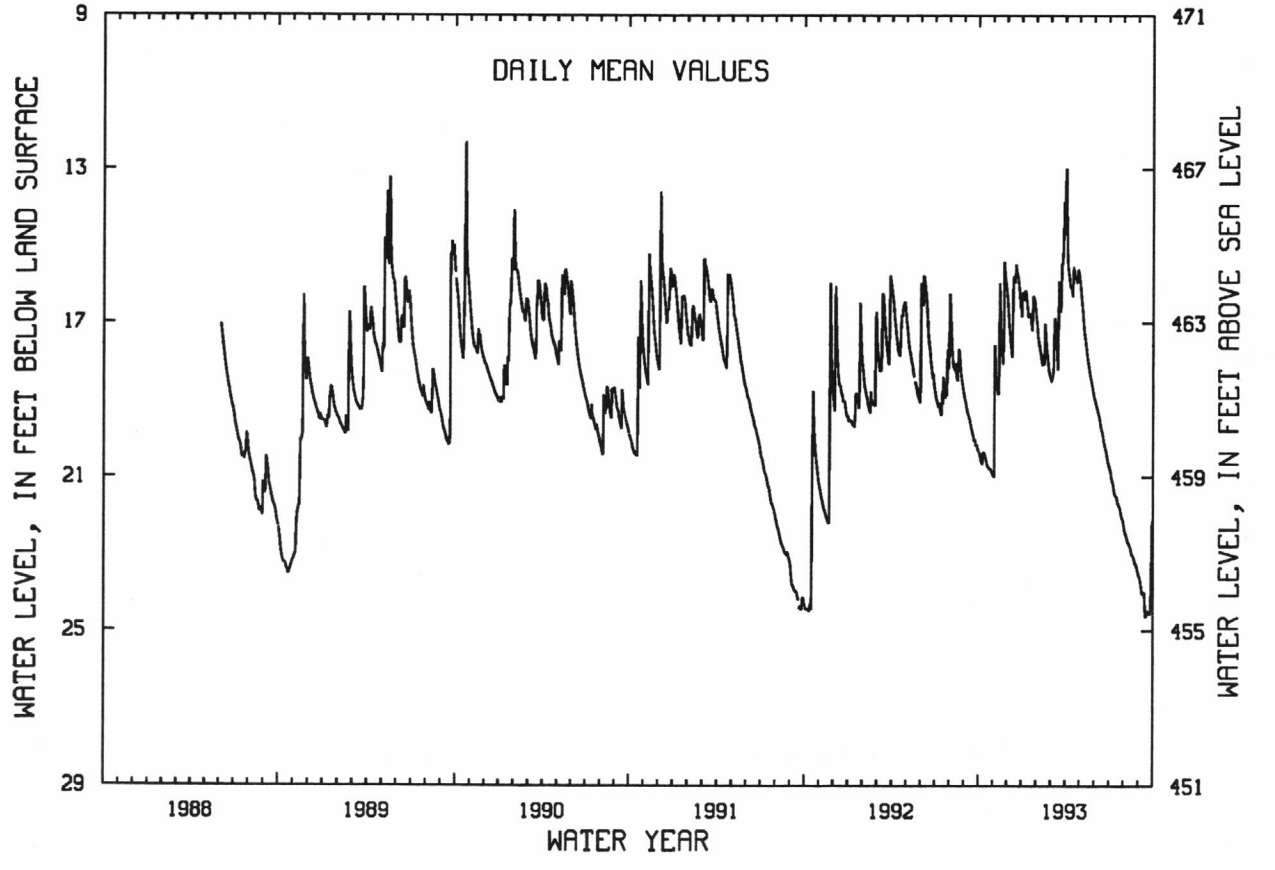
410914074540401. Local I.D., Taylor Obs. NJ-WRD Well Number, 37-0202.
LOCATION.--Lat 41°09'14", long 74°53'04", Hydrologic Unit 02040104, near Walpack Center, Delaware Water Gap National Recreation Area, Walpack Township.
Owner: National Park Service.
AQUIFER.--Bossardville Limestone of Silurian age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 95 ft, open hole 42 to 95 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land surface is 480 ft above sea level, from topographic map.
Measuring point: Top of recorder shelf, 3.00 ft above land surface.
PERIOD OF RECORD.--June 1988 to current year. Records for 1988 are unpublished and are available in files of the New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 11.28 ft below land surface, Oct. 20, 1989; lowest, 24.66 ft below land surface, Sept. 16-17, 1993.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	20.56	18.30	17.25	16.32	17.57	18.39	15.43	16.45	19.17	20.99	22.49	23.77
10	20.40	18.83	17.88	16.45	17.96	16.87	16.04	17.23	19.42	21.26	22.69	24.01
15	20.50	16.78	15.85	16.82	18.07	18.06	16.31	17.71	19.75	21.49	22.86	24.62
20	20.73	17.99	15.65	17.10	17.55	16.43	15.73	18.15	20.09	21.70	23.05	24.55
25	20.79	15.79	16.13	16.37	18.21	15.48	15.93	18.53	20.37	21.91	23.26	24.55
EOM	20.95	16.35	16.24	16.97	18.38	14.61	15.78	18.93	20.68	22.18	23.54	22.14
MEAN	20.63	17.55	16.46	16.59	17.77	16.77	15.58	17.66	19.80	21.50	22.91	23.97

WTR YR 1993 MEAN 18.95 HIGH 12.39 APR 1 LOW 24.66 SEP 16-17

NJ-WRD WELL NO.37-0202



SUSSEX COUNTY

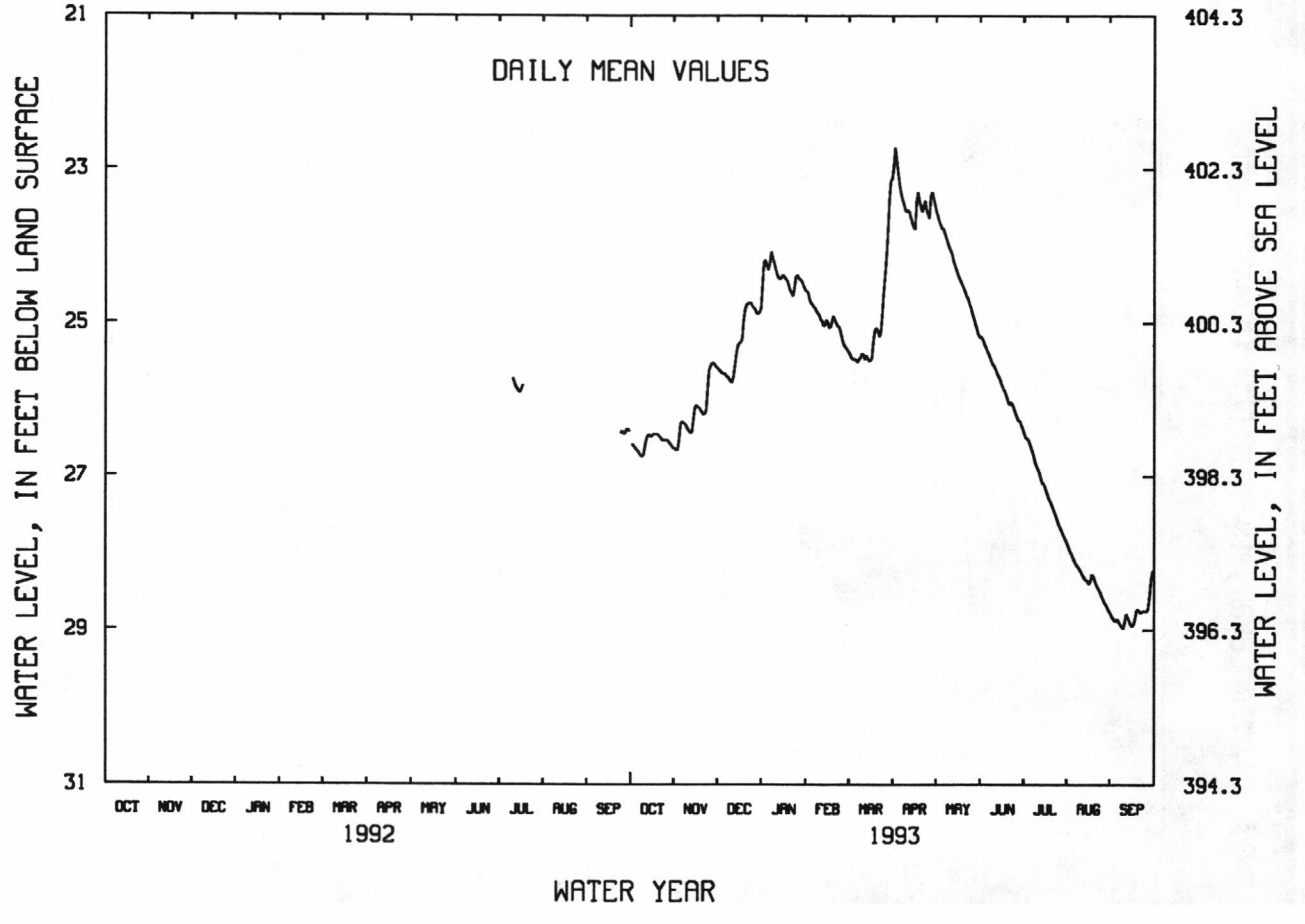
410928074522801. Local I.D., Walpack Twp. 4 Obs. NJ-WRD Well Number, 37-0207.
LOCATION.--Lat 41°09'28", long 74°52'28", Hydrologic Unit 02040104, off Main St., about 800 ft east of Flat Brook, Walpack Center, Walpack Township.
Owner: State of New Jersey.
AQUIFER.--Stratified drift of Pleistocene age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 4 in., depth 55 ft, screened 46 to 55 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Periodic manual measurements Apr. 1991 to July 1992.
DATUM.--Land surface is 425.3 ft above sea level.
Measuring point: Top of recorder shelf, 3.40 ft above land surface.
PERIOD OF RECORD.--April 1991 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 22.69 ft below land surface, Apr. 2, 1993; lowest, 28.98 ft below land surface, Sept. 9-10, 1993.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	26.67	26.29	25.66	24.23	24.80	25.47	23.19	23.77	25.35	26.56	28.07	28.86
10	26.60	26.41	25.77	24.37	24.97	25.40	23.55	24.02	25.56	26.86	28.23	28.90
15	26.47	26.07	25.26	24.40	25.06	25.49	23.75	24.31	25.79	27.09	28.37	28.95
20	26.48	26.19	24.77	24.61	25.00	25.06	23.48	24.55	26.04	27.33	28.35	28.76
25	26.53	25.56	24.80	24.42	25.26	24.62	23.58	24.80	26.18	27.59	28.56	28.76
EOM	26.64	25.59	24.52	24.59	25.35	23.13	23.46	25.18	26.38	27.85	28.78	28.23
MEAN	26.56	26.11	25.21	24.40	24.99	25.00	23.41	24.35	25.79	27.14	28.34	28.78

WTR YR 1993 MEAN 25.85 HIGH 22.69 APR 2 LOW 28.98 SEP 9-10

NJ-WRD WELL NO.37-0207



UNION COUNTY

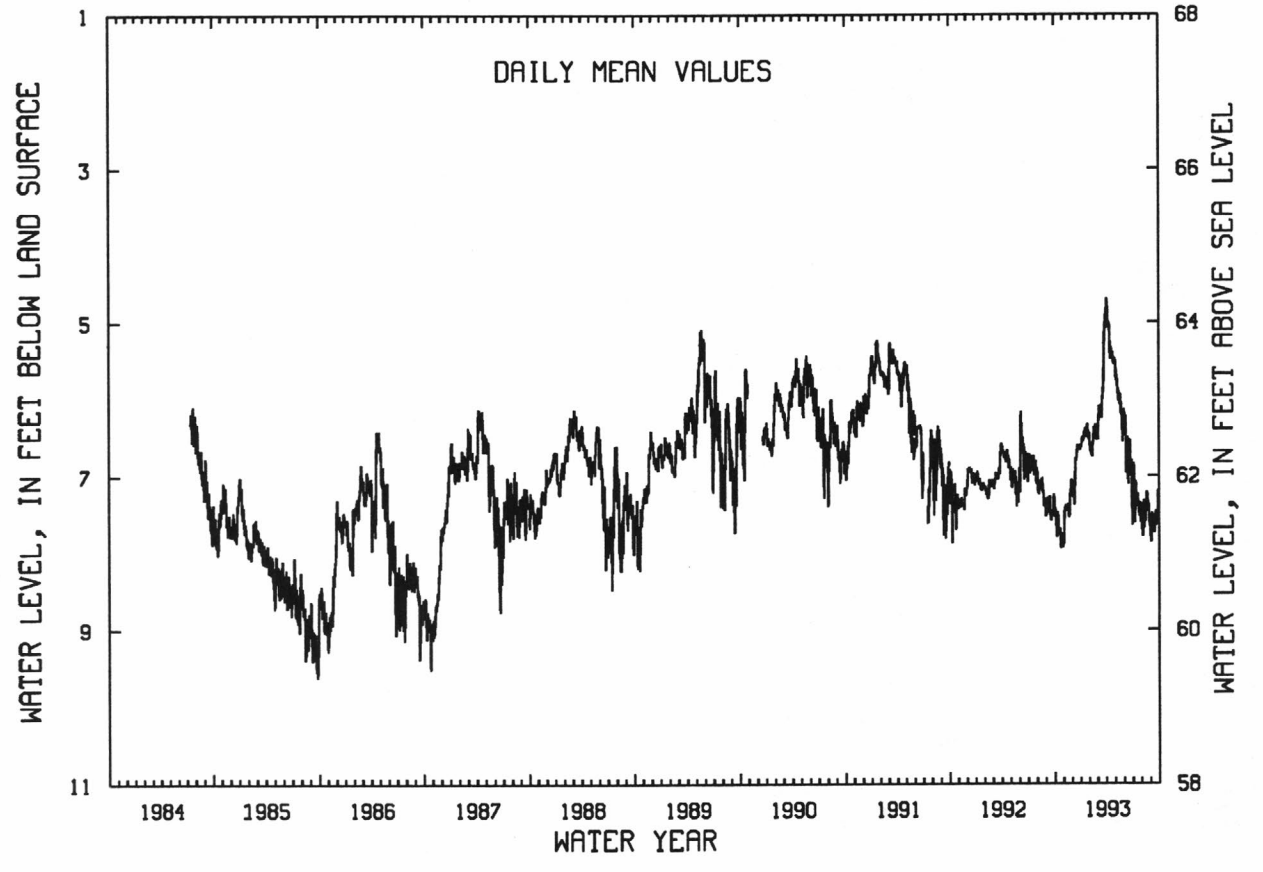
404106074171901. Local I.D., Union County Park Obs. NJ-WRD Well Number, 39-0119.
LOCATION.--Lat 40°41'06", long 74°17'19", Hydrologic Unit 02030104, at Galloping Hill Golf Course, Kenilworth Borough.
Owner: Union County Park Commission.
AQUIFER.--Passaic Formation of Triassic-Jurassic age.
WELL CHARACTERISTICS.--Drilled artesian observation well, depth 290 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land surface is 69.00 ft above sea level.
Measuring point: Top of recorder shelf, 2.30 ft above land surface.
REMARKS.--Water level affected by nearby pumping of irrigation well.
PERIOD OF RECORD.--June 1943 to current year. Records for 1975 to 1983 are unpublished and are available in files of the New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.06 ft below land surface, June 2, 1952; lowest, 16.05 ft below land surface, June 29, 1966.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.51	7.43	7.26	6.52	6.67	6.28	4.81	5.61	6.27	6.89	7.78	7.50
10	7.59	7.43	7.37	6.55	6.73	6.16	5.01	5.84	6.50	7.27	7.67	7.52
15	7.68	7.39	6.77	6.43	6.54	6.19	5.47	6.01	6.96	7.25	7.50	7.63
20	7.74	7.54	6.60	6.46	6.40	5.95	5.45	5.95	6.70	7.34	7.22	7.65
25	7.74	7.23	6.63	6.33	6.52	5.22	5.46	6.22	6.89	7.34	7.37	7.53
EOM	7.91	7.07	6.60	6.44	6.51	5.08	5.48	6.22	7.64	7.60	7.52	7.24
MEAN	7.71	7.39	6.88	6.47	6.55	5.89	5.22	5.98	6.70	7.32	7.47	7.53

WTR YR 1993 MEAN 6.76 HIGH 4.68 APR 2 LOW 8.58 OCT 22

NJ-WRD WELL NO.39-0119



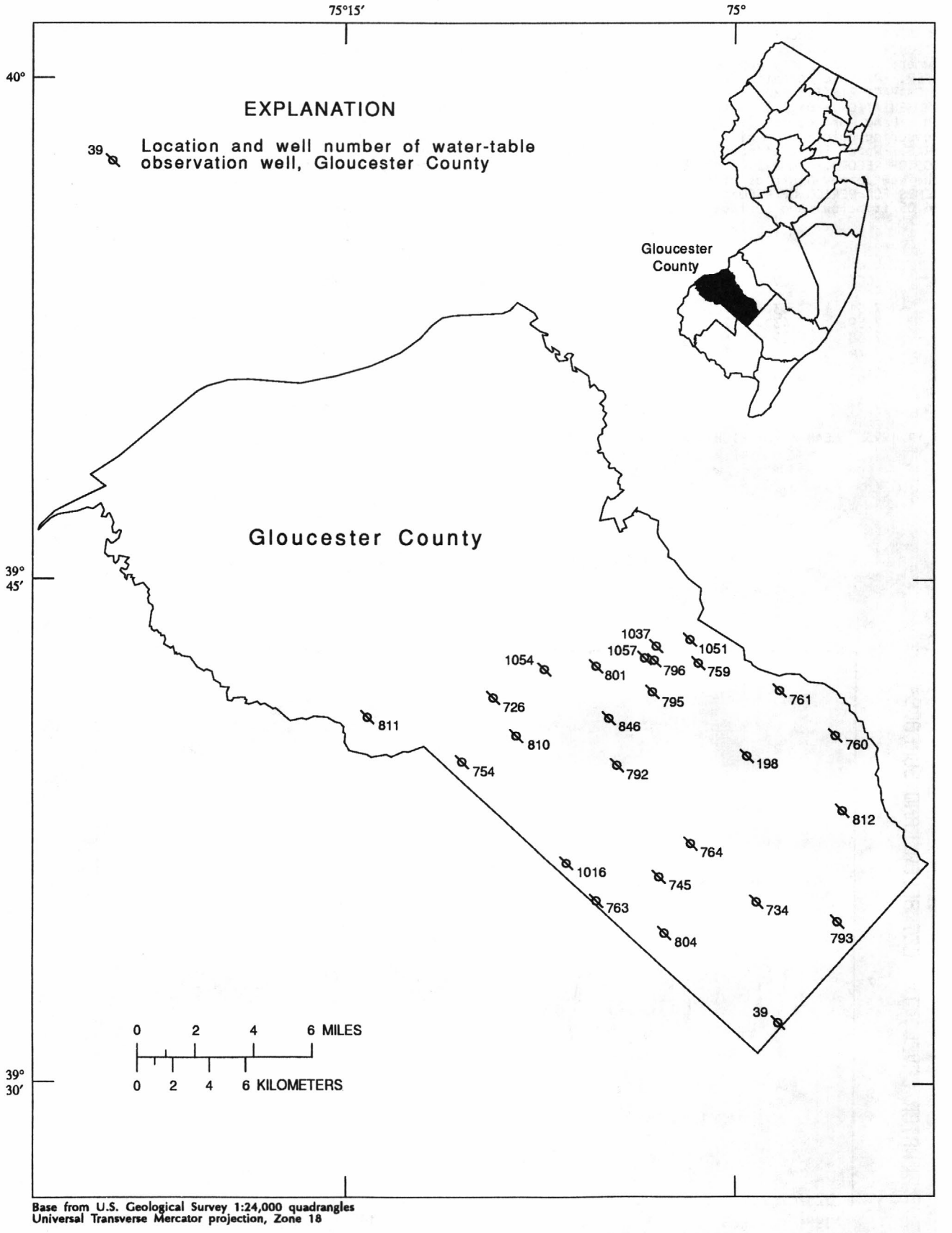


Figure 13.--Locations of ground-water wells in the Gloucester County water-table network.

Table 1.--Water levels at manually measured wells in the Gloucester County water-table network

	NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	PERIOD OF RECORD	ALTITUDE OF LAND SURFACE (FT.)	SCREEN INTERVAL (FT.*)	DATE OF MEASUREMENT	WATER LEVEL (FT.*)
	15-0039	CIFALOGLIO, SYLVESTER	1	393148	745822	1986-P	110	75-123	10-28-92 5-25-93	10.85 7.19
	15-0198	LESHAY BROS	1965 WELL	393944	745934	1986-P	126	93-141	10-27-92 5-25-93	11.05 8.11
†	15-0726	SMITH, JOHN	AURA ORCHARDS	394130	750921	1986-P	140	52-62	10-27-92 5-25-93	13.72 8.62
†	15-0734	DASE, DENNIS	DASE 1	393523	745912	1986-P	138	100-110	10-27-92 5-25-93	21.24 15.93
	15-0745	FRANKLIN TWP SANITARY LANDFILL	DUMP NORTH	393608	750257	1986-P	124	15-35	10-27-92 5-25-93	25.62 21.75
	15-0754	DEAN, GEORGE	DEAN 1	393934	751033	1986-P	143	48-58	10-27-92 5-25-93	16.54 9.06
	15-0759	MESIANO, JIM	MESIANO 1	394232	750126	1986-P	159	130-135	10-27-92 5-25-93	40.50 36.18
	15-0760	WILLIAMS, RONALD	RW 1	394020	745611	1986-P	115	25-30	10-27-92 5-25-93	16.77 12.94
	15-0761	LUCAS, HARRY	LUCAS IRR 1	394142	745818	1986-P	130	33-38	10-27-92 5-25-93	14.40 11.96
	15-0763	MOORE, EAYRE	MOORE 2	393525	750521	1986-P	109	55-60	10-27-92 5-25-93	21.45 17.83
	15-0764	SCAFONIS, FELIX	SCAFONIS D	393708	750143	1986-P	130	44-49	10-27-92 5-25-93	21.76 16.58
	15-0792	THE PLANT PLACE INC	PP 1	393928	750434	1986-P	110	65-75	10-27-92 5-25-93	13.17 10.80
	15-0793	FERRUCCI, MARY	FERRUCCI 10	393448	745606	1986-P	110	100-150	10-27-92 5-25-93	16.72 13.77
	15-0795	SMITH, FRED	SMITH-1965	394140	750312	1986-P	150	90-100	10-27-92 5-25-93	16.06 11.38
	15-0796	SMITH, FRED	SMITH 5	394238	750308	1986-P	160	85-90	10-27-92 5-25-93	20.53 16.24

Altitudes of land surface are from USGS topographic maps.

* - below land surface.

† - a hydrograph for this site is located at the end of table 1.

Aquifer unit: 121CKKD - Kirkwood-Cohansey aquifer system

Table 1.--Water levels at manually measured wells in the Gloucester County water-table network--Continued

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	PERIOD OF RECORD	ALTITUDE OF LAND SURFACE (FT.)	SCREEN INTERVAL (FT.*)	DATE OF MEASUREMENT	WATER LEVEL (FT.*)
15-0801	CHILLARI, JOE	CHILLARI 1	394227	750522	1986-P	144	80-85	10-27-92	16.65
								5-25-93	12.78
15-0804	FRANKLIN TWP BOARD OF EDUCATION	MALAGA 1	393428	750244	1986-P	110	95-100	10-27-92	30.93
								5-25-93	29.30
15-0810	ELK TWP MUA	ELK 1	394021	750827	1986-P	144	58-63	10-27-92	16.40
								5-25-93	12.57
15-0811	SHOEMAKER, G	SHOEMAKER 1	394055	751412	1986-P	140	27-32	10-27-92	21.04
								5-25-93	16.87
15-0812	CORONA PUMPS	CORONA 1	393805	745554	1986-P	123	100-110	10-27-92	28.83
								5-25-93	26.00
15-0846	US GEOLOGICAL SURVEY	CARPENTER 126	394053	750453	1987-P	126	9-10	10-27-92	7.35
								5-25-93	[1]
15-1016	DUFFIELD, CLAUDE	DUFFIELD 2	393633	750630	1986-P	129	50-60	10-27-92	26.41
								5-25-93	[2]
15-1037	DILLNER, PETER	FRIMAIR IRR	394303	750303	1989-P	150	72-77	10-27-92	20.74
								5-25-93	16.74
15-1051	US GEOLOGICAL SURVEY	WTMUA OBS-1 SHALLOW	394314	750145	1991-P	155	22-27	5-25-93	10.57
15-1054	US GEOLOGICAL SURVEY	GSC OBS-1 SHALLOW	394221	750722	1991-P	155	31-36	5-25-93	19.44
15-1057	US GEOLOGICAL SURVEY	TPE OBS-1 SHALLOW	394242	750330	1991-P	152	22-27	5-25-93	14.56

Altitudes of land surface are from USGS topographic maps

* - below land surface.

