Department of Natural Resources
MARYLAND GEOLOGICAL SURVEY
Kenneth N. Weaver, Director

BASIC DATA REPORT NO. 19

HYDROLOGIC DATA FOR HOWARD COUNTY, MARYLAND

Compiled by

James R. Dine, James C. Adamski,
and
Michael D. Tompkins

Prepared in cooperation with the
United States Department of the Interior
Geological Survey
and the
Howard County Department of Public Works
Division of Environmental Management

1992

CONVERSION FACTORS, VERTICAL DATUM, AND ABBREVIATED WATER-QUALITY UNITS

Multiply	*By*	*To obtain*
inch (in.)	25.4	millimeter
foot (ft)	0.3048	meter
mile (mi)	1.609	kilometer
square foot (ft^2)	0.09290	square meter
square mile (mi^2)	2.59	square kilometer
acre (ac)	0.4047	square hectometer
gallon (gal)	3.785	liter
million gallons (Mgal)	3,785	cubic meter
gallon per minute (gal/min)	0.06309	liter per second
gallon per day (gal/d)	0.003785	cubic meter per day
million gallons per day (Mgal/d)	0.04381	cubic meter per second
cubic foot per second (ft^3/s)	0.02832	cubic meter per second
ton (t)	907.2	kilogram

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

Chemical concentrations and temperatures are presented in SI (metric) units. Chemical concentration is given in milligrams per liter (mg/L), micrograms per liter (μg/L), micrograms per gram (μg/g), or micrograms per kilogram (μg/kg), except as noted. Milligrams per liter is a unit expressing the concentration of chemical constituents in solution as weight (milligrams) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter. Concentrations in milligrams per liter are equivalent to concentrations in parts per million for values less than 7,000 mg/L.

Radioactivity is expressed in disintegrations per second, regardless of radionuclide species [1 picoCurie per liter (pCi/L) = 3.7×10^{-2} disintegrations per second]. Specific electrical conductance of water is expressed in microsiemens per centimeter at 25 degrees Celsius (μs/cm). This unit is equivalent to micromhos per centimeter at 25 degrees Celsius (μmho/cm), formerly used by the U.S. Geological Survey. Temperature in degrees Celsius (°C) can be converted to degrees Fahrenheit (°F) using the following equation:

$$°F = 1.8(°C) + 32$$

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ABSTRACT

This report presents a compilation of hydrologic data for Howard County, Maryland, for the period from 1896 to 1990. Data on 2,484 wells and 29 springs in the county, and 30 additional wells drilled in Anne Arundel and Baltimore Counties by the Howard County Department of Public Works are included. Water-level data for 65 observation wells, geophysical logs of 6 wells, and measurements of physical properties for 11 springs are also included. Chemical analyses of ground water include 179 major-ion and organic-carbon determinations, 120 determinations of trace elements and radon, 68 triazine-group pesticide determinations, 69 determinations of carbamate-group pesticides, 11 determinations of volatile organic compounds, 24 tritium determinations, and 61 nitrogen and phosphorus determinations.

Streamflow information includes drainage-basin characteristics for 33 sites, monthly and annual flow statistics for 11 gaging stations, and discharge measurements at 22 partial-record stations. Chemical analyses of stream water include 281 major-ion determinations, 57 determinations of physical properties, bacteria, nutrients, trace metals, and radionuclides for the Patapsco River, and 14 pesticide and 10 trace-metal determinations on stream-bottom materials. Water-appropriation and withdrawal data for ground-water and surface-water sources also are presented.

INTRODUCTION

Howard County, Maryland, is experiencing rapid population growth and considerable residential and commercial development. Because this growth creates additional demands on the water resources, it is important to have a base of hydrologic data to assess current conditions and effects of development, and to plan for future use of the resources. This report has been prepared to meet the need for fundamental hydrologic information on Howard County and to provide a basis for a new county water resources report prepared in cooperation with the U.S. Geological Survey, the Maryland Geological Survey, and the Howard County Department of Public Works (Dine and Adamski, in preparation).

Howard County has a total land area of 251 square miles (160,640 acres) and is located between Washington, D.C., and Baltimore, Maryland (fig. 1, 2). Undeveloped land accounts for 92,300 acres, or 58 percent of the total area (Howard County Department of Planning and Zoning, 1990a). Farmland, once the dominant land use, now occupies about 43,000 acres, or 27 percent of the total land area (Howard County Department of Planning and Zoning, 1990b). Parks, designated "open space," and other natural areas account for about 49,300 acres, or 31 percent of the total land area. Developed land accounts for the remaining 42 percent of the county area, with residential areas occupying 37,500 acres, and commercial, industrial, institutional, road and utility right-of-ways, and other miscellaneous areas occupying the remaining 30,800 acres.

The population of Howard County grew rapidly from 1970 to 1990, mainly because of its exurban location. The population increased from 62,394 in 1970 to 118,572 in 1980. By 1990, the population increased to an estimated 181,800 (Maryland Department of State Planning, 1990). The two largest cities in Howard County, Columbia and Ellicott City (fig. 2), account for about 60 percent of the total population.

The Patapsco and Patuxent Rivers are the principal streams in Howard County. The Patapsco River basin drains the northern part of the county. The South Branch Patapsco River rises in the far western part of the county and flows eastward to join the Patapsco River, which eventually discharges to Chesapeake Bay. The Patuxent River, which drains the southern part of the county, rises about one-half mile southwest of the South Branch Patapsco River and

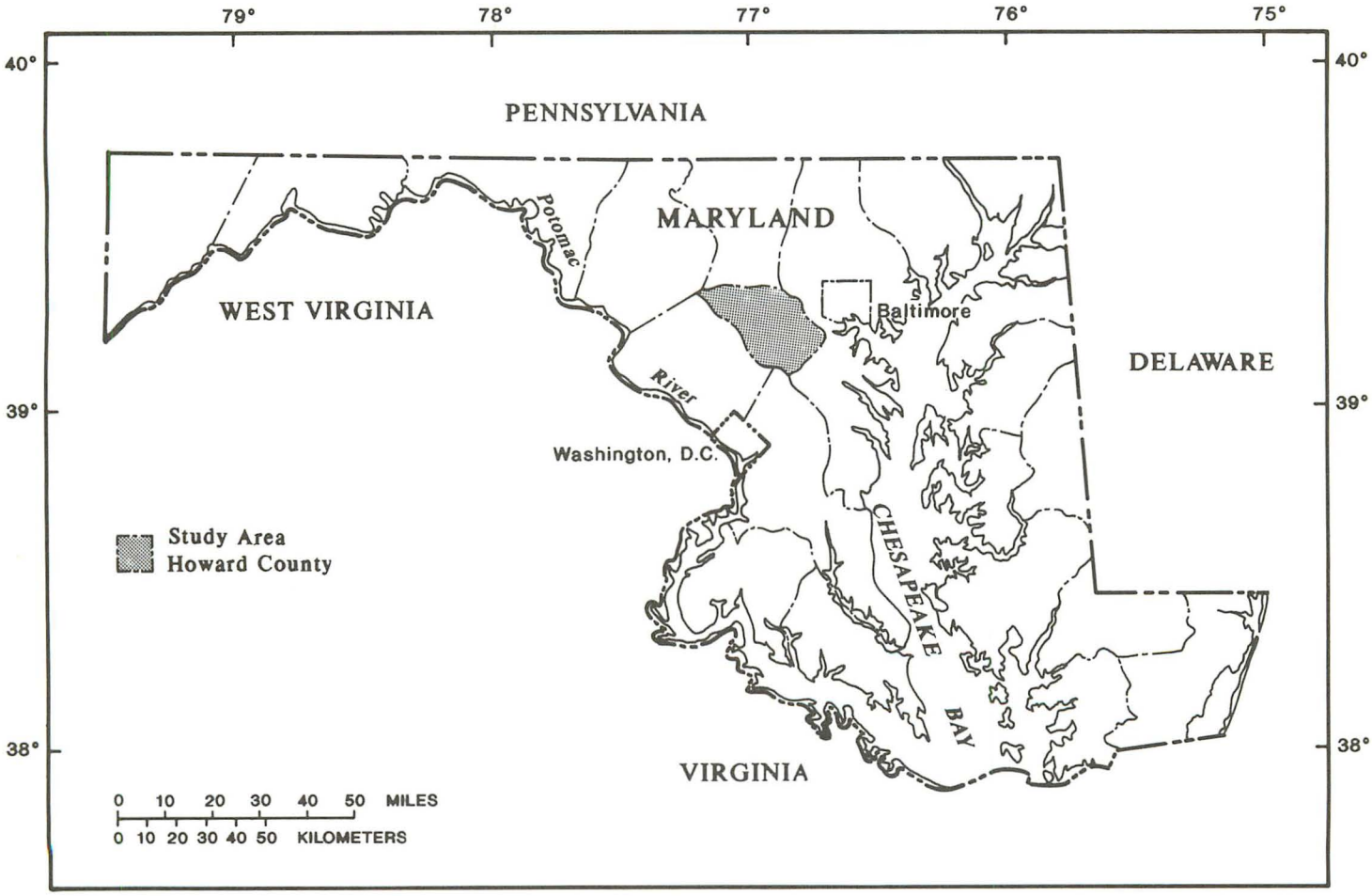


Figure 1. Location of Howard County, Maryland.

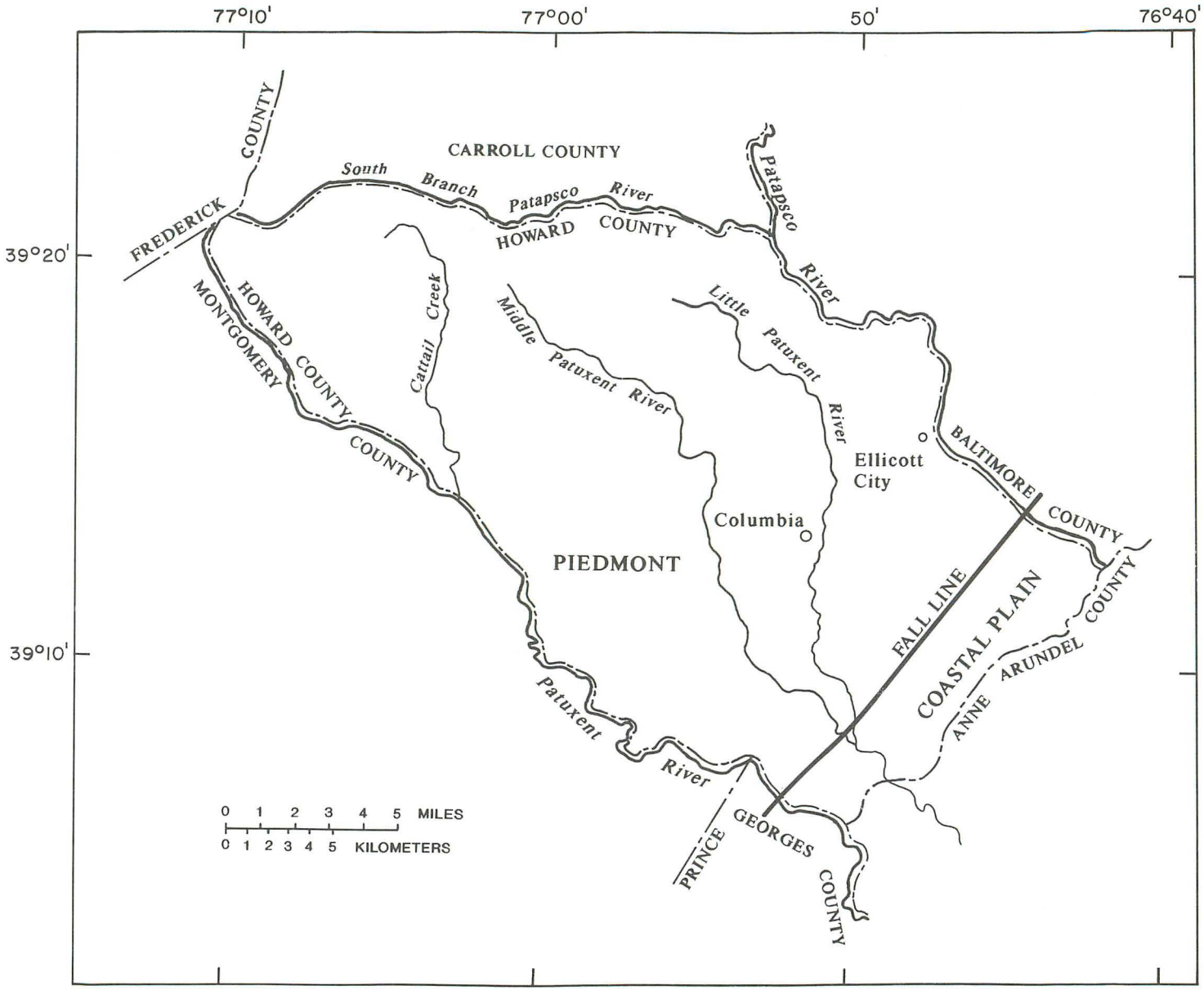


Figure 2. Location of Fall Line separating Piedmont and Coastal Plain areas in Howard County.

flows southeastward to Chesapeake Bay. The Little and Middle Patuxent Rivers drain the central parts of the county and join the Patuxent River in Anne Arundel County.

Precipitation averages about 42 inches annually. The distribution is fairly uniform throughout the year, with slightly greater amounts in the spring months. The mean annual temperature is about 55 degrees Fahrenheit (°F), and mean monthly temperatures range from 31°F in January to 75°F in July.

Howard County occupies parts of two physiographic provinces—the Piedmont and the Coastal Plain (fig. 2). The Piedmont province consists of fractured crystalline rocks. The Coastal Plain province consists of a thin veneer of unconsolidated sediments that overlie the crystalline rocks in the eastern part of the county. Few wells are drilled into the Coastal Plain sediments because eastern Howard County is served by public water-supply systems, which acquire water from nearby surface-water sources. In western Howard County, water is derived entirely from wells in the crystalline rocks. Hence, ground-water use is greater in the Piedmont than in the Coastal Plain of Howard County.

Purpose and Scope

This report presents a compilation of hydrologic data for Howard County and is a product of a cooperative study conducted from 1988 to 1991 to evaluate the water resources of the county (Dine and Adamski, in preparation). The types of data include locations and descriptions of 2,484 wells and 29 springs in Howard County and 30 wells in Anne Arundel and Baltimore Counties, water-level measurements in 65 wells, geophysical logs of 6 wells, surface-water discharge and drainage-basin characteristics for 33 sites, and water appropriation and withdrawal information. Water-quality data include chemical analyses for 117 wells and springs, and 25 stream sites. Chemical determinations include major ions, trace elements, nutrients, radionuclides, pesticides, and volatile organic compounds.

Previous Investigations

The geology of Howard County was originally mapped by Cloos and Broedel (1940). Cloos and others (1964) described the lithology and structural geology of Howard and Montgomery Counties. Current work by the Maryland Geological Survey has resulted in further refinement of the stratigraphy of various formations (Edwards, J.E., Maryland Geological Survey, oral commun., 1990).

The water resources of Howard County were first studied by Dingman and others (1954). Studies of the ground-water resources of the Maryland Piedmont were conducted by Nutter and Otton (1969), Nutter (1974), Richardson (1980), and Otton and Hilleary (1985). Streamflow characteristics for sites in Howard County were presented by Carpenter (1983). Willey and Achmad (1986) developed a model of ground-water flow in the Cattail Creek basin to determine water availability. Duigon (1983) prepared a hydrogeologic atlas for the Ellicott City 7 ½-minute quadrangle, which includes portions of Baltimore and Howard Counties. A recent study by the U.S. Geological Survey investigated the effects of agricultural best-management practices on nitrogen transport to ground water at two sites in the Patuxent River basin (McFarland, E.R., U.S. Geological Survey, oral commun., 1990).