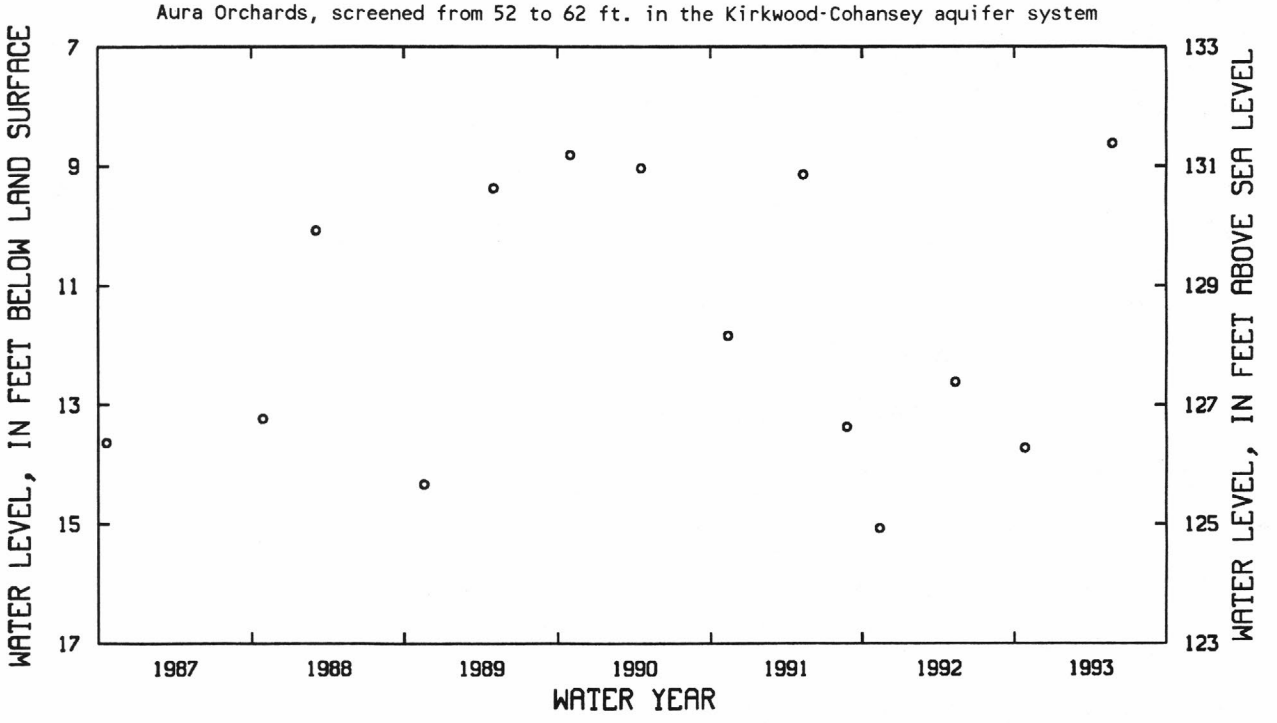
[1] - Could not locate well (assumed destroyed).

[2] - Well found sealed with cement.

Aquifer unit: 121CKKD - Kirkwood-Cohansey aquifer system

NJ-WRD WELL NO. 15-0726

Aura Orchards, screened from 52 to 62 ft. in the Kirkwood-Cohansey aquifer system



NJ-WRD WELL NO. 15-0734

Dase 1, screened from 100 to 110 ft. in the Kirkwood-Cohansey aquifer system

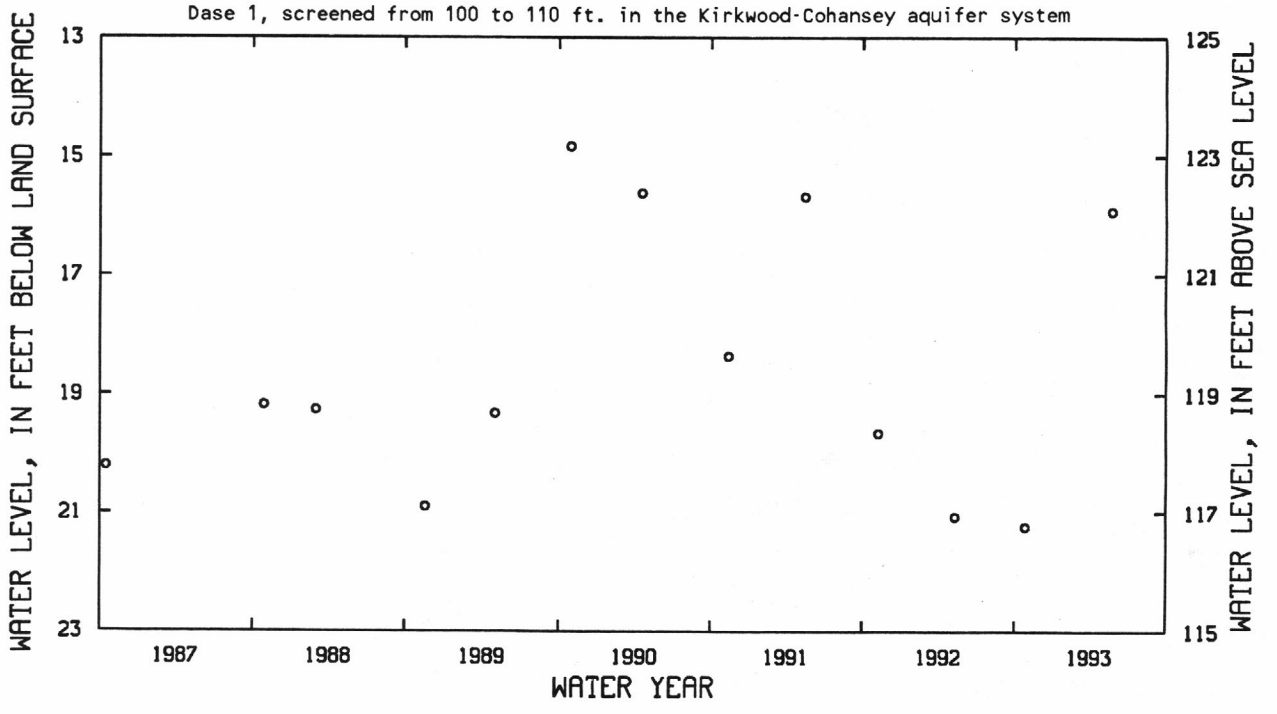


Table 2.--Water levels at manually measured observation wells

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	AQUIFER UNIT	PERIOD OF RECORD	ALTITUDE OF LAND SURFACE (FT.)	SCREEN OR OPEN INTERVAL (FT.*)	DATE OF MEASUREMENT	WATER LEVEL (FT.*)
01-702	US GEOLOGICAL SURVEY	BURKE AVE TW OBS	392032	743008	122KRKDL	1985-P	5	740-750	11- 9-92	94.49
									1-14-93	86.04
									3-22-93	83.59
									6-15-93	99.73
									8-31-93	116.80
†01-775	ATLANTIC CITY MUA	FAA INTERMEDIATE OBS	392639	743232	121CKKD	1985-P	38.1	132-182	11- 9-92	31.56
									1-14-93	27.53
									3-22-93	30.35
									6-15-93	31.74
									8-31-93	30.86
†01-776	ATLANTIC CITY MUA	FAA SHALLOW OBS	392639	743232	121CKKD	1985-P	38.1	73- 93	11- 9-92	20.25
									1-14-93	19.17
									3-22-93	18.46
									6-15-93	19.06
									8-31-93	19.90
03-289	STATE OF NJ - NJGS	SADDLE RIVER 17 OBS	410155	740602	227PSSC	1991-P	148.9	165-175	4-29-93	-1.87
									8-16-93	2.89
05-063	WILLINGBORO MUA	WILLINGBORO 1 OBS	400213	745108	211MRPAM	1966-P	45.45	284-294	4- 8-93	65.44
									9-10-93	69.69
05-259	US GEOLOGICAL SURVEY	MEDFORD 2 OBS	395524	745025	211EGLS	1963-P	72.92	253-263	11-23-92	48.62
									1-29-93	47.93
									3-25-93	47.54
									6-24-93	48.85
									8-26-93	49.76
†05-274	DENTON VACUUM INC	CAMPBELL 1 OBS	395841	745905	211MRPAL	1972-P	40	241-262	4- 8-93	68.65
									9-10-93	70.77
05-407	US GEOLOGICAL SURVEY	ATSION 1 OBS	394422	744309	124PNPN	1963-P	46.76	240-260	4-27-93	-4.92
									9-15-93	-4.10
05-408	US GEOLOGICAL SURVEY	ATSION 2 OBS	394422	744309	121CKKD	1963-P	47.52	63- 65	11-23-92	3.98
									12-21-92	2.94
									1-27-93	3.42
									2-24-93	3.10
									3-25-93	2.45
									4-27-93	2.78
									5-24-93	3.56
									6-30-93	4.78
									7-28-93	5.47
									8-31-93	5.12
									9-15-93	5.48
									9-28-93	5.30
05-409	US GEOLOGICAL SURVEY	ATSION 3 OBS	394422	744309	121CKKD	1963-P	47.13	14- 17	11-23-92	6.64
									12-21-92	5.38
									1-27-93	5.71
									2-24-93	5.50
									3-25-93	4.39
									4-27-93	4.70
									5-24-93	5.54
									6-30-93	6.60
									7-28-93	7.41
									8-31-93	7.83
									9-15-93	8.04
									9-28-93	8.15

Aquifer unit:
- 121CKKD - Kirkwood Cohansey aquifer system
- 122KRKDL - Atlantic City 800-foot sand of the Kirkwood Formation
- 124PNPN - Piney Point aquifer
- 211EGLS - Englishtown aquifer system
- 211MRPAM - Middle Potomac-Raritan-Magothy aquifer
- 211MRPAL - Lower Potomac-Raritan-Magothy aquifer
- 227PSSC - Passaic Formation

* - below land surface. Water levels above land surface are listed as negative values.

† - a hydrograph for this site is located at the end of table 2.

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	AQUIFER UNIT	PERIOD OF RECORD	ALTITUDE OF LAND SURFACE (FT.)	SCREEN INTERVAL (FT.*)	DATE OF MEASUREMENT	WATER LEVEL (FT.*)
05-570	US GEOLOGICAL SURVEY	MOUNT OBS	394106	743623	121CKKD	1955-P	63.24	25**	12- 1-92	14.80
									12-21-92	14.09
									1-28-93	13.08
									2-24-93	12.95
									3-25-93	10.73
									4-28-93	9.50
									5-25-93	9.99
									6-29-93	11.07
									7-28-93	12.35
									8-31-93	13.50
									9-28-93	14.13
05-628	US GEOLOGICAL SURVEY	PENN SF SHALLOW OBS	394452	742819	121CKKD	1936-P	78.78	12**	11-20-92	2.16
									12-23-92	1.23
									1-28-93	1.47
									2-25-93	1.26
									3-23-93	0.78
									4-30-93	1.19
									5-24-93	1.62
									6-28-93	3.04
									7-27-93	4.31
									8-30-93	3.18
									9-28-93	4.30
05-630	US GEOLOGICAL SURVEY	PENN SF DEEP OBS	394513	742806	121CKKD	1963-P	104.30	41**	11-20-92	27.21
									12-23-92	26.87
									1-28-93	26.22
									2-25-93	26.26
									3-23-93	25.69
									4-30-93	23.84
									5-24-93	24.64
									6-28-93	25.92
									7-27-93	26.91
									8-30-93	27.64
									9-28-93	28.09
†05-676	US GEOLOGICAL SURVEY	COYLE AIRPORT OBS	394914	742546	124PNPN	1962-P	199.19	530-540	4- 6-93	79.15
									9- 3-93	79.40
†07-118	NJ-AMERICAN WATER CO	HUTTON HILL 2 OBS	395229	745712	211MLRW	1967-P	157.53	137-147	11-10-92	89.69
									1-20-93	88.67
									3-26-93	87.62
									6-16-93	88.83
									8-11-93	89.69
†07-283	NJ-AMERICAN WATER CO	EGBERT OBS	395246	750434	211MRPAL	1963-P	23.66	445-455	4- 8-93	81.84
									9-10-93	90.58
09-020	US GEOLOGICAL SURVEY	TRAFFIC CIRCLE OBS	385616	745800	112HLBC	1967-P	9.12	15- 20	4-19-93	3.69
									9-30-93	5.36
†09-048	US GEOLOGICAL SURVEY	CANAL 5 OBS	385748	745533	121CNSY	1957-P	17.48	242-252	3- 3-93	31.00
									8-25-93	54.73
†09-060	US GEOLOGICAL SURVEY	AIRPORT 7 OBS	390056	745426	121CNSY	1963-P	13.11	242-257	4-19-93	23.98
									8-25-93	37.35
09-080	US GEOLOGICAL SURVEY	CAPE MAY 42 OBS	390213	745056	121CNSY	1957-P	13.67	242-252	4-19-93	14.89
									8-25-93	23.08
09-081	US GEOLOGICAL SURVEY	CAPE MAY 23 OBS	390211	745055	112HLBC	1957-P	14.90	23- 26	4-19-93	7.06
									8-25-93	10.35

Aquifer unit:
112HLBC - Holly Beach water-bearing zone
121CKKD - Kirkwood-Cohansey aquifer system
121CNSY - Cohansey Sand
124PNPN - Piney Point aquifer

* - below land surface.

** - total depth of well (extent of screen or open interval is not known).

† - a hydrograph for this site is located at the end of table 2.

Table 2.--Water levels at manually measured observation wells--Continued

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	AQUIFER UNIT	PERIOD OF RECORD	ALTITUDE OF LAND SURFACE (FT.)	SCREEN OR OPEN INTERVAL (FT.*)	DATE OF MEASUREMENT	WATER LEVEL (FT.*)
11-043	CUMBERLAND COUNTY	VOCATIONAL SCHOOL 1 OBS	392732	750929	121CKKD	1972-P	82.14	133-138	11-23-92	8.57
									1-28-93	7.32
									3-30-93	5.35
									6-17-93	5.55
									8- 3-93	6.48
†11-044	CUMBERLAND COUNTY	VOCATIONAL SCHOOL 3 OBS	392732	750929	124PNPN	1972-P	81.95	361-376	11-23-92	80.03
									1-28-93	80.14
									3-30-93	79.87
									6-17-93	80.60
									8- 3-93	80.97
11-073	CUMBERLAND COUNTY	SHEPPARDS 2 OBS	392508	751846	121CKKD	1973-P	37.35	35- 40	6-17-93	4.98
									9- 9-93	5.20
†11-097	CUMBERLAND COUNTY	JONES ISLAND 1 OBS	391829	751208	121CKKD	1972-P	10.10	166-171	11-23-92	8.93
									1-28-93	8.70
									3-30-93	8.06
									6-17-93	9.39
									9- 9-93	9.87
11-118	CUMBERLAND COUNTY	HEISLERVILLE 1 OBS	391350	750018	121CKKD	1972-P	6.22	36- 41	4-19-93	3.05
									9-30-93	3.54
11-119	CUMBERLAND COUNTY	HEISLERVILLE 2 OBS	391350	750018	121CKKD	1972-P	5.98	125-135	4-19-93	1.90
									9-30-93	3.15
11-163	CUMBERLAND COUNTY	FAIR GROUNDS 3 OBS	392526	750643	124PNPN	1973-P	80	463-473	6-17-93	76.98
									8- 3-93	77.39
11-237	CUMBERLAND COUNTY	NATURAL AREA 1 OBS	392920	745700	121CKKD	1972-P	88	76- 81	4-19-93	7.44
									8-25-93	10.58
13-013	NJ-AMERICAN WATER CO	CANOE BROOK 30 OBS	404452	742116	112SFDF	1950-P	170	130**	11-19-92	74.03
									4-19-93	70.83
									6-15-93	73.29
									8- 4-93	77.01
†13-014	EAST ORANGE WD	NEUTRAL ZONE OBS	404454	742021	112SFDF	1926-P	179.37	64**	10- 8-92	53.34
									1- 7-93	56.37
									3- 9-93	56.60
									5- 6-93	52.88
									7- 8-93	54.03
									9-24-93	48.36
†13-017	WALSH BROS INC	BALLENTINE 8 OBS	404401	740834	227PSSC	1949-P	12.79	95-875	4-28-93	20.00
									9- 7-93	16.84
13-095	STATE OF NJ	CHRIST CHURCH 2 OBS	404347	741933	112SFDF	1991-P	276.9	180-200	10- 8-92	119.77
									1- 7-93	120.73
									3- 9-93	120.70
									5- 6-93	118.78
									7- 8-93	119.60
									9-24-93	119.49
†15-297	HUNTSMAN CORP	SHELL 6 OBS	394942	751317	211MRPAU	1970-P	20.50	113-118	11- 6-92	32.56
									1- 6-93	31.42
									3-10-93	31.33
									5-10-93	29.30
									7-13-93	32.50
									9-14-93	32.12
#15-727	US GEOLOGICAL SURVEY	STEFKA 3 OBS	394808	751724	211MRPAM	1987-P	5.06	195-205	11- 6-92	13.75
									1- 6-93	11.77
									3-10-93	11.03
									7-15-93	13.47
									9-14-93	14.01

Aquifer unit:
- 112SFDF - Stratified drift
- 121CKKD - Kirkwood-Cohansey aquifer system
- 124PNPN - Piney Point aquifer
- 211MRPAU - Upper Potomac-Raritan-Magothy aquifer
- 211MRPAM - Middle Potomac-Raritan-Magothy aquifer
- 227PSSC - Passaic Formation

* - below land surface.

** - total depth of well (extent of screen or open interval is not known).

† - a hydrograph for this site is available at the end of table 2.

- Water-quality data for this site are available elsewhere in this report.

Table 2.--Water levels at manually measured observation wells--Continued

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	AQUIFER UNIT	PERIOD OF RECORD	ALTITUDE OF LAND SURFACE (FT.)	SCREEN OR OPEN INTERVAL (FT.*)	DATE OF MEASUREMENT	WATER LEVEL (FT.*)
†21-028	STATE OF NJ	CIVIL DEFENSE OBS	401553	745012	231LCKG	1964-P	122.99	33-300	5-19-93	17.83
21-088	US GEOLOGICAL SURVEY	HONEY BRANCH 10 OBS	402128	744613	227PSSC	1968-P	179.50	20-150	5-19-93	26.66
23-194	PERTH AMBOY WD	RUNYON 1 OBS	402536	742018	211FRNG	1934-P	18.30	201-281	4-20-93 9- 2-93	19.43 35.46
23-273	STATE OF NJ	PLAINSBORO POND OBS	401932	743529	211MRPAM	1970-P	76	70- 75	4-20-93 9- 2-93	26.61 28.68
23-291	MONROE TWP MUA	FORSGATE 1 OBS	402109	743013	211FRNG	1965-P	106.79	192-203	4-20-93 9- 2-93	40.31 41.55
23-292	MONROE TWP MUA	FORSGATE 2 OBS	402109	743012	211ODBG	1961-P	106.89	93-104	4-20-93 9- 2-93	33.56 35.14
23-344	SAYREVILLE WD	SWD 2 OBS	402558	742013	211ODBG	1968-P	22.19	31- 37	4-20-93 9- 2-93	3.70 6.38
#23-351	SAYREVILLE WD	SWD 1 OBS	402605	741959	211ODBG	1968-P	35.27	76- 82	4-20-93 9- 2-93	12.88 14.97
†23-365	DUHERNAL WC	DUH SAY 4 OBS	402633	742120	211FRNG	1932-P	5.70	148-160	4-20-93 9- 2-93	10.33 22.94
#23-439	SOUTH RIVER WD	SRWD 2 OBS	402633	742200	211FRNG	1968-P	20.69	121-126	4-20-93 7-28-93 9- 2-93	18.19 33.58 28.95
23-482	AMERICAN CYANAMID CO	TEST 1 OBS	403242	741617	211FRNG	1950-P	11.00	44- 76	4-28-93 9- 7-93	0.48 1.40
†25-250	GORDONS CRNR WC	VILLAGE 215 OBS	401918	741529	211EGLS	1971-P	138.60	185-215	4- 6-93 8-24-93	39.20 49.38
#25-316	STATE OF NJ	SANDY HOOK SP 1	402536	735905	211ODBG	1965-P	10.91	371-397	4-12-93 8- 6-93	9.76 13.96
27-001	US GEOLOGICAL SURVEY	RECREATION FLD OBS	404432	742252	112SFDF	1967-P	218.80	140-150	5- 3-93 9-23-93	77.21 80.28
†27-003	US GEOLOGICAL SURVEY	W B DRIVER 2 OBS	404748	742419	112SFDF	1966-P	178.26	99-108	5- 3-93 9-23-93	27.43 34.06
27-004	US GEOLOGICAL SURVEY	CLEMENS OBS	404816	742359	112SFDF	1966-P	174.91	100-110	5- 3-93 9-23-93	23.54 28.21
27-005	US GEOLOGICAL SURVEY	SANDOZ CHEM CO OBS	404826	742347	112SFDF	1966-P	188.25	113-123	5- 3-93 9-23-93	36.01 40.09
27-006	US GEOLOGICAL SURVEY	GREEN ACRES OBS	404937	742200	112SFDF	1967-P	181	94-104	4-28-93 9-23-93	10.75 14.22
†27-014	US GEOLOGICAL SURVEY	ESSO SIX INCH OBS	404705	742452	112SFDF	1967-P	176	110-120	5- 3-93 9-23-93	14.31 20.92
27-015	MORRISTOWN ARPT	TEST 2 OBS	404743	742522	112SFDF	1960-P	180.60	51- 62	5- 3-93 9-23-93	4.03 6.90
27-017	MADISON BORO WD	MBWD 4 OBS	404508	742402	112SFDF	1958-P	194.90	100**	5- 3-93 9-23-93	29.35 34.18

Aquifer unit:
- 112SFDF - Stratified drift
- 211EGLS - Englishtown aquifer system
- 211ODBG - Old Bridge aquifer, Potomac-Raritan-Magothy aquifer system
- 211FRNG - Farrington aquifer, Potomac-Raritan-Magothy aquifer system
- 211MRPAM - Middle Potomac-Raritan-Magothy aquifer
- 227PSSC - Passaic Formation
- 231LCKG - Lockatong Formation

* - below land surface.

** - total depth of well (extent of screen or open interval is not known).

† - a hydrograph for this site is available at the end of table 2.

- Water-quality data for this site are available elsewhere in this report.

Table 2.--Water levels at manually measured observation wells--Continued

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	AQUIFER UNIT	PERIOD OF RECORD	ALTITUDE OF LAND SURFACE (FT.)	SCREEN OR OPEN INTERVAL (FT.*)	DATE OF MEASUREMENT	WATER LEVEL (FT.*)
27-022	INT PIPE AND CERAMIC	INT PIPE OBS	405209	742638	112SFDF	1963-P	353.05	146-155	4-28-93	75.71
									9-23-93	80.65
27-023	RANDOLPH TWP WD	MT FREEDOM 2 OBS	404921	743356	400PCMB	1964-P	800	11-218	4-27-93	0.00
									9-23-93	1.95
27-1197	STATE OF NJ-NJGS	MADISON 8 OBS	404513	742454	112SFDF	1991-P	246.6	142-161	5- 3-93	74.25
									9-23-93	78.97
29-018	US GEOLOGICAL SURVEY	ISLAND BEACH 2 OBS	394829	740535	124PNPN	1962-P	8.50	468-474	3-23-93	9.03
									6-18-93	8.16
									9-29-93	9.54
#29-020	US GEOLOGICAL SURVEY	ISLAND BEACH 4 OBS	394829	740535	121CKKD	1962-P	8.19	9- 12	3-23-93	3.10
									6-18-93	3.78
									8-10-93	4.26
									9-29-93	4.00
†29-425	US GEOLOGICAL SURVEY	WEBBS MILLS 2 OBS	395322	742252	124PNPN	1962-P	128.27	348**	4- 6-93	8.14
									9- 3-93	9.41
29-513	US GEOLOGICAL SURVEY	GARDEN ST PKY 1 OBS	394744	741418	121CKKD	1962-P	44.25	18- 21	4- 6-93	3.82
									9- 3-93	7.40
†29-514	US GEOLOGICAL SURVEY	GARDEN ST PKY 2 OBS	394744	741418	121CKKD	1962-P	43.82	306-316	4- 6-93	6.23
									9- 3-93	7.78
29-530	PT PLEASANT WD	PPWD 6 OBS	400454	740413	211EGLS	1988-P	20	730-790	4- 6-93	119.00
									9- 3-93	181.61
†33-020	HORNER,EPHRAIM	HORNER OBS	393534	751752	211MLRW	1959-P	76.75	283**	4- 8-93	44.25
									8- 3-93	47.39
†33-348	STATE OF NJ	PENNS GROVE 14 OBS	394317	752619	211MRPAU	1959-P	25.40	18**	4- 8-93	3.32
									9- 9-93	8.74
37-204	STATE OF NJ	SPARTA TWP 6 OBS	410449	743932	112SFDF	1991-P	621.7	123-143	1-14-93	33.33
									3-10-93	33.52
									5- 7-93	32.00
									7-14-93	38.24
									9-22-93	37.38
39-058	SCHWEITZER, P J	SCHWEITZER OBS	404113	741216	227BRCKS	1956-P	28.23	660**	4-28-93	13.69
									9- 7-93	15.68
									9-20-93	15.74
39-102	SCHERING CORP	WHITE LAB 3 OBS	404027	741644	227BRCKS	1952-P	85.22	49-251	1- 7-93	25.19
									4-20-93	20.55
39-115	SCHERING CORP	WHITE LAB 4 OBS	404043	741618	227BRCKS	1952-P	96.20	47-251	1- 7-93	67.20
									4-20-93	48.29
									7-27-93	61.87

Aquifer unit:
- 112SFDF - Stratified drift
- 121CKKD - Kirkwood-Cohansey aquifer system
- 124PNPN - Piney Point aquifer
- 211MLRW - Wenonah-Mount Laurel aquifer
- 211EGLS - Englishtown aquifer system
- 211MRPAU - Upper Potomac-Raritan-Magothy aquifer
- 227BRCKS - Brunswick Group sedimentary rocks
- 400PCMB - Precambrian Erathem

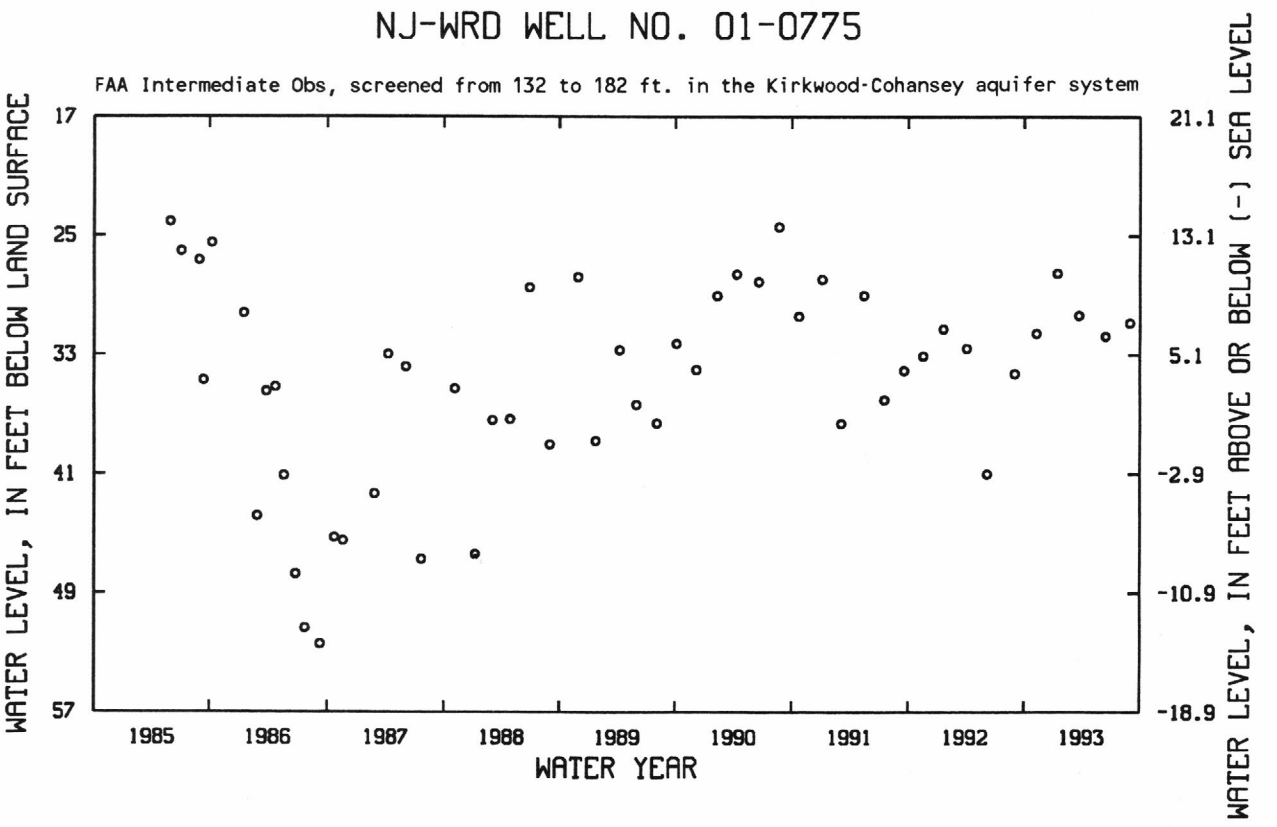
* - below land surface.

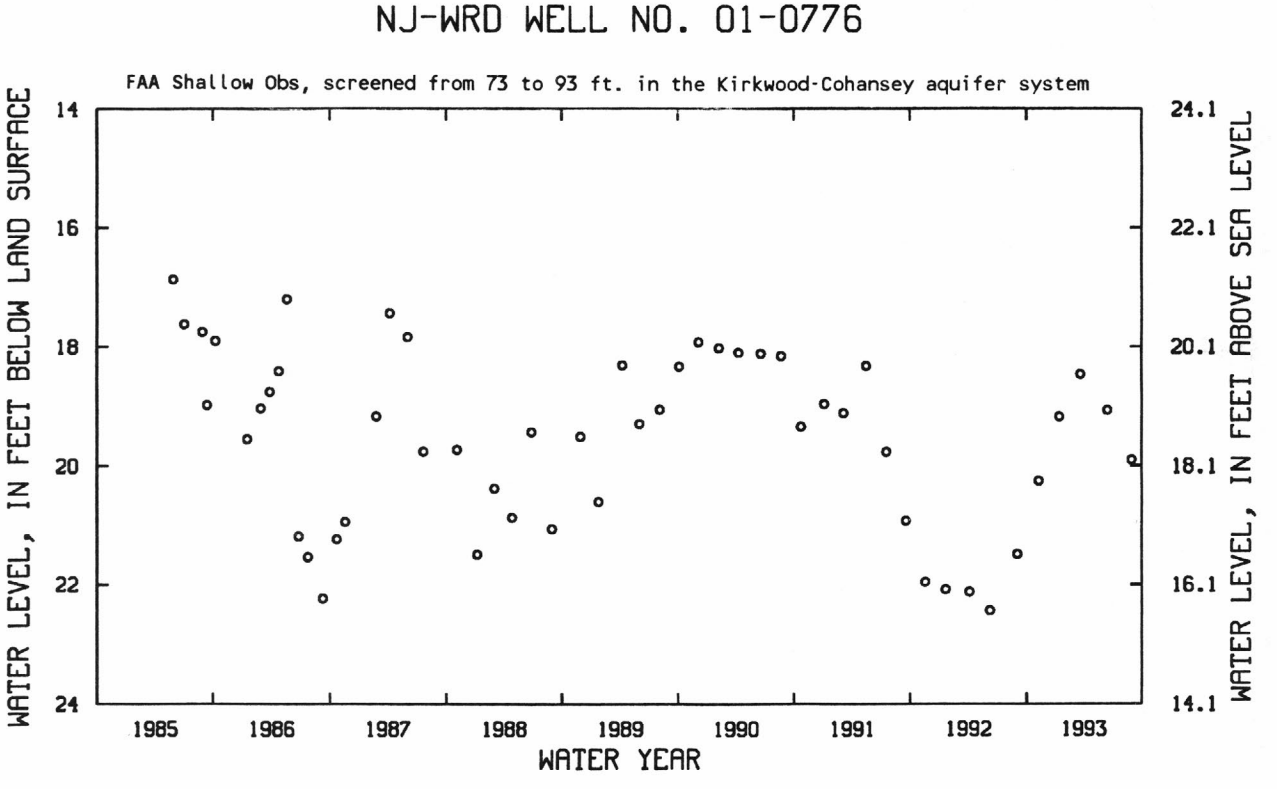
** - total depth of well (extent of screen or open interval is not known).

† - a hydrograph for this site is available at the end of table 2.

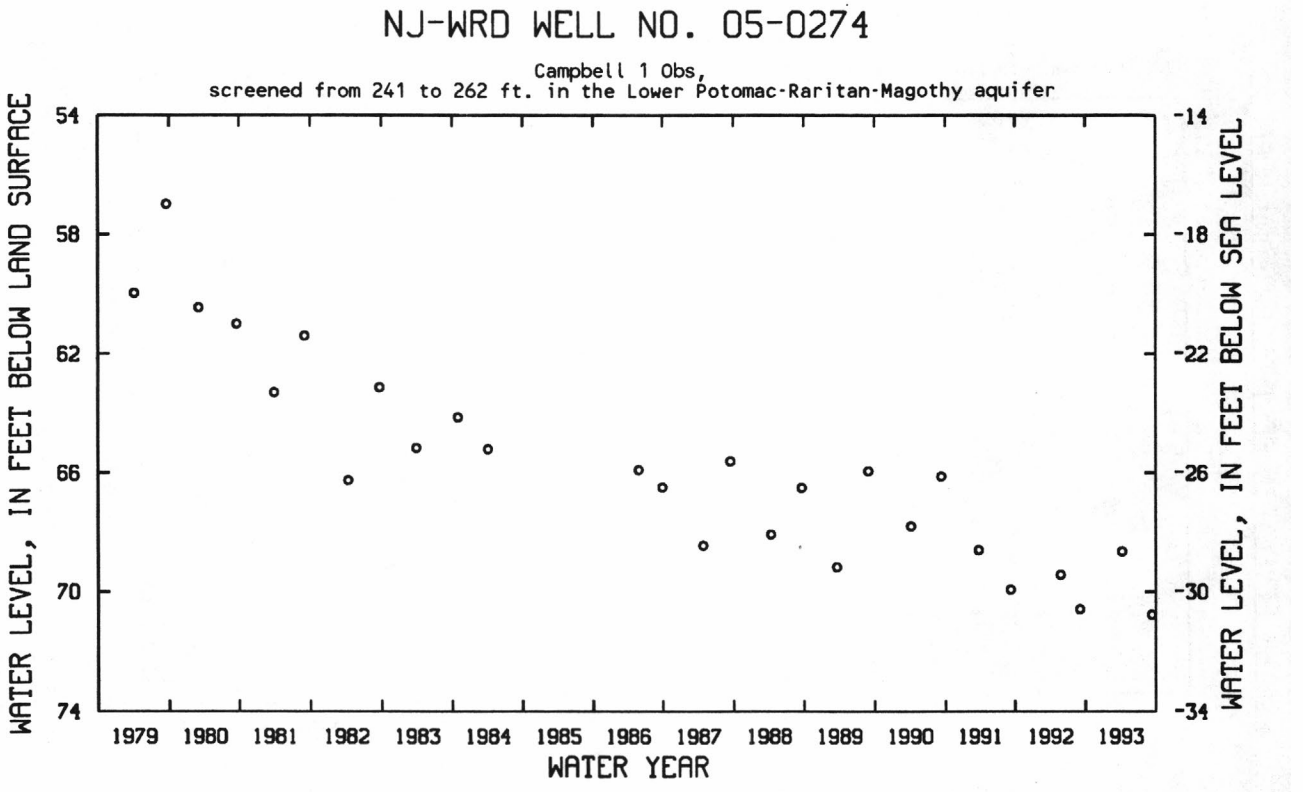
- Water-quality data for this site are available elsewhere in this report.

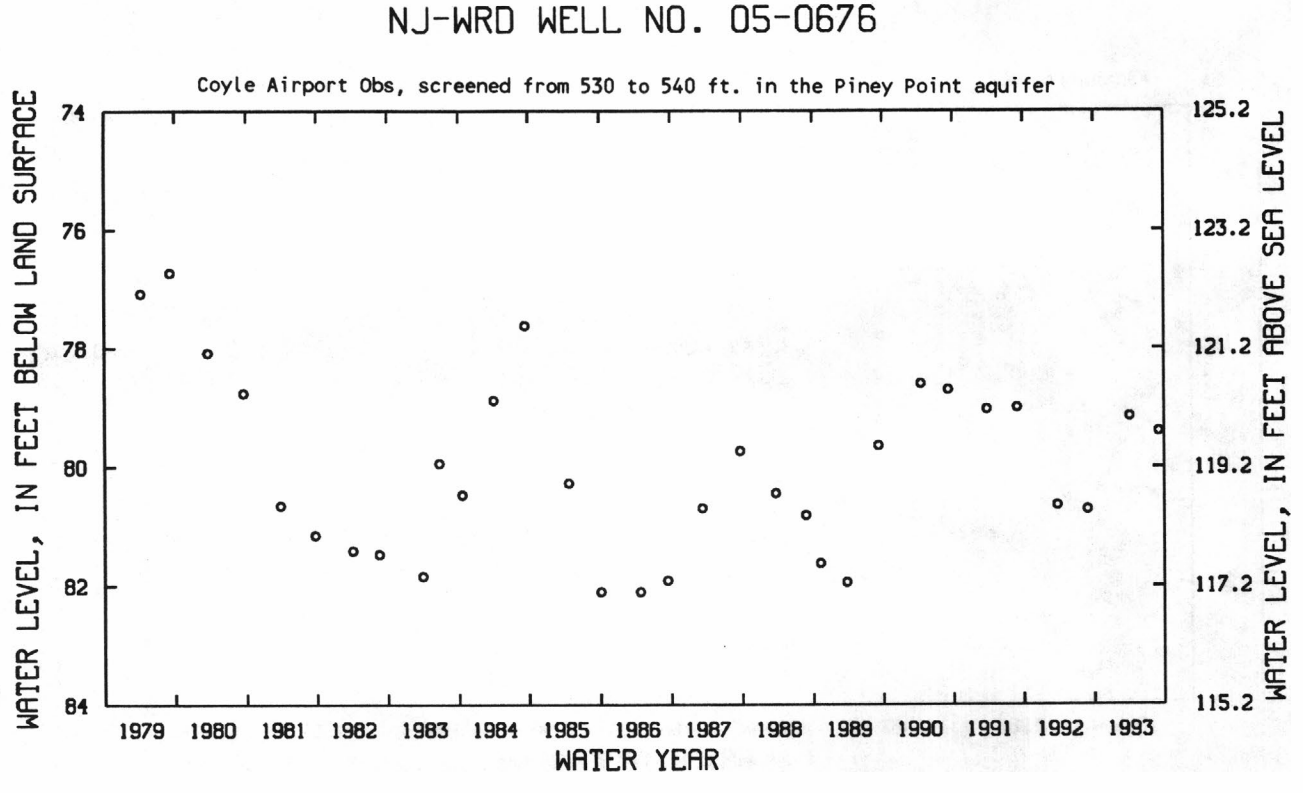
Selected hydrographs showing water levels at manually measured observation wells in Atlantic County.

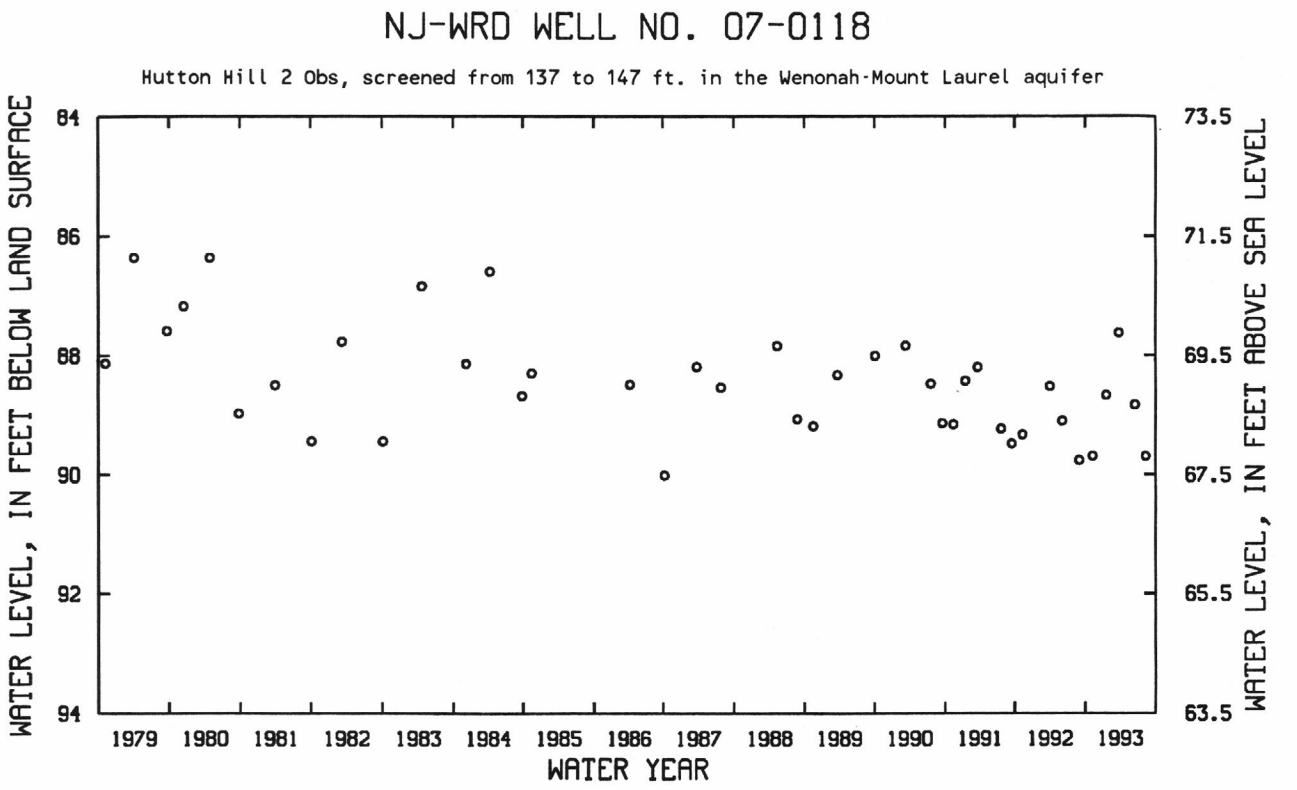


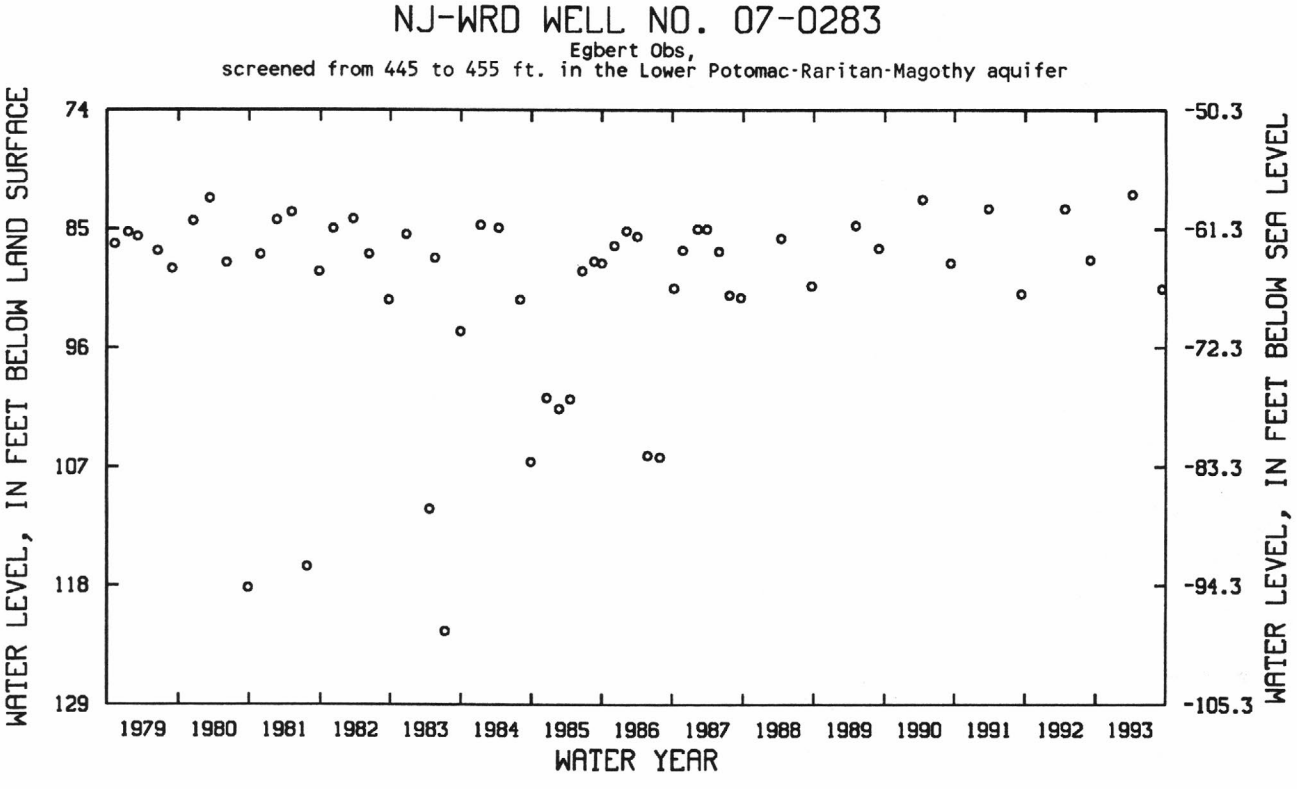


Selected hydrographs showing water levels at manually measured observation wells in Burlington County.