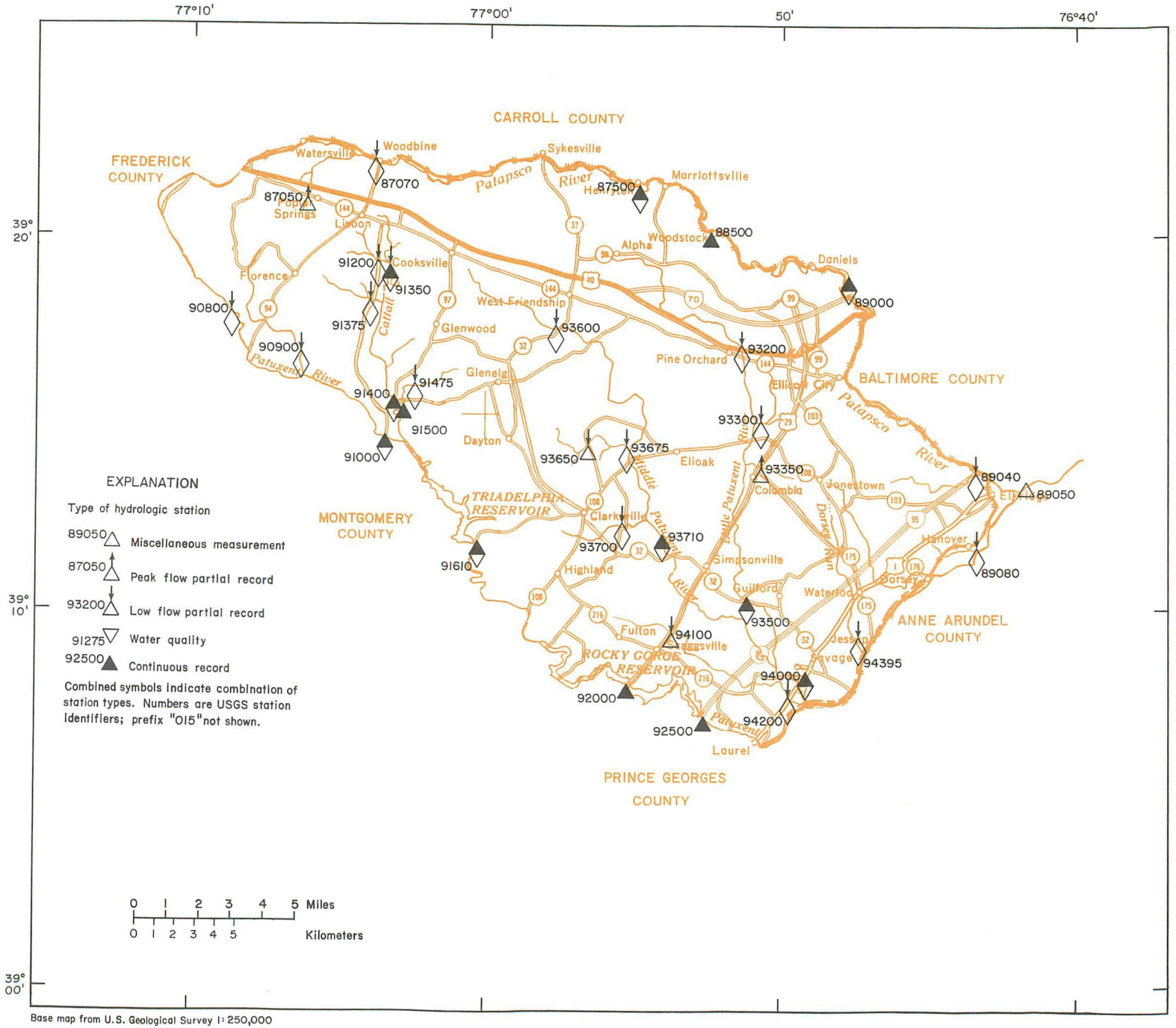
Site-Numbering System

Wells and springs in Maryland are identified and located by a numbering system devised by the Maryland Geological Survey. The identifier for a well or spring consists of four letters and from one to three numbers. The first two letters identify the county in which the site is located (HO for Howard County). Location of the site within the county is determined using 5-minute quadrangles arranged in rows and columns that cover the county. The last two letters identify the particular quadrangle in which the well or spring is located. The first of these (in upper case) indicates the position of the row of that quadrangle from the north; the second letter (in lower case) indicates the position of the column of that quadrangle from the west. Wells and springs in each 5-minute quadrangle are numbered sequentially. For example, HO Bd 120 is the 120th well recorded in the quadrangle located in the second row from the north, the fourth column from the west, in Howard County. Maps showing locations of all inventoried wells and springs by 5-minute quadrangle location are presented at the end of this report; index maps of 7 ½-minute and 5-minute quadrangle coverage are shown in figures 5 and 6, respectively.

Surface-water stations are assigned a unique identification number according to a consecutive downstream numbering system devised by the U.S. Geological Survey. Within a particular basin, the station farthest upstream is assigned the smallest identification number and each station in the downstream direction is assigned a successively larger number. Stations on a tributary entering upstream from a mainstream station are assigned lower identification numbers than the mainstream station. Figure 3 shows the locations of streamflow-gaging stations in Howard County.

Acknowledgments

Participation in this study by the Howard County Department of Public Works was authorized by the Howard County Council. Appreciation is extended to the numerous property owners who permitted hydrologic measurements and collection of water samples from their wells and springs.



EXPLANATION

Type of hydrologic station

89050 △ Miscellaneous measurement

87050 △ Peak flow partial record

93200 △ Low flow partial record

91275 ▽ Water quality

92500 ▲ Continuous record

Combined symbols indicate combination of station types. Numbers are USGS station identifiers; prefix "015" not shown.

0 1 2 3 4 5 Miles

0 1 2 3 4 5 Kilometers

Base map from U.S. Geological Survey 1:250,000

Figure 3. Locations of streamflow-gaging stations in Howard County.

RECORDS OF WELLS AND SPRINGS

Approximately 1,650 wells and 8 springs in Howard County were inventoried for the current study. Combined with previous efforts, a total of 2,484 wells and 29 springs have been inventoried in the county. Data collected and compiled on wells include location, topographic setting, geologic unit, construction details, depth, and yield (table 1). Data also were collected on 30 wells owned by the Howard County Department of Public Works, but located in Anne Arundel and Baltimore Counties (table 2) (Whitman, Requardt and Associates, 1983).

For this study, water levels were measured in 55 wells. Water levels measured in 10 additional wells for another USGS study (McFarland, E.R., U.S. Geological Survey, oral commun., 1991) also are included in this report. Most water levels were measured monthly using a steel tape. Periodic water-level measurements are presented in table 3. Twenty of the 55 wells listed in table 3 were equipped with continuous water-level recorders for periods of up to 4 years. Continuous water-level data are presented in table 4.

Data collected and compiled for 29 springs in Howard County include location, topographic setting, geologic unit, discharge, and improvements (table 5). Three springs (HO Bc 176, HO Bc 264, and HO Cd 240) were monitored monthly as part of the study. Discharge and temperature were measured from 1987 to 1990, and pH and specific conductance were measured from 1989 to 1990. Data for the three springs and eight additional springs for which information had been previously collected are presented in table 6.

Seven wells were geophysically logged for the study. Logs obtained include caliper, fluid resistivity, temperature, single-point resistance, multi-point resistivity, spontaneous potential, and gamma. Logs of six wells are shown in figure 4.

Since 1945, permits issued by the State of Maryland have been required for all wells drilled in the State. Since 1973, regulations have required that metal tags identifying the permit number be affixed to the well casings. The driller is required to submit a well-completion report to the State for filing with the permit. The completion report includes information on well construction and yield, along with the driller's lithologic log. Some data from these sources are included in the well records (tables 1 and 2) presented in this report.

STREAMFLOW DATA AND DRAINAGE-BASIN CHARACTERISTICS

The U.S. Geological Survey began a national network of streamflow-gaging stations in 1889 to record streamflow systematically; in 1897, the station at Patapsco River at Woodstock was established in Howard County. Since then, 13 continuous-record gaging stations have been established in Howard County, of which 8 are currently in operation. Streamflow data also have been collected at partial-record stations where periodic measurements are made to estimate low-flow or peak-flow characteristics or determine discharge for water-quality analyses. Table 7 lists selected streamflow and drainage-basin characteristics for 33 continuous and partial-record stations in Howard County. Locations of these sites are shown in figure 3. Monthly and annual streamflow statistics for 11 continuous-record gaging stations are presented in table 8. Streamflow measurements at 22 partial-record stations are listed in table 9. Annual peak flow as presented in table 9 is the maximum flow recorded during a water year.

WATER-QUALITY DATA

Since 1951, water-quality data have been collected in Howard County by the U.S. Geological Survey. These data are important to understanding water-quality conditions in the county, particularly the changes that have taken place over time. For this study, water samples were collected and preserved in the field according to methods prescribed by the U.S. Geological Survey, and were analyzed by U.S. Geological Survey Laboratories. Ground-water samples were collected from wells where water-conditioning equipment was absent or could be bypassed. Temperature, pH, specific conductance, alkalinity, dissolved oxygen concentration, and discharge (flow rate) were measured in the field at ground-water and surface-water sites. Samples collected for analysis of dissolved constituents were filtered through a 0.45-micrometer cellulose acetate membrane prior to analysis. Analyses for total constituents were derived from unfiltered water.

During 1951–90, a total of 439 water samples from wells and springs in Howard County were analyzed for various chemical constituents; results of 179 analyses are included in this report. Analyses include major ions, nutrients, and organic carbon (table 10), trace elements and radon (table 11), triazine pesticides (table 12), carbamate pesticides (table 13), volatile organic compounds (table 14), and tritium (table 15). Table 16 presents 61 selected analyses for nitrogen and phosphorus species from a total of 322

available. Only those analyses having associated major-ion determinations were selected for inclusion in this table.

During 1954–89, a total of 392 water-quality samples were collected from streams in Howard County. Analyses include major ions, nutrients, and organic carbon (table 17), and field parameters, bacteria, and additional water-quality determinations for the Patapsco River at Hollofield, Maryland (table 18). Stream-bottom sediments also were collected during September–October 1989 and analyzed for trace elements (table 19) and pesticides (table 20).

WATER APPROPRIATION AND WITHDRAWAL DATA

The Maryland Water Resources Administration issues appropriation permits for all water uses other than domestic. Usage in excess of 10,000 gallons per day is reported monthly to the Administration. Appropriation and withdrawal data for ground-water and surface-water sources are presented in table 21. Public water supplied to communities in eastern Howard County is purchased from Baltimore City and the Washington Suburban Sanitary Commission.

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Table 1.—Records of selected wells in Howard County

[ft = feet; in. = inches; gal/min = gallons per minute; (gal/min)/ft = gallons per minute per foot of drawdown; -- = data not available]

Explanation of codes

Topographic setting	Use of water	Finish	Water level	Other data available
F Flat	A Heat pump	F Gravel filled	E Estimated	C Drill cuttings
H Hilltop	C Commercial	G Gravel, screen	F Flowing	L Geophysical logs
S Hillside	H Domestic	P Perforated	S Measured	O Observation well; see table 3
U Undulating	I Irrigation	O Open end		Q Water quality; see table 10
V Valley	J Industrial cooling	S Screen		
W Draw	L Landfill	W Walled		
	N Industrial	X Open hole		
	Q Aquaculture	Z Other		
	R Recreation			
	S Stock			
	T Institution			
	U Unused			
	Z Occasional use			

Explanation of Geologic Unit Codes

217PTXN	Patuxent Formation
300CCKV	Cockeysville Marble
300DDHL	James Run Formation, Druid Hill Amphibolite Member
300ELCC	Ellicott City Granite
300GLLS	Gillis Formation
300GLFD	Guilford Granite
300LCRV	Loch Raven Schist
300MRGR	Morgan Run Formation
300MWSG	Mount Washington Amphibolite
300OELL	Oella Formation
300PGMT	Pegmatite dikes
300PLGV	Pleasant Grove Schist
300PRTB	Prettyboy Schist
300RELY	James Run Formation, Relay Gneiss Member
300STRS	Setters Formation
300SKVL	Sykesville Formation
300SKVLG	Sykesville Formation, gneiss member
300SKVLS	Sykesville Formation, schist member
300UMFC	Hollofield Layered Ultramafite
400BLMR	Baltimore Gneiss

Table 1.—Records of selected wells in Howard County—Continued

Well no.	Well permit no.	Owner or name	Driller	Date of construction	Altitude of land surface (ft)	Topo-graphic setting	Depth Drilled (ft)	Use of water	Geologic unit
HO Aa 1	--	Snyder, Harry M	Edward Brown	1919	820	S	114	H,S	300GLLS
HO Aa 2	--	U S Government	Edward Brown	1952	880	H	125	T	300GLLS
HO Aa 3	--	U S Government	Edward Brown	1952	880	H	135	T	300GLLS
HO Aa 4	--	U S Government	Edward Brown	1952	830	V	60	U	300GLLS
HO Aa 5	--	U S Government	Edward Brown	1953	840	V	60	U	300GLLS
HO Aa 6	--	U S Government	Edward Brown	1953	850	W	350	T	300GLLS
HO Aa 7	HO-73-4272	Anderson, James W	Ralph Mayne	09-24-1982	860	H	125	H	300GLLS
HO Aa 8	HO-73-3740	Wilkins, Randy	L F Easterday	12-01-1980	790	V	200	H	300GLLS
HO Aa 9	HO-73-2628	Schafer, Michael	Alton Keyser	03-29-1978	805	H	310	H	300GLLS
HO Aa 10	HO-73-1968	Taylor, Norman	Joseph Mayne	04-18-1977	785	H	70	H	300GLLS
HO Aa 11	HO-73-0891	Doudnikoff, Basil	D H Woodward	12-03-1974	720	S	225	H	300GLLS
HO Aa 12	HO-66-0198	Cline, N Edward Jr	L F Easterday	01-14-1966	850	H	180	H	300GLLS
HO Aa 13	--	Wilkins, Randy	L F Easterday	1980	800	S	--	U	300GLLS
HO Aa 14	--	Wilkins, Randy	L F Easterday	1980	800	S	--	U	300GLLS
HO Aa 15	--	Wilkins, Randy	L F Easterday	1980	800	S	--	U	300GLLS
HO Aa 16	HO-81-1915	Snell's Nursery	Ralph Mayne	03-12-1987	800	S	300	C,I	300GLLS
HO Ab 1	HO-00-3963	Lettire, Joseph	Dewey Brown	05-10-1949	660	V	60	H	300GLLS
HO Ab 2	HO-00-7973	Ridgeville Nurseries	L F Easterday	05-31-1951	750	S	85	I	300GLLS
HO Ab 3	--	Young, Fanny	Edward Brown	1918	815	S	75	H	300GLLS
HO Ab 4	--	Pickett, Merhle P	--	1900	720	S	33	U	300PRTB
HO Ab 5	HO-73-1521	Fulp, William G	Joseph Mayne	07-13-1976	750	H	165	H	300PRTB
HO Ab 6	HO-73-1677	Porter, Timothy W	H Edmondson	10-07-1976	750	H	100	H	300PRTB
HO Ab 7	HO-73-1501	Weber, Gerard J	Joseph Mayne	06-21-1976	760	H	145	H	300PRTB
HO Ab 8	HO-73-1502	Harrell, William G	Mayne	06-22-1976	755	H	145	H	300PRTB
HO Ab 9	HO-73-2153	Turkel, Steven C	L F Easterday	07-01-1977	735	H	140	H	300PRTB
HO Ab 10	HO-73-1845	Curtin, Thomas E	L F Easterday	02-23-1977	748	H	140	H	300PRTB
HO Ab 11	HO-73-2061	Walk, Charles R	L F Easterday	06-29-1977	740	H	165	H	300PRTB
HO Ab 12	HO-73-2062	Webster, Edward P	L F Easterday	06-29-1977	730	H	205	H	300PRTB
HO Ab 13	HO-73-1844	Miernicki, Robert A	L F Easterday	02-23-1977	730	H	120	H	300PRTB
HO Ab 14	HO-73-1673	Diangelo, Marion R	L F Easterday	10-18-1976	745	S	200	H	300PRTB
HO Ab 15	HO-73-2483	United Builders	L F Easterday	02-02-1978	740	H	165	H	300PRTB
HO Ab 16	HO-73-2519	Hilliard, Thurber G	Joseph Mayne	02-06-1978	670	S	300	H	300PRTB
HO Ab 17	HO-73-3442	Hamilton, Martin C	Keyser-Garver	10-18-1979	705	S	205	H	300PRTB
HO Ab 18	HO-73-2610	Miller, Jesse	L F Easterday	04-10-1978	720	H	185	H	300PRTB
HO Ab 19	--	Parker, James B	--	--	708	S	--	H	300PRTB
HO Ab 20	HO-73-3013	Dorsey, Phillip H	L F Easterday	12-14-1978	680	S	280	H	300PRTB
HO Ab 21	HO-73-1533	Sturdevant, George	L F Easterday	08-18-1976	770	H	180	H	300PRTB
HO Ab 22	HO-73-2790	Stysley, Michael T	L F Easterday	06-16-1978	740	H	105	H	300PRTB
HO Ab 23	--	Hood, Robert M	--	--	775	H	--	H	300PRTB
HO Ab 24	--	Stancer, Charles A	--	--	730	S	--	H	300PRTB
HO Ab 25	HO-66-0067	Pickett, Clarence E	L F Easterday	08-27-1965	765	H	100	H	300PRTB
HO Ab 26	--	Baker, Charles Jr	--	--	730	S	--	H	300PRTB
HO Ab 27	--	Lemmon, Laurence F	--	--	742	S	80	H	300PRTB
HO Ab 28	--	Blair, Vernon E	--	--	720	S	--	H	300PRTB
HO Ab 29	HO-73-3601	Miller, Stanley	Dillon Bros	06-04-1980	690	S	225	H	300PRTB
HO Ab 30	HO-73-2205	Mitchell, Allen	L F Easterday	08-25-1977	710	S	145	H	300PRTB
HO Ab 31	HO-73-3194	Phebus, Kenneth D	Joseph Mayne	04-02-1979	700	S	260	H	300PRTB
HO Ab 32	HO-73-3240	Winters, Eugene R	Robert Cline	05-16-1979	750	H	170	H	300PRTB
HO Ab 33	HO-73-2495	Baile, Robert J	L F Easterday	02-02-1978	740	H	105	H	300PRTB
HO Ab 34	HO-65-0417	Poplar Springs Meth Ch	L F Easterday	05-18-1965	745	S	100	H	300PRTB
HO Ab 35	HO-72-0208	Fredericksen, Alvin H	L F Easterday	07-24-1972	760	W	120	H	300PRTB
HO Ab 36	HO-73-3745	Tyler, Richard A	Ralph Mayne	12-03-1980	840	H	405	H	300GLLS
HO Ab 37	HO-73-3963	Reinhardt	L F Easterday	1981	770	W	493	H	300GLLS
HO Ab 38	HO-81-0563	Katzenberger, Donald	L F Easterday	06-18-1987 06-29-1984	795	H	89	H	300GLLS
HO Ab 39	HO-73-0418	Bolling, Gene E	L F Easterday	06-19-1974	780	V	300	H	300GLLS
HO Ab 40	HO-73-1459	Thompson, J	Ralph Mayne	06-04-1976	830	F	150	H	300GLLS
HO Ab 41	HO-73-3374	Pant, Manmohan	Westminster	08-13-1979	825	F	610	U	300GLLS
HO Ab 42	HO-73-2970	Pant, Manmohan	Westminster	09-19-1978	825	F	398	H	300GLLS
HO Ab 43	HO-81-0371	Haughton, Robert	Harley Drlg	01-31-1984	845	H	300	H	300GLLS
HO Ab 44	HO-81-0791	Evelin, Harvey	Keyser-Garver	11-23-1984	800	W	205	H	300GLLS
HO Ab 45	HO-81-0801	Evelin, Harvey	Keyser-Garver	11-21-1984	780	W	400	H	300GLLS
HO Ab 46	HO-73-0358	Faith Tabernacle	L F Easterday	11-12-1973	845	H	400	H	300GLLS
HO Ab 47	HO-73-1107	Lyons, John B	Joseph Mayne	09-04-1975	870	H	360	H	300GLLS
HO Ab 48	HO-73-1356	Browning, Robert	G E Harr Sons	03-25-1976	820	S	125	H	300GLLS
HO Ab 49	HO-73-0340	Tucker, Richard	L F Easterday	07-05-1973	805	H	120	H	300GLLS
HO Ab 50	HO-81-1161	Hopkins, William E	L F Easterday	09-13-1985	800	H	300	H	300GLLS
HO Ab 51	HO-73-1111	Davis, Roger	Keyser-Garver	08-22-1975	790	S	302	H	300GLLS
HO Ab 52	HO-81-0512	Barnard, Dayton	Ralph Mayne	04-24-1984	720	S	265	H	300GLLS
HO Ab 53	HO-81-0186	Hopkins, David	Ralph Mayne	07-18-1983	785	H	305	H	300GLLS
HO Ab 54	HO-73-3745	Tyler, Richard A	Ralph Mayne	12 -- 1980	840	H	--	U	300GLLS
HO Ab 55	HO-73-3745	Tyler, Richard A	Ralph Mayne	12 -- 1980	855	S	--	U	300GLLS
HO Ab 56	HO-73-3963	Reinhardt	L F Easterday	1981	770	S	140	U	300GLLS