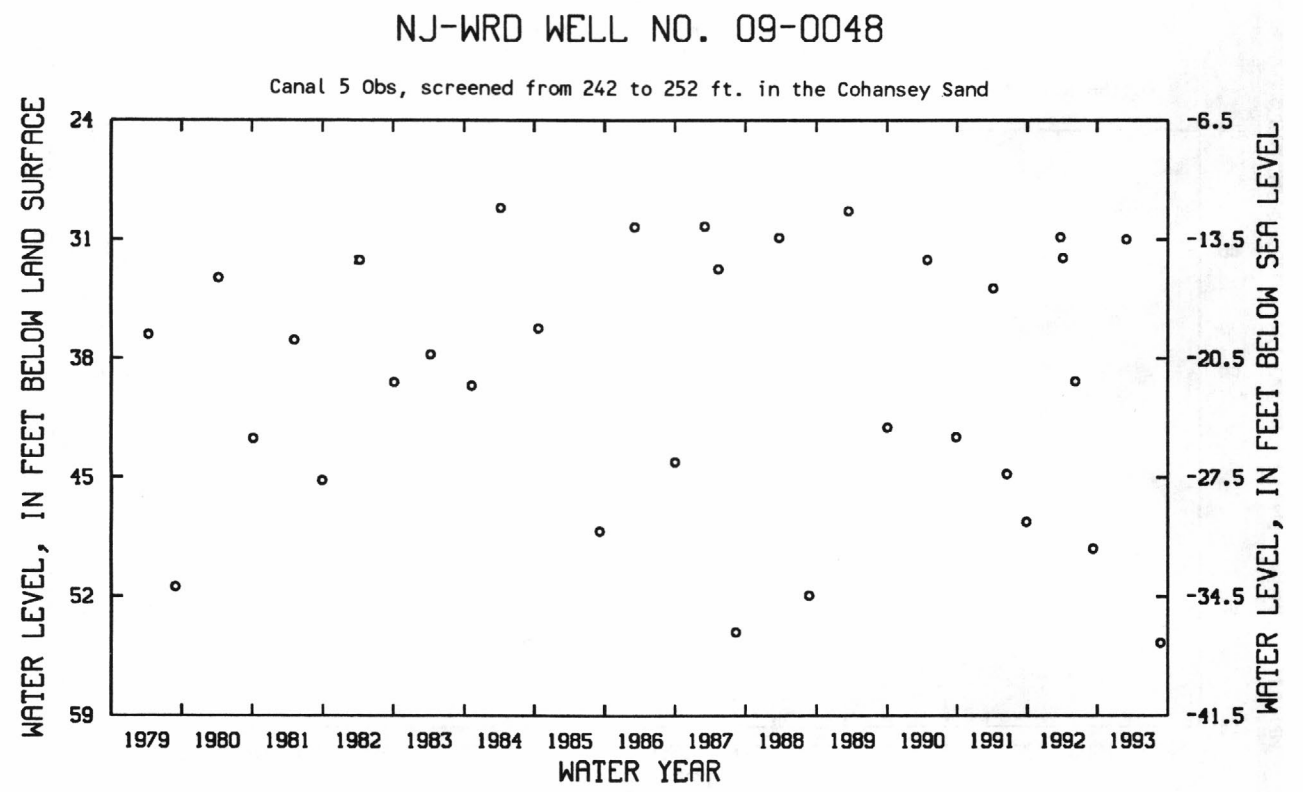


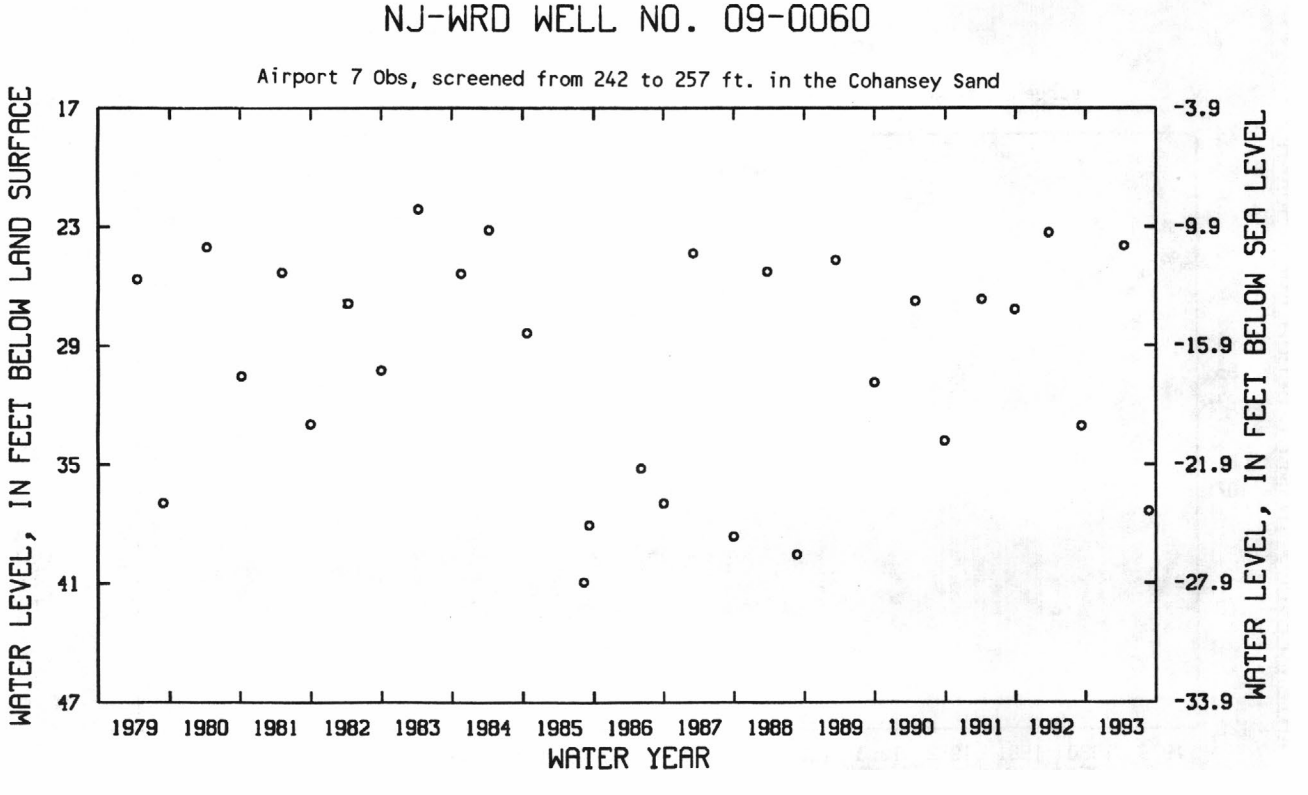


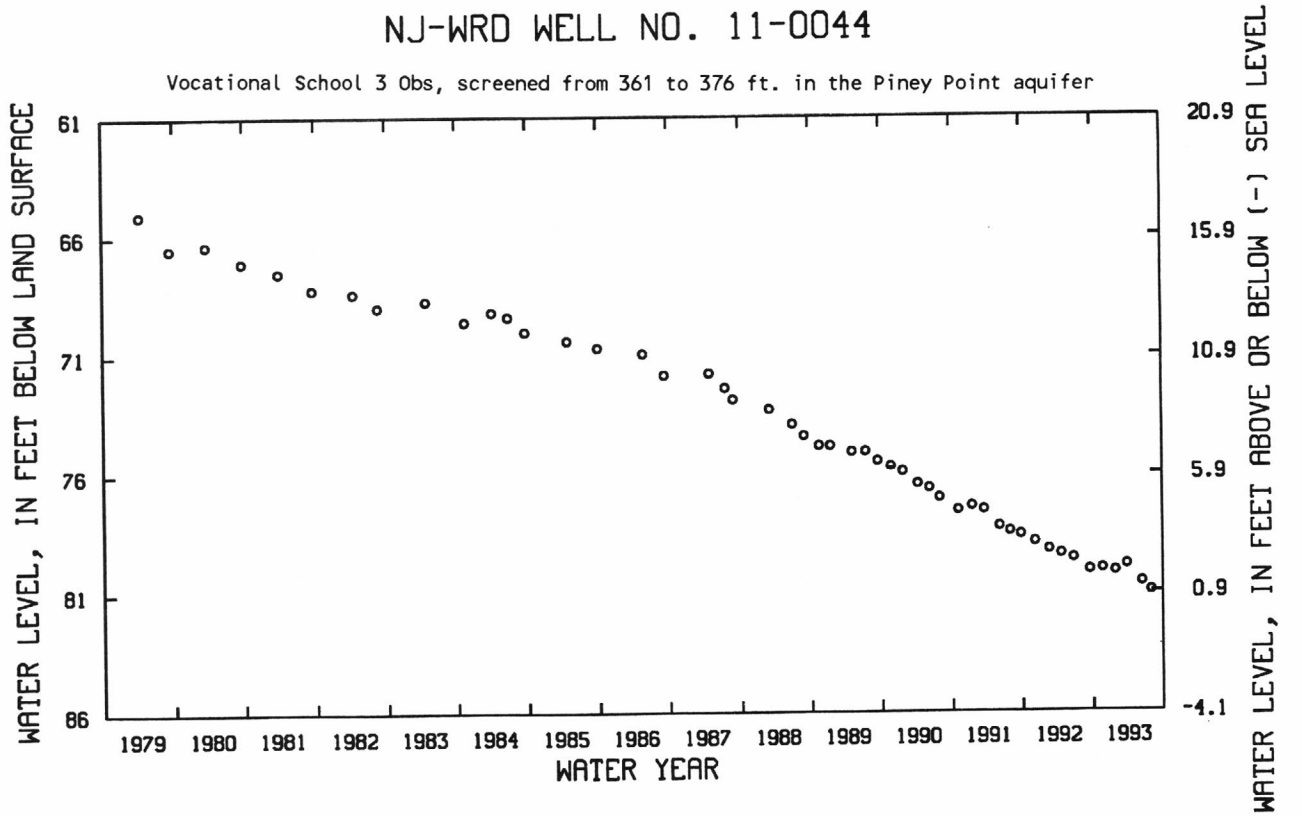

NJ-WRD WELL NO. 07-0118
Hutton Hill 2 Obs, screened from 137 to 147 ft. in the Wenonah-Mount Laurel aquifer
WATER LEVEL, IN FEET BELOW LAND SURFACE
84
86
88
90
92
94
WATER LEVEL, IN FEET ABOVE SEA LEVEL
73.5
71.5
69.5
67.5
65.5
63.5
1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993
WATER YEAR

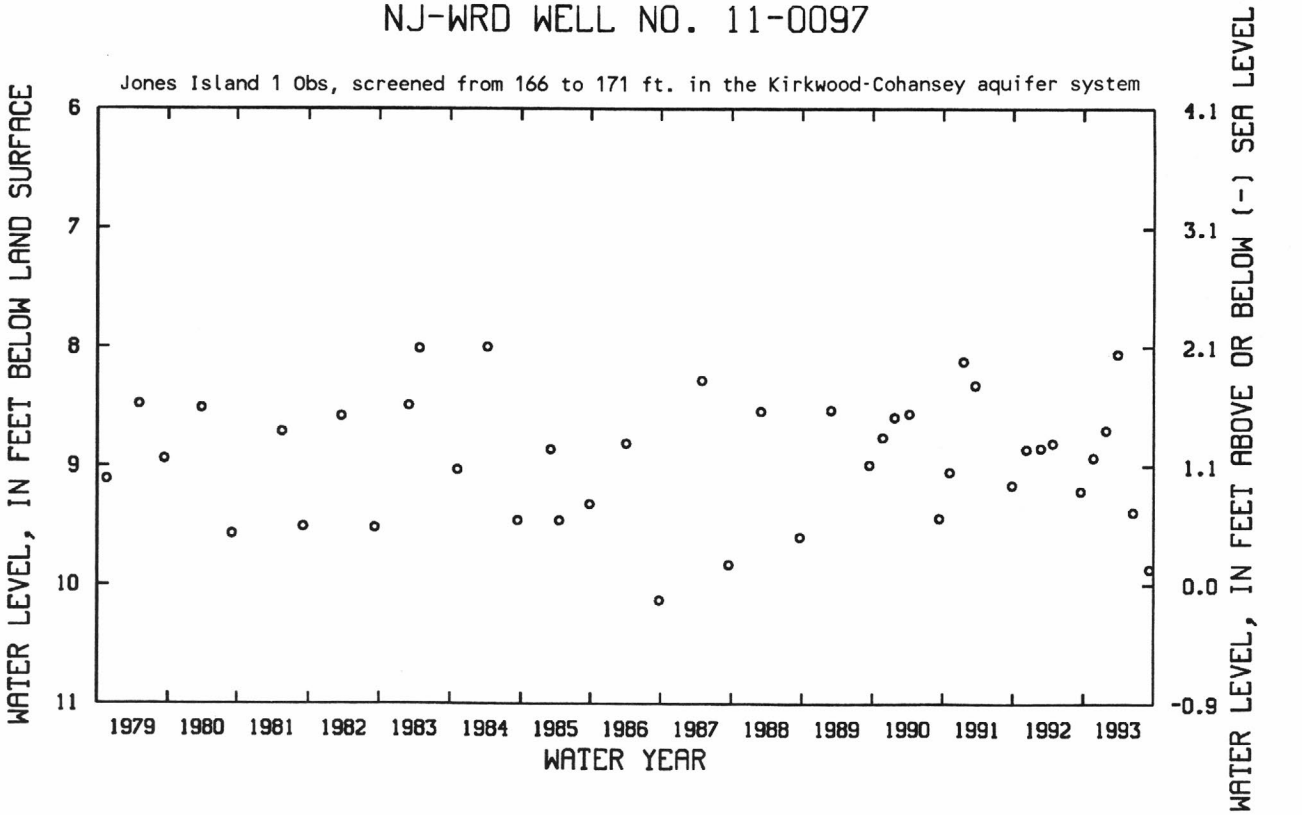

NJ-WRD WELL NO. 07-0283
Egbert Obs,
screened from 445 to 455 ft. in the Lower Potomac-Raritan-Magothy aquifer
WATER LEVEL, IN FEET BELOW LAND SURFACE
74
85
96
107
118
129
WATER LEVEL, IN FEET BELOW SEA LEVEL
-50.3
-61.3
-72.3
-83.3
-94.3
-105.3
1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993
WATER YEAR

Selected hydrographs showing water levels at manually measured observation wells in Cape May County.

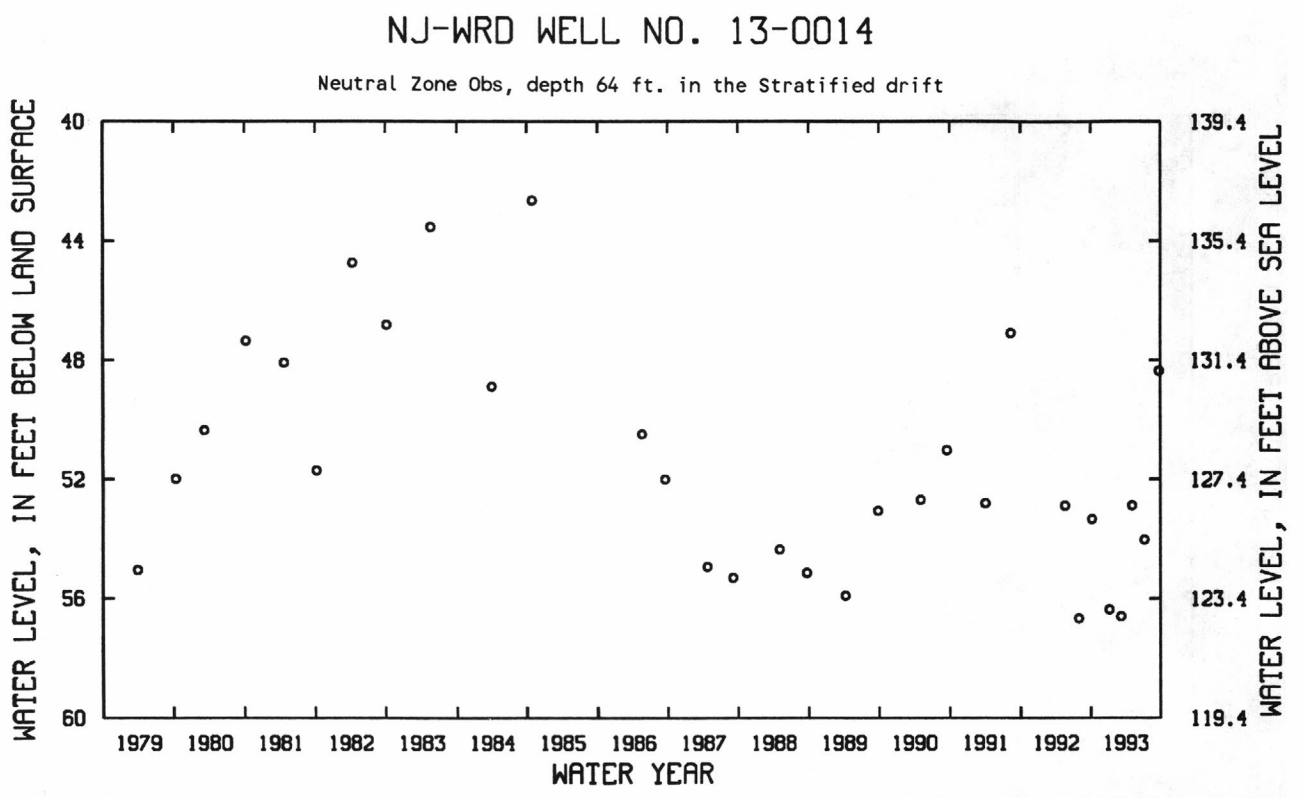


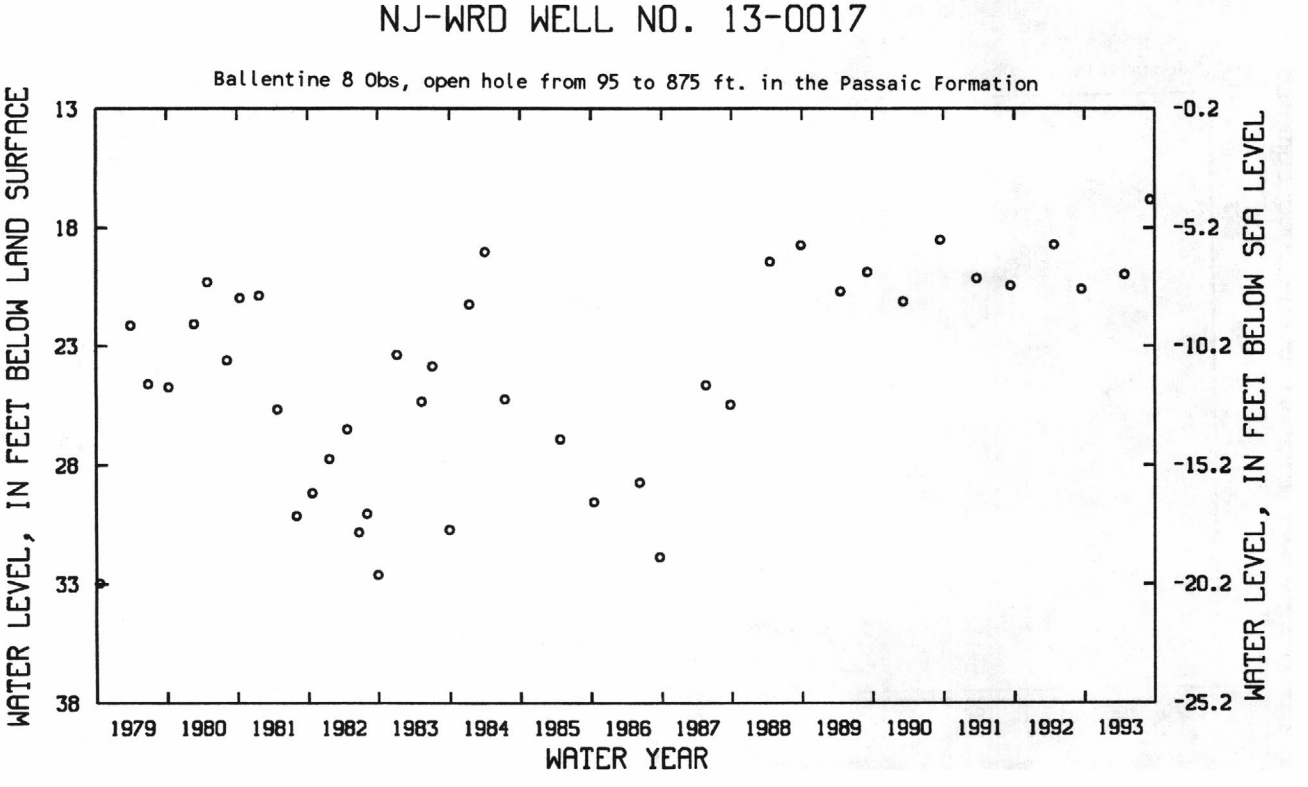


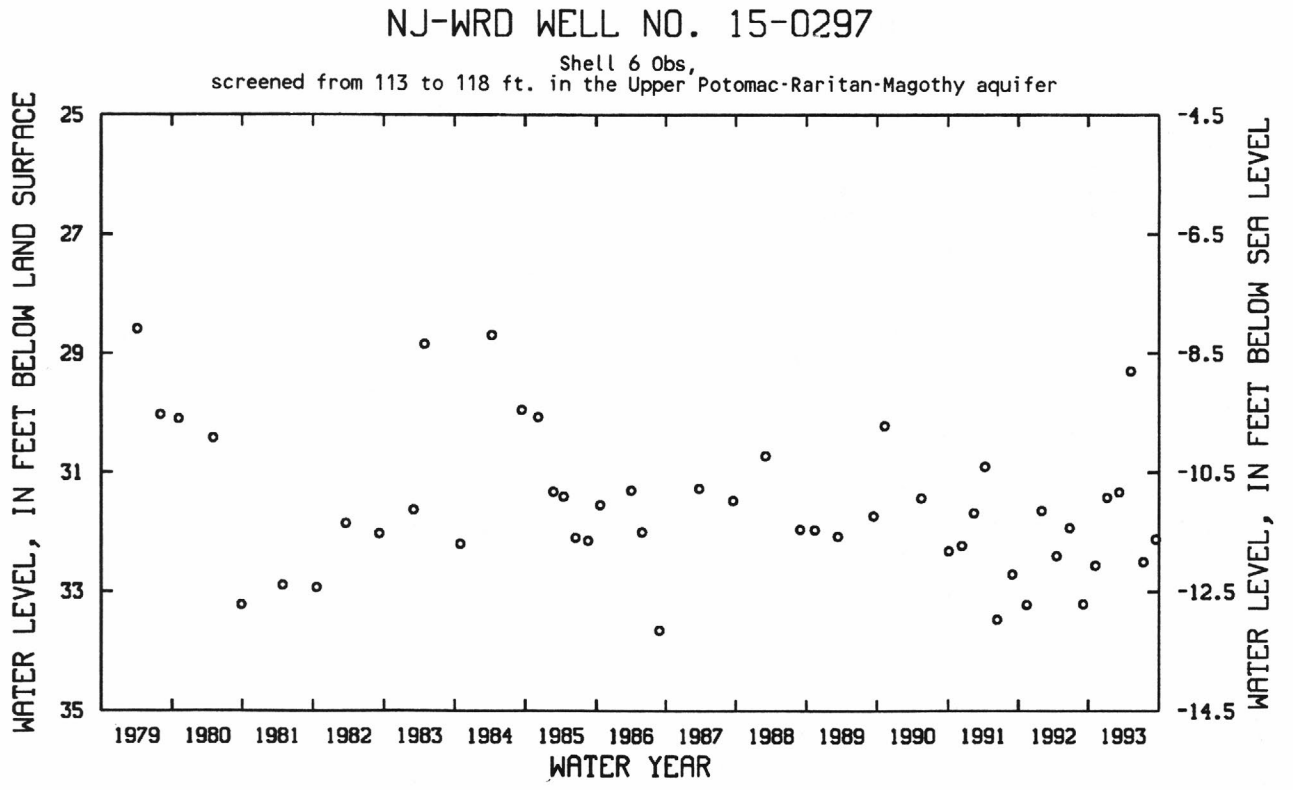

NJ-WRD WELL NO. 11-0044
Vocational School 3 Obs, screened from 361 to 376 ft. in the Piney Point aquifer
WATER LEVEL, IN FEET BELOW LAND SURFACE
61
66
71
76
81
86
20.9
15.9
10.9
5.9
0.9
-4.1
WATER LEVEL, IN FEET ABOVE OR BELOW (-) SEA LEVEL
1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993
WATER YEAR

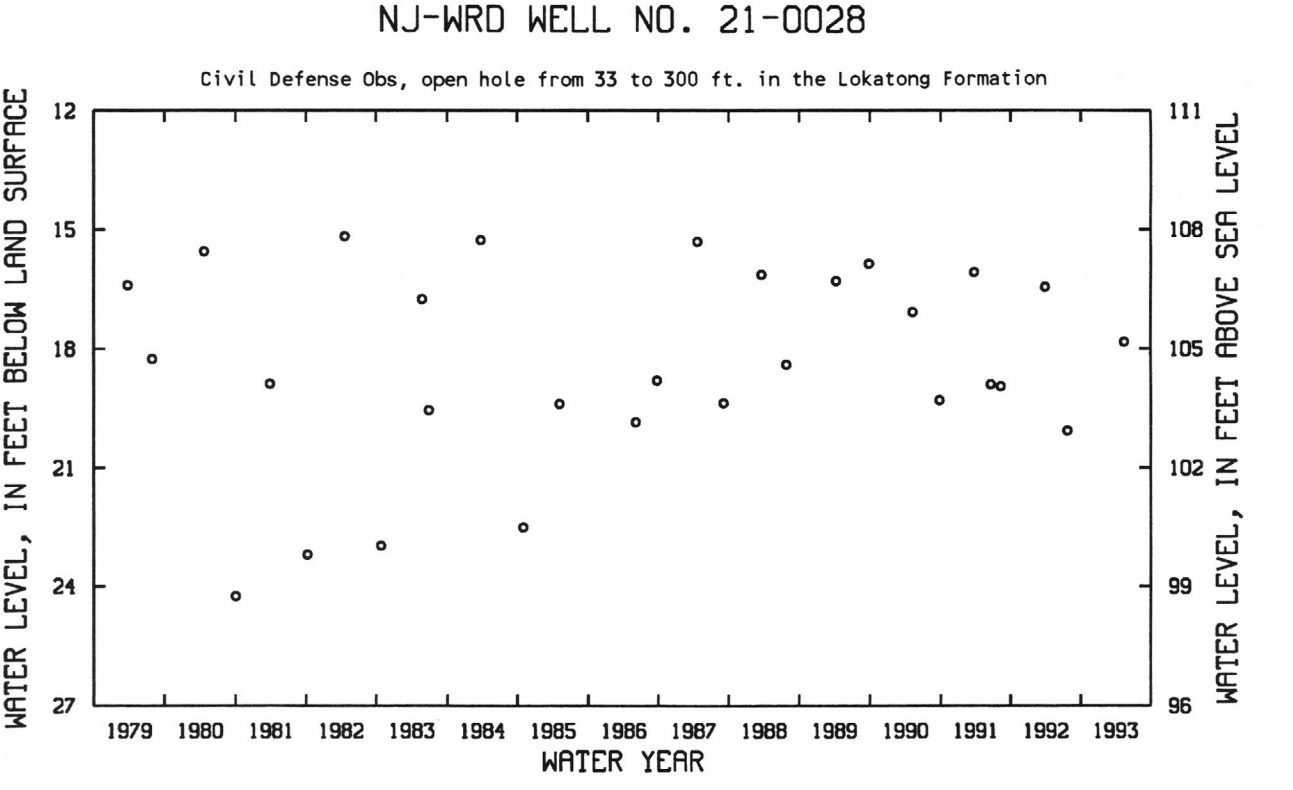

NJ-WRD WELL NO. 11-0097
Jones Island 1 Obs, screened from 166 to 171 ft. in the Kirkwood-Cohansey aquifer system
WATER LEVEL, IN FEET BELOW LAND SURFACE
6
7
8
9
10
11
4.1
3.1
2.1
1.1
0.0
-0.9
WATER LEVEL, IN FEET ABOVE OR BELOW (-) SEA LEVEL
1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993
WATER YEAR

Selected hydrographs showing water levels at manually measured observation wells in Essex County.