Casing			Water level		Aquifer test					Other	
Depth (ft)	Diameter (in.)	Finish	Depth, ft below land surface	Date measured	Yield (gal/min)	Drawdown (ft)	Specific capacity [(gal/min)/ft]	Hours pumped	Date	data available	Well no.
--	6	-	15	09-04-1952	--	--	--	--	--	--	HO Aa 1
--	6	-	--	--	1.5	--	--	--	1952	--	HO Aa 2
--	6	-	--	--	1.5	--	--	--	1952	--	HO Aa 3
--	6	-	--	--	1	--	--	--	1953	--	HO Aa 4
--	6	-	--	--	1	--	--	--	1953	--	HO Aa 5
--	6	-	--	--	5	--	--	--	1953	--	HO Aa 6
18	6	X	47	09-24-1982	8	78	0.10	3	09-24-1982	--	HO Aa 7
37	6	X	10	12-01-1980	3	190	.02	3	12-01-1980	Q	HO Aa 8
40	6	X	40	03-29-1978	3	265	.01	4	03-29-1978	--	HO Aa 9
45	6	X	30	04-18-1977	10	35	.29	2	04-18-1977	--	HO Aa 10
21	6	X	30	12-03-1974	5	170	.03	2	12-03-1974	--	HO Aa 11
21	6	X	40	01-14-1966	.5	140	<.01	.5	01-14-1966	--	HO Aa 12
--	--	X	Dry	1980	0	--	--	--	1980	--	HO Aa 13
--	--	X	Dry	1980	0	--	--	--	1980	--	HO Aa 14
--	--	X	Dry	1980	0	--	--	--	1980	--	HO Aa 15
18	6	X	31	03-12-1987	1	234	<.01	6	03-12-1987	--	HO Aa 16
50	6	X	40	05-10-1949	--	--	--	--	--	--	HO Ab 1
--	--	-	25	05-31-1951	15	25	.60	--	05-31-1951	Q	HO Ab 2
--	6	-	--	--	8	--	--	--	1918	--	HO Ab 3
--	36	W	12.63 S	05-13-1977	--	--	--	--	--	O	HO Ab 4
35	6	X	34.00[1]S	05-08-1980	5	115	.04	2	07-13-1976	--	HO Ab 5
28	6	X	30	10-07-1976	7	10	.70	6	10-07-1976	--	HO Ab 6
21	6	X	40	06-21-1976	8	100	.08	2	06-21-1976	--	HO Ab 7
38	6	X	34.80 S	04-15-1980	10	105	.10	2	06-22-1976	--	HO Ab 8
19	6	X	37.10 S	04-15-1980	6	100	.06	2	07-01-1977	--	HO Ab 9
19	6	X	41.70 S	04-09-1980	8	100	.08	2	02-23-1977	--	HO Ab 10
21	6	X	40	06-29-1977	6	125	.05	2	06-29-1977	--	HO Ab 11
21	6	X	51.00 S	04-15-1980	2	165	.01	2	06-29-1977	--	HO Ab 12
19	6	X	45.7	04-09-1980	40	80	.50	2	02-23-1977	--	HO Ab 13
19	6	X	54	04-22-1980	3	155	.02	2	10-18-1976	--	HO Ab 14
61	6	X	43.30 S	04-09-1980	5	125	.04	2	02-02-1978	--	HO Ab 15
63	6	X	55.00 S	04-11-1980	1	240	<.01	4	02-06-1978	--	HO Ab 16
62	6	X	38.70 S	04-11-1980	20	147	.14	3	10-18-1979	--	HO Ab 17
84	6	X	35.10 S	04-14-1980	30	145	.21	2	04-10-1978	--	HO Ab 18
--	6	-	40.50 S	04-14-1980	--	--	--	--	--	--	HO Ab 19
78	6	X	39.90 S	04-14-1980	10	240	.04	1	12-14-1978	--	HO Ab 20
19	6	X	18.90 S	04-18-1980	3	135	.02	2	08-18-1976	--	HO Ab 21
20	6	X	30.60 S	04-16-1980	60	65	.92	2	06-16-1978	--	HO Ab 22
--	6	-	23.08 S	04-21-1980	--	--	--	--	--	--	HO Ab 23
--	6	-	12.36 S	04-23-1980	--	--	--	--	--	--	HO Ab 24
30	6	X	41.60 S	04-24-1980	20	70	.29	.5	08-27-1965	--	HO Ab 25
--	6	-	33.77 S	04-28-1980	--	--	--	--	--	--	HO Ab 26
--	--	W	50.40 S	04-28-1980	--	--	--	--	--	--	HO Ab 27
--	6	-	42.00 S	04-28-1980	--	--	--	--	--	--	HO Ab 28
78	6	X	35.90 S	06-09-1980	15	90	.17	6	06-04-1980	--	HO Ab 29
54	6	X	34.70 S	06-09-1980	4	105	.04	2	08-25-1977	--	HO Ab 30
90	6	X	40	04-02-1979	2	220	.01	4	04-02-1979	--	HO Ab 31
56	6	X	40	05-16-1979	10	130	.08	1	05-16-1979	--	HO Ab 32
19	6	X	30	02-02-1978	15	75	.20	2	02-02-1978	--	HO Ab 33
24	6	X	32.60 S	07-02-1980	4	55	.07	.5	05-18-1965	--	HO Ab 34
46	6	X	25.90 S	07-11-1980	5	80	.06	1	07-24-1972	--	HO Ab 35
20	6	X	30	12-03-1980	1	375	<.01	8	12-03-1980	--	HO Ab 36
13	6	X	8	06-18-1987	1	226	<.01	4	1981	--	HO Ab 37
					1	482	<.01	7	06-18-1987		
26	6	X	48	06-29-1984	10	1	10.0	3	06-29-1984	--	HO Ab 38
23	6	X	40	06-19-1974	2	260	.01	1	06-19-1974	--	HO Ab 39
23	6	X	40	06-04-1976	3	110	.03	2	06-04-1976	--	HO Ab 40
73	6	X	49.81 S	08-11-1987	2	255	.01	6	08-13-1979	O	HO Ab 41
21	6	X	45	09-19-1978	2	205	.01	6	09-19-1978	--	HO Ab 42
19	6	X	54	01-31-1984	1	246	<.01	6	01-31-1984	--	HO Ab 43
60	6	X	64	11-23-1984	5	16	.31	3	11-23-1984	--	HO Ab 44
47	6	X	50	11-21-1984	1	349	<.01	5	11-21-1984	--	HO Ab 45
19	6	X	60	11-12-1973	4	340	.01	1	11-12-1973	--	HO Ab 46
40	6	X	45	09-04-1975	2	310	.01	2	09-04-1975	--	HO Ab 47
48	6	X	45	03-25-1976	10	3	3.33	6	03-25-1976	--	HO Ab 48
18	6	X	40	07-05-1973	15	80	.19	1	07-05-1973	--	HO Ab 49
18	6	X	70	09-13-1985	2	8	.25	6	09-13-1985	--	HO Ab 50
39	6	X	46	08-22-1975	2	10	.20	2	08-22-1975	--	HO Ab 51
18	6	X	45	04-24-1984	4	220	.02	3	04-24-1984	--	HO Ab 52
19	6	X	53	07-18-1983	2	252	.01	6	07-18-1983	--	HO Ab 53
--	--	X	Dry	12 -- 1980	0	--	--	--	12 -- 1980	--	HO Ab 54
--	--	X	Dry	12 -- 1980	0	--	--	--	12 -- 1980	--	HO Ab 55
--	--	X	Dry	12 -- 1980	0	--	--	--	1981	--	HO Ab 56

[1] Recently pumped.

Table 1.—Records of selected wells in Howard County—Continued

Well no.	Well permit no.	Owner or name	Driller	Date of construction	Altitude of land surface (ft)	Topo-graphic setting	Depth Drilled (ft)	Use of water	Geologic unit
HO Ab 57	HO-73-3963	Reinhardt	L F Easterday	1981	770	S	100	U	300GLLS
HO Ab 58	HO-73-3963	Reinhardt	L F Easterday	1981	770	S	140	U	300GLLS
HO Ab 59	HO-73-3963	Reinhardt	L F Easterday	1981	770	S	80	U	300GLLS
HO Ab 60	HO-73-3963	Reinhardt	L F Easterday	1981	770	S	100	U	300GLLS
HO Ab 61	HO-73-3963	Reinhardt	L F Easterday	1981	770	S	100	U	300GLLS
HO Ab 62	HO-73-3963	Reinhardt	L F Easterday	1981	770	S	160	U	300GLLS
HO Ab 63	HO-73-3963	Reinhardt	L F Easterday	1981	770	S	80	U	300GLLS
HO Ab 64	HO-73-3963	Reinhardt	L F Easterday	1981	770	S	80	U	300GLLS
HO Ab 65	HO-73-3963	Reinhardt	L F Easterday	1981	770	S	80	U	300GLLS
HO Ab 66	HO-73-3963	Reinhardt	L F Easterday	1981	770	S	60	U	300GLLS
HO Ab 67	HO-73-3963	Reinhardt	L F Easterday	1981	770	S	80	U	300GLLS
HO Ab 68	HO-73-1924	Wicker, Jack	L F Easterday	04-12-1977	835	S	160	H	300GLLS
HO Ab 69	HO-73-4201	Henley, Shane	L F Easterday	06-14-1982	705	H	140	H	300PRTB
HO Ab 70	HO-81-0689	Myers, Leroy	Joseph Mayne	08-30-1984	750	S	265	H	300GLLS
HO Ab 71	HO-81-1584	Tolson, Richard C	A & H Drilling	07-25-1986	765	S	405	H	300GLLS
HO Ab 72	HO-73-2393	Lamb, Thomas	Robert Cline	02-27-1978	775	S	400	H	300GLLS
HO Ab 73	HO-81-0025	Casto, David W	Harley Drlg	04-05-1983	805	H	200	H	300GLLS
HO Ab 74	HO-73-4037	Hough, Wayne C	Joseph Mayne	10-30-1981	790	H	400	H	300GLLS
HO Ab 75	HO-73-0866	Hough, Wayne C	L F Easterday	11-20-1974	790	H	365	U	300GLLS
HO Ab 76	HO-67-0157	Hough, W Dale	L F Easterday	11-17-1966	785	H	300	H	300GLLS
HO Ab 77	HO-81-0706	Hough, Richard M	Ralph Mayne	09-14-1984	765	H	260	H	300GLLS
HO Ab 78	HO-81-0255	Smith, Jacob H	L F Easterday	09-20-1983	740	S	300	H	300GLLS
HO Ab 79	HO-73-4073	Hartman, Frances	Ralph Mayne	05-12-1982	730	S	105	H	--
HO Ab 80	HO-81-0932	Harris, Thomas L	L F Easterday	04-02-1985	730	H	260	H	300PRTB
HO Ab 81	HO-81-0932	Harris, Thomas L	L F Easterday	04-02-1985	730	H	340	U	300PRTB
HO Ab 82	HO-73-4163	Howard, James W Jr	L F Easterday	05-06-1982	715	S	160	H	300PRTB
HO Ab 83	HO-66-0120	Baudrau, Robert E	Edward Brown	11-11-1965	725	H	120	H	300PRTB
HO Ab 84	HO-73-0278	Ridgeway, Richard O	Joseph Mayne	05-23-1973	720	S	140	H	300PRTB
HO Ab 85	HO-81-0715	Mayne, Ralph E	Ralph Mayne	03-28-1986	750	S	125	H	300PRTB
HO Ab 86	HO-66-0086	St Michael's Cath Ch	Edward Brown	09-23-1965	760	H	110	H	300PRTB
HO Ab 87	HO-73-1018	St Michael's Cath Ch	L F Easterday	05-30-1975	745	H	100	H	300PRTB
HO Ab 88	HO-73-3289	Blanton, Kenneth	Joseph Mayne	06-01-1979	750	F	125	H	300PRTB
HO Ab 89	HO-73-0913	Barnard, Steven E	Ralph Mayne	01-07-1975	720	S	72	H	300PRTB
HO Ab 90	HO-73-2931	Spicer, William A Jr	Joseph Mayne	08-29-1978	700	H	100	H	300PRTB
HO Ab 91	HO-65-0483	Toypar Ltd	L F Easterday	06-17-1965	750	S	120	C	300PRTB
HO Ab 92	HO-67-0171	Poplar Springs Inn	L F Easterday	12-18-1966	750	H	200	C	300PRTB
HO Ab 93	HO-81-0148	--	Westminster	06-28-1983	700	H	378	H	300PRTB
HO Ab 94	HO-81-0146	--	Westminster	06-28-1983	685	S	453	H	300PRTB
HO Ab 95	HO-73-3365	Everett, James	Westminster	07-11-1979	685	H	279	H	300PRTB
HO Ab 96	HO-81-0559	Vosloh, Carl	Ralph Mayne	06-24-1984	720	S	145	H	300GLLS
HO Ab 97	HO-73-3423	Gerber, Damon P	Westminster	09-05-1979	745	H	295	H	300GLLS
HO Ab 98	HO-81-0357	--	Ralph Mayne	12-13-1983	725	S	205	H	--
HO Ab 99	HO-81-0358	--	Ralph Mayne	12-20-1983	700	S	260	H	300PRTB
HO Ab 100	HO-73-3366	Ch Of The Open Bible	Joseph Mayne	07-16-1979	705	S	245	H	300PRTB
HO Ab 101	HO-73-3262	Fleming, Jonathan R	Ralph Mayne	05-22-1979	685	S	265	H	300PRTB
HO Ab 102	HO-73-4223	Hillside Nursery Inc	L F Easterday	07-21-1982	700	S	300	I	300PRTB
HO Ab 103	HO-81-1646	Phillips, Thomas	Ralph Mayne	09-02-1986	680	S	160	H	300PRTB
HO Ab 104	HO-81-1525	Lanning, Coy	L F Easterday	07-11-1986	740	H	300	H	300PRTB
HO Ab 105	HO-81-1525	Lanning, Coy	L F Easterday	07-11-1986	740	H	200	U	300PRTB
HO Ab 106	HO-73-0601	Beall, D L	John Greene	02-25-1974	685	S	300	H	300PRTB
HO Ab 107	HO-73-2660	Harrison, Michael	Joseph Mayne	04-17-1978	740	U	165	H	300GLLS
HO Ab 108	HO-73-3603	Dove, Harry R	W B Quynn	05-12-1980	735	S	200	H	300GLLS
HO Ab 109	HO-73-0068	Vigue, Daniel R	L F Easterday	10-06-1972	755	S	140	H	300GLLS
HO Ab 110	HO-73-2100	B S U Assoc	L F Easterday	06-17-1977	730	H	85	H	300GLLS
HO Ab 111	HO-73-1498	Frier & Sanell	L F Easterday	06-25-1976	700	S	245	H	300GLLS
HO Ab 112	HO-73-2005	Ruppalt, Matt	L F Easterday	05-10-1977	675	S	300	H	300GLLS
HO Ab 113	HO-73-1017	Waser, Gerald	Westminster	06-10-1975	700	S	235	H	300PRTB
HO Ab 114	HO-73-1554	Copenhaver, Edward	G E Harr Sons	07-26-1976	745	H	200	H	300PRTB
HO Ab 115	HO-81-0594	Schulze, Dwight	Joseph Mayne	07-02-1984	720	S	200	H	300PRTB
HO Ab 116	HO-73-3957	Cramer, Stephen	A C Reider	03-29-1981	715	S	240	U	300PRTB
HO Ab 117	HO-81-1813	Kelley, Truman Jr	Ralph Mayne	12-29-1986	840	H	405	H	300GLLS
HO Ab 118	HO-81-1813	Kelley, Truman Jr	Ralph Mayne	12-29-1986	840	H	--	U	300GLLS
HO Ab 119	HO-81-1813	Kelley, Truman Jr	Ralph Mayne	12-29-1986	840	H	--	U	300GLLS
HO Ab 120	HO-81-1813	Kelley, Truman Jr	Ralph Mayne	12-29-1986	840	H	--	U	300GLLS
HO Ab 121	HO-73-1310	Lilley, James	H Edmondson	02-25-1976	750	H	110	H	--
HO Ab 122	HO-81-2007	Paylor, Robert	L F Easterday	05-01-1987	825	H	200	H	300GLLS
HO Ab 123	HO-81-1379	Katzenberger, Donald	Joseph Mayne	05-15-1986	765	S	325	H	300GLLS
HO Ab 124	HO-81-1379	Katzenberger, Donald	Joseph Mayne	05-15-1986	765	S	345	U	300GLLS
HO Ab 125	HO-81-1379	Katzenberger, Donald	Joseph Mayne	05-15-1986	765	S	165	U	300GLLS
HO Ab 126	HO-81-2776	Cottone Properties	Ralph Mayne	06-08-1988	745	H	325	H	300GLLS
HO Ab 127	HO-81-2777	Cottone Properties	Ralph Mayne	06-08-1988	750	H	190	H	300GLLS
HO Ab 128	HO-81-2178	--	Westminster	07-13-1987	745	W	178	H	300GLLS
HO Ab 129	HO-81-2180	--	Westminster	07-15-1987	770	S	203	H	300GLLS
HO Ab 130	HO-81-2271	Wally's Iron Works	L F Easterday	09-14-1987	770	H	200	N	300GLLS
HO Ab 131	HO-81-2271	Wally's Iron Works	L F Easterday	09-14-1987	770	H	300	U	300GLLS