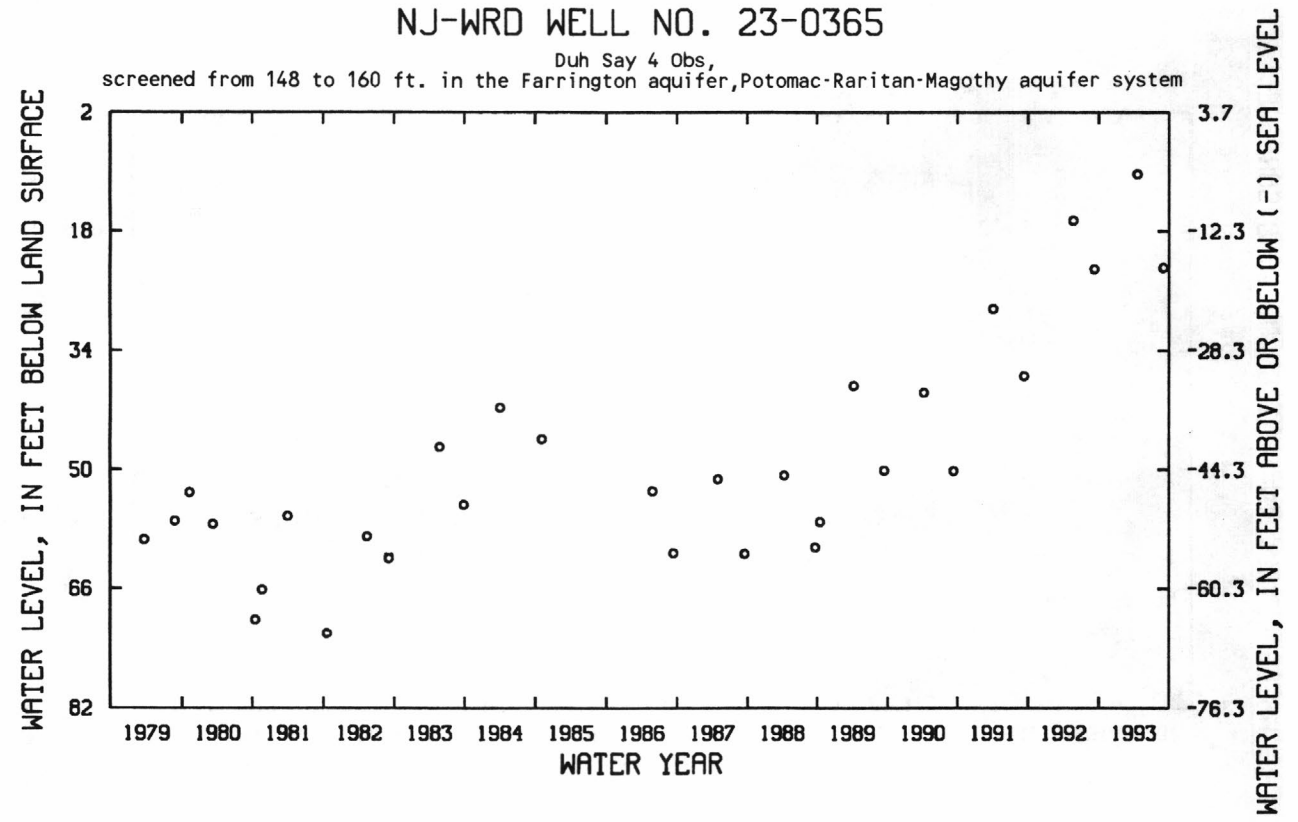


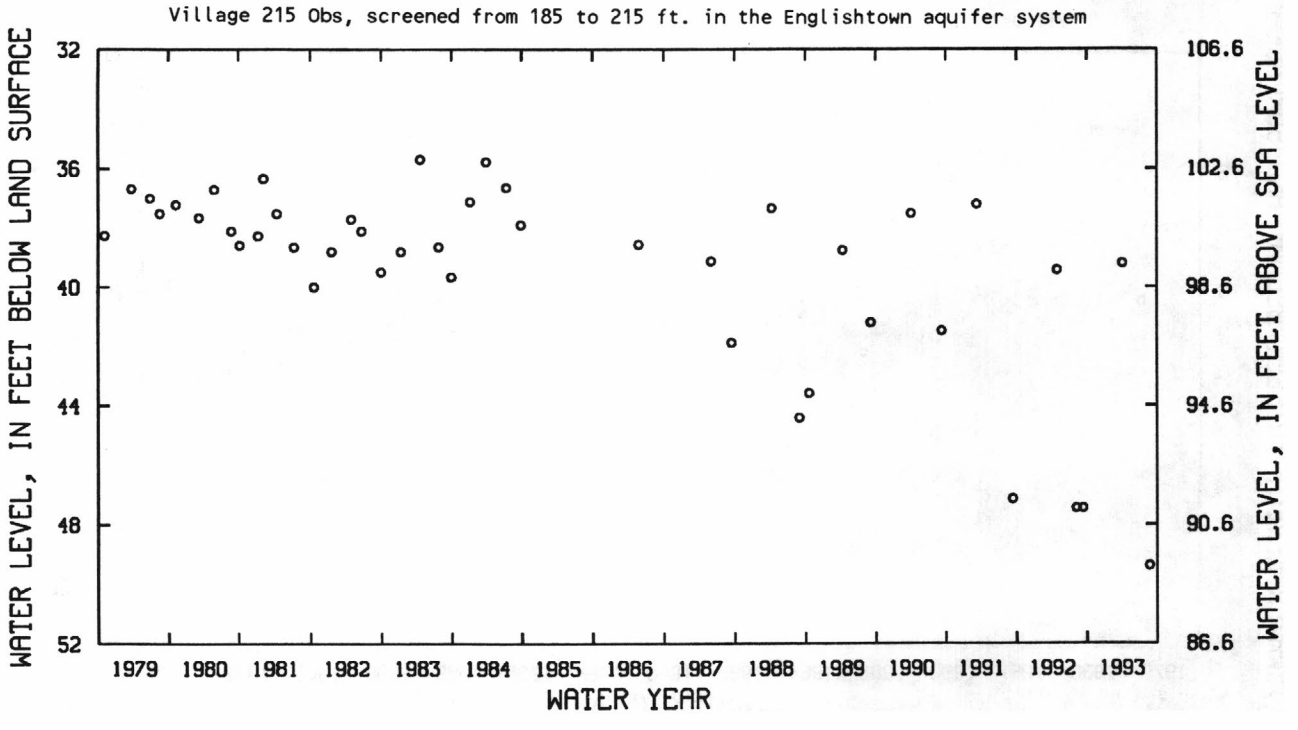



NJ-WRD WELL NO. 15-0297
Shell 6 Obs,
screened from 113 to 118 ft. in the Upper Potomac-Raritan-Magothy aquifer
WATER LEVEL, IN FEET BELOW LAND SURFACE
25
27
29
31
33
35
-4.5
-6.5
-8.5
-10.5
-12.5
-14.5
WATER LEVEL, IN FEET BELOW SEA LEVEL
1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993
WATER YEAR


NJ-WRD WELL NO. 21-0028
Civil Defense Obs, open hole from 33 to 300 ft. in the Lokatong Formation
WATER LEVEL, IN FEET BELOW LAND SURFACE
12
15
18
21
24
27
111
108
105
102
99
96
WATER LEVEL, IN FEET ABOVE SEA LEVEL
1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993
WATER YEAR

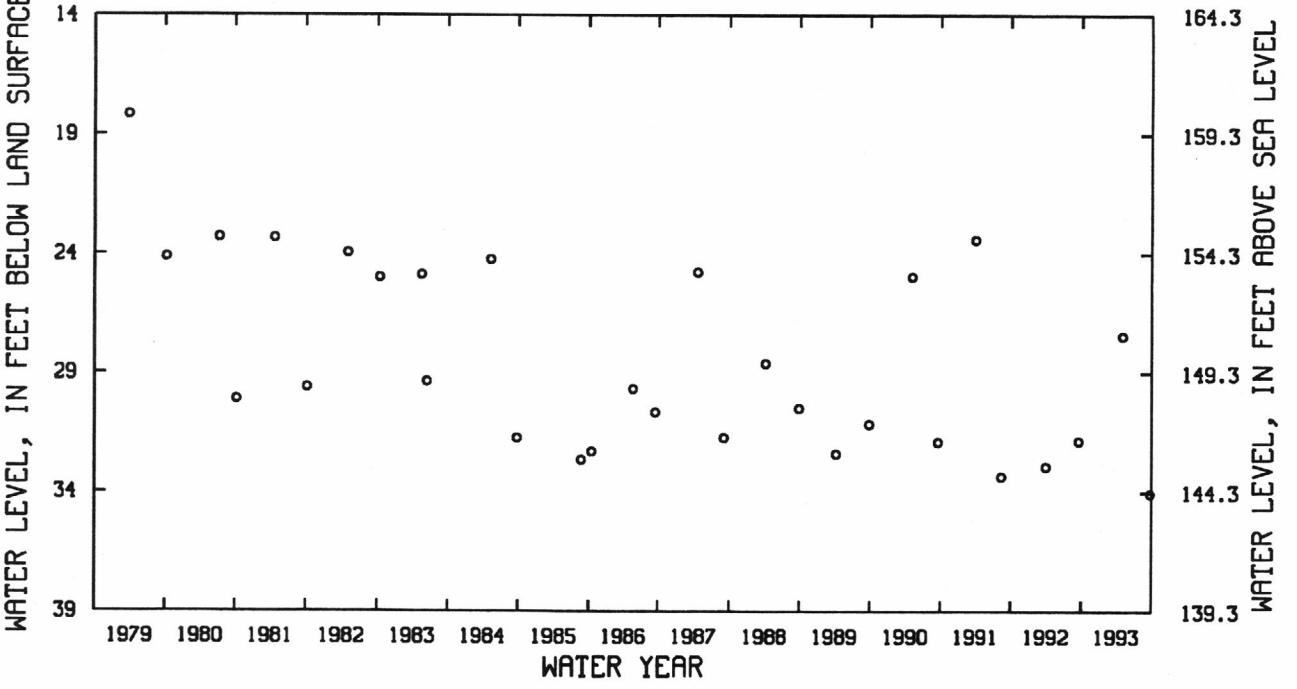
Selected hydrographs showing water levels at manually measured observation wells in Middlesex and Monmouth Counties.





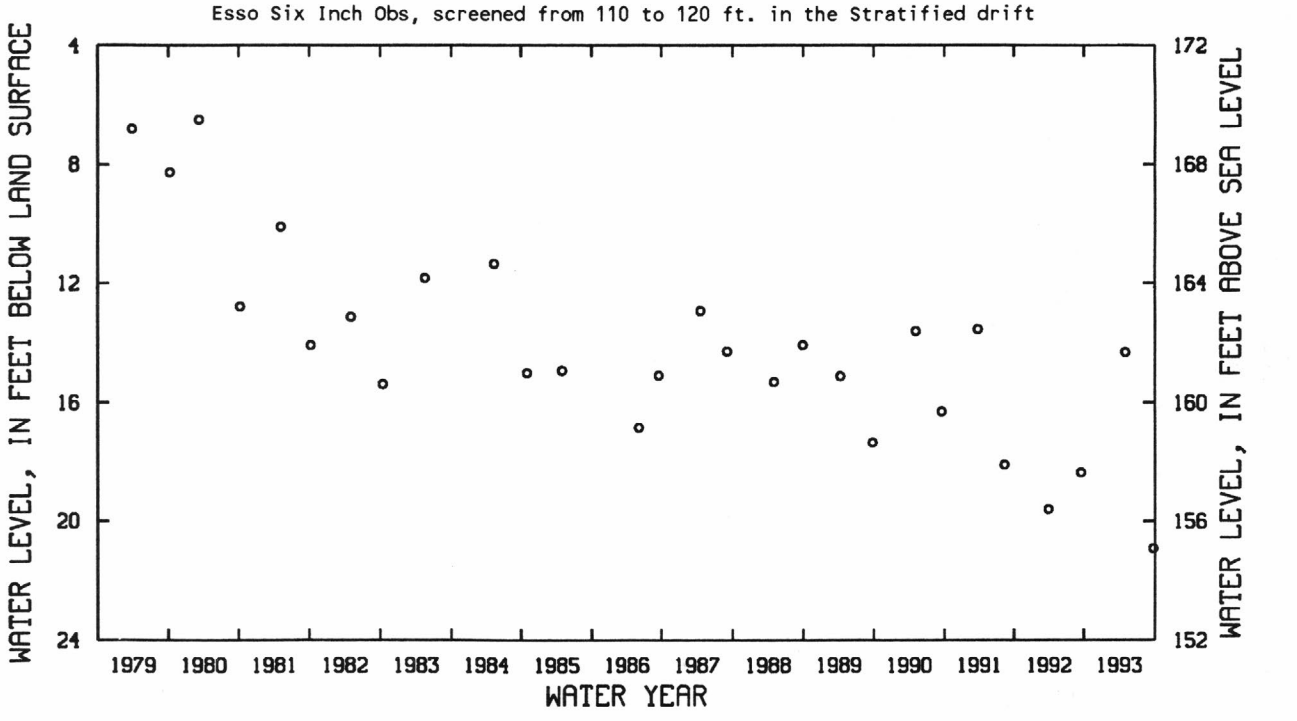
NJ-WRD WELL NO. 27-0003

W B Driver 2 Obs, screened from 99 to 108 ft. in the Stratified drift

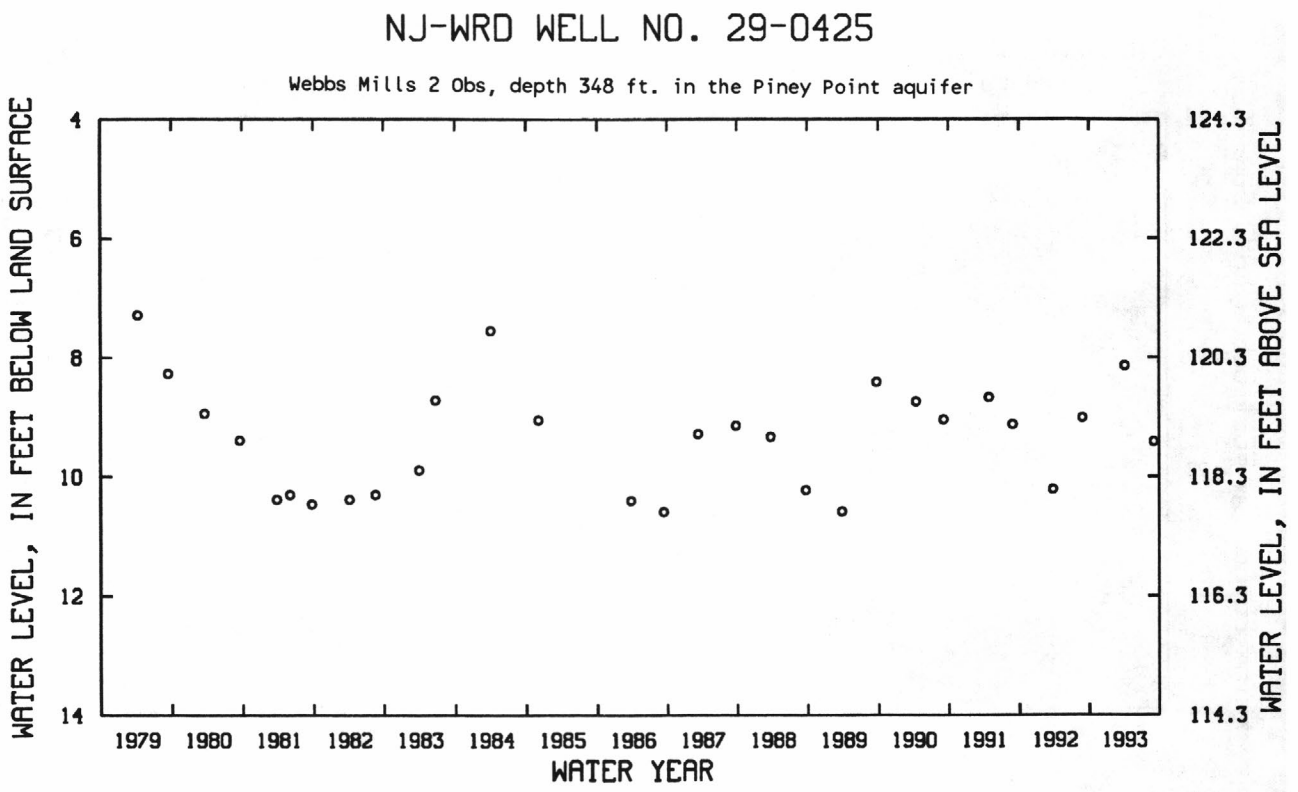


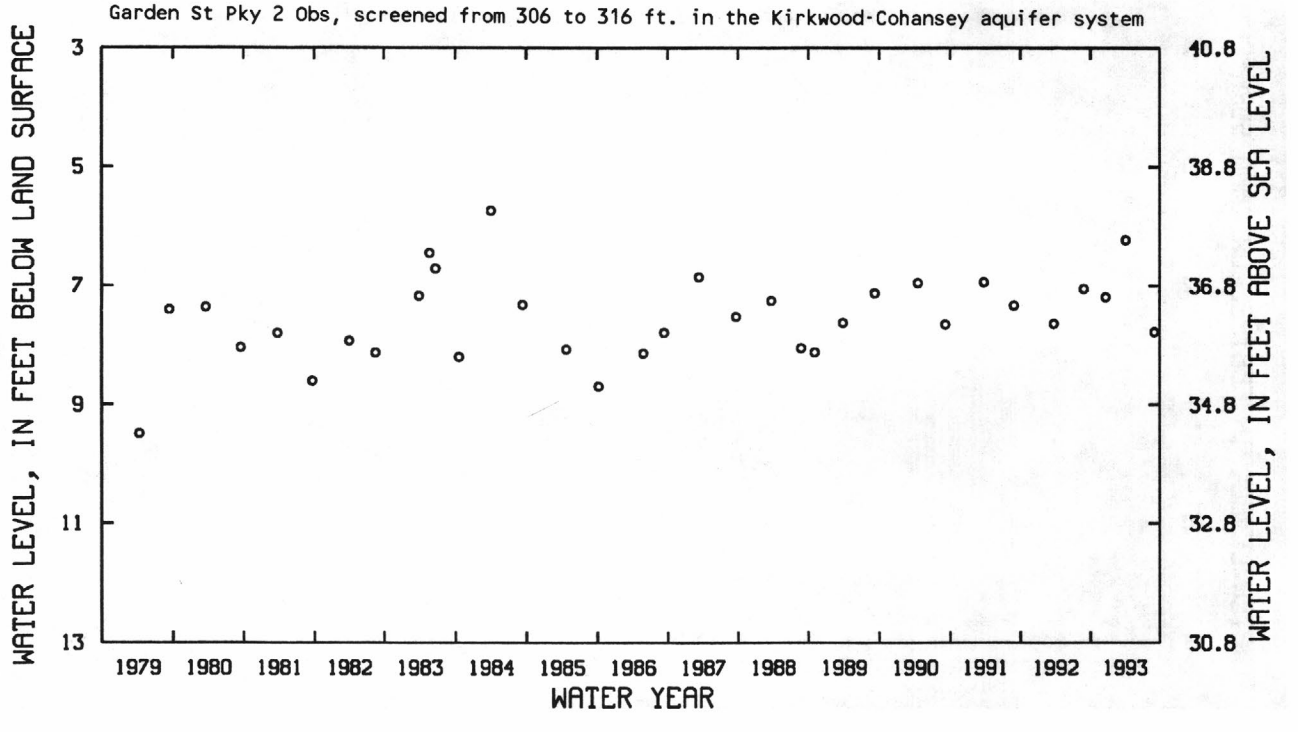
NJ-WRD WELL NO. 27-0014

Esso Six Inch Obs, screened from 110 to 120 ft. in the Stratified drift



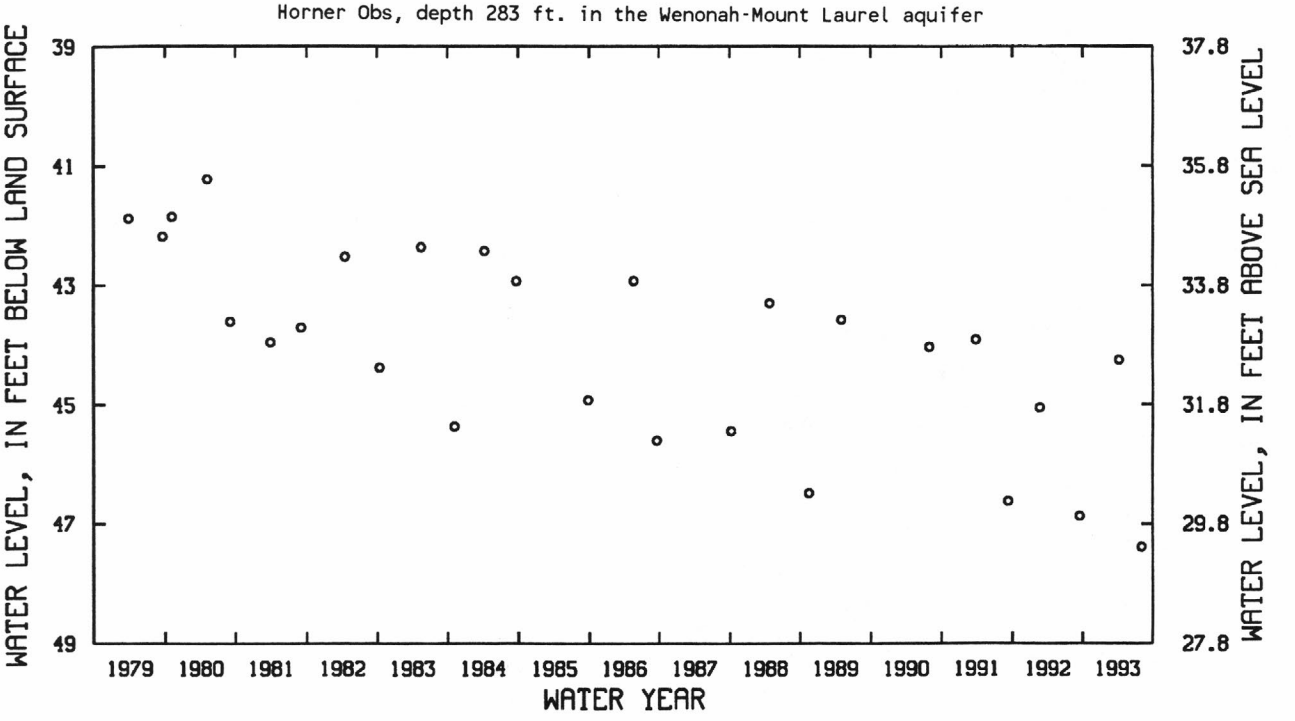
Selected hydrographs showing water levels at manually measured observation wells in Ocean County.





NJ-WRD WELL NO. 33-0020

Horner Obs, depth 283 ft. in the Wenonah-Mount Laurel aquifer



NJ-WRD WELL NO. 33-0348

Penns Grove 14 Obs, depth 18 ft. in the Upper Potomac-Raritan-Magothy aquifer

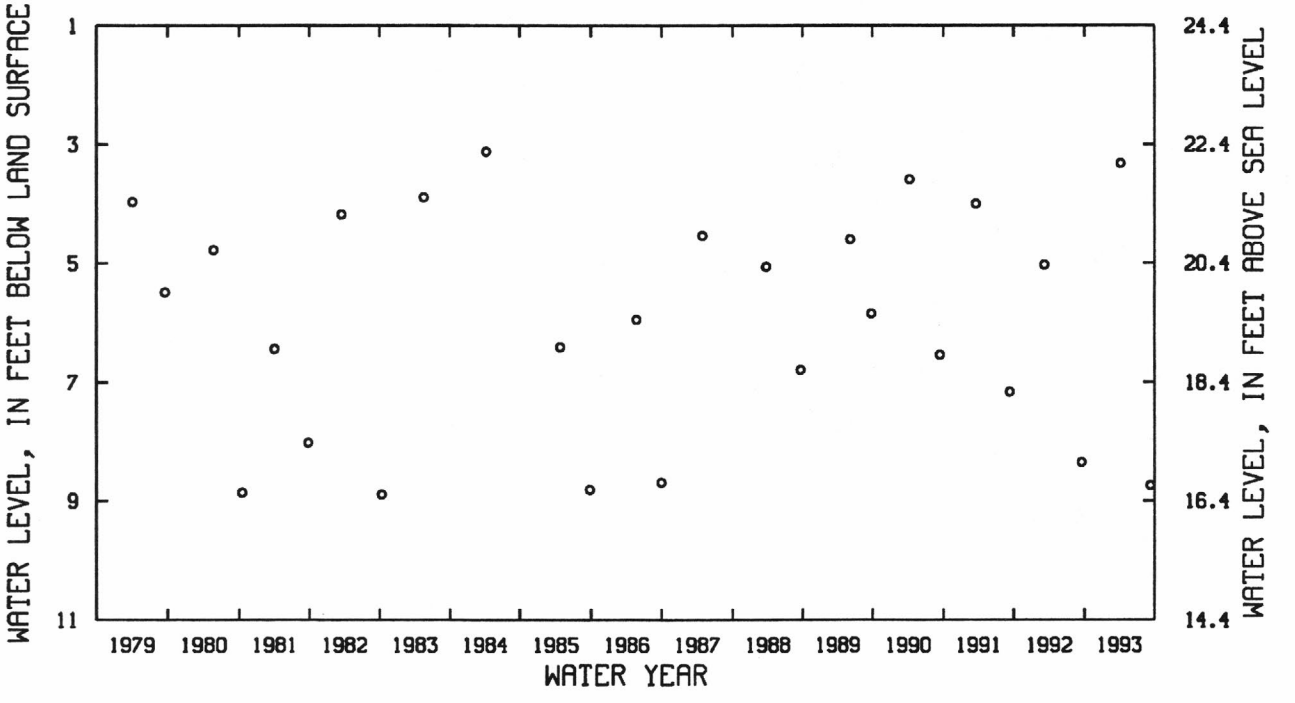


Table 3.--Discontinued observation wells

for which ground-water-level data are available.

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	PERIOD OF RECORD	AQUIFER UNIT
01-387	RALPH RAMBERG - AMATOL	AMATOL 6 OBS	393557	744114	1961-91	121CKKD
01-496	US GEOLOGICAL SURVEY	USGS 4 H 2	394029	743957	1963-86	121CKKD
01-542	US GEOLOGICAL SURVEY	WHARTON 2G	394028	744000	1960-86	121CKKD
01-545	US GEOLOGICAL SURVEY	WHARTON 11	394058	744022	1957-86	121CKKD
03-286	US GEOLOGICAL SURVEY	WALLINGTON 2 OBS	405053	740604	1989-92	227PSSC
03-287	US GEOLOGICAL SURVEY	WALLINGTON 1 OBS	405106	740610	1989-92	227PSSC
03-288	US GEOLOGICAL SURVEY	WALLINGTON 3 OBS	405105	740557	1989-92	227PSSC
05-029	US GEOLOGICAL SURVEY	OSWEGO LAKE 1	394208	742645	1962-86	121CKKD
05-030	US GEOLOGICAL SURVEY	OSWEGO LAKE 2	394208	742645	1962-86	121CKKD
05-648	WILLINGBORO MUA	WMUA 3-OBS	400103	745409	1966-86	211MRPAL
05-690	US GEOLOGICAL SURVEY	LEBANON SF 2	395211	743103	1964-86	121CKKD
07-030	SO JRSY PORT CM	NY SHIP 5A	395447	750711	1950-86	211MRPAU
07-322	NJ/AMERICAN WATER CO	OAKLYN TEST	395359	750445	1963-86	211MRPAU
07-354	GENERAL FOODS	PETTY IS OBS	395811	750556	1950-92	211MRPAL
09-011	CAPE MAY CITY WD	CMCWD 1 OBS	385612	745457	1967-86	121CNSY
09-071	WILDWOOD WATER DEPARTMENT	RIO GRANDE 23 OBS	390138	745348	1990-92	122KRKDU
09-079	LEE HALLER	NUMMY ISLAND 2 OBS	390210	744730	1990-92	122KRKDL
09-097	US GEOLOGICAL SURVEY	BDWLL DCH 31ES	390527	745024	1968-84	112ESRNS
09-098	US GEOLOGICAL SURVEY	BDWLL DCH 31HB	390527	745024	1968-84	112HLBC
09-292	US GEOLOGICAL SURVEY	WETLANDS 1 OBS	390337	744623	1988-92	121CNSY
09-293	US GEOLOGICAL SURVEY	WETLANDS 2 OBS	399337	744623	1988-92	112ESRNS
09-294	US GEOLOGICAL SURVEY	WETLANDS 3 OBS	390337	744623	1988-92	112ESRNS
09-295	US GEOLOGICAL SURVEY	WETLANDS 4 OBS	390337	744623	1988-92	112HLBC
09-304	US GEOLOGICAL SURVEY	AIRPORT RIO GRANDE OBS	390002	745410	1990-92	122KRKDU
11-141	MILLVILLE WD	ORANGE ST	392219	750113	1962-86	121CKKD
11-161	CUMBERLAND COUNTY	FAIR GROUNDS 1	392526	750643	1972-86	121CKKD
11-162	CUMBERLAND COUNTY	FAIR GROUNDS 2	392526	750643	1972-86	121CKKD
11-188	CUMBERLAND COUNTY	BOSTWICK LK 1	393141	751601	1972-86	121CKKD
11-692	US GEOLOGICAL SURVEY	RUTGERS R&D 1 SHALLOW OBS	393104	751222	1991-92	121CKKD
11-693	US GEOLOGICAL SURVEY	RUTGERS R&D 2 MED OBS	393104	751222	1991-92	121CKKD
11-694	US GEOLOGICAL SURVEY	RUTGERS R&D 3 DEEP OBS	393104	751222	1991-92	121CKKD
15-097	HERCULES CHEM	GIBBSTOWN TH 8/TW8	395000	751636	1953-89	211MRPAM
15-279	HUNTSMAN POLYPROPYLENE CORP	SHELL OBS 7	394857	751250	1962-86	211MRPAM
15-540	US EPA	EPA 108	394800	751936	1985-88	211MRPAM
15-564	US EPA-GAVENTA	S-9	394802	751933	1985-88	211MRPAU
15-615	US GEOLOGICAL SURVEY	SHIVELER LOWER	394637	751916	1985-88	211MRPAL
15-616	US GEOLOGICAL SURVEY	SHIVELER MIDDLE	394637	751916	1985-88	211MRPAM
15-617	US GEOLOGICAL SURVEY	SHIVELER UPPER	394637	751916	1985-88	211MRPAU
15-618	US GEOLOGICAL SURVEY	GAVENTA DEEP	394804	751933	1985-88	211MRPAL
15-620	US GEOLOGICAL SURVEY	GAVENTA MIDDLE 1	394804	751933	1985-88	211MRPAM
15-1052	US GEOLOGICAL SURVEY	USGS WTMUA OBS-2 MED	394314	750145	1991-92	121CKKD
15-1053	US GEOLOGICAL SURVEY	USGS WTMUA OBS-3 DEEP	394314	750145	1991-92	121CKKD
15-1055	US GEOLOGICAL SURVEY	USGS GSC OBS-2 MED	394221	750722	1991-92	121CKKD
15-1056	US GEOLOGICAL SURVEY	USGS GSC OBS-3 DEEP	394221	750722	1991-92	121CKKD
15-1058	US GEOLOGICAL SURVEY	USGS TPE OBS-2 MED-DEEP	394242	750330	1991-92	121CKKD
15-1059	US GEOLOGICAL SURVEY	USGS TPE OBS-3 DEEP	394242	750330	1991-92	121CKKD
15-1063	US GEOLOGICAL SURVEY	USGS TPE OBS-4 MED-SHALL	394242	750330	1991-92	121CKKD
19-249	US GEOLOGICAL SURVEY	HUNTER RD TB 3 OBS	402141	745358	1989-92	227PSSC
19-250	US GEOLOGICAL SURVEY	WEST AMWELL FIRE TB 2 OBS	402146	745351	1989-92	227PSSC

Data available in the files of the New Jersey District Office.

Aquifer unit:

112HLBC - Holly Beach water-bearing zone
112ESRNS - Cape May Formation, estuarine sand facies
121CNSY - Cohansey Sand
121CKKD - Kirkwood-Cohansey aquifer system
122KRKDU - Rio Grande water-bearing zone of the Kirkwood Formation
122KRKDL - Atlantic City 800-foot sand of the Kirkwood Formation
211MRPAU - Upper Potomac-Raritan-Magothy aquifer
211MRPAM - Middle Potomac-Raritan-Magothy aquifer
211MRPAL - Lower Potomac-Raritan-Magothy aquifer
227PSSC - Passaic Formation

Table 3.--Discontinued observation wells

for which ground-water-level data are available--Continued.

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	PERIOD OF RECORD	AQUIFER UNIT
21-358	US GEOLOGICAL SURVEY	PRINCETON 1-BRICK RD OBS	402023	743919	1989-90	231SCKN
21-359	US GEOLOGICAL SURVEY	PRINCETON 2-CHILL PL OBS	402032	743925	1989-92	231SCKN
23-159	DUHERNAL WC	DUHERNAL OBS 5	402353	742152	1939-86	211ODBG
23-180	DUHERNAL WC	DUHERNAL OBS 1	402438	742129	1938-86	211ODBG
23-181	PERTH AMBOY WD	RUNYON 123	402442	742136	1955-86	211ODBG
23-265	CHEVRON OIL CO	11	403211	741612	1950-86	211FRNG
23-270	AMER CYANAMID	TEST 2	403231	741616	1950-86	211FRNG
23-306	PHELPS DODGE CO	PHELPS DODGE 3	402147	742847	1969-87	211FRNG
23-433	STATE OF NJ	SO RIVER 4	402555	742133	1968-86	211ODBG
23-516	NOVAK	HULSART	402123	741849	1936-84	211EGLS
23-796	PRINCETON UNIVERSITY	TEST WELL 5 OBS	402058	743559	1986-92	231SCKN
23-800	PRINCETON UNIVERSITY	TEST WELL 9 OBS	402058	743559	1986-92	231SCKN
27-150	US GEOLOGICAL SURVEY	GREAT SWAMP 4 OBS	404349	742516	1989-90	112SFDF
27-152	US GEOLOGICAL SURVEY	NILES PARK 1 OBS	404450	742459	1990-91	112SFDF
27-250	US ARMY - PICATINNY ARSENAL	PICATINNY LF 1 OBS	405509	743504	1983-84,89-91	374LSVL
27-251	US ARMY - PICATINNY ARSENAL	PICATINNY LF 2 OBS	405509	743504	1983-91	112SFDF
27-321	ROCKAWAY RIVER C C	GEONICS 2	405344	742740	1985-90	112SFDF
27-322	DOVER TOWN WD	DTWD TW 2	405314	743250	1985-89	112SFDF
27-323	MOUNTAIN LAKES WD	CRANE RD (GEONICS 1)	405253	742708	1985-89	112SFDF
27-324	ST CLARES HOSPITAL	POCONO RD (GEONICS 2)	405334	742828	1985-89	112SFDF
27-325	BOONTON TOWNSHIP	VALLEY RD (GEONICS 3)	405542	742617	1985-89	400PCMB
27-709	KEUFFEL & ESSER CO	KEUFFEL 2	405441	742948	1985-89	112SFDF
27-1083	MORRIS COUNTY MUA	MCMUA TEST WELL 1 OBS	405005	744101	1988-90	374LSVL
27-1084	MORRIS COUNTY MUA	MCMUA TEST WELL 2 OBS	404954	744122	1988-90	374LSVL
27-1085	WASHINGTON TWP MUA	WASHINGTON TWP TW OBS	404705	744638	1988-91	374LSVL
27-1123	US GEOLOGICAL SURVEY	KENVIL NEWCRETE 1 OBS	405330	743638	1989-91	374LSVL
27-1124	US GEOLOGICAL SURVEY	KENVIL NEWCRETE 2 OBS	405330	743638	1989-90	112SFDF
27-1126	US GEOLOGICAL SURVEY	BLACK RIVER 4 OBS	404809	744155	1989-91	374LSVL
27-1127	US ARMY - PICATINNY ARSENAL	PICATINNY SB1-1 OBS	405458	743455	1989-91	400PCMB
27-1128	US ARMY - PICATINNY ARSENAL	PICATINNY SB1-2 OBS	405458	743455	1989-91	112SFDF
27-1129	US ARMY - PICATINNY ARSENAL	PICATINNY SB1-3 OBS	405458	743455	1989-91	112SFDF
27-1130	US ARMY - PICATINNY ARSENAL	PICATINNY SB2-1 OBS	405509	743509	1989-91	112SFDF
27-1131	US ARMY - PICATINNY ARSENAL	PICATINNY SB2-2 OBS	405509	743509	1989-91	112SFDF
27-1132	US ARMY - PICATINNY ARSENAL	PICATINNY SB3-1 OBS	405517	743515	1989-91	374LSVL
27-1133	US ARMY - PICATINNY ARSENAL	PICATINNY SB2-3 OBS	405509	743509	1989-91	374LSVL
27-1134	US ARMY - PICATINNY ARSENAL	PICATINNY SB3-2 OBS	405517	743515	1989-91	112SFDF
27-1135	US ARMY - PICATINNY ARSENAL	PICATINNY SB3-3 OBS	405517	743515	1989-91	112SFDF
27-1164	US GEOLOGICAL SURVEY	BLACK RIVER 5 OBS	404809	744155	1989-91	112SFDF
27-1183	US GEOLOGICAL SURVEY	KENVIL NEWCRETE 7 OBS	405330	743638	1989-90	112SFDF
27-1302	STATE OF NJ	JENKINSON FARM 1 OBS	404452	744931	1989-91	374LSVL
29-486	WHITING BIBLE CHURCH	CRAMMER OBS	395714	742234	1952-90	121CKKD
29-532	PT PLEASANT WD	PPWD 3	400459	740359	1986-88	211EGLS
31-011	WANAQUE WD	HASKELL OBS	410209	741708	1965-82	112SFDF
33-279	DARETOWN FIRE CO	GARRISON	393622	751531	1959-86	211MLRW
33-342	STATE OF NJ	PENNS GROVE 24	394236	752724	1942-87	211MRPAU
33-680	US GEOLOGICAL SURVEY	USGS COLES FARM OBS-1	393818	751324	1991-92	121CKKD
33-681	US GEOLOGICAL SURVEY	USGS COLES FARM OBS-2	393818	751324	1991-92	121CKKD
39-133	HATFIELD WIRE	HATFIELD OBS	403726	741623	1959-87	227BRCKS
41-013	HOFFMAN-LAROCHE	HOF LAR 4	405050	750332	1960-85	112SFDF

Data available in the files of the New Jersey District Office.

Aquifer unit:

112SFDF - Stratified drift
121CKKD - Kirkwood-Cohansey aquifer system
211MLRW - Wenonah-Mount Laurel aquifer
211EGLS - Englishtown aquifer system
211MRPAU - Upper Potomac-Raritan-Magothy aquifer
211ODBG - Old Bridge aquifer, Potomac-Raritan-Magothy aquifer system (Middlesex County)
211FRNG - Farrington aquifer, Potomac-Raritan-Magothy aquifer system (Middlesex County)
227BRCKS - Brunswick Group sedimentary rocks
231SCKN - Stockton Formation
374LSVL - Leithsville Formation
400PCMB - Precambriam Erathem

WATER QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

CAPE MAY COUNTY

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	ALTITUDE OF LAND SURFACE (FT.)	SCREEN INTERVAL (FT.)	AQUIFER UNIT
09-352	US GEOLOGICAL SURVEY	ROSLYN AVE OBS SHALLOW	385855	745737	20	170 - 180	112ESRNS
09-353	US GEOLOGICAL SURVEY	ROSLYN AVE OBS DEEP	385855	745737	20	262 - 272	121CNSY
09-354	US GEOLOGICAL SURVEY	GRASSY SOUND 1-D OBS	390147	744855	4.67	230 - 240	121CNSY
09-355	US GEOLOGICAL SURVEY	GRASSY SOUND 1-S OBS	390147	744855	4.59	100 - 110	112ESRNS
09-350	US GEOLOGICAL SURVEY	GRT CEDAR SWAMP 1-D OBS	391218	744545	16	227 - 237	121CKKD
09-351	US GEOLOGICAL SURVEY	GRT CEDAR SWAMP 1-S OBS	391218	744545	16	57 - 67	121CKKD
09-384	GUMMEL, CHARLES & BETTY	1989 DOM TARKILN RD	391706	745104	54	70 - 80	121CKKD

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	DATE	TEMPERATURE WATER (DEG C)	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	SODIUM, DISSOLVED (MG/L AS NA)	CHLORIDE, DISSOLVED (MG/L AS CL)
09-352	US GEOLOGICAL SURVEY	ROSLYN AVE OBS SHALLOW	10- 6-92	15.5	222	7.5	25	6.4
09-353	US GEOLOGICAL SURVEY	ROSLYN AVE OBS DEEP	10- 6-92	15.5	249	7.7	36	11
09-354	US GEOLOGICAL SURVEY	GRASSY SOUND 1-D OBS	10-14-92	15.0	886	7.2	100	210
09-355	US GEOLOGICAL SURVEY	GRASSY SOUND 1-S OBS	10-14-92	14.5	194	7.2	16	25
09-350	US GEOLOGICAL SURVEY	GRT CEDAR SWAMP 1-D OBS	10- 8-92	12.0	78	6.0	8.7	5.0
09-351	US GEOLOGICAL SURVEY	GRT CEDAR SWAMP 1-S OBS	10- 8-92	13.0	62	5.5	8.4	5.7
09-384	GUMMEL, CHARLES & BETTY	1989 DOM TARKILN RD	10-15-92	15.0	78	5.1	4.4	9.2

CUMBERLAND COUNTY

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	ALTITUDE OF LAND SURFACE (FT.)	SCREEN INTERVAL (FT.)	AQUIFER UNIT
#11-096	CUMBERLAND COUNTY	JONES ISLAND 2 OBS	391829	751208	10.10	365 - 375	124PNPN

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	DATE	TEMPERATURE WATER (DEG C)	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	SODIUM, DISSOLVED (MG/L AS NA)	CHLORIDE, DISSOLVED (MG/L AS CL)
11-096	CUMBERLAND COUNTY	JONES ISLAND 2 OBS	9- 9-93	15.0	215	8.1	9.6	3.6

- Water-level data for this well are available elsewhere in this report.

Aquifer unit:

112ESRNS - Cape May Formation, estuarine sand facies
121CNSY - Cohansey Sand
121CKKD - Kirkwood-Cohansey aquifer system
124PNPN - Piney Point aquifer

WATER QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

GLOUCESTER COUNTY

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	ALTITUDE OF LAND SURFACE (FT.)	SCREEN INTERVAL (FT.)	AQUIFER UNIT
#15-742	US GEOLOGICAL SURVEY	MANTUA DEEP OBS	394652	751004	84	757 - 777	211MRPAL
#15-741	US GEOLOGICAL SURVEY	MANTUA SHALLOW OBS	394652	751004	82	293 - 313	211MRPAU
#15-712	US GEOLOGICAL SURVEY	STEFKA 1 OBS	394808	751724	6.50	275 - 290	211MRPAL
#15-713	US GEOLOGICAL SURVEY	STEFKA 2 OBS	394808	751724	5.64	125 - 155	211MRPAM
#15-727	US GEOLOGICAL SURVEY	STEFKA 3 OBS	394808	751724	5.06	195 - 205	211MRPAM
#15-671	US GEOLOGICAL SURVEY	DEPTFORD DEEP OBS	394957	750530	35	650 - 670	211MRPAL

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	DATE	TEMPERATURE WATER (DEG C)	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	SODIUM, DISSOLVED (MG/L AS NA)	CHLORIDE, DISSOLVED (MG/L AS CL)
15-742	US GEOLOGICAL SURVEY	MANTUA DEEP OBS	7-16-93	16.5	759	8.4	140	140
15-741	US GEOLOGICAL SURVEY	MANTUA SHALLOW OBS	7-23-93	16.0	412	8.4	82	19
15-712	US GEOLOGICAL SURVEY	STEFKA 1 OBS	7-13-93	14.5	2,340	6.8	350	610
15-713	US GEOLOGICAL SURVEY	STEFKA 2 OBS	7-14-93	14.5	187	6.6	12	9.3
15-727	US GEOLOGICAL SURVEY	STEFKA 3 OBS	7-15-93	14.5	897	6.6	120	210
15-671	US GEOLOGICAL SURVEY	DEPTFORD DEEP OBS	7- 9-93	17.0	202	8.0	30	12

MIDDLESEX COUNTY

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	ALTITUDE OF LAND SURFACE (FT.)	SCREEN INTERVAL (FT.)	AQUIFER UNIT
#23-351	SAYREVILLE W D	SWD 1 OBS	402605	741959	35.27	76 - 82	211ODBG
#23-439	SOUTH RIVER W D	SRWD 2 OBS	402633	742200	20.69	121 - 126	211FRNG

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	DATE	TEMPERATURE WATER (DEG C)	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	SODIUM, DISSOLVED (MG/L AS NA)	CHLORIDE, DISSOLVED (MG/L AS CL)
23-351	SAYREVILLE W D	SWD 1 OBS	9- 2-93	15.5	203	5.8	17	32
23-439	SOUTH RIVER W D	SRWD 2 OBS	7-28-93	14.5	161	5.3	8.5	23

- Water-level data for this well are available elsewhere in this report.

Aquifer unit:

211MRPAU - Upper Potomac-Raritan-Magothy aquifer
211MRPAM - Middle Potomac-Raritan-Magothy aquifer
211MRPAL - Lower Potomac-Raritan-Magothy aquifer
211ODBG - Old Bridge aquifer, Potomac-Raritan-Magothy aquifer system
211FRNG - Farrington aquifer, Potomac-Raritan-Magothy aquifer system

WATER QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

MONMOUTH COUNTY

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	ALTITUDE OF LAND SURFACE (FT.)	SCREEN INTERVAL (FT.)	AQUIFER UNIT
#25-316	STATE OF NJ	SANDY HOOK SP1	402536	735905	10.91	371 - 397	211ODBG
#25-206	KEYPORT BORO WD	KEYPORT 4 OBS	402625	741145	14.47	225 - 249	211ODBG

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	DATE	TEMPERATURE WATER (DEG C)	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	SODIUM, DISSOLVED (MG/L AS NA)	CHLORIDE, DISSOLVED (MG/L AS CL)
25-316	STATE OF NJ	SANDY HOOK SP1	8- 6-93	16.0	192	7.2	13	3.0
25-206	KEYPORT BORO WD	KEYPORT 4 OBS	9-22-93	14.0	496	6.4	9.4	130

OCEAN COUNTY

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	ALTITUDE OF LAND SURFACE (FT.)	SCREEN INTERVAL (FT.)	AQUIFER UNIT
#29-017	US GEOLOGICAL SURVEY	ISLAND BEACH 1 OBS	394829	740535	8.50	377 - 397	121CKKD
#29-020	US GEOLOGICAL SURVEY	ISLAND BEACH 4 OBS	394829	740535	8.19	9 - 12	121CKKD
#29-585	STATE OF NJ	DOE-FORKED RIVER OBS	395028	741044	15	412 - 422	124PNPN

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	DATE	TEMPERATURE WATER (DEG C)	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	SODIUM, DISSOLVED (MG/L AS NA)	CHLORIDE, DISSOLVED (MG/L AS CL)
29-017	US GEOLOGICAL SURVEY	ISLAND BEACH 1 OBS	8-10-93	15.5	184	--	18	8.7
29-020	US GEOLOGICAL SURVEY	ISLAND BEACH 4 OBS	9-29-93	--	343	6.6	41	67
29-585	STATE OF NJ	DOE-FORKED RIVER OBS	7-27-93	14.5	354	8.9	61	1.6

SALEM COUNTY

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	ALTITUDE OF LAND SURFACE (FT.)	SCREEN INTERVAL (FT.)	AQUIFER UNIT
#33-252	US GEOLOGICAL SURVEY	SALEM 2 OBS	393348	752755	3.25	91 - 96	211MLRW
#33-253	US GEOLOGICAL SURVEY	SALEM 3 OBS	393348	752755	3.00	335 - 340	211MRPAU

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	DATE	TEMPERATURE WATER (DEG C)	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	SODIUM, DISSOLVED (MG/L AS NA)	CHLORIDE, DISSOLVED (MG/L AS CL)
33-252	US GEOLOGICAL SURVEY	SALEM 2 OBS	7-26-93	14.5	720	7.7	3.8	86
33-253	US GEOLOGICAL SURVEY	SALEM 3 OBS	9-24-93	15.0	2,610	7.8	400	670

- Water-level data for this well are available elsewhere in this report.