Casing			Water level		Aquifer test					Other data	Well
Depth (ft)	Diameter (in.)	Finish	Depth, ft below land surface	Date measured	Yield (gal/min)	Drawdown (ft)	Specific capacity [(gal/min)/ft]	Hours pumped	Date	available	no.
--	--	X	Dry	1981	0	--	--	--	1981	--	HO Ab 57
--	--	X	Dry	1981	0	--	--	--	1981	--	HO Ab 58
--	--	X	Dry	1981	0	--	--	--	1981	--	HO Ab 59
--	--	X	Dry	1981	0	--	--	--	1981	--	HO Ab 60
--	--	X	Dry	1981	0	--	--	--	1981	--	HO Ab 61
--	--	X	Dry	1981	0	--	--	--	1981	--	HO Ab 62
--	--	X	Dry	1981	0	--	--	--	1981	--	HO Ab 63
--	--	X	Dry	1981	0	--	--	--	1981	--	HO Ab 64
--	--	X	Dry	1981	0	--	--	--	1981	--	HO Ab 65
--	--	X	Dry	1981	0	--	--	--	1981	--	HO Ab 66
--	--	X	Dry	1981	0	--	--	--	1981	--	HO Ab 67
19	6	X	40	04-12-1977	5	120	0.04	2	04-12-1977	--	HO Ab 68
36	6	X	36	06-14-1982	5	3.50	1.43	3	06-14-1982	--	HO Ab 69
21	6	X	33	08-30-1984	4	108	.04	3	08-30-1984	--	HO Ab 70
65	6	X	50	07-25-1986	1	355	<.01	2	07-25-1986	--	HO Ab 71
76	6	X	36	02-27-1978	3	364	.01	1	02-27-1978	--	HO Ab 72
45	6	X	50	04-05-1983	10	13	.77	3	04-05-1983	--	HO Ab 73
40	6	X	175	10-30-1981	1	155	.01	6	10-30-1981	--	HO Ab 74
19	6	X	63.93 S	08-24-1987	1	315	<.01	1	11-20-1974	O	HO Ab 75
22	6	X	50	11-17-1966	1	250	<.01	.5	11-17-1966	--	HO Ab 76
58	6	X	58	09-14-1984	5	27	.19	3	09-14-1984	--	HO Ab 77
54	6	X	52	09-20-1983	10	30	.33	3	09-20-1983	Q	HO Ab 78
48	6	X	30	05-12-1982	15	75	.20	4	05-12-1982	--	HO Ab 79
23	6	X	36	04-02-1985	2	69	.03	6	04-02-1985	--	HO Ab 80
--	6	X	40.45 S	08-24-1987	.5	--	--	--	04-02-1985	O	HO Ab 81
80	6	X	33	05-06-1982	4	32	.12	3	05-06-1982	--	HO Ab 82
24	6	X	45	11-11-1965	10	--	--	2	11-11-1965	--	HO Ab 83
31	6	X	40	05-23-1973	20	0	--	2.5	05-23-1973	--	HO Ab 84
40	6	X	53	03-28-1986	10	2	5.0	3	03-28-1986	--	HO Ab 85
20	6	X	32	09-23-1965	4	--	--	2	09-23-1965	--	HO Ab 86
19	6	X	35	05-30-1975	20	65	.31	1	05-30-1975	--	HO Ab 87
39	6	X	35	06-01-1979	10	90	.11	2	06-01-1979	--	HO Ab 88
21	6	X	35	01-07-1975	10	37	.27	2	01-07-1975	--	HO Ab 89
25	6	X	45	08-29-1978	12	55	.22	2	08-29-1987	--	HO Ab 90
25	6	X	35	06-17-1965	3	85	.04	.5	06-17-1965	--	HO Ab 91
30	6	X	60	12-18-1966	4	140	.03	.5	12-18-1966	--	HO Ab 92
66	6	X	42	06-28-1983	3.3	239	.01	6	06-28-1983	--	HO Ab 93
61.7	6	X	38	06-28-1983	2.8	349	.01	6	06-28-1983	--	HO Ab 94
82	6	X	70	07-11-1979	8.5	140	.06	4	07-11-1979	--	HO Ab 95
38	6	X	31	06-24-1984	9	5	1.80	3	06-24-1984	--	HO Ab 96
86	6	X	44	09-05-1979	6.5	235	.03	6	09-05-1979	--	HO Ab 97
70	6	X	18	12-13-1983	5	187	.03	3	12-13-1983	--	HO Ab 98
50	6	X	25	12-20-1983	3	235	.01	6	12-20-1983	--	HO Ab 99
63	6	X	45	07-16-1979	5	200	.02	4	07-16-1979	--	HO Ab 100
40	6	X	25	05-22-1979	5	240	.02	6	05-22-1979	--	HO Ab 101
19	6	X	40	07-21-1982	6	260	.02	3	07-21-1982	--	HO Ab 102
42	6	X	40	09-02-1986	10	5	2.0	3	09-02-1986	Q	HO Ab 103
66	6	X	75	07-11-1986	1	26	.04	6	07-11-1986	--	HO Ab 104
--	6	X	Dry	07-11-1986	0	--	--	--	07-11-1986	--	HO Ab 105
26	6	X	60	02-25-1974	8	234	.03	2	02-25-1987	--	HO Ab 106
44	6	X	45	04-17-1978	10	0	--	2	04-17-1978	--	HO Ab 107
40	6	X	25	05-12-1980	5	170	.03	3	05-12-1980	--	HO Ab 108
18	6	X	36	10-06-1972	5	104	.05	2	10-06-1972	--	HO Ab 109
20	6	X	30	06-17-1977	12	55	.22	2	06-17-1977	--	HO Ab 110
19	6	X	45	06-25-1976	2	200	.01	2	06-25-1976	--	HO Ab 111
19	6	X	35	05-10-1977	1	265	<.01	2	05-10-1977	--	HO Ab 112
42	6	X	60	06-10-1975	5	137	.04	6	06-10-1975	--	HO Ab 113
43	6	X	65	07-26-1976	10	33	.30	6	07-26-1976	--	HO Ab 114
40	6	X	24	07-02-1984	12	3	4.0	3	07-02-1984	--	HO Ab 115
36	6	X	33	03-29-1981	2	76	.03	6	03-29-1981	--	HO Ab 116
19	6	X	30	12-29-1986	1	255	<.01	6	12-29-1986	--	HO Ab 117
--	--	X	Dry	12-29-1986	0	--	--	--	12-29-1986	--	HO Ab 118
--	--	X	Dry	12-29-1986	0	--	--	--	12-29-1986	--	HO Ab 119
--	--	X	Dry	12-29-1986	0	--	--	--	12-29-1986	--	HO Ab 120
25	6	X	35	02-25-1976	8	10	.80	3	02-25-1976	--	HO Ab 121
19	6	X	10	05-01-1987	5	64	.08	3	05-01-1987	--	HO Ab 122
45	6	X	35	05-15-1986	5	125	.04	3	05-15-1986	--	HO Ab 123
--	--	X	Dry	05-15-1989	0	--	--	--	05-15-1989	--	HO Ab 124
--	--	X	Dry	05-15-1989	0	--	--	--	05-15-1986	--	HO Ab 125
20	6	X	42	06-08-1988	2	194	.01	6	06-08-1988	--	HO Ab 126
19	6	X	42	06-08-1988	4	77	.05	3	06-08-1988	--	HO Ab 127
40.6	6	X	43	07-13-1987	10	68	.15	3	07-13-1987	--	HO Ab 128
46	6	X	43	07-15-1987	5	101	.05	3	07-15-1987	--	HO Ab 129
59	6	X	50	09-14-1987	15	150	.10	3	09-14-1987	--	HO Ab 130
--	--	X	Dry	09-14-1987	0	--	--	--	09-14-1987	--	HO Ab 131

Table 1.—Records of selected wells in Howard County—Continued

Well no.	Well permit no.	Owner or name	Driller	Date of construction	Altitude of land surface (ft)	Topo-graphic setting	Depth Drilled (ft)	Use of water	Geologic unit
HO Ab 132	HO-81-2464	Long, Christopher	H Edmondson	12-03-1987	785	H	375	H	300GLLS
HO Ab 133	HO-81-2431	Long, Christopher	H Edmondson	12-03-1987	785	H	325	H	300GLLS
HO Ab 134	HO-81-2433	Shaffer	Ralph Mayne	11-30-1987	765	S	185	H	300GLLS
HO Ab 135	HO-88-0370	Swartzbeck, Paul	W B Quynn	01-06-1989	860	H	340	H	300GLLS
HO Ab 136	HO-88-0095	Warfield, Ken	Ralph Mayne	08-29-1988	710	S	205	H	300PRTB
HO Ab 137	HO-88-0097	Warfield, Ken	Ralph Mayne	08-25-1988	725	H	245	H	300PRTB
HO Ab 138	HO-88-0099	Warfield, Ken	Ralph Mayne	08-25-1988	710	H	205	U	300PRTB
HO Ac 1	HO-00-7704	Wyatt, William	Dewey Brown	07-06-1951	590	F	81.2	H	300MRGR
HO Ac 2	HO-68-0254	Markley, Albert	L F Easterday	07-08-1968	570	H	160	H	300MRGR
HO Ac 3	HO-73-0424	Bradly, Donald C	L F Easterday	09-06-1973	580	H	140	H	300MRGR
HO Ac 4	HO-73-0687	Strader, Warren	Mayne	07-15-1974	590	S	110	H	300PLGV
HO Ac 5	HO-03-1849	Taylor, Tom A	C Edmondson	09-12-1958	640	H	84	H	300MRGR
HO Ac 6	HO-66-0252	Sanner, Roger F	L F Easterday	08-09-1966	630	S	140	H	300PLGV
HO Ac 7	HO-73-0749	Bowens, Carol S	L F Easterday	07-26-1974	635	H	125	H	300PLGV
HO Ac 8	HO-73-1760	Cheak, Dewitt	A R Keyser	12-09-1976	590	H	100	H	300PLGV
HO Ac 9	HO-73-0369	Smith, Edgar W Jr	L F Easterday	08-06-1973	590	H	100	H	300PLGV
HO Ac 10	HO-73-1589	Lisbon Elem School	Westminster	08-13-1976	550	H	368	T	300MRGR
HO Ac 11	HO-73-0308	Miller, Stanley B	L F Easterday	06-14-1973	680	H	140	H	300PRTB
HO Ac 12	HO-73-0110	Sharpe, Charles M	Tri County	12-30-1972	625	H	82	H	300PLGV
HO Ac 13	HO-73-0202	Mills, Raymond F	Joseph Mayne	04-02-1973	625	S	85	H	300PLGV
HO Ac 14	HO-73-0144	Rohde, Carl D	John Wells	03-26-1973	620	S	140	H	300PLGV
HO Ac 15	HO-73-0143	Morrone, Joseph A	John Wells	05-07-1973	610	S	100	H	300PLGV
HO Ac 16	HO-03-7495	Lisbon Vol Fire Co	Edward Brown	01-07-1960	580	H	57	H	300PLGV
HO Ac 17	HO-73-2060	Brown, Harts M	L F Easterday	06-29-1977	720	H	105	H	300PRTB
HO Ac 18	HO-73-1846	Hardesty, Donald H	L F Easterday	02-23-1977	725	H	120	H	300PRTB
HO Ac 19	HO-73-2137	Clark, Jimmie L	L F Easterday	07-01-1977	750	H	120	H	300PRTB
HO Ac 20	HO-73-2737	Burchett, James M	L F Easterday	06-15-1978	660	H	205	H	300PRTB
HO Ac 21	HO-73-1833	Gilroy, William F	L F Easterday	02-22-1977	620	H	300	H	300MRGR
HO Ac 22	HO-73-1834	Evans, Robert M	L F Easterday	02-22-1977	610	H	160	H	300MRGR
HO Ac 23	HO-73-2680	Hill, Willie Jr	L F Easterday	04-26-1978	600	H	145	H	300MRGR
HO Ac 24	HO-73-2681	Patterson, Larry A	L F Easterday	04-26-1978	600	H	145	H	300MRGR
HO Ac 25	HO-73-2122	Corbin, Arthur L	L F Easterday	03-07-1978	620	H	120	H	300MRGR
HO Ac 26	HO-73-1835	Donovan, Cecilia L	L F Easterday	02-22-1977	630	H	140	H	300MRGR
HO Ac 27	HO-73-1836	Oliphant, Charles A	L F Easterday	02-22-1977	620	H	140	H	300MRGR
HO Ac 28	HO-73-2049	Eash, David D	L F Easterday	05-27-1977	610	H	165	H	300MRGR
HO Ac 29	HO-73-2132	Pope, Francis X	L F Easterday	11-23-1977	620	H	300	H	300MRGR
HO Ac 30	HO-73-2683	Zack, Suzan M	L F Easterday	04-24-1978	620	S	220	H	300MRGR
HO Ac 31	HO-73-2125	Dixon, Loring J	L F Easterday	10-14-1977	610	H	200	H	300MRGR
HO Ac 32	HO-73-2128	Day, Howard M	L F Easterday	09-15-1977	630	H	140	H	300MRGR
HO Ac 33	HO-73-2131	Long, Robert D	L F Easterday	03-07-1978	620	S	120	H	300MRGR
HO Ac 34	HO-73-2134	Jacjeredon Inc	L F Easterday	11-23-1977	620	S	120	H	300MRGR
HO Ac 35	HO-73-2038	Nugent, Julius	A R Keyser	06-08-1977	685	S	125	H	300MRGR
HO Ac 36	--	Dorsey, Joseph M	--	--	580	S	--	H	300MRGR
HO Ac 37	--	Brown, William H	--	--	580	S	--	H	300MRGR
HO Ac 38	HO-73-0750	Clement, Thomas J	L F Easterday	07-26-1974	615	S	125	H	300PLGV
HO Ac 39	--	Freeman, Carl M	--	--	565	H	--	H	300MRGR
HO Ac 40	--	Freeman, Carl M	--	--	565	H	--	H	300MRGR
HO Ac 41	--	Schulte, William A	--	--	610	H	--	H	300MRGR
HO Ac 42	HO-73-0372	Liberty Baptist Ch	Ralph Mayne	07-27-1973	585	F	102	H	300PLGV
HO Ac 43	HO-73-2695	Swann, William L	Ralph Mayne	04-14-1978	635	S	105	H	300PRTB
HO Ac 44	--	Esworthy, Robert L	--	--	580	F	--	U	300PLGV
HO Ac 45	--	Warner, Frank L	--	--	580	F	--	H	300PLGV
HO Ac 46	--	Franklin, Herman M	--	--	585	S	--	H	300PLGV
HO Ac 47	HO-65-0254	Sirk, Jasper L Jr	Edward Brown	11-03-1964	575	F	75	H	300PLGV
HO Ac 48	--	Sclar, Reuben	--	--	585	S	--	H	300PLGV
HO Ac 49	--	Clark, Howard W	--	--	590	F	--	H	300PLGV
HO Ac 50	--	Howard Association	--	--	610	F	--	U	300PLGV
HO Ac 51	--	Harless, Marion	--	--	600	F	--	U	300PLGV
HO Ac 52	--	Bates, Abraham	--	--	630	H	--	H	300MRGR
HO Ac 53	--	Welsh, Hazel L	--	--	575	H	--	H	300MRGR
HO Ac 54	--	Bradley, Donald C	--	--	575	H	--	H	300MRGR
HO Ac 55	--	Bradley, Donald C	--	--	575	H	--	H	300PLGV
HO Ac 56	--	Saunders	--	--	625	H	--	H	300PLGV
HO Ac 57	--	Wilson, W F	--	--	645	H	--	H	300PRTB
HO Ac 58	HO-68-0031	Harless, Marion	Edward Brown	08-18-1967	590	H	81	H	300PLGV
HO Ac 59	--	Weller, Norman	--	1900	590	H	46	H	300PLGV
HO Ac 60	--	Pue, Ridgely R	--	--	645	H	--	H	300MRGR
HO Ac 61	--	Harbin, Rufus	--	--	640	H	--	H	300MRGR
HO Ac 62	HO-73-0977	Thomey, Ronald J	Westminster	04-16-1975	640	S	158	H	300PRTB
HO Ac 63	HO-70-0042	Lutheran Methodist Ch	L F Easterday	10-09-1969	570	F	100	H	300PLGV
HO Ac 64	--	Whittington, William A	--	--	565	F	--	H	300PLGV
HO Ac 65	--	Cross, Ethel	--	--	555	S	--	H	300MRGR
HO Ac 66	HO-73-3036	Bowlin, James G	Dillon Bros	01-29-1979	725	H	145	H	300PRTB
HO Ac 67	HO-73-3484	Simco Corp	S Bollinger	11-08-1979	750	H	105	H	300PRTB