Aquifer unit:

121CKKD - Kirkwood-Cohansey aquifer system
124PNPN - Piney Point aquifer
211MLRW - Wenonah-Mount Laurel aquifer
211MRPAU - Upper Potomac-Raritan-Magothy aquifer
211ODBG - Old Bridge aquifer, Potomac-Raritan-Magothy aquifer system

WATER QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

ATLANTIC COUNTY

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	ALTITUDE OF LAND SURFACE (FT.)	SCREEN INTERVAL (FT.)	AQUIFER UNIT
01-0349	STATE OF NJ	MULLICA 2D	394041	0744604	58.75	145 - 150	121CKKD

NJ-WRD WELL NUMBER	DATE	TIME	FLOW RATE, INSTANTANEOUS (G/M)	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	HARDNESS TOTAL (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)
01-0349	AUG 1993 25...	1410	1.2	67	4.4	15.5	0.7	4	0.64	0.52	2.6	1.1

NJ-WRD WELL NUMBER	DATE	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P)	ALUMINUM, DISSOLVED (UG/L AS AL)
01-0349	AUG 1993 25...	12	3.5	<0.1	11	<0.01	<0.05	0.02	<0.2	<0.01	640

NJ-WRD WELL NUMBER	DATE	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, DISSOLVED (UG/L AS MN)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, DISSOLVED (UG/L AS ZN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)
01-0349	AUG 1993 25...	24	<1.0	<5	<10	580	3	8	2.0	9	0.7

Aquifer Unit:

121CKKD - Kirkwood-Cohansey aquifer system

WATER QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

BERGEN COUNTY

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	ALTITUDE OF LAND SURFACE (FT.)	SCREEN INTERVAL (FT.)	AQUIFER UNIT
03-0182*	OAKLAND BOROUGH WD	SOONS 6	410301	0741330	238.20	85 - 93	112SFDF

NJ-WRD WELL NUMBER	DATE	TIME	FLOW RATE, INSTANTANEOUS (G/M)	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	HARDNESS TOTAL (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE IT-FLD (MG/L AS HCO3)
03-0182	JUN 1993 16...	1400	150	452	6.9	10.5	6.9	170	48	11	23	1.2	105

NJ-WRD WELL NUMBER	DATE	CARBONATE IT-FLD (MG/L AS CO3)	ALKALINITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P)
03-0182	JUN 1993 16...	--	86	19	63	<0.1	20	248	<0.01	2.60	<0.01	<0.2	<0.01

NJ-WRD WELL NUMBER	DATE	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, DISSOLVED (UG/L AS ZN)
03-0182	JUN 1993 16...	<10	<1	37	<1.0	<1	8	12	1	<1	<0.1	<1.0	41

NJ-WRD WELL NUMBER	DATE	SELENIUM, DISSOLVED (UG/L AS SE)	GROSS BETA, DISSOLVED (PCI/L AS CS-137)	BETA, 2 SIGMA WATER, DISS, AS CS-137 (PCI/L)	ALPHA RADIO. WATER DISS AS TH-230 (PCI/L)	ALPHA COUNT, 2 SIGMA WAT DIS AS TH-230 (PCI/L)	RADIUM 226, DISSOLVED, RADON METHOD (PCI/L)	RA-226 2 SIGMA WATER, DISS, (PCI/L)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	DIBROMOMETHANE WATER WHOLE RECOVER (UG/L)	DICHLOROBROMOMETHANE TOTAL (UG/L)	CARBONTETRACHLORIDE TOTAL (UG/L)	1,2-DICHLOROETHANE TOTAL (UG/L)
03-0182	JUN 1993 16...	<1	1.5	0.74	<0.6	0.43	--	--	0.4	<0.2	<0.2	<0.2	<0.2

NJ-WRD WELL NUMBER	DATE	BROMOFORM TOTAL (UG/L)	CHLORODIBROMOMETHANE TOTAL (UG/L)	CHLOROFORM TOTAL (UG/L)	TOLUENE TOTAL (UG/L)	BENZENE TOTAL (UG/L)	ACROLEIN TOTAL (UG/L)	ACRYLONITRILE TOTAL (UG/L)	CHLOROBENZENE TOTAL (UG/L)	CHLOROETHANE TOTAL (UG/L)	ETHYLBENZENE TOTAL (UG/L)	METHYLBROMIDE TOTAL (UG/L)	METHYLCHLORIDE TOTAL (UG/L)
03-0182	JUN 1993 16...	<0.2	<0.2	0.2	<0.2	<0.2	<20	<20	<0.20	<0.2	<0.2	<0.2	<0.2

NJ-WRD WELL NUMBER	DATE	METHYLENE CHLORIDE TOTAL (UG/L)	TETRACHLOROETHYLENE TOTAL (UG/L)	TRICHLOROFLUOROMETHANE TOTAL (UG/L)	1,1-DICHLOROETHANE TOTAL (UG/L)	1,1-DICHLOROETHYLENE TOTAL (UG/L)	1,1,1-TRICHLOROETHANE TOTAL (UG/L)	1,1,2-TRICHLOROETHANE TOTAL (UG/L)	ETHANE, 1,1,2,2 TETRACHLOROWAT UNF REC (UG/L)	BENZENE O-CHLOROWATER UNFLTRD REC (UG/L)	1,2-DICHLOROPROPANE TOTAL (UG/L)	1,2-TRANSDICHLOROETHENE TOTAL (UG/L)
03-0182	JUN 1993 16...	<0.2	<0.2	<0.2	0.3	<0.2	0.5	<0.2	<0.2	<0.20	<0.2	<0.2

WATER QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

BERGEN COUNTY--Continued

NJ-WRD WELL NUMBER	DATE	BENZENE 1,2,4-TRI-CHLORO-WAT UNF REC (UG/L)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L)	2-CHLORO-ETHYL-VINYL-ETHER TOTAL (UG/L)	DI-CHLORO-DI-FLUORO-METHANE TOTAL (UG/L)	NAPHTH-ALENE TOTAL (UG/L)	TRANS-1,3-DI-CHLORO-PROPENE TOTAL (UG/L)	CIS 1,3-DI-CHLORO-PROPENE TOTAL (UG/L)	VINYL CHLO-RIDE TOTAL (UG/L)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L)	HEXA-CHLORO-BUT-ADIENE TOTAL (UG/L)
03-0182	JUN 1993 16...	<0.20	<0.20	<0.20	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2

NJ-WRD WELL NUMBER	DATE	CIS-1,2-DI-CHLORO-ETHENE WATER TOTAL (UG/L)	STYRENE TOTAL (UG/L)	1,1-DI CHLORO-PRO-PENE, WAT, WH TOTAL (UG/L)	2,2-DI CHLORO-PRO-PANE WAT, WH TOTAL (UG/L)	1,3-DI-CHLORO-PROPANE WAT. WH TOTAL (UG/L)	PSEUDO-CUMENE WATER UNFLTRD REC (UG/L)	ISO-PROPYL-BENZENE WATER WHOLE REC (UG/L)	BENZENE N-PROPY WATER UNFLTRD REC (UG/L)	MESIT-YLENE WATER UNFLTRD REC (UG/L)	O-CHLORO-TOLUENE WATER WHOLE TOTAL (UG/L)	TOLUENE P-CHLOR WATER UNFLTRD REC (UG/L)
03-0182	JUN 1993 16...	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.2	<0.20

NJ-WRD WELL NUMBER	DATE	BENZENE N-BUTYL WATER UNFLTRD REC (UG/L)	BENZENE SEC BUTYL-WATER UNFLTRD REC (UG/L)	BENZENE TERT-BUTYL-WATER UNFLTRD REC (UG/L)	P-ISO-PROPYL-TOLUENE WATER WHOLE REC (UG/L)	123-TRI CHLORO-PROPANE WATER WHOLE TOTAL (UG/L)	ETHANE, 1112-TETRA-CHLORO-WAT UNF REC (UG/L)	1,2,3-TRI-CHLORO BENZENE WAT, WH REC (UG/L)	1,2-DIBROMO ETHANE WATER WHOLE TOTAL (UG/L)	XYLENE WATER UNFLTRD REC (UG/L)	BROMO-BENZENE WATER, WHOLE, TOTAL (UG/L)	DIBROMO CHLORO-PROPANE WATER WHOLE TOT.REC (UG/L)
03-0182	JUN 1993 16...	<0.20	<0.20	<0.20	<0.20	<0.2	<0.2	<0.20	<0.2	<0.20	<0.2	<1.0

* - Field data and samples for laboratory analyses provided by New Jersey Department of Environmental Protection and Energy.

Aquifer Unit:

112SFDF - Stratified drift

WATER QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

BURLINGTON COUNTY

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	ALTITUDE OF LAND SURFACE (FT.)	SCREEN INTERVAL (FT.)	AQUIFER UNIT
05-0404	STATE OF NJ	MULLICA 27S	394406	0744127	40.88	30 - 35	121CKKD

NJ-WRD WELL NUMBER	DATE	TIME	FLOW RATE, INSTAN-TANEOUS (G/M)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXY-GEN, DIS-SOLVED (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE IT-FLD (MG/L AS HCO3)
05-0404	AUG 1993 25...	1000	1.2	34	4.7	13.0	2.6	3	0.59	0.33	1.6	0.20	2.0

NJ-WRD WELL NUMBER	DATE	ALKA-LINITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)
05-0404	AUG 1993 25...	1	4.9	2.9	0.1	3.4	16	<0.01	<0.05	0.03	<0.2	<0.01

NJ-WRD WELL NUMBER	DATE	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)
05-0404	AUG 1993 25...	480	20	<1.0	<5	<10	10	<1	40	2.0	21	0.5

Aquifer Unit:

121CKKD - Kirkwood-Cohansey aquifer system

WATER QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

CAMDEN COUNTY

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	ALTITUDE OF LAND SURFACE (FT.)	SCREEN INTERVAL (FT.)	AQUIFER UNIT
07-0451	STATE OF NJ	MULLICA 1D	394628	0744923	122.36	161 - 166	121CKKD
07-0452	STATE OF NJ	MULLICA 50S	394628	0744923	122.33	36 - 41	121CKKD

NJ-WRD WELL NUMBER	DATE	TIME	FLOW RATE, INSTAN-TANEOUS (G/M)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE IT-FLD (MG/L AS HCO3)
07-0451	AUG 1993 26...	1120	1.5	30	5.0	14.0	0.2	3	0.76	0.34	1.2	1.8	2.0
07-0452	AUG 1993 26...	1300	1.7	39	4.9	13.0	9.6	9	1.8	1.0	1.4	0.40	2.0

NJ-WRD WELL NUMBER	DATE	ALKA-LINITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)
07-0451	AUG 1993 26...	2	5.8	1.5	<0.1	12	25	<0.01	<0.05	0.02	<0.2	0.02
07-0452	AUG 1993 26...	2	8.3	2.7	<0.1	4.0	21	<0.01	<0.05	0.03	<0.2	<0.01

NJ-WRD WELL NUMBER	DATE	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)
07-0451	AUG 1993 26...	30	44	<1.0	<5	<10	670	<1	16	4.0	16	0.2
07-0452	AUG 1993 26...	50	66	<1.0	<5	<10	<3	<1	57	<1.0	7	0.5

Aquifer Unit:

121CKKD - Kirkwood-Cohansey aquifer system

WATER QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

PASSAIC COUNTY

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	ALTITUDE OF LAND SURFACE (FT.)	SCREEN INTERVAL (FT.)	AQUIFER UNIT
31-0010*	WANAQUE WD	HASKELL	410209	0741704	230	90 - 115	112SFDF
31-0064*	RINGWOOD BOROUGH WC	RINGWOOD BEATTIE LANE 9	410408	0741700	220	75 - 93	112SFDF

NJ-WRD WELL NUMBER	DATE	TIME	FLOW RATE, INSTAN-TANEOUS (G/M)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE IT-FLD (MG/L AS HCO3)
31-0010	JUN 1993 17...	1240	700	344	7.5	12.0	1.8	150	43	10	11	1.0	126
31-0064	JUN 1993 24...	1430	200	--	6.3	12.5	3.1	49	12	4.5	15	1.1	30

NJ-WRD WELL NUMBER	DATE	CAR-BONATE IT-FLD (MG/L AS CO3)	ALKA-LINITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)
31-0010	JUN 1993 17...	--	102	33	17	0.1	15	196	<0.01	0.89	<0.01	<0.2	0.01
31-0064	JUN 1993 24...	--	24	16	30	<0.1	7.8	103	<0.01	0.40	0.02	<0.2	0.01

NJ-WRD WELL NUMBER	DATE	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, DIS-SOLVED (UG/L AS ZN)
31-0010	JUN 1993 17...	<10	<1	5	<1.0	<1	1	<3	<1	<1	<0.1	<1.0	6
31-0064	JUN 1993 24...	20	<1	13	<1.0	<1	5	250	1	16	<0.1	<1.0	11

NJ-WRD WELL NUMBER	DATE	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	BETA, 2 SIGMA WATER, DISS, AS CS-137 (PCI/L)	ALPHA RADIO. WATER DISS AS TH-230 (PCI/L)	ALPHA COUNT, 2 SIGMA WAT DIS AS TH-230 (PCI/L)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L)	RA-226 2 SIGMA WATER, DISS, (PCI/L)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	DI-BROMO-METHANE WATER WHOLE RECOVER (UG/L)	DI-CHLORO-BROMO-METHANE TOTAL (UG/L)	CARBON-TETRA-CHLO-RIDE TOTAL (UG/L)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L)
31-0010	JUN 1993 17...	<1	1.7	0.78	<0.6	0.60	--	--	0.5	<0.2	<0.2	<0.2	<0.2
31-0064	JUN 1993 24...	<1	1.6	0.69	<0.6	0.35	--	--	0.5	--	--	--	--

NJ-WRD WELL NUMBER	DATE	BROMO-FORM TOTAL (UG/L)	CHLORO-DI-BROMO-METHANE TOTAL (UG/L)	CHLORO-FORM TOTAL (UG/L)	TOLUENE TOTAL (UG/L)	BENZENE TOTAL (UG/L)	ACRO-LEIN TOTAL (UG/L)	ACRYLO-NITRILE TOTAL (UG/L)	CHLORO-BENZENE TOTAL (UG/L)	CHLORO-ETHANE TOTAL (UG/L)	ETHYL-BENZENE TOTAL (UG/L)	METHYL-BROMIDE TOTAL (UG/L)	METHYL-CHLO-RIDE TOTAL (UG/L)
31-0010	JUN 1993 17...	<0.2	<0.2	<0.2	<0.2	<0.2	<20	<20	<0.20	<0.2	<0.2	<0.2	<0.2
31-0064	JUN 1993 24...	--	--	--	--	--	--	--	--	--	--	--	--

WATER QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

PASSAIC COUNTY--Continued

NJ-WRD WELL NUMBER	DATE	METHYL-ENE CHLO-RIDE TOTAL (UG/L)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L)	1,1-DI-CHLORO-ETHYL-ENE TOTAL (UG/L)	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L)	1,1,2-TRI-CHLORO-ETHANE TOTAL (UG/L)	ETHANE, 1,1,2,2 TETRA-CHLORO-WAT UNF REC (UG/L)	BENZENE O-CHLORO-WATER UNFLTRD REC (UG/L)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L)	1,2-TRANSDI CHLORO-ETHENE TOTAL (UG/L)
31-0010	JUN 1993 17...	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.2	<0.2
31-0064	JUN 1993 24...	--	--	--	--	--	--	--	--	--	--	--

NJ-WRD WELL NUMBER	DATE	BENZENE 1,2,4-TRI-CHLORO-WAT UNF REC (UG/L)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L)	2-CHLORO-ETHYL-VINYL-ETHER TOTAL (UG/L)	DI-CHLORO-DI-FLUORO-METHANE TOTAL (UG/L)	NAPHTH-ALENE TOTAL (UG/L)	TRANS-1,3-DI-CHLORO-PROPENE TOTAL (UG/L)	CIS 1,3-DI-CHLORO-PROPENE TOTAL (UG/L)	VINYL CHLO-RIDE TOTAL (UG/L)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L)	HEXA-CHLORO-BUT-ADIENE TOTAL (UG/L)
31-0010	JUN 1993 17...	<0.20	<0.20	<0.20	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
31-0064	JUN 1993 24...	--	--	--	--	--	--	--	--	--	--	--

NJ-WRD WELL NUMBER	DATE	CIS-1,2-DI-CHLORO-ETHENE WATER TOTAL (UG/L)	STYRENE TOTAL (UG/L)	1,1-DI CHLORO-PRO-PENE, WAT, WH TOTAL (UG/L)	2,2-DI CHLORO-PRO-PANE WAT, WH TOTAL (UG/L)	1,3-DI-CHLORO-PROPANE WAT. WH TOTAL (UG/L)	PSEUDO-CUMENE WATER UNFLTRD REC (UG/L)	ISO-PROPYL-BENZENE WATER WHOLE REC (UG/L)	BENZENE N-PROPY WATER UNFLTRD REC (UG/L)	MESIT-YLENE WATER UNFLTRD REC (UG/L)	O-CHLORO-TOLUENE WATER WHOLE TOTAL (UG/L)	TOLUENE P-CHLOR WATER UNFLTRD REC (UG/L)
31-0010	JUN 1993 17...	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.2	<0.20
31-0064	JUN 1993 24...	--	--	--	--	--	--	--	--	--	--	--

NJ-WRD WELL NUMBER	DATE	BENZENE N-BUTYL WATER UNFLTRD REC (UG/L)	BENZENE SEC BUTYL-WATER UNFLTRD REC (UG/L)	BENZENE TERT-BUTYL-WATER UNFLTRD REC (UG/L)	P-ISO-PROPYL-TOLUENE WATER WHOLE REC (UG/L)	123-TRI CHLORO-PROPANE WATER WHOLE TOTAL (UG/L)	ETHANE, 1112-TETRA-CHLORO-WAT UNF REC (UG/L)	1,2,3-TRI-CHLORO BENZENE WAT, WH REC (UG/L)	1,2-DIBROMO ETHANE WATER WHOLE TOTAL (UG/L)	XYLENE WATER UNFLTRD REC (UG/L)	BROMO-BENZENE WATER, WHOLE, TOTAL (UG/L)	DIBROMO CHLORO-PROPANE WATER WHOLE TOT.REC (UG/L)
31-0010	JUN 1993 17...	<0.20	<0.20	<0.20	<0.20	<0.2	<0.2	<0.20	<0.2	<0.20	<0.2	<1.0
31-0064	JUN 1993 24...	--	--	--	--	--	--	--	--	--	--	--

* - Field data and samples for laboratory analyses provided by New Jersey Department of Environmental Protection and Energy.

Aquifer Unit:

112SFDF - Stratified drift

WATER QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

SUSSEX COUNTY

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	ALTITUDE OF LAND SURFACE (FT.)	OPEN OR SCREEN INTERVAL (FT.)	AQUIFER UNIT
37-0255*	STANHOPE BOROUGH	BORO OF STANHOPE TW5	405414	0744246	780	173 - 225	400PCMB
37-0256*	KUNESCH, IAN	ROLLING GRNS GLF CSE OW1	410213	0744231	600	164 - 174	112SFDF
37-0257*	KUNESCH, IAN	ROLLING GRNS GLF CSE OW2	410216	0744237	600	208 - 275	360KTTN
37-0258*	SALESIAN SISTRS MISSIONARY SOCIETY	SALESIAN SISTERS MISSION	410406	0744708	660	23 - 382	361MRBG
37-0259	SUSSEX COUNTY COMMUNITY COLLEGE	SUSSEX CTY COMM COLLEGE	410407	0744526	680	21.3 - 370	361MRBG
37-0235	YMCA-FAIRVIEW LK CMP	FAIRVIEW LAKE YMCA CAMP	410452	0745447	980	105 - 250	361MRBG
37-0261*	SPARTA TWP	SPARTA TWP TW4	410455	0743908	625	125 - 155	112SFDF
37-0236	SUSSEX CO-DPW	HOMESTEAD COMPLEX	410727	0744523	515	101 - 340	360KTTN
37-0237	SUSSEX CO-DPW	YOUTH DETENTION CENTER	410740	0744529	560	20 - 156	361MRBG
37-0262	SUSSEX CO-FRHLDRS	SUSSEX CTY LIBRARY	411035	0743236	430	126 - 130	400FRKL
37-0263*	SPACE FARMS INC	SPACE FARMS NURSERY	411239	0744146	760	248**	361MRBG
37-0264	VERNON TWP-BOE	GLEN MEADOW MID SCHOOL	411256	0743030	585	239**	400FRKL
37-0265*	RUTGERS U 4-H CAMP	4-H CAMP BEEMERVILLE	411424	0744103	1020	50 - 320	361MRBG

NJ-WRD WELL NUMBER	DATE	TIME	FLOW RATE, INSTANTANEOUS (G/M)	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	HARDNESS TOTAL (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)
37-0255	06-22-93	1200	260	731	7.3	12.0	3.0	310	84	25	18
37-0256	08-19-93	1415	10	625	7.5	11.0	0.2	280	64	29	19
37-0257	08-24-93	1330	10	368	7.7	11.5	6.0	190	40	21	3.5
37-0258	08-17-93	1230	30	423	7.1	21.0	3.2	170	58	5.6	19
37-0259	09-17-93	1010	--	1140	7.6	14.5	4.4	420	130	22	60
37-0235	08-12-93	1230	--	213	8.1	13.5	0.3	91	28	5.2	8.3
37-0261	08-26-93	1430	10	690	7.5	12.0	1.0	350	80	36	7.8
37-0236	08-13-93	1105	--	460	8.0	12.0	0	190	40	22	17
37-0237	08-13-93	1300	--	480	7.6	12.5	3.1	180	61	7.4	30
37-0262	09-17-93	1325	15	1220	7.5	11.5	7.8	440	110	40	84
37-0263	06-23-93	1245	20	417	8.7	12.0	0.2	63	15	6.1	59
37-0264	09-16-93	1425	15	345	7.8	12.5	6.4	170	45	14	10
37-0265	08-23-93	1330	15	243	7.4	12.0	0.1	93	30	4.3	12

NJ-WRD WELL NUMBER	DATE	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE IT-FLD (MG/L AS HCO3)	CARBONATE IT-FLD (MG/L AS CO3)	ALKALINITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)
37-0255	06-22-93	1.6	186	--	154	40	96	0.10	26	393	<0.010
37-0256	08-19-93	1.4	244	--	202	40	49	<0.10	12	335	<0.010
37-0257	08-24-93	1.1	--	--	--	27	10	0.10	10	205	<0.010
37-0258	08-17-93	0.70	154	--	126	21	41	<0.10	9.8	233	<0.010
37-0259	09-17-93	0.90	145	--	121	35	260	<0.10	13	594	<0.010
37-0235	08-12-93	0.50	104	--	84	16	1.1	0.10	14	124	<0.010
37-0261	08-26-93	1.4	--	--	--	34	16	<0.10	9.8	344	<0.010
37-0236	08-13-93	1.0	165	--	134	22	49	0.50	11	244	<0.010
37-0237	08-13-93	0.90	145	--	117	48	56	<0.10	10	286	<0.010
37-0262	09-17-93	1.7	370	--	302	31	180	<0.10	12	663	<0.010
37-0263	06-23-93	4.2	105	7.0	97	55	20	0.80	11	243	0.070
37-0264	09-16-93	1.7	210	--	171	9.2	7.3	0.20	21	215	<0.010
37-0265	08-23-93	2.4	88	--	72	29	4.3	1.6	24	151	<0.010

WATER QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

SUSSEX COUNTY--Continued

NJ-WRD WELL NUMBER	DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)
37-0255	06-22-93	2.50	0.020	<0.20	0.030	<10	<1	24	<1.0	<1	5
37-0256	08-19-93	0.055	<0.010	<0.20	<0.010	<10	<1	41	<1.0	2	<1
37-0257	08-24-93	1.00	<0.010	<0.20	<0.010	<10	<1	17	<1.0	<1	<1
37-0258	08-17-93	0.370	0.020	<0.20	<0.010	<10	<1	44	<1.0	<1	16
37-0259	09-17-93	0.310	0.030	<0.20	<0.010	10	<1	130	<1.0	<1	2
37-0235	08-12-93	<0.050	0.010	<0.20	0.010	<10	<1	9	<1.0	<1	<1
37-0261	08-26-93	2.10	0.010	<0.20	<0.010	<10	<1	28	<1.0	<1	5
37-0236	08-13-93	<0.050	0.010	<0.20	<0.010	<10	1	69	<1.0	<1	<1
37-0237	08-13-93	0.220	0.010	<0.20	<0.010	<10	<1	27	<1.0	<1	<1
37-0262	09-17-93	5.00	0.020	<0.20	<0.010	<10	<1	56	<1.0	<1	4
37-0263	06-23-93	3.00	0.050	<0.20	<0.010	10	1	72	<1.0	<1	<1
37-0264	09-16-93	0.640	0.010	<0.20	0.010	<10	1	19	<1.0	<1	1
37-0265	08-23-93	<0.050	<0.010	<0.20	<0.010	<10	<1	5	<1.0	<1	2

NJ-WRD WELL NUMBER	DATE	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, DIS-SOLVED (UG/L AS ZN)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	BETA, 2 SIGMA WATER, DISS, AS CS-137 (PCI/L)	ALPHA RADIO. WATER DISS AS TH-230 (PCI/L)
37-0255	06-22-93	<3	<1	<1	<0.1	<1.0	8	1	2.1	1.0	0.7
37-0256	08-19-93	120	<1	2	<0.1	<1.0	3	<1	3.2	1.0	1.5
37-0257	08-24-93	17	<1	3	<0.1	<1.0	<3	<1	1.9	0.87	0.9
37-0258	08-17-93	11	<1	40	<0.1	<1.0	320	<1	2.1	0.91	1.2
37-0259	09-17-93	6	<1	14	<0.1	<1.0	67	<1	--	--	--
37-0235	08-12-93	14	1	58	<0.1	<1.0	<3	<1	1.4	0.74	0.9
37-0261	08-26-93	<3	<1	<1	0.1	<1.0	<3	<1	2.5	1.1	0.8
37-0236	08-13-93	27	<1	4	0.2	<1.0	<3	<1	2.3	0.87	2.2
37-0237	08-13-93	13	<1	120	0.2	<1.0	4	<1	1.3	0.78	3.3
37-0262	09-17-93	10	<1	<1	<0.1	<1.0	110	<1	4.4	1.9	4.0
37-0263	06-23-93	7	<1	11	<0.1	<1.0	<3	<1	5.1	1.4	1.7
37-0264	09-16-93	<3	<1	<1	<0.1	<1.0	33	<1	7.1	1.8	<0.6
37-0265	08-23-93	14	<1	190	<0.1	<1.0	80	<1	6.2	1.6	1.7

NJ-WRD WELL NUMBER	DATE	ALPHA COUNT, 2 SIGMA WAT DIS AS TH-230 (PCI/L)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L)	RA-226 2 SIGMA WATER, DISS, (PCI/L)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	DI-BROMO-METHANE WATER WHOLE RECOVER (UG/L)	DI-CHLORO-BROMO-METHANE TOTAL (UG/L)	CARBON-TETRA-CHLO-RIDE TOTAL (UG/L)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L)	BROMO-FORM TOTAL (UG/L)	CHLORO-DI-BROMO-METHANE TOTAL (UG/L)
37-0255	06-22-93	0.99	--	--	0.6	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
37-0256	08-19-93	1.1	--	--	0.3	--	--	--	--	--	--
37-0257	08-24-93	0.69	--	--	0.2	--	--	--	--	--	--
37-0258	08-17-93	1.0	--	--	0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
37-0259	09-17-93	--	--	--	0.4	--	--	--	--	--	--
37-0235	08-12-93	0.58	--	--	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
37-0261	08-26-93	1.0	--	--	0.6	--	--	--	--	--	--
37-0236	08-13-93	1.1	--	--	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
37-0237	08-13-93	1.7	--	--	0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
37-0262	09-17-93	2.9	--	--	0.4	--	--	--	--	--	--
37-0263	06-23-93	1.2	--	--	0.4	--	--	--	--	--	--
37-0264	09-16-93	0.62	0.25	0.050	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
37-0265	08-23-93	0.90	--	--	0.3	--	--	--	--	--	--

WATER QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

SUSSEX COUNTY--Continued

NJ-WRD WELL NUMBER	DATE	CHLORO-FORM TOTAL (UG/L)	TOLUENE TOTAL (UG/L)	BENZENE TOTAL (UG/L)	ACRO-LEIN TOTAL (UG/L)	ACRYLO-NITRILE TOTAL (UG/L)	CHLORO-BENZENE TOTAL (UG/L)	CHLORO-ETHANE TOTAL (UG/L)	ETHYL-BENZENE TOTAL (UG/L)	METHYL-BROMIDE TOTAL (UG/L)
37-0255	06-22-93	<0.2	<0.2	<0.2	<20	<20	<0.20	<0.2	<0.2	<0.2
37-0256	08-19-93	--	--	--	--	--	--	--	--	--
37-0257	08-24-93	--	--	--	--	--	--	--	--	--
37-0258	08-17-93	<0.2	<0.2	<0.2	<20	<20	<0.20	<0.2	<0.2	<0.2
37-0259	09-17-93	--	--	--	--	--	--	--	--	--
37-0235	08-12-93	<0.2	<0.2	<0.2	<20	<20	<0.20	<0.2	<0.2	<0.2
37-0261	08-26-93	--	--	--	--	--	--	--	--	--
37-0236	08-13-93	<0.2	<0.2	<0.2	<20	<20	<0.20	<0.2	<0.2	<0.2
37-0237	08-13-93	<0.2	<0.2	<0.2	<20	<20	<0.20	<0.2	<0.2	<0.2
37-0262	09-17-93	--	--	--	--	--	--	--	--	--
37-0263	06-23-93	--	--	--	--	--	--	--	--	--
37-0264	09-16-93	--	--	--	--	--	--	--	--	--
37-0265	08-23-93	--	--	--	--	--	--	--	--	--

NJ-WRD WELL NUMBER	DATE	METHYL-CHLO-RIDE TOTAL (UG/L)	METHYL-ENE CHLO-RIDE TOTAL (UG/L)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L)	1,1-DI-CHLORO-ETHYL-ENE TOTAL (UG/L)	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L)	1,1,2-TRI-CHLORO-ETHANE TOTAL (UG/L)	ETHANE, 1,1,2,2 TETRA-CHLORO-WAT UNF REC (UG/L)
37-0255	06-22-93	<0.2	<0.2	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
37-0256	08-19-93	--	--	--	--	--	--	--	--	--
37-0257	08-24-93	--	--	--	--	--	--	--	--	--
37-0258	08-17-93	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
37-0259	09-17-93	--	--	--	--	--	--	--	--	--
37-0235	08-12-93	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
37-0261	08-26-93	--	--	--	--	--	--	--	--	--
37-0236	08-13-93	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
37-0237	08-13-93	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
37-0262	09-17-93	--	--	--	--	--	--	--	--	--
37-0263	06-23-93	--	--	--	--	--	--	--	--	--
37-0264	09-16-93	--	--	--	--	--	--	--	--	--
37-0265	08-23-93	--	--	--	--	--	--	--	--	--

NJ-WRD WELL NUMBER	DATE	BENZENE O-CHLORO-WATER UNFLTRD REC (UG/L)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L)	1,2-TRANSDI CHLORO-ETHENE TOTAL (UG/L)	BENZENE 1,2,4-TRI-CHLORO-WAT UNF REC (UG/L)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L)	2-CHLORO-ETHYL-VINYL-ETHER TOTAL (UG/L)	DI-CHLORO-DI-FLUORO-METHANE TOTAL (UG/L)	NAPHTH-ALENE TOTAL (UG/L)
37-0255	06-22-93	<0.20	<0.2	<0.2	<0.20	<0.20	<0.20	<1.0	<0.2	<0.2
37-0256	08-19-93	--	--	--	--	--	--	--	--	--
37-0257	08-24-93	--	--	--	--	--	--	--	--	--
37-0258	08-17-93	<0.20	<0.2	<0.2	<0.20	<0.20	<0.20	<1.0	<0.2	<0.2
37-0259	09-17-93	--	--	--	--	--	--	--	--	--
37-0235	08-12-93	<0.20	<0.2	<0.2	<0.20	<0.20	<0.20	<1.0	<0.2	<0.2
37-0261	08-26-93	--	--	--	--	--	--	--	--	--
37-0236	08-13-93	<0.20	<0.2	<0.2	<0.20	<0.20	<0.20	<1.0	<0.2	<0.2
37-0237	08-13-93	<0.20	<0.2	<0.2	<0.20	<0.20	<0.20	<1.0	<0.2	<0.2
37-0262	09-17-93	--	--	--	--	--	--	--	--	--
37-0263	06-23-93	--	--	--	--	--	--	--	--	--
37-0264	09-16-93	--	--	--	--	--	--	--	--	--
37-0265	08-23-93	--	--	--	--	--	--	--	--	--

WATER QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

SUSSEX COUNTY--Continued

NJ-WRD WELL NUMBER	DATE	TRANS-1,3-DI-CHLORO-PROPENE TOTAL (UG/L)	CIS 1,3-DI-CHLORO-PROPENE TOTAL (UG/L)	VINYL CHLO-RIDE TOTAL (UG/L)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L)	HEXA-CHLORO-BUT-ADIENE TOTAL (UG/L)	CIS-1,2-DI-CHLORO-ETHENE WATER TOTAL (UG/L)	STYRENE TOTAL (UG/L)	1,1-DI CHLORO-PRO-PENE, WAT, WH TOTAL (UG/L)	2,2-DI CHLORO-PRO-PANE WAT, WH TOTAL (UG/L)
37-0255	06-22-93	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	<0.2	<0.2	<0.2
37-0256	08-19-93	--	--	--	--	--	--	--	--	--
37-0257	08-24-93	--	--	--	--	--	--	--	--	--
37-0258	08-17-93	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
37-0259	09-17-93	--	--	--	--	--	--	--	--	--
37-0235	08-12-93	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
37-0261	08-26-93	--	--	--	--	--	--	--	--	--
37-0236	08-13-93	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
37-0237	08-13-93	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
37-0262	09-17-93	--	--	--	--	--	--	--	--	--
37-0263	06-23-93	--	--	--	--	--	--	--	--	--
37-0264	09-16-93	--	--	--	--	--	--	--	--	--
37-0265	08-23-93	--	--	--	--	--	--	--	--	--

NJ-WRD WELL NUMBER	DATE	1,3-DI-CHLORO-PROPANE WAT. WH TOTAL (UG/L)	PSEUDO-CUMENE WATER UNFLTRD REC (UG/L)	ISO-PROPYL-BENZENE WATER WHOLE REC (UG/L)	BENZENE N-PROPY WATER UNFLTRD REC (UG/L)	MESIT-YLENE WATER UNFLTRD REC (UG/L)	O-CHLORO-TOLUENE WATER WHOLE TOTAL (UG/L)	TOLUENE P-CHLOR WATER UNFLTRD REC (UG/L)	BENZENE N-BUTYL WATER UNFLTRD REC (UG/L)	BENZENE SEC BUTYL-WATER UNFLTRD REC (UG/L)
37-0255	06-22-93	<0.2	<0.20	<0.20	<0.20	<0.20	<0.2	<0.20	<0.20	<0.20
37-0256	08-19-93	--	--	--	--	--	--	--	--	--
37-0257	08-24-93	--	--	--	--	--	--	--	--	--
37-0258	08-17-93	<0.2	<0.20	<0.20	<0.20	<0.20	<0.2	<0.20	<0.20	<0.20
37-0259	09-17-93	--	--	--	--	--	--	--	--	--
37-0235	08-12-93	<0.2	<0.20	<0.20	<0.20	<0.20	<0.2	<0.20	<0.20	<0.20
37-0261	08-26-93	--	--	--	--	--	--	--	--	--
37-0236	08-13-93	<0.2	<0.20	<0.20	<0.20	<0.20	<0.2	<0.20	<0.20	<0.20
37-0237	08-13-93	<0.2	<0.20	<0.20	<0.20	<0.20	<0.2	<0.20	<0.20	<0.20
37-0262	09-17-93	--	--	--	--	--	--	--	--	--
37-0263	06-23-93	--	--	--	--	--	--	--	--	--
37-0264	09-16-93	--	--	--	--	--	--	--	--	--
37-0265	08-23-93	--	--	--	--	--	--	--	--	--

NJ-WRD WELL NUMBER	DATE	BENZENE TERT-BUTYL-WATER UNFLTRD REC (UG/L)	P-ISO-PROPYL-TOLUENE WATER WHOLE REC (UG/L)	123-TRI CHLORO-PROPANE WATER WHOLE TOTAL (UG/L)	ETHANE, 1112-TETRA-CHLORO-WAT UNF REC (UG/L)	1,2,3-TRI-CHLORO BENZENE WAT, WH REC (UG/L)	1,2-DIBROMO ETHANE WATER WHOLE TOTAL (UG/L)	XYLENE WATER UNFLTRD REC (UG/L)	BROMO-BENZENE WATER, WHOLE, TOTAL (UG/L)	DIBROMO CHLORO-PROPANE WATER WHOLE TOT.REC (UG/L)
37-0255	06-22-93	<0.20	<0.20	<0.2	<0.2	<0.20	<0.2	<0.20	<0.2	<1.0
37-0256	08-19-93	--	--	--	--	--	--	--	--	--
37-0257	08-24-93	--	--	--	--	--	--	--	--	--
37-0258	08-17-93	<0.20	<0.20	<0.2	<0.2	<0.20	<0.2	<0.20	<0.2	<1.0
37-0259	09-17-93	--	--	--	--	--	--	--	--	--
37-0235	08-12-93	<0.20	<0.20	<0.2	<0.2	<0.20	<0.2	<0.20	<0.2	<1.0
37-0261	08-26-93	--	--	--	--	--	--	--	--	--
37-0236	08-13-93	<0.20	<0.20	<0.2	<0.2	<0.20	<0.2	<0.20	<0.2	<1.0
37-0237	08-13-93	<0.20	<0.20	<0.2	<0.2	<0.20	<0.2	<0.20	<0.2	<1.0
37-0262	09-17-93	--	--	--	--	--	--	--	--	--
37-0263	06-23-93	--	--	--	--	--	--	--	--	--
37-0264	09-16-93	--	--	--	--	--	--	--	--	--
37-0265	08-23-93	--	--	--	--	--	--	--	--	--

* - Field data and samples for laboratory analyses provided by New Jersey Department of Environmental Protection and Energy.

** - Total depth of well (extent of screen or open interval is not known).

Aquifer Units:

400PCMB - Precambrian Erathem
112SFDF - Stratified drift
360KTTN - Kittatinny Limestone
361MRBG - Martinsburg Shale
400FRKL - Franklin Limestone

WATER QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

WARREN COUNTY

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	ALTITUDE OF LAND SURFACE (FT.)	OPEN INTERVAL (FT.)	AQUIFER UNIT
41-0274	MANSFIELD TWP	MANSFIELD TWP 4	404548	0745542	520	144 - 400	360KTTN
41-0272	STORER CABLE COMMUNICATIONS	STORER CABLE COMM	404653	0745502	640	60 - 198	361MRBG
41-0275	ROCKPORT PRESBY CHURCH	ROCKPORT PRESBY CHURCH	404838	0745308	660	103 - 333	361MRBG
41-0276*	STATE OF NJ - PARKS & FORESTRY/JENNY JUMP	JENNY JUMP BATH HOUSE	405458	0745456	980	50 - 400	400PCMB
41-0277	ROGERS, RICHARD	ROGERS DOM 3	405859	0745346	680	60 - 245	361MRBG
41-0273	JERS CENTRAL - YARD CRK REC CENTER	JCP&L-YD CK REC CTR	405955	0750214	925	18.8 - 125	361MRBG

NJ-WRD WELL NUMBER	DATE	TIME (G/M)	FLOW RATE, INSTANTANEOUS (US/CM)	SPECIFIC CONDUCTANCE UNITS)	PH WATER WHOLE FIELD (STANDARD (DEG C)	TEMPERATURE WATER (MG/L)	OXYGEN, DISSOLVED CACO3)	HARDNESS TOTAL (MG/L AS AS CA)	CALCIUM DISSOLVED (MG/L AS MG)	MAGNESIUM, DISSOLVED (MG/L AS NA)	SODIUM, DISSOLVED (MG/L AS K)	POTASSIUM, DISSOLVED (MG/L HCO3)	BICARBONATE IT-FLD (MG/L AS
41-0274	SEP 1993 17...	1500	--	585	8.0	11.0	7.9	250	51	30	19	1.6	200
41-0272	AUG 1993 12...	1545	9.0	95	6.6	12.5	7.0	35	9.7	2.5	4.2	1.2	42
41-0275	SEP 1993 16...	1600	7.5	157	8.2	13.5	0.1	71	21	4.6	6.2	0.60	80
41-0276	AUG 1993 25...	1330	10	256	7.4	11.0	0.1	120	30	11	5.4	1.0	122
41-0277	SEP 1993 17...	1115	4.0	304	8.2	13.5	8.3	120	22	16	18	0.90	163
41-0273	AUG 1993 12...	1130	10	418	7.8	13.5	0.2	200	68	8.2	6.4	0.50	133

NJ-WRD WELL NUMBER	DATE	CARBONATE IT-FLD (MG/L AS CO3)	ALKALINITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P)
41-0274	SEP 1993 17...	--	165	19	67	<0.1	11	309	<0.01	2.80	0.02	<0.2	<0.01
41-0272	AUG 1993 12...	--	34	3.3	3.3	<0.1	16	70	<0.01	2.00	<0.01	<0.2	0.02
41-0275	SEP 1993 16...	--	66	13	1.3	0.2	14	100	<0.01	<0.05	0.01	<0.2	<0.01
41-0276	AUG 1993 25...	--	100	18	1.4	0.9	19	147	<0.01	<0.05	0.01	<0.2	<0.01
41-0277	SEP 1993 17...	--	133	18	2.0	0.2	18	176	<0.01	0.05	0.05	<0.2	<0.01
41-0273	AUG 1993 12...	--	108	110	3.1	<0.1	13	275	<0.01	<0.05	0.02	<0.2	<0.01

NJ-WRD WELL NUMBER	DATE	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, DISSOLVED (UG/L AS ZN)
41-0274	SEP 1993 17...	<10	<1	45	<1.0	<1	<1	<3	2	<1	<0.1	<1.0	16
41-0272	AUG 1993 12...	<1	<1	<2	<1.0	<1	7	<3	<1	<1	0.2	<1.0	<3
41-0275	SEP 1993 16...	<10	<1	21	<1.0	<1	1	24	<1	23	<0.1	<1.0	5
41-0276	AUG 1993 25...	<10	<1	3	<1.0	<1	<1	18	2	110	0.1	<1.0	10
41-0277	SEP 1993 17...	10	<1	77	<1.0	<1	120	13	<1	5	--	<1.0	<3
41-0273	AUG 1993 12...	<10	<1	27	<1.0	<1	23	<3	<1	41	0.2	<1.0	6

WATER QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

WARREN COUNTY--Continued

NJ-WRD WELL NUMBER	DATE	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	BETA, 2 SIGMA WATER, DISS, AS CS-137 (PCI/L)	ALPHA RADIO. WATER DISS AS TH-230 (PCI/L)	ALPHA COUNT, 2 SIGMA WAT DIS AS TH-230 (PCI/L)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L)	RA-226 2 SIGMA WATER, DISS, (PCI/L)	RADIUM 228 DIS-SOLVED (PCI/L AS RA-228)	RA-228 SIGMA WATER DISS (PCI/L)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	DI-BROMO-METHANE WATER WHOLE RECOVER (UG/L)	DI-CHLORO-BROMO-METHANE TOTAL (UG/L)
41-0274	SEP 1993 17...	<1	3.0	1.0	1.1	1.1	--	--	--	--	0.4	<0.2	<0.2
41-0272	AUG 1993 12...	<1	1.8	0.72	<0.6	0.28	--	--	--	--	<0.1	--	--
41-0275	SEP 1993 16...	<1	1.4	0.62	1.5	0.70	--	--	--	--	0.1	--	--
41-0276	AUG 1993 25...	<1	15	3.1	18	3.2	--	--	0.777	0.422	0.4	--	--
41-0277	SEP 1993 17...	<1	--	--	--	--	--	--	--	--	0.2	--	--
41-0273	AUG 1993 12...	<1	1.3	0.79	1.5	1.2	--	--	--	--	0.2	<0.2	<0.2

NJ-WRD WELL NUMBER	DATE	CARBON-TETRA-CHLO-RIDE TOTAL (UG/L)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L)	BROMO-FORM TOTAL (UG/L)	CHLORO-DI-BROMO-METHANE TOTAL (UG/L)	CHLORO-FORM TOTAL (UG/L)	TOLUENE TOTAL (UG/L)	BENZENE TOTAL (UG/L)	ACRO-LEIN TOTAL (UG/L)	ACRYLO-NITRILE TOTAL (UG/L)	CHLORO-BENZENE TOTAL (UG/L)	CHLORO-ETHANE TOTAL (UG/L)	ETHYL-BENZENE TOTAL (UG/L)
41-0274	SEP 1993 17...	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<20	<20	<0.20	<0.2	<0.2
41-0272	AUG 1993 12...	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<20	<20	<0.20	<0.2	<0.2
41-0275	SEP 1993 16...	--	--	--	--	--	--	--	--	--	--	--	--
41-0276	AUG 1993 25...	--	--	--	--	--	--	--	--	--	--	--	--
41-0277	SEP 1993 17...	--	--	--	--	--	--	--	--	--	--	--	--
41-0273	AUG 1993 12...	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<20	<20	<0.20	<0.2	<0.2

NJ-WRD WELL NUMBER	DATE	METHYL-BROMIDE TOTAL (UG/L)	METHYL-CHLO-RIDE TOTAL (UG/L)	METHYL-ENE CHLO-RIDE TOTAL (UG/L)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L)	1,1-DI-CHLORO-ETHYL-ENE TOTAL (UG/L)	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L)	1,1,2-TRI-CHLORO-ETHANE TOTAL (UG/L)	ETHANE, 1,1,2,2 TETRA-CHLORO-WAT UNF REC (UG/L)	BENZENE O-CHLORO-WATER UNFLTRD REC (UG/L)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L)
41-0274	SEP 1993 17...	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.2
41-0272	AUG 1993 12...	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.2
41-0275	SEP 1993 16...	--	--	--	--	--	--	--	--	--	--	--	--
41-0276	AUG 1993 25...	--	--	--	--	--	--	--	--	--	--	--	--
41-0277	SEP 1993 17...	--	--	--	--	--	--	--	--	--	--	--	--
41-0273	AUG 1993 12...	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.2

NJ-WRD WELL NUMBER	DATE	1,2-TRANSDI CHLORO-ETHENE TOTAL (UG/L)	BENZENE 1,2,4-TRI-CHLORO-WAT UNF REC (UG/L)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L)	2-CHLORO-ETHYL-VINYL-ETHER TOTAL (UG/L)	DI-CHLORO-DI-FLUORO-METHANE TOTAL (UG/L)	NAPHTH-ALENE TOTAL (UG/L)	TRANS-1,3-DI-CHLORO-PROPENE TOTAL (UG/L)	CIS 1,3-DI-CHLORO-PROPENE TOTAL (UG/L)	VINYL CHLO-RIDE TOTAL (UG/L)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L)	HEXA-CHLORO-BUT-ADIENE TOTAL (UG/L)
41-0274	SEP 1993 17...	<0.2	<0.20	<0.20	<0.20	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
41-0272	AUG 1993 12...	<0.2	<0.20	<0.20	<0.20	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
41-0275	SEP 1993 16...	--	--	--	--	--	--	--	--	--	--	--	--
41-0276	AUG 1993 25...	--	--	--	--	--	--	--	--	--	--	--	--
41-0277	SEP 1993 17...	--	--	--	--	--	--	--	--	--	--	--	--
41-0273	AUG 1993 12...	<0.2	<0.20	<0.20	<0.20	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2

WATER QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

WARREN COUNTY--Continued

NJ-WRD WELL NUMBER	DATE	CIS-1,2 -DI- CHLORO- ETHENE WATER TOTAL (UG/L)	STYRENE TOTAL (UG/L)	1,1-DI CHLORO- PRO- PENE, WAT, WH TOTAL (UG/L)	2,2-DI CHLORO- PRO- PANE WAT, WH TOTAL (UG/L)	1,3-DI- CHLORO- PROPANE WAT. WH TOTAL (UG/L)	PSEUDO- CUMENE WATER UNFLTRD REC (UG/L)	ISO- PROPYL- BENZENE WATER WHOLE REC (UG/L)	BENZENE N-PROPY WATER UNFLTRD REC (UG/L)	MESIT- YLENE WATER UNFLTRD REC (UG/L)	O- CHLORO- TOLUENE WATER WHOLE TOTAL (UG/L)	TOLUENE P-CHLOR WATER UNFLTRD REC (UG/L)
41-0274	SEP 1993 17...	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.2	<0.20
41-0272	AUG 1993 12...	--	--	--	--	--	--	--	--	--	--	--
41-0275	SEP 1993 16...	--	--	--	--	--	--	--	--	--	--	--
41-0276	AUG 1993 25...	--	--	--	--	--	--	--	--	--	--	--
41-0277	SEP 1993 17...	--	--	--	--	--	--	--	--	--	--	--
41-0273	AUG 1993 12...	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.2	<0.20

NJ-WRD WELL NUMBER	DATE	BENZENE N-BUTYL WATER UNFLTRD REC (UG/L)	BENZENE SEC BUTYL- WATER UNFLTRD REC (UG/L)	BENZENE TERT- BUTYL- WATER UNFLTRD REC (UG/L)	P-ISO- PROPYL- TOLUENE WATER WHOLE REC (UG/L)	123-TRI CHLORO- PROPANE WATER WHOLE TOTAL (UG/L)	ETHANE, 1112- TETRA- CHLORO- WAT UNF REC (UG/L)	1,2,3- TRI- CHLORO BENZENE WAT, WH REC (UG/L)	1,2- DIBROMO ETHANE WATER WHOLE TOTAL (UG/L)	XYLENE WATER UNFLTRD REC (UG/L)	BROMO- BENZENE WATER, WHOLE, TOTAL (UG/L)	DIBROMO CHLORO- PROPANE WATER WHOLE TOT.REC (UG/L)
41-0274	SEP 1993 17...	<0.20	<0.20	<0.20	<0.20	<0.2	<0.2	<0.20	<0.2	<0.20	<0.2	<1.0
41-0272	AUG 1993 12...	--	--	--	--	--	--	--	--	--	--	--
41-0275	SEP 1993 16...	--	--	--	--	--	--	--	--	--	--	--
41-0276	AUG 1993 25...	--	--	--	--	--	--	--	--	--	--	--
41-0277	SEP 1993 17...	--	--	--	--	--	--	--	--	--	--	--
41-0273	AUG 1993 12...	<0.20	<0.20	<0.20	<0.20	<0.2	<0.2	<0.20	<0.2	<0.20	<0.2	<1.0

* - Field data and samples for laboratory analyses provided by New Jersey Department of Environmental Protection and Energy.

Aquifer Units:

360KTTN - Kittatinny Limestone
361MRBG - Martinsburg Shale
400PCMB - Precambrian Erathem

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CONVERSION FACTORS AND VERTICAL DATUM

Multiply	By	To obtain
	Length	
inch (in.)	2.54×10^{1}	millimeter
	2.54×10^{-2}	meter
foot (ft)	3.048×10^{-1}	meter
mile (mi)	1.609×10^{0}	kilometer
	Area	
acre	4.047×10^{3}	square meter
	4.047×10^{-1}	square hectometer
	4.047×10^{-3}	square kilometer
square mile (mi^2)	2.590×10^{0}	square kilometer
	Volume	
gallon (gal)	3.785×10^{0}	liter
	3.785×10^{0}	cubic decimeter
	3.785×10^{-3}	cubic meter
million gallons (Mgal)	3.785×10^{3}	cubic meter
	3.785×10^{-3}	cubic hectometer
cubic foot (ft^3)	2.832×10^{1}	cubic decimeter
	2.832×10^{-2}	cubic meter
cubic–foot–per–second day [(ft^3/s) d]	2.447×10^{3}	cubic meter
	2.447×10^{-3}	cubic hectometer
acre–foot (acre–ft)	1.233×10^{3}	cubic meter
	1.233×10^{-3}	cubic hectometer
	1.233×10^{-6}	cubic kilometer
	Flow	
cubic foot per second (ft^3/s)	2.832×10^{1}	liter per second
	2.832×10^{1}	cubic decimeter per second
	2.832×10^{-2}	cubic meter per second
gallon per minute (gal/min)	6.309×10^{-2}	liter per second
	6.309×10^{-2}	cubic decimeter per second
	6.309×10^{-5}	cubic meter per second
million gallons per day (Mgal/d)	4.381×10^{1}	cubic decimeter per second
	4.381×10^{-2}	cubic meter per second
	Mass	
ton (short)	9.072×10^{-1}	megagram or metric ton

Sea level: In this report "sea level" refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929)—a geodetic datum derived from a general adjustment for the first–order level nets of both the United States and Canada, formerly called Sea Level Datum of 1929.

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