Casing			Water level		Aquifer test					Other	
Depth (ft)	Diameter (in.)	Finish	Depth, ft below land surface	Date measured	Yield (gal/min)	Drawdown (ft)	Specific capacity [(gal/min)/ft]	Hours pumped	Date	data available	Well no.
82	6	X	50	12-03-1987	.6	240	<0.01	6	12-03-1987	--	HO Ab 132
71	6	X	55	12-03-1987	1.2	235	.01	6	12-03-1987	--	HO Ab 133
20	6	X	52	11-30-1987	9	3	3.0	3	11-30-1987	--	HO Ab 134
58	6	X	62	01-06-1989	1	278	<.01	2	01-06-1989	--	HO Ab 135
78	6	X	27	08-29-1988	10	25	.40	3	08-29-1988	--	HO Ab 136
68	6	X	38	08-25-1988	5	41	.12	3	08-25-1988	--	HO Ab 137
38	6	X	37	08-25-1988	9	7	1.29	3	08-25-1988	--	HO Ab 138
8	6	X	40.20 S	05-07-1952	3	--	--	.5	05-07-1952	--	HO Ac 1
28	6	X	35	07-08-1968	4	125	.03	.5	07-08-1968	--	HO Ac 2
22	6	X	24.10 S	04-10-1980	25	110	.23	1	09-06-1973	--	HO Ac 3
20	6	X	16.60 S	04-10-1980	10	80	.12	2	07-15-1974	--	HO Ac 4
24	6	X	38.10 S	04-10-1980	15	10	1.50	2	09-12-1958	--	HO Ac 5
40	6	X	40	08-09-1966	6	100	.06	.5	08-09-1966	--	HO Ac 6
45	6	X	39.80 S	04-15-1980	15	85	.18	1	07-26-1974	--	HO Ac 7
50	6	X	20.80 S	04-08-1980	15	70	.21	1	12-09-1976	--	HO Ac 8
23	6	X	13.70 S	04-08-1980	20	60	.33	1	08-06-1973	--	HO Ac 9
82	6	X	16.81 S	04-08-1980	12	125	.10	6	08-13-1976	--	HO Ac 10
21	6	X	51.50 S	04-14-1980	6	90	.07	1	06-14-1973	--	HO Ac 11
26	6	X	32	12-30-1972	10	--	--	3	12-30-1972	--	HO Ac 12
49	6	X	35.80 S	05-05-1980	9	30	.30	2.5	04-02-1973	--	HO Ac 13
27	6	X	37.10 S	04-11-1980	20	0	--	2	03-26-1973	--	HO Ac 14
27	6	X	21.30 S	04-11-1980	30	6	5.0	2	05-07-1973	--	HO Ac 15
25	6	X	6.09 S	04-01-1980	20	12	1.67	2	01-07-1960	--	HO Ac 16
21	6	X	53.30 S	04-15-1980	30	75	.40	2	06-29-1977	--	HO Ac 17
19	6	X	47.10 S	04-09-1980	30	80	.37	2	02-23-1977	--	HO Ac 18
19	6	X	46.80 S	04-28-1980	20	80	.25	2	07-01-1977	--	HO Ac 19
75	6	X	53.50 S	04-15-1980	3	165	.02	2	06-16-1978	--	HO Ac 20
19	6	X	43.90 S	04-21-1980	1	260	<.01	2	02-22-1977	--	HO Ac 21
19	6	X	40.80 S	04-21-1980	5	120	.04	2	02-22-1977	--	HO Ac 22
70	6	X	33.00 S	06-22-1978	10	105	.10	2	04-26-1978	--	HO Ac 23
48	6	X	32.20 S	04-21-1980	6	105	.06	2	04-26-1978	--	HO Ac 24
50	6	X	34.10 S	04-10-1980	12	80	.15	2	03-07-1978	Q	HO Ac 25
19	6	X	38.80 S	04-10-1980	5	100	.05	2	02-22-1977	--	HO Ac 26
20	6	X	40	02-22-1977	5	100	.05	2	02-22-1977	--	HO Ac 27
32	6	X	45.80 S	04-10-1980	4	125	.03	2	05-27-1977	--	HO Ac 28
86	6	X	53.50 S	04-10-1980	1	240	<.01	2	11-23-1977	--	HO Ac 29
61	6	X	39.40 S	06-22-1978	2	180	.01	2	04-24-1978	--	HO Ac 30
19	6	X	44.30 S	04-22-1980	3	160	.02	2	10-14-1977	--	HO Ac 31
19	6	X	40	09-15-1977	5	100	.05	2	09-15-1977	--	HO Ac 32
55	6	X	39.20 S	04-10-1980	12	80	.15	2	03-07-1978	--	HO Ac 33
19	6	X	25.60 S	07-07-1980	7	100	.07	2	11-23-1977	--	HO Ac 34
25	6	X	33.30 S	04-09-1980	10	90	.11	1	06-08-1977	--	HO Ac 35
--	6	-	37.30 S	04-09-1980	--	--	--	--	--	--	HO Ac 36
--	6	-	44.50 S	04-09-1980	--	--	--	--	--	--	HO Ac 37
74	6	X	28.00 S	04-09-1980	25	85	.29	1	07-26-1974	--	HO Ac 38
--	6	-	31.80 S	04-11-1980	--	--	--	--	--	--	HO Ac 39
--	11	O	35.24 S	04-11-1980	--	--	--	--	--	--	HO Ac 40
--	6	-	30.40 S	04-21-1980	--	--	--	--	--	--	HO Ac 41
30	6	X	33.00 S	04-12-1980	15	0	--	2	07-27-1973	--	HO Ac 42
55	6	X	34.00 S	04-16-1980	10	55	.18	6	04-14-1978	--	HO Ac 43
--	--	W	18.96 S	04-18-1980	--	--	--	--	--	--	HO Ac 44
--	6	-	17.85 S	04-18-1980	--	--	--	--	--	--	HO Ac 45
--	6	X	17.90 S	04-21-1980	--	--	--	--	--	--	HO Ac 46
42	6	X	24.70 S	04-23-1980	10	--	--	2	11-03-1964	--	HO Ac 47
--	6	-	35.65 S	04-23-1980	--	--	--	--	--	--	HO Ac 48
--	--	W	27.26 S	04-23-1980	--	--	--	--	--	--	HO Ac 49
--	6	-	20.50 S	04-24-1980	--	--	--	--	--	--	HO Ac 50
--	--	W	23.00 S	04-24-1980	--	--	--	--	--	--	HO Ac 51
--	6	-	35.00 S	04-28-1980	--	--	--	--	--	--	HO Ac 52
--	6	-	30.69 S	04-28-1980	--	--	--	--	--	--	HO Ac 53
--	--	W	28.85 S	04-28-1982	--	--	--	--	--	--	HO Ac 54
--	6	-	31.54 S	04-28-1980	--	--	--	--	--	--	HO Ac 55
--	--	W	38.70 S	04-28-1980	--	--	--	--	--	--	HO Ac 56
--	6	-	44.55 S	04-28-1980	--	--	--	--	--	--	HO Ac 57
65	6	X	19.50 S	04-29-1980	10	28	.36	2	08-18-1967	--	HO Ac 58
--	--	W	18.40 S	04-30-1980	--	--	--	--	--	--	HO Ac 59
--	6	-	40.55 S	04-30-1980	--	--	--	--	--	--	HO Ac 60
--	6	-	33.58 S	05-05-1980	--	--	--	--	--	--	HO Ac 61
81	6	X	29.60 S	05-05-1980	15	23	.65	7	04-16-1975	--	HO Ac 62
20	6	X	23.80 S	06-09-1980	50	70	.71	1	10-09-1969	--	HO Ac 63
--	6	-	17.10 S	06-09-1980	--	--	--	--	--	--	HO Ac 64
--	4	W	32.70 S	06-09-1980	--	--	--	--	--	--	HO Ac 65
34	6	X	35	01-29-1979	10	65	.15	6	01-29-1979	--	HO Ac 66
21	6	X	54.60 S	07-11-1980	30	65	.46	2	11-08-1979	--	HO Ac 67

Table 1.—Records of selected wells in Howard County—Continued

Well no.	Well permit no.	Owner or name	Driller	Date of construction	Altitude of land surface (ft)	Topo-graphic setting	Depth Drilled (ft)	Use of water	Geologic unit
HO Ac 68	HO-73-2321	Harbin, George	Joseph Mayne	09-22-1977	630	H	245	H	300MRGR
HO Ac 69	HO-73-0181	Dove, Wilbur A	L F Easterday	03-22-1973	600	S	100	H	300MRGR
HO Ac 70	HO-73-2682	Rynarzewski, Robert J	L F Easterday	04-26-1978	625	H	140	H	300MRGR
HO Ac 71	HO-73-2684	Creel, Donald J	L F Easterday	04-24-1978	620	H	120	H	300MRGR
HO Ac 72	HO-73-3186	Smith Brothers	L F Easterday	04-02-1979	600	S	305	H	300MRGR
HO Ac 73	--	Clayton, James L	--	--	595	S	--	H	300MRGR
HO Ac 74	HO-73-2127	Ball, Harold H Jr	L F Easterday	10-20-1977	630	H	200	H	300MRGR
HO Ac 75	--	Cross, Ethel	--	--	560	S	96	H	300MRGR
HO Ac 76	HO-73-2685	Kasda, William J Jr	L F Easterday	04-26-1978	630	H	300	H	300MRGR
HO Ac 77	HO-73-3616	McIntosh, Peter	Ralph Mayne	07-10-1980	594	F	145	H	300PLGV
HO Ac 79	HO-81-0030	West Howard Swim Club	L F Easterday	04-04-1983	680	S	200	R	300PRTB
HO Ac 80	HO-81-0043	West Howard Swim Club	L F Easterday	04-04-1983	685	H	200	R	300PRTB
HO Ac 81	HO-81-0030	West Howard Swim Club	L F Easterday	04-04-1983	680	S	340	U	300PRTB
HO Ac 82	HO-81-0188	Calvary Lutheran Ch	L F Easterday	08-18-1983	685	S	140	H	300PRTB
HO Ac 83	HO-73-4214	Sebastin, Richard	Joseph Mayne	07-09-1982	685	S	184	H	300PRTB
HO Ac 84	HO-81-1605	Puckett, David F	Joseph Mayne	08-19-1986	695	H	245	H	300PRTB
HO Ac 85	HO-73-1988	Redmiles, David L	Joseph Mayne	04-15-1977	700	S	305	H	300PRTB
HO Ac 86	HO-73-2034	Flester	Ralph Mayne	05-26-1977	700	H	101	H	300PRTB
HO Ac 87	HO-05-2246	Westminster Bank	Dewey Brown	06-25-1963	640	F	73	C	300PRTB
HO Ac 88	HO-71-0102	Lisbon Pharmacy	Dewey Brown	03-22-1971	585	S	122	C	300PLGV
HO Ac 89	HO-73-2637	Barth, Charles A	Joseph Mayne	03-20-1978	500	S	145	H	--
HO Ac 90	HO-73-0088	Covell, Nelson S.	L F Easterday	12-14-1972	535	H	120	H	300PLGV
HO Ac 92	HO-73-3785	Lisbon U M Church	L F Easterday	03-18-1981	550	S	200	H	300MRGR
HO Ac 93	HO-73-4139	Sanner, Harry E	Ralph Mayne	03-30-1982	715	S	125	H	300PRTB
HO Ac 94	HO-73-3322	Secker, Arthur E	L F Easterday	06-28-1979	615	S	300	U	300MRGR
HO Ac 95	HO-73-4080	Secker, Arthur E	L F Easterday	01-14-1982	610	S	500	H	300MRGR
HO Ac 96	HO-81-1508	Bost, Michael	Ralph Mayne	08-27-1986	555	V	180	H	300SKVL
HO Ac 97	HO-81-0947	Geisler, Jerry	L F Easterday	04-20-1985	625	H	400	H	300MRGR
HO Ac 98	HO-73-1559	Belieff, Dan	Alton Keyser	09-06-1976	620	H	125	H	300SKVL
HO Ac 99	HO-73-0466	Hooker, Mike	Dillon Bros	10-09-1973	600	S	100	H	300SKVL
HO Ac 100	HO-73-2141	Cohen, Gary	Westminster	07-11-1977	615	S	453	H	300SKVL
HO Ac 101	HO-73-3703	Kline, Howard	S Bollinger	10-10-1980	585	H	145	H	300MRGR
HO Ac 102	HO-73-2074	Bell, Donald	Joseph Mayne	06-07-1977	560	S	245	H	300MRGR
HO Ac 103	HO-81-0024	Eng, Gary	S Bollinger	03-17-1983	515	H	165	H	300MRGR
HO Ac 104	HO-73-2058	Neale & Neale	L F Easterday	06-06-1977	630	F	125	H	300SKVL
HO Ac 105	HO-73-2359	Penn, Robert	G E Harr Sons	10-03-1977	640	H	300	H	300SKVL
HO Ac 106	HO-73-0322	Deeder, Stanley	Joseph Mayne	07-19-1973	595	S	300	H	300SKVL
HO Ac 107	HO-73-0552	Harman, John	Joseph Mayne	01-08-1974	570	S	80	H	300SKVL
HO Ac 108	HO-73-1183	Bateman, Donald	L F Easterday	11-10-1975	540	H	165	H,S	300SKVL
HO Ac 109	HO-72-0120	Schaffer, James	Joseph Mayne	01-27-1972	620	S	73	H	300SKVL
HO Ac 110	HO-81-2003	Mincin, Dante	Ralph Mayne	06-06-1987	665	H	205	H	300PRTB
HO Ac 111	HO-81-1651	Bosley, Barry	Tri County	09-02-1986	665	S	175	H	300PRTB
HO Ac 112	HO-81-2269	Snyder, Norman	Ralph Mayne	09-14-1987	620	S	205	H	300PRTB
HO Ac 113	HO-81-1634	Sargent Associates	Ralph Mayne	08-22-1986	685	H	225	H	300PRTB
HO Ac 114	HO-81-1565	White, Robert	Tri County	06-30-1986	680	H	200	H	300PRTB
HO Ac 115	HO-81-1737	Compton, Allen	Tri County	11-20-1986	665	H	210	H	300PRTB
HO Ac 116	HO-81-1978	Lisbon Shopping Center	Joseph Mayne	04-03-1987	640	F	405	C	300PRTB
HO Ac 117	HO-81-1979	Lisbon Shopping Center	Joseph Mayne	04-07-1987	630	F	345	C	300PRTB
HO Ac 118	HO-73-4123	Cramer, Stephen	A C Reider	03-10-1982	720	S	100	H	300PRTB
HO Ac 119	HO-81-2027	German, Eugene	Joseph Mayne	04-30-1987	685	H	500	H	300PRTB
HO Ac 120	HO-81-2027	German, Eugene	Joseph Mayne	04-30-1987	685	H	500	U	300PRTB
HO Ac 121	HO-88-0018	Reich, Mark	Ralph Mayne	06-30-1988	540	H	205	H	300PLGV
HO Ac 122	HO-81-2497	Pouncy, M E	H Edmondson	01-19-1988	560	H	175	H	300PLGV
HO Ac 123	HO-81-2400	Hemphill Associates	Ralph Mayne	11-20-1987	485	S	205	H	300PLGV
HO Ac 124	HO-81-2687	Campas, Arthur	Ralph Mayne	06-28-1988	500	H	185	H	300PLGV
HO Ac 125	HO-88-0132	Carlo, John A	W W Reichart	09-09-1988	515	H	100	H	300PLGV
HO Ad 1	--	Thomas, Howard	B Edmondson	1948	450	S	50	H	300SKVL
HO Ad 2	--	Hawkins, William L	B Edmondson	--	475	S	43	H	300SKVL
HO Ad 3	--	Day, Robert E	B Edmondson	1912	460	H	79.7	U	300SKVL
HO Ad 4	--	Streaker	Lockart	1915	560	H	56	H,S	300SKVL
HO Ad 5	--	Warfield, Lee	--	1850	600	H	32	H	300SKVL
HO Ad 6	--	Dickey, James W	--	--	515	S	--	H	300SKVL
HO Ad 7	HO-67-0297	Dickey, James W	Edward Brown	08-04-1967	610	H	200	U	300SKVL
HO Ad 8	HO-68-0018	Dickey, James W	Edward Brown	08-16-1967	530	S	200	U	300SKVL
HO Ad 9	HO-69-0110	Dickey, James W	L F Easterday	05-07-1969	605	H	135	H	300SKVL
HO Ad 10	HO-81-1919	Gray, Kea	Ralph Mayne	02-24-1987	450	H	145	H	300SKVL
HO Ad 11	HO-81-0937	Hallam, Thomas R	Joseph Mayne	05-16-1985	465	H	305	H	300SKVL
HO Ad 12	HO-81-1946	Myers, Mike	Tri County	04-21-1987	515	S	200	H	300SKVL
HO Ad 13	HO-81-1966	Meyers, Glen	Westminster	04-11-1987	550	S	250	H	300SKVL
HO Ad 14	HO-81-1947	Myers, Mike	Tri County	07-27-1987	540	H	100	H	300SKVL
HO Ad 15	HO-73-0336	Clarke, William	John Wells	10-18-1973	570	S	265	H	300SKVL
HO Ad 16	HO-73-1213	--	L F Easterday	12-08-1975	565	S	125	H	300SKVL
HO Ad 17	HO-73-2435	--	L F Easterday	01-31-1978	585	H	167	H	300SKVL
HO Ad 18	HO-73-3300	Conaway, James M	C C Campbell	08-10-1979	600	H	76	H	300SKVL
HO Ad 19	HO-81-0973	Burch, Jim	L F Easterday	04-25-1985	560	S	220	H	300SKVL

Casing			Water level		Aquifer test					Other data	
Depth (ft)	Diameter (in.)	Finish	Depth, ft below land surface	Date measured	Yield (gal/min)	Drawdown (ft)	Specific capacity [(gal/min)/ft]	Hours pumped	Date	available	Well no.
52	6	X	45	09-22-1977	6	195	0.03	2	09-22-1977	--	HO Ac 68
19	6	X	40	03-22-1973	5	60	.08	2	03-22-1973	--	HO Ac 69
72	6	X	40	04-26-1978	4	100	.04	2	04-26-1978	--	HO Ac 70
61	6	X	40	04-24-1978	12	80	.15	2	04-24-1978	--	HO Ac 71
74	6	X	40	04-02-1979	1	265	<.01	2	04-02-1979	--	HO Ac 72
--	--	-	15.49 S	07-11-1980	--	--	--	--	--	--	HO Ac 73
19	6	X	40	10-20-1977	5	160	.03	2	10-20-1977	--	HO Ac 74
--	--	-	37.00 S	07-14-1980	--	--	--	--	--	--	HO Ac 75
61	6	X	50	04-26-1978	1	250	<.01	2	04-26-1978	--	HO Ac 76
34	6	X	40	07-10-1980	20	105	.19	4	07-10-1980	--	HO Ac 77
41	6	X	90	04-04-1983	6	110	.05	3	04-04-1983	--	HO Ac 79
66	6	X	90	04-04-1983	6	110	.05	3	04-04-1983	--	HO Ac 80
--	--	X	Dry	04-04-1983	0	--	--	--	04-04-1983	--	HO Ac 81
30	6	X	30	08-18-1983	20	110	.18	2	08-18-1983	Q	HO Ac 82
59	6	X	34	07-09-1982	10	16	.62	3	07-09-1982	--	HO Ac 83
59	6	X	60	08-19-1986	6.5	103	.06	3	08-19-1986	--	HO Ac 84
28	6	X	45	04-15-1977	2	255	.01	2	04-15-1977	--	HO Ac 85
41	6	X	50	05-26-1977	6	51	.12	2	05-26-1977	--	HO Ac 86
59	6	X	50	06-25-1963	7	10	.70	1	06-25-1963	--	HO Ac 87
78	6	X	40	03-22-1971	7	60	.12	1	03-22-1971	--	HO Ac 88
35	6	X	5	03-20-1978	7	40	.17	2	03-20-1978	--	HO Ac 89
19	6	X	20	12-14-1972	10	100	.10	1	12-14-1972	--	HO Ac 90
19	6	X	45	03-18-1981	6	155	.04	4	03-18-1981	Q	HO Ac 92
51	6	X	40	03-30-1982	30	85	.35	3	03-30-1982	--	HO Ac 93
40	6	X	45	06-28-1979	2	255	.01	3	06-28-1979	--	HO Ac 94
34	6	X	80	01-14-1982	1	420	<.01	6	01-14-1982	--	HO Ac 95
48	6	X	5	08-27-1986	10	15	.67	3	08-27-1986	--	HO Ac 96
23	6	X	59	04-20-1985	4	102	.04	3	04-20-1985	--	HO Ac 97
21	6	X	30	09-06-1976	5	90	.06	1	09-06-1976	--	HO Ac 98
26	6	X	20	10-09-1973	8	60	.13	6	10-09-1973	--	HO Ac 99
65	6	X	130	07-11-1977	4.5	305	.01	6	07-11-1977	--	HO Ac 100
45	6	X	38	10-10-1980	9	107	.08	2	10-10-1980	--	HO Ac 101
31	6	X	40	06-07-1977	3	205	.01	2	06-07-1977	--	HO Ac 102
39	6	X	54	03-17-1983	10	11	.91	3	03-17-1983	--	HO Ac 103
61	6	X	40	06-06-1977	20	85	.24	2	06-06-1977	--	HO Ac 104
42	6	X	56	10-03-1977	4	194	.02	4	10-03-1977	--	HO Ac 105
28	6	X	150	07-19-1973	3	150	.02	2	07-19-1973	--	HO Ac 106
20	6	X	30	01-08-1974	10	0	--	2	01-08-1974	--	HO Ac 107
63	6	X	45	11-10-1975	8	120	.07	1	11-10-1975	--	HO Ac 108
35	6	X	25	01-27-1972	7	40	.17	2	01-27-1972	--	HO Ac 109
38	6	X	38	06-06-1987	10	12	.83	3	06-06-1987	--	HO Ac 110
77	6	X	40	09-02-1986	5	35	.14	3	09-02-1986	--	HO Ac 111
19	6	X	37	09-14-1987	9	18	.50	3	09-14-1987	--	HO Ac 112
78	6	X	45	08-22-1986	2	100	.02	3	08-22-1986	--	HO Ac 113
110	6	X	47	06-30-1986	4	58	.07	5.5	06-30-1986	--	HO Ac 114
77	6	X	35	11-20-1986	7	50	.14	3	11-20-1986	--	HO Ac 115
79	6	X	35	04-03-1987	5.5	105	.05	3	04-03-1987	--	HO Ac 116
106	6	X	35	04-07-1987	9	44	.20	3	04-07-1987	--	HO Ac 117
48	6	X	10	03-10-1982	30	88	.34	2	03-10-1982	--	HO Ac 118
84	6	X	38	04-30-1987	1.6	206	.01	6	04-30-1987	--	HO Ac 119
--	--	X	Dry	04-30-1987	0	--	--	--	04-30-1987	--	HO Ac 120
28	6	X	30	06-30-1988	6	45	.13	3	06-30-1988	--	HO Ac 121
37	6	X	30	01-19-1988	15	0	--	3	01-19-1988	--	HO Ac 122
48	6	X	21	11-20-1987	10	2	5.0	3	11-20-1987	--	HO Ac 123
28	6	X	37	06-28-1988	9	1	9.0	3	06-28-1988	--	HO Ac 124
41	6	X	9	09-09-1988	9	6	1.50	3	09-09-1988	--	HO Ac 125
--	6	-	--	--	--	--	--	--	--	--	HO Ad 1
--	6	-	20.60 S	07-23-1952	--	--	--	--	--	--	HO Ad 2
--	6	-	39.60 S	07-21-1952	--	--	--	--	--	--	HO Ad 3
--	6	-	--	--	--	--	--	--	--	--	HO Ad 4
32	6	W	--	--	--	--	--	--	--	--	HO Ad 5
--	--	-	--	--	--	--	--	--	--	--	HO Ad 6
56	6	X	84	08-04-1967	2	--	--	2	08-04-1967	--	HO Ad 7
38	6	X	65	08-16-1967	8	--	--	2	08-16-1967	--	HO Ad 8
32	6	X	30	05-07-1969	15	105	.14	1	05-07-1969	--	HO Ad 9
62	6	X	45	02-24-1987	10	0	--	3	02-24-1987	--	HO Ad 10
36	6	X	25	05-16-1985	19	196	.10	6	05-16-1985	--	HO Ad 11
20	6	X	30	04-21-1987	4	20	.20	3	04-21-1987	--	HO Ad 12
123	6	X	60	04-11-1987	15	54	.28	3	04-11-1987	--	HO Ad 13
42	6	X	46	07-27-1987	10	4	2.50	3	07-27-1987	--	HO Ad 14
46	6	X	65	10-18-1973	2	195	.01	2	10-18-1973	--	HO Ad 15
24	6	X	45	12-08-1975	10	80	.12	2	12-08-1975	--	HO Ad 16
103	6	X	40	01-31-1978	4	127	.03	2	01-31-1978	--	HO Ad 17
39	6	X	30	08-10-1979	10	20	.50	6	08-10-1979	--	HO Ad 18
82	6	X	21	04-25-1985	8	108	.07	3	04-25-1985	--	HO Ad 19

Table 1.—Records of selected wells in Howard County—Continued

Well no.	Well permit no.	Owner or name	Driller	Date of construction	Altitude of land surface (ft)	Topo-graphic setting	Depth Drilled (ft)	Use of water	Geologic unit
HO Ad 20	HO-73-3277	Garratt, David	Ralph Mayne	06-05-1979	580	H	305	H	300SKVL
HO Ad 21	HO-73-2299	Silverman, Samuel	L F Easterday	09-29-1977	545	H	120	H	300SKVL
HO Ad 22	HO-73-0512	Maus, Earl	L F Easterday	12-04-1973	550	H	160	H	300SKVL
HO Ad 24	HO-73-4301	The Duke's Place	L F Easterday	10-28-1982	360	V	160	C	300SKVL
HO Ad 25	HO-81-2116	Bronk, Charles	Joseph Mayne	06-17-1987	510	H	140	H	300SKVL
HO Ad 26	HO-81-1618	Litt, Larry B	Joseph Mayne	08-25-1986	560	S	345	H	300SKVL
HO Ad 27	HO-73-0732	Smuck, William	A P Edmondson	07-18-1974	600	H	83	H	300SKVL
HO Ad 28	HO-66-0201	Sutton, Ivan C	Westminster	01-10-1966	590	F	110	H	300SKVL
HO Ad 29	HO-81-1658	WLP Enterprises Inc	Ralph Mayne	10-15-1986	600	H	260	H	300SKVL
HO Ad 30	HO-81-0073	Dehart, Dennis	Keyser-Garver	04-29-1985	585	S	145	H	300SKVL
HO Ad 31	HO-81-0073	Dehart, Dennis	Keyser-Garver	04-29-1985	585	S	--	U	300SKVL
HO Ad 32	HO-81-1741	Lennon, Thomas	Ralph Mayne	11-20-1986	580	H	265	H	300SKVL
HO Ad 33	HO-81-0668	Karfonta, Charles	Ralph Mayne	09-04-1984	565	U	160	H	300SKVL
HO Ad 34	HO-69-0204	Kyne, Phillip	L F Easterday	06-17-1969	585	H	120	H,I	300SKVL
HO Ad 35	HO-73-2522	--	John Greene	02-14-1978	605	H	125	H	300SKVL
HO Ad 36	HO-73-2520	--	John Greene	04-15-1978	565	S	135	H	300SKVL
HO Ad 37	HO-73-3267	Buckholtz, Howard	C C Campbell	05-23-1979	545	S	200	H	300SKVL
HO Ad 38	HO-81-0738	--	Joseph Mayne	02-05-1985	560	H	265	H	300SKVL
HO Ad 39	HO-73-2527	--	John Greene	04-28-1978	600	H	82	H	300SKVL
HO Ad 40	HO-73-0590	Link, Roland	G E Harr Sons	02-26-1974	590	S	100	H	300SKVL
HO Ad 41	HO-81-2103	Lape, Charles	Ralph Mayne	06-09-1987	575	H	125	H	300SKVL
HO Ad 42	HO-73-2281	Snyder, William	Ray Keyser	09-05-1977	520	S	100	H	300SKVL
HO Ad 43	HO-73-2064	Petenbrink, Paul	C C Campbell	07-28-1977	565	S	125	H	300SKVL
HO Ad 44	HO-73-2063	Terzi, Darren	L F Easterday	06-06-1977	560	H	145	H	300SKVL
HO Ad 45	HO-73-2857	Livingston, John	Dillon Bros	11-30-1978	525	S	200	H	300SKVL
HO Ad 46	HO-73-2847	Holston, Dale	C A Cromwell	07-21-1978	525	H	160	H	300SKVL
HO Ad 47	HO-73-2105	Arrington, Richard	L F Easterday	08-24-1977	500	S	200	H	300SKVL
HO Ad 49	HO-73-0089	Mood, Frank R Jr	L F Easterday	10-25-1972	525	H	83	U	300SKVL
HO Ad 50	HO-81-0002	Mood, Frank R Jr	L F Easterday	02-25-1983	525	H	200	H	300SKVL
HO Ad 51	HO-73-0494	Stafford	Joseph Mayne	11-19-1973	525	S	145	H	300SKVL
HO Ad 52	HO-73-3786	Wiker, Richard A	S Bollinger	02-26-1981	505	H	125	H	300SKVL
HO Ad 53	HO-73-2624	--	L F Easterday	03-30-1978	540	S	80	H	300SKVL
HO Ad 54	HO-73-2464	--	L F Easterday	01-31-1978	550	H	120	H	300SKVL
HO Ad 55	HO-73-1357	Montgomery, Virginia	L F Easterday	03-16-1976	550	H	80	U	300SKVL
HO Ad 56	HO-81-0642	Montgomery, Virginia	Joseph Mayne	07-23-1984	550	H	144	H	300SKVL
HO Ad 57	HO-73-2858	Wyczalek, Marlene	L F Easterday	06-30-1978	550	H	100	H	300SKVL
HO Ad 58	HO-73-3678	Martinez, Tirso	L F Easterday	09-05-1980	515	S	120	H	300SKVL
HO Ad 59	HO-73-3545	Stirn, John V	L F Easterday	01-30-1980	560	H	120	H	300SKVL
HO Ad 60	HO-81-0602	Hayek, Carlton W	G E Harr Sons	07-07-1984	540	H	200	H	300SKVL
HO Ad 61	HO-73-1627	Cook, William D	L F Easterday	09-14-1976	540	S	140	H	300SKVL
HO Ad 62	HO-73-2368	--	L F Easterday	11-10-1977	535	H	100	H	300SKVL
HO Ad 63	HO-73-2387	--	L F Easterday	01-31-1978	550	H	120	H	300SKVL
HO Ad 64	HO-81-1595	Fisher	Westminster	07-16-1986	545	H	78	H	300SKVL
HO Ad 65	HO-73-0231	Arthur, John T	L F Easterday	04-16-1973	495	S	100	H	300SKVL
HO Ad 66	HO-67-0230	Jacobs, James	George Hart	05-05-1967	565	S	80	U	300SKVL
HO Ad 67	HO-73-4346	Jacobs, James	Westminster	12-09-1982	565	S	203	H	300SKVL
HO Ad 68	HO-73-2540	Helmrich, Earl	L F Easterday	03-01-1978	550	S	130	H	300SKVL
HO Ad 69	HO-81-1052	Jacobs, Jim	Joseph Mayne	08-05-1985	555	S	185	H	300SKVL
HO Ad 70	HO-73-4382	Sanford, James	L F Easterday	02-23-1983	545	S	160	H	--
HO Ad 71	HO-81-0126	White, Charles	S Bollinger	09-19-1983	570	S	145	H	300MRGR
HO Ad 72	HO-81-1474	Yingling, David E	L F Easterday	05-23-1986	575	S	220	H	300MRGR
HO Ad 73	HO-73-0889	Burt, Raymond	A C Reider	01-21-1975	585	H	100	H	300MRGR
HO Ad 74	HO-73-0538	Hickman, Melvin	John Greene	11-09-1973	585	H	185	H	300UMFC
HO Ad 75	HO-73-2849	Czincilla, William J	Westminster	06-27-1978	560	S	152	H	300UMFC
HO Ad 76	HO-73-0377	Fisher, Jack	L F Easterday	08-17-1973	605	S	100	H	300MRGR
HO Ad 77	HO-73-3805	Landgraf, Vernon H	Westminster	03-26-1981	615	H	402	H	300MRGR
HO Ad 78	HO-73-3805	Landgraf, Vernon H	Westminster	03-26-1981	620	H	303	U	300MRGR
HO Ad 79	HO-73-0389	Landgraf, Vernon H	L F Easterday	08-18-1973	620	H	160	U	300MRGR
HO Ad 80	HO-73-2447	Lookingbill, Martin	Westminster	01-23-1978	575	H	145	H	300SKVL
HO Ad 81	HO-73-2447	Lookingbill, Martin	Westminster	01-23-1978	575	H	89	U	300SKVL
HO Ad 82	HO-73-2887	Bartha, John L	L F Easterday	07-31-1978	570	H	140	H	300SKVL
HO Ad 83	HO-73-1160	Restivo, James P	A C Reider	10-16-1975	470	H	90	H	300UMFC
HO Ad 84	HO-73-1306	Conner, John B	H Edmondson	02-18-1976	525	S	105	H	300UMFC
HO Ad 85	HO-81-1901	Jones, Charles	L F Easterday	03-13-1987	545	H	400	H	300UMFC
HO Ad 86	HO-73-1573	Criswell, James	Alton Keyser	08-25-1976	500	S	250	H	300MRGR
HO Ad 87	HO-73-1474	Flanigan, Anna R	Westminster	11-16-1976	505	S	158	H	--
HO Ad 88	HO-81-1564	Winyall, David	L F Easterday	09-05-1986	470	S	200	H	300MRGR
HO Ad 89	HO-73-2514	Baranger, George H	W W Reichart	04-03-1978	415	S	300	H	300LCRV
HO Ad 90	HO-73-0801	Leavitt, John	L F Easterday	08-12-1974	455	S	205	H	300LCRV
HO Ad 91	HO-73-2672	McQuegg, Michael G	Dillon Bros	05-16-1978	480	H	400	H	300LCRV
HO Ad 92	HO-73-2172	Scheel, Albert	L F Easterday	08-24-1977	450	S	180	H	300LCRV
HO Ad 93	HO-71-0141	Patapsco Valley St Pk	L F Easterday	05-11-1971	470	H	300	H	300SKVL
HO Ad 94	HO-81-2624	Rouiller, Charles	Ralph Mayne	03-23-1988	520	S	185	H	300SKVL
HO Ad 95	HO-81-2457	Wilson, Ed	L F Easterday	12-17-1987	480	H	300	H	300SKVL
HO Ae 1	HO-73-3607	Vinci Stone Products	Westminster	05-09-1980	320	V	153	C	300STRS

Casing			Water level		Aquifer test					Other	
Depth (ft)	Diameter (in.)	Finish	Depth, ft below land surface	Date measured	Yield (gal/min)	Drawdown (ft)	Specific capacity [(gal/min)/ft]	Hours pumped	Date	data available	Well no.
21	6	X	40	06-05-1979	2	265	0.01	8	06-05-1979	--	HO Ad 20
50	6	X	37	09-29-1977	20	83	.24	2	09-29-1977	--	HO Ad 21
--	6	X	35	12-04-1973	3	125	.02	1	12-04-1973	--	HO Ad 22
22	6	X	60	10-28-1982	12	100	.12	3	10-28-1982	--	HO Ad 24
27	6	X	45	06-17-1987	12	0	--	3	06-17-1987	--	HO Ad 25
20	6	X	84	08-25-1986	9	74	.12	3	08-25-1986	Q	HO Ad 26
21	6	X	40	07-18-1974	5	28	.18	2	07-18-1974	--	HO Ad 27
33	6	X	46	01-10-1966	10	59	.17	2.5	01-10-1966	--	HO Ad 28
41	6	X	40	10-15-1986	4	0	--	3	10-15-1986	--	HO Ad 29
34	6	X	16	04-29-1985	8	0	--	3	04-29-1985	--	HO Ad 30
--	--	X	Dry	04-29-1985	0	--	--	--	04-29-1985	--	HO Ad 31
81	6	X	37	11-20-1986	3	153	.02	6	11-20-1986	--	HO Ad 32
24	6	X	25	09-04-1984	9	0	--	3	09-04-1984	--	HO Ad 33
31	6	X	40	06-17-1969	50	80	.62	.5	06-17-1969	Q	HO Ad 34
40	6	X	45	02-14-1978	8	25	.32	6	02-14-1978	--	HO Ad 35
40	6	X	40	04-15-1978	8	50	.16	6	04-15-1978	--	HO Ad 36
38	6	X	20	05-23-1979	7	22	.32	6	05-23-1979	--	HO Ad 37
71	6	X	33	02-05-1985	4	106	.04	3	02-05-1985	--	HO Ad 38
27	6	X	40	04-28-1978	5	12	.42	6	04-28-1978	--	HO Ad 39
21	6	X	20	02-26-1974	20	5	4.0	6	02-26-1974	--	HO Ad 40
54	6	X	25	06-09-1987	12	10	1.20	3	06-09-1987	--	HO Ad 41
21	6	X	35	09-05-1977	20	60	.33	2	09-05-1977	--	HO Ad 42
15	6	X	22	07-28-1977	3	43	.07	6	07-28-1977	--	HO Ad 43
19	6	X	40	06-06-1977	4	105	.04	2	06-06-1977	--	HO Ad 44
40	6	X	35	11-30-1978	10	145	.07	6	11-30-1978	--	HO Ad 45
24	6	X	40	07-21-1978	25	110	.23	1	07-21-1978	--	HO Ad 46
38	6	X	30	08-24-1977	2	170	.01	2	08-24-1977	--	HO Ad 47
26	6	X	50	10-25-1972	10	33	.30	2	10-25-1972	--	HO Ad 49
35	6	X	70	02-25-1983	1	130	.01	3	02-25-1983	--	HO Ad 50
21	6	X	40	11-19-1973	5	105	.05	2	11-19-1973	--	HO Ad 51
36	6	X	35	02-26-1981	20	90	.22	3	02-26-1981	--	HO Ad 52
44	6	X	40	03-30-1978	30	40	.75	2	03-30-1978	--	HO Ad 53
58	6	X	50	01-31-1978	20	70	.29	2	01-31-1978	--	HO Ad 54
20	6	X	30	03-16-1976	40	50	.80	2	03-16-1976	--	HO Ad 55
26	6	X	30	07-23-1984	15	14	1.07	3	07-23-1984	--	HO Ad 56
21	6	X	20	06-30-1978	40	80	.50	2	06-30-1978	--	HO Ad 57
28	6	X	30	09-05-1980	30	90	.33	2	09-05-1980	--	HO Ad 58
29	6	X	40	01-30-1980	20	80	.25	2	01-30-1980	--	HO Ad 59
45	6	X	39	07-07-1984	10	7	1.43	3	07-07-1984	--	HO Ad 60
18	6	X	30	09-14-1976	6	110	.05	2	09-14-1976	--	HO Ad 61
22	6	X	40	11-10-1977	20	60	.33	2	11-10-1977	--	HO Ad 62
44	6	X	50	01-31-1978	12	70	.17	2	01-31-1978	--	HO Ad 63
41	6	X	19	07-16-1986	15	1	15.0	3	07-16-1986	--	HO Ad 64
43	6	X	40	04-16-1973	12	60	.20	1	04-16-1973	--	HO Ad 65
42	6	X	45	05-05-1967	14	15	.93	2	05-05-1967	--	HO Ad 66
51	6	X	63	12-09-1982	4	38	.11	6	12-09-1982	--	HO Ad 67
44	6	X	40	03-01-1978	8	90	.09	2	03-01-1978	--	HO Ad 68
48	6	X	30	08-05-1985	12	47	.26	3	08-05-1985	--	HO Ad 69
38	6	X	48	02-23-1983	10	7	1.43	3	02-23-1983	--	HO Ad 70
59	6	X	33	09-19-1983	15	13	1.15	3	09-19-1983	--	HO Ad 71
58	6	X	7	05-23-1986	10	58	.17	3	05-23-1986	--	HO Ad 72
21	6	X	45	01-21-1975	15	35	.43	6	01-21-1975	--	HO Ad 73
43	6	X	40	11-09-1973	2	25	.08	4	11-09-1973	--	HO Ad 74
43	6	X	53	06-27-1978	5	14	.36	6	06-27-1978	--	HO Ad 75
58	6	X	30	08-17-1973	50	70	.71	1	08-17-1973	--	HO Ad 76
86	6	X	215	03-26-1981	15	160	.09	5	03-26-1981	--	HO Ad 77
--	--	X	Dry	03-26-1981	0	--	--	--	03-26-1981	--	HO Ad 78
57	6	X	36.49 S	06-06-1988	5	110	.05	1	08-18-1973	O	HO Ad 79
91	6	X	31	01-23-1978	30	113	.27	6	01-23-1978	--	HO Ad 80
--	--	X	Dry	01-23-1978	0	--	--	--	01-23-1978	--	HO Ad 81
70	6	X	50	07-31-1978	10	90	.11	2	07-31-1978	--	HO Ad 82
22	6	X	32	10-16-1975	6	53	.11	6	10-16-1975	Q	HO Ad 83
25	6	X	30	02-18-1976	4	30	.13	2	02-18-1976	--	HO Ad 84
44	6	X	20	03-13-1987	2	107	.02	6	03-13-1987	--	HO Ad 85
53	6	X	35	08-25-1976	2	210	.01	3	08-25-1976	--	HO Ad 86
32	6	X	45	11-16-1976	12	84	.14	6	11-16-1976	--	HO Ad 87
48	6	X	42	09-05-1986	4	28	.14	3	09-05-1986	--	HO Ad 88
61	6	X	35	04-03-1978	1.5	--	--	1	04-03-1978	--	HO Ad 89
22	6	X	50	08-12-1974	1	155	.01	1	08-12-1974	--	HO Ad 90
28	6	X	40	05-16-1978	1	335	<.01	6	05-16-1978	--	HO Ad 91
28	6	X	40	08-24-1977	3	140	.02	2	08-24-1977	--	HO Ad 92
19	6	X	60	05-11-1971	6	240	.02	1	05-11-1971	--	HO Ad 93
43	6	X	25	03-23-1988	9	14	.64	3	03-23-1988	--	HO Ad 94
37	6	X	81	12-17-1987	5	35	.14	3	12-17-1987	--	HO Ad 95
60	6	X	75	05-09-1980	30	52	.58	4	05-09-1980	--	HO Ae 1

Table 1.—Records of selected wells in Howard County—Continued

Well no.	Well permit no.	Owner or name	Driller	Date of construction	Altitude of land surface (ft)	Topo-graphic setting	Depth Drilled (ft)	Use of water	Geologic unit
HO Ae 2	HO-73-2904	Moody, William	Westminster	08-21-1978	415	S	203	H	400BLMR
HO Ae 3	HO-73-0403	Crosby, Joseph	Joseph Mayne	08-27-1973	420	H	140	H	400BLMR
HO Ae 4	HO-73-0404	Harting, Dennis L	Joseph Mayne	08-27-1973	420	S	120	H	400BLMR
HO Ae 5	HO-73-1192	Antonis, Nicholas	Westminster	10-15-1975	440	H	203	H	400BLMR
HO Ae 6	HO-81-0056	Colonial Pipeline Co	S Bollinger	04-22-1983	465	H	100	H	400BLMR
HO Ae 7	HO-81-0177	Benneck, Paul	L F Easterday	07-08-1983	485	H	300	H	400BLMR
HO Ae 8	HO-69-0201	Neff, Francis H	Dillon Bros	06-20-1969	500	H	100	H	400BLMR
HO Ae 9	HO-73-0952	--	G E Harr Sons	04-19-1975	510	H	100	H	400BLMR
HO Ae 10	HO-73-1135	Walton, Mullen C	Joseph Mayne	09-15-1975	530	F	185	H	400BLMR
HO Ae 11	HO-73-1616	Spindler, Jno Jr	G E Harr Sons	09-21-1976	525	F	100	H	--
HO Ae 12	HO-73-2264	--	G E Harr Sons	10-05-1977	500	S	300	H	300STRS
HO Ae 13	HO-73-4378	Eaton, William	L F Easterday	03-23-1983	490	S	280	H	300STRS
HO Ae 14	HO-81-1056	Resh, Denver	G E Harr Sons	06-26-1985	485	H	300	H	400BLMR
HO Ae 15	HO-81-1056	Resh, Denver	G E Harr Sons	06-26-1985	485	H	300	U	400BLMR
HO Ae 16	HO-81-2342	Mooney, Mark	L F Easterday	11-05-1987	505	H	400	H	400BLMR
HO Ae 17	HO-81-2238	McVey, Tim	Joseph Mayne	09-24-1987	485	H	325	H	300STRS
HO Ae 18	HO-81-2313	Schwindt, Barbara	G E Harr Sons	10-05-1987	455	H	300	H	400BLMR
HO Ba 1	HO-00-7594	Mullineaux, Robert	L F Easterday	03-24-1951	790	H	90	H	300GLLS
HO Bb 1	HO-00-7620	Poole	L F Easterday	03-20-1951	805	H	100	H	300GLLS
HO Bb 2	--	Warfield, Bernard D	Edward Brown	01-06-1918	600	S	56	H,S	300PLGV
HO Bb 3	--	Duvall, Raymond	--	1920	620	H	50	H	300MRGR
HO Bb 4	--	Duvall, Albert	--	1920	550	H	50	H	300PLGV
HO Bb 5	--	Clyde, David	Edward Brown	1918	590	F	93	H,S	300PRTB
HO Bb 6	HO-73-0012	Lober, Nelson W	L F Easterday	07-27-1972	595	S	120	H	300MRGR
HO Bb 7	HO-73-0076	Sealing, Leroy	L F Easterday	10-06-1972	580	S	140	H	300MRGR
HO Bb 8	HO-73-1162	Clark, Edward	C A Cromwell	10-20-1975	580	S	150	H	300MRGR
HO Bb 9	HO-73-0465	Roesemann, Henry	John Greene	01-15-1974	580	S	180	H	300MRGR
HO Bb 10	HO-71-0062	Morningstar, James F	L F Easterday	11-04-1970	610	H	200	H	300MRGR
HO Bb 11	HO-05-6758	Warfield, David R	Edward Brown	04-01-1964	610	H	92	H	300MRGR
HO Bb 12	HO-73-1707	Marsheck, Charles W	Joseph Mayne	11-06-1976	590	S	340	U	300MRGR
HO Bb 13	HO-73-0165	Gilmore, David L Jr	L F Easterday	02-19-1973	760	H	200	H	300MRGR
HO Bb 14	HO-72-0237	Kettermen, Olen W	L F Easterday	06-20-1972	760	S	300	H	300MRGR
HO Bb 15	HO-73-0666	Moody, Thomas	C A Cromwell	05-03-1974	740	H	150	H	300MRGR
HO Bb 16	HO-73-0427	Patrick, Loyd V	C A Cromwell	10-19-1973	750	H	150	H	300MRGR
HO Bb 17	HO-73-0743	Howard, Melvin C	L F Easterday	01-15-1973	640	S	100	H	300MRGR
HO Bb 18	HO-73-1888	McFann, Charles E	L F Easterday	03-30-1977	615	S	125	H	300MRGR
HO Bb 19	HO-73-0981	Howes, Warren G	L F Easterday	04-22-1975	620	S	100	H	300MRGR
HO Bb 20	HO-72-0166	Boone, David	L F Easterday	03-28-1972	690	H	160	H	300MRGR
HO Bb 21	HO-72-0161	Oles, Thomas F	L F Easterday	03-27-1972	750	H	350	H	300MRGR
HO Bb 22	HO-73-0070	Oles, Thomas F	L F Easterday	11-06-1972	745	H	200	H	300MRGR
HO Bb 23	HO-71-0178	Bowie, Charles	L F Easterday	08-13-1971	720	H	160	H	300MRGR
HO Bb 24	HO-73-0339	Petrides, Earnest	L F Easterday	05-30-1973	680	S	160	H	300MRGR
HO Bb 25	HO-73-0393	Gigliotta, Anthony P	Dillon Bros	09-28-1973	685	S	175	H	300MRGR
HO Bb 26	HO-73-0118	Thomas, Melvin P	L F Easterday	03-28-1973	750	H	300	U	300MRGR
HO Bb 27	HO-73-0493	Thomas, Melvin P	L F Easterday	07-22-1974	750	H	145	H	300MRGR
HO Bb 28	HO-73-2659	Templeman, Robert E	L F Easterday	04-28-1978	575	W	100	H	300MRGR
HO Bb 29	--	Streaker, J W	--	--	665	H	--	H	300MRGR
HO Bb 30	--	Barnes, William E	--	--	665	S	--	H	300MRGR
HO Bb 31	HO-73-2865	Gilroy, William R	Joseph Mayne	08-09-1978	585	S	265	H	300MRGR
HO Bb 32	HO-73-2348	Pippin, Landon D	L F Easterday	10-20-1977	755	F	145	H	300MRGR
HO Bb 33	HO-68-0116	Bowman, Stanley E	L F Easterday	01-10-1968	600	H	120	H	300MRGR
HO Bb 34	--	Prentice, Vern C	--	--	760	S	--	H	300MRGR
HO Bb 35	--	Mullinix, Lester E	--	--	740	S	--	U	300MRGR
HO Bb 36	HO-73-0421	Luce, Llewellyn A	A R Keyser	09-18-1973	610	S	235	H	300MRGR
HO Bb 37	--	Barnes, Edgar J	--	--	765	S	--	H	300MRGR
HO Bb 38	HO-72-0095	Slagle, Paul D	Joseph Mayne	11-24-1971	590	H	102	H	300MRGR
HO Bb 39	HO-73-0911	Fleshman, Allen D	Joseph Mayne	12-30-1974	650	S	185	H	300MRGR
HO Bb 40	--	Robinson, Wilbur B	L F Easterday	1900	760	H	--	I	300MRGR
HO Bb 41	--	Robinson, Wilbur B	L F Easterday	1900	760	H	--	H	300MRGR
HO Bb 42	HO-73-1176	Trageser, Herbert W Sr	L F Easterday	12-24-1975	605	S	140	H	300MRGR
HO Bb 43	HO-73-1523	Leonhardt, Karl T	L F Easterday	07-29-1976	605	H	125	H	300MRGR
HO Bb 44	HO-73-1525	Sweadner, Nicholas E	L F Easterday	07-01-1976	645	S	125	H	300MRGR
HO Bb 45	--	Gibson, Clyde F Jr	--	--	765	H	--	H	300MRGR
HO Bb 46	HO-73-0392	Staehling, Robert J Sr	Dillon Bros	09-24-1973	685	S	175	H	300MRGR
HO Bb 47	HO-72-0092	Reed, Carl	Robert Cline	11-05-1971	620	S	170	H	300MRGR
HO Bb 48	HO-73-1320	Dabbs, Lawrence W	Harley Drlg	02-25-1976	600	H	125	H	300MRGR
HO Bb 49	HO-73-0859	Hall, Joseph W	Joseph Mayne	10-28-1974	610	S	185	H	300MRGR
HO Bb 51	HO-04-3463	Moore, Richard H	L F Easterday	08-03-1961	740	S	143	H	300GLLS
HO Bb 52	HO-73-0930	Jackson, William E	Joseph Mayne	02-04-1975	765	S	180	H	300GLLS
HO Bb 53	HO-73-3809	Walter, Charles R	L F Easterday	02-25-1981	780	S	260	H	300GLLS
HO Bb 54	HO-73-0919	Stottlemyer, Larry	Hilton Drlg	02-28-1975	775	S	105	H	300GLLS
HO Bb 55	HO-73-0841	Hamilton, John	Keyser-Garver	11-19-1974	760	H	400	H	300GLLS
HO Bb 56	HO-81-0333	Schaefer, Robert	L F Easterday	12-09-1983	785	H	360	H	300GLLS
HO Bb 57	HO-81-0605	Jones, Angela S	Joseph Mayne	07-03-1984	805	H	365	H	300GLLS
HO Bb 58	HO-66-0264	Howard Chapel Meth Ch	L F Easterday	03-30-1966	785	H	220	H	300GLLS

Casing			Water level		Aquifer test					Other	
Depth (ft)	Diameter (in.)	Finish	Depth, ft below land surface	Date measured	Yield (gal/min)	Drawdown (ft)	Specific capacity [(gal/min)/ft]	Hours pumped	Date	data available	Well no.
21	6	X	40	08-21-1978	3	163	0.02	6	08-21-1978	--	HO Ae 2
20	6	X	60	08-27-1973	20	20	1.0	2	08-27-1973	Q	HO Ae 3
19	6	X	45	08-27-1973	15	75	.20	2	08-27-1973	--	HO Ae 4
21	6	X	68	10-15-1975	4	97	.04	6	10-15-1975	--	HO Ae 5
31	6	X	30	04-22-1983	10	6	1.67	3	04-22-1983	--	HO Ae 6
48	6	X	50	07-08-1983	2	250	.01	4	07-08-1983	--	HO Ae 7
32	6	X	30	06-20-1969	20	70	.29	2	06-20-1969	--	HO Ae 8
44	6	X	23	04-19-1975	15	0	--	6	04-19-1975	--	HO Ae 9
46	6	X	40	09-15-1975	6	140	.04	2	09-15-1975	--	HO Ae 10
37	6	X	31	09-21-1976	15	59	.25	6	09-21-1976	--	HO Ae 11
29	6	X	31	10-05-1977	7	14	.50	6	10-05-1977	--	HO Ae 12
18	6	X	45	03-23-1983	10	84	.12	3	03-23-1983	--	HO Ae 13
42	6	X	43	06-26-1985	4.28	237	.02	3	06-26-1985	--	HO Ae 14
--	--	X	Dry	06-26-1985	0	--	--	--	06-26-1985	--	HO Ae 15
45	6	X	35	11-05-1987	6	129	.05	3	11-05-1987	--	HO Ae 16
59	6	X	57	09-24-1987	6	97	.06	3	09-24-1987	--	HO Ae 17
60	6	X	78	10-05-1987	12	41	.29	3	10-05-1987	--	HO Ae 18
--	6	-	20.40 S	05-06-1952	8	60	.13	--	03-24-1951	--	HO Ba 1
--	6	-	45.30 S	05-06-1952	8	--	--	--	03-20-1951	--	HO Bb 1
--	6	-	35.90 S	04-09-1980	--	--	--	--	--	--	HO Bb 2
--	6	-	--	--	2	--	--	--	1920	--	HO Bb 3
--	6	-	--	--	2	--	--	--	1920	--	HO Bb 4
--	6	-	30	1918	3	--	--	--	1918	--	HO Bb 5
18	6	X	33.50 S	04-21-1980	5	80	.06	1	07-27-1972	--	HO Bb 6
28	6	X	30	10-06-1972	7	110	.06	2	10-06-1972	--	HO Bb 7
21	6	X	34.50 S	04-23-1980	8	110	.07	2	10-20-1975	--	HO Bb 8
74	6	X	33.60 S	04-21-1980	8	--	--	2	01-15-1974	--	HO Bb 9
34	6	X	40.30 S	04-15-1980	10	160	.06	1	11-04-1970	--	HO Bb 10
22	6	X	36	04-01-1964	10	29	.34	1	04-01-1964	--	HO Bb 11
80	6	X	34.00 S	04-18-1980	1	285	<.01	2	11-06-1976	--	HO Bb 12
19	6	X	40	02-19-1973	2	160	.01	1	02-19-1973	--	HO Bb 13
31	6	X	55.20 S	04-16-1980	5	250	.02	1	06-20-1972	--	HO Bb 14
21	6	X	41.00 S	04-11-1980	10	110	.09	2	05-03-1974	--	HO Bb 15
21	6	X	22.80 S	04-11-1980	10	105	.10	2	10-19-1973	--	HO Bb 16
21	6	X	40	01-15-1973	15	60	.25	1	01-15-1973	--	HO Bb 17
19	6	X	30.90 S	04-11-1980	30	85	.35	2	03-30-1977	--	HO Bb 18
22	6	X	27.20 S	04-11-1980	30	60	.50	1	04-22-1975	--	HO Bb 19
19	6	X	50.00 S	07-11-1980	15	100	.15	1	03-28-1972	--	HO Bb 20
41	6	X	37.00 S	04-20-1980	2	290	.01	1	03-27-1972	--	HO Bb 21
43	6	X	21.80 S	04-20-1980	6	160	.04	2	11-06-1972	--	HO Bb 22
19	6	X	31.10 S	04-11-1980	3	110	.03	1	08-13-1971	--	HO Bb 23
44	6	X	38.30 S	04-20-1980	15	120	.12	1	05-30-1973	--	HO Bb 24
26	6	X	47.90 S	07-07-1980	5	135	.04	6	09-28-1973	--	HO Bb 25
19	6	X	30.81 S	06-24-1980	1	265	<.01	1	03-28-1973	L,O	HO Bb 26
22	6	X	23.20 S	04-01-1980	5	105	.05	1	07-22-1974	--	HO Bb 27
47	6	X	24.00 S	04-09-1980	18	55	.33	2	04-28-1978	--	HO Bb 28
--	11	-	42.04 S	04-11-1980	--	--	--	--	--	--	HO Bb 29
--	6	-	35.26 S	04-18-1980	--	--	--	--	--	--	HO Bb 30
48	6	X	28.50 S	04-18-1980	2	200	.01	5	08-09-1978	--	HO Bb 31
19	6	X	45.00 S	04-17-1980	6	105	.06	2	10-20-1977	--	HO Bb 32
40	6	X	34.20 S	04-18-1980	8	80	.10	.5	01-10-1968	--	HO Bb 33
--	6	-	26.37 S	04-18-1980	--	--	--	--	--	--	HO Bb 34
--	--	W	17.50 S	04-24-1980	--	--	--	--	--	--	HO Bb 35
43	6	X	35.40 S	04-29-1980	3	--	--	1	09-18-1973	--	HO Bb 36
--	6	-	73.77 S	07-09-1980	--	--	--	--	--	--	HO Bb 37
51	6	X	35.70 S	07-02-1980	8	25	.32	1.5	11-24-1971	--	HO Bb 38
46	6	X	36.40 S	07-02-1980	10	140	.07	2	12-30-1974	--	HO Bb 39
--	6	-	29.50 S	07-02-1980	--	--	--	--	--	--	HO Bb 40
--	6	-	28.80 S	07-02-1980	--	--	--	--	--	--	HO Bb 41
20	6	X	29.40 S	07-07-1980	8	95	.08	2	12-24-1975	--	HO Bb 42
19	6	X	44.60 S	07-07-1980	12	85	.14	2	07-29-1976	--	HO Bb 43
19	6	X	42.80 S	07-07-1980	8	85	.09	2	07-01-1976	--	HO Bb 44
--	6	-	52.87 S	07-11-1980	--	--	--	--	--	--	HO Bb 45
30	6	X	39.30 S	07-07-1980	10	120	.08	6	09-24-1973	--	HO Bb 46
100	6	X	59.60 S	04-21-1980	12	108	.11	1	11-05-1971	--	HO Bb 47
78	6	X	40.00 S	04-21-1980	15	75	.20	2	02-25-1976	--	HO Bb 48
78	6	X	49.40 S	04-16-1980	3	132	.02	2	10-28-1974	--	HO Bb 49
20	6	X	50	08-03-1961	10	30	.33	--	08-03-1961	--	HO Bb 51
29	6	X	35	02-04-1975	6	140	.04	2	02-04-1975	--	HO Bb 52
19	6	X	--	--	15	--	--	3	02-25-1981	--	HO Bb 53
33	6	X	33	02-28-1975	5	43	.12	2	02-28-1975	--	HO Bb 54
59	6	X	50	11-19-1974	1	20	.05	3	11-19-1974	--	HO Bb 55
26	6	X	56	12-09-1983	2	78	.03	6	12-09-1983	--	HO Bb 56
24	6	X	60	07-03-1984	4	103	.04	3	07-03-1984	--	HO Bb 57
24	6	X	51.93 S	09-29-1987	7	170	.04	.5	03-30-1966	O	HO Bb 58

Table 1.—Records of selected wells in Howard County—Continued

Well no.	Well permit no.	Owner or name	Driller	Date of construction	Altitude of land surface (ft)	Topo-graphic setting	Depth Drilled (ft)	Use of water	Geologic unit
HO Bb 59	HO-73-3408	Ashwell, Dale	L F Easterday	08-30-1979	725	S	300	H	300GLLS
HO Bb 61	HO-73-3719	Brittle, William	Joseph Mayne	10-22-1980	655	H	185	H	300GLLS
HO Bb 62	HO-73-0828	Pontious, George	L F Easterday	10-24-1974	660	S	200	H	300GLLS
HO Bb 63	HO-73-3991	Madden, Walter H	Keyser-Garver	09-29-1981	660	S	500	H	300GLLS
HO Bb 64	HO-73-2233	Madden, Walter H	L F Easterday	09-08-1977	660	S	300	H	300GLLS
HO Bb 65	HO-73-0556	Arter, Kenneth	John Greene	12-26-1973	685	H	120	H	300GLLS
HO Bb 66	HO-73-1571	Kaelin, Richard E	L F Easterday	08-04-1976	660	H	105	H	300GLLS
HO Bb 67	HO-73-2764	Baltrotsky, Richard E	L F Easterday	06-02-1978	700	H	120	H	300GLLS
HO Bb 68	HO-81-0883	Dugan, Mathew R	L F Easterday	02-20-1985	725	S	150	H	300GLLS
HO Bb 69	HO-73-1527	Brotherton, Warren	Robert Cline	10-14-1976	700	S	400	H	300GLLS
HO Bb 70	HO-81-0605	Jones, Angela S	Joseph Mayne	07 -- 1984	800	H	300	U	300GLLS
HO Bb 71	HO-81-0318	Hamilton, John	W B Quynn	11-01-1983	765	H	280	H	300GLLS
HO Bb 72	HO-73-0918	Rourke, Michael	Joseph Mayne	01-23-1975	775	S	185	H	300GLLS
HO Bb 73	HO-81-1138	Helton, J P	Ralph Mayne	08-22-1985	805	H	300	H	300GLLS
HO Bb 74	HO-73-0116	Barnard, George E	L F Easterday	12-19-1972	760	S	300	H	300GLLS
HO Bb 75	HO-73-2165	--	L F Easterday	07-27-1977	710	F	145	H	300GLLS
HO Bb 76	HO-73-0479	Hayes, Kenneth	L F Easterday	11-26-1973	700	S	140	H	300GLLS
HO Bb 77	HO-73-3544	Blackart, Robert	L F Easterday	01-25-1980	685	F	180	H	300GLLS
HO Bb 78	HO-73-3278	Jones, Mary H	Ralph Mayne	06-07-1979	645	S	185	H	300GLLS
HO Bb 79	HO-73-1668	Harless	L F Easterday	10-18-1976	760	H	280	H	300GLLS
HO Bb 80	HO-04-5652	Knill, Gorden	Dewey Brown	12-15-1961	680	S	89	H	300GLLS
HO Bb 81	HO-73-0656	Miller, Stanley B Jr	Dillon Bros	05-05-1974	680	H	150	H	300GLLS
HO Bb 82	HO-73-1440	Edwards	Ralph Mayne	05-18-1976	725	S	80	H	300GLLS
HO Bb 83	HO-73-0279	Breault, Leon	Joseph Mayne	06-01-1973	750	H	120	H	300GLLS
HO Bb 84	HO-69-0043	Hopkins, Hubert	L F Easterday	09-09-1968	745	H	160	H	300GLLS
HO Bb 85	HO-73-1046	Smith, Frank N	Robert Cline	06-24-1975	690	S	225	H	300MRGR
HO Bb 86	HO-69-0152	Johnston, Donald B	Dewey Brown	05-20-1969	715	H	78	H	300MRGR
HO Bb 87	HO-69-0152	Johnston, Donald B	Dewey Brown	05 -- 1969	730	S	100	U	300MRGR
HO Bb 88	HO-81-0976	Lariland Farms	L F Easterday	05 -- 1985	645	S	240	C	300PLGV
HO Bb 89	HO-73-1895	Webb, Roy	Keyser-Garver	03-26-1977	640	U	370	H	300MRGR
HO Bb 90	HO-81-1571	Arms, Gregory	Ralph Mayne	07-28-1986	585	S	205	H	300MRGR
HO Bb 91	HO-73-1195	Cornet, James R	Ralph Mayne	11-03-1975	565	S	100	H	--
HO Bb 92	HO-73-2606	Walker, Leo G Jr	L F Easterday	03-23-1978	540	S	200	H	300MRGR
HO Bb 93	HO-73-4248	Sotiros, Thomas A	L F Easterday	09-28-1982	550	H	100	H	300MRGR
HO Bb 94	HO-73-3215	Martin, William B	L F Easterday	04-26-1979	645	H	100	U	300MRGR
HO Bb 95	HO-73-3752	Martin, William B	L F Easterday	12-04-1980	640	S	320	H	300MRGR
HO Bb 96	HO-81-1413	Martin, Andrew B	L F Easterday	05-01-1986	645	H	340	A	300MRGR
HO Bb 97	HO-81-1414	Martin, Kevin B	L F Easterday	05-01-1986	665	H	120	H	300MRGR
HO Bb 98	HO-81-1167	Taylor, Garry	L F Easterday	09-25-1985	665	H	300	H	300MRGR
HO Bb 99	HO-73-1817	Carter, Donald	A P Edmondson	03-01-1977	540	S	75	H	300MRGR
HO Bb 100	HO-73-1312	Myrtue, Richard E	Joseph Mayne	04-13-1976	540	S	105	H	300MRGR
HO Bb 101	HO-81-0908	Gasch, Doug	L F Easterday	03-22-1985	545	U	140	H	300MRGR
HO Bb 102	HO-73-1849	Myrtue, Richard E	Joseph Mayne	02-25-1977	580	S	185	H	300MRGR
HO Bb 103	HO-73-1203	Carroll, Thomas	Ralph Mayne	11-06-1975	580	S	100	H	300MRGR
HO Bb 104	HO-73-0974	Hanes, W C	L F Easterday	04-14-1975	625	S	260	H	300MRGR
HO Bb 105	HO-73-2927	Martin, Barry	L F Easterday	08-30-1978	655	S	225	H	300MRGR
HO Bb 106	HO-73-0710	Holderied, Robert M	L F Easterday	06-11-1974	665	H	240	H	300MRGR
HO Bb 107	HO-81-1013	Swann, Bill	Joseph Mayne	01-23-1986	565	H	245	H	300MRGR
HO Bb 108	HO-73-1936	Schilke, Robert	L F Easterday	04-12-1977	600	F	185	H	300MRGR
HO Bb 109	HO-73-0526	Palf, George	Ralph Mayne	02-27-1974	580	F	125	H	300MRGR
HO Bb 110	HO-81-1433	Davis, James	W B Quynn	05-16-1986	580	U	180	H	300MRGR
HO Bb 111	HO-81-0125	Vechery, Kathryn	L F Easterday	06-13-1983	555	U	200	H	300MRGR
HO Bb 112	HO-73-0408	Bollinger, Mike	L F Easterday	09-06-1973	560	H	180	H	300MRGR
HO Bb 113	HO-73-1570	Svrcek, Susan C	L F Easterday	09-07-1976	580	S	265	H	300MRGR
HO Bb 114	HO-73-2215	Koontz, Joseph C	G E Harr Sons	07-22-1977	575	F	250	H	300MRGR
HO Bb 115	HO-81-1300	Daly, H Kenneth	L F Easterday	02-03-1986	560	S	160	H	300MRGR
HO Bb 116	HO-81-1300	Daly, H Kenneth	L F Easterday	02-03-1986	565	S	200	U	300MRGR
HO Bb 117	HO-81-1300	Daly, H Kenneth	L F Easterday	02-03-1986	565	S	200	U	300MRGR
HO Bb 118	HO-81-1300	Daly, H Kenneth	L F Easterday	02-03-1986	565	S	200	U	300MRGR
HO Bb 119	HO-81-1300	Daly, H Kenneth	L F Easterday	02-03-1986	565	S	300	U	300MRGR
HO Bb 120	HO-81-1300	Daly, H Kenneth	L F Easterday	02-03-1986	565	S	260	U	300MRGR
HO Bb 121	HO-73-3638	Clark, Robert	Joseph Mayne	07-31-1980	570	U	265	H	300MRGR
HO Bb 122	HO-73-2796	Schaefer, Norman T	L F Easterday	06-15-1978	580	H	105	H	300MRGR
HO Bb 123	HO-68-0194	Crabb, John H	L F Easterday	04-29-1968	585	H	100	H	300MRGR
HO Bb 124	HO-73-1277	Cissele, Lambert	Joseph Mayne	02-19-1976	565	H	140	H	300MRGR
HO Bb 125	HO-73-1304	Daly Corporation	L F Easterday	01-30-1976	570	H	200	H	300MRGR
HO Bb 126	HO-73-3918	Meyer, H J	Joseph Mayne	05-26-1981	545	H	165	H	300MRGR
HO Bb 127	HO-73-2500	Henderson, Robert L	Joseph Mayne	02-13-1978	510	H	220	H	300MRGR
HO Bb 128	HO-73-1334	Dunst, Joseph W	L F Easterday	04-14-1976	545	H	105	H	300MRGR
HO Bb 129	HO-73-2250	Aldin	Westminster	08-17-1977	575	H	227	H,S	300MRGR
HO Bb 130	HO-73-1172	Asbury	Keyser-Garver	12-08-1975	570	H	162	H	300MRGR
HO Bb 131	HO-73-3070	Jackson	Joseph Mayne	12-14-1979	575	H	205	H	300MRGR
HO Bb 132	HO-81-0071	Phebus, Stanley	Joseph Mayne	04-29-1983	580	S	165	H	300MRGR
HO Bb 133	HO-81-2296	Hickerson, Robert L	Westminster	10-17-1977	620	U	205	H	300MRGR
HO Bb 134	HO-73-4198	Zacharia, Frederick	Ralph Mayne	06-10-1982	565	S	135	H	300MRGR

Casing			Water level		Aquifer test					Other	
Depth (ft)	Diameter (in.)	Finish	Depth, ft below land surface	Date measured	Yield (gal/min)	Drawdown (ft)	Specific capacity [(gal/min)/ft]	Hours pumped	Date	data available	Well no.
49	6	X	50	08-30-1979	1	250	<0.01	3	08-30-1979	Q	HO Bb 59
35	6	X	60	10-22-1980	15	115	.13	2	10-22-1980	--	HO Bb 61
19	6	X	50	10-24-1974	2	150	.01	1	10-24-1974	--	HO Bb 62
49	6	X	50	09-29-1981	1	420	<.01	5	09-29-1981	--	HO Bb 63
19	6	X	80	09-08-1977	1	220	<.01	2	09-08-1977	--	HO Bb 64
41	6	X	45	12-26-1973	10	0	--	2	12-26-1973	--	HO Bb 65
19	6	X	40	08-04-1976	12	65	.18	2	08-04-1976	Q	HO Bb 66
40	6	X	30	06-02-1978	30	90	.33	2	06-02-1978	--	HO Bb 67
87	6	X	18	02-20-1985	8	36	.22	3	02-20-1985	--	HO Bb 68
60	6	X	28	10-14-1976	1	372	<.01	1	10-14-1976	--	HO Bb 69
--	--	X	Dry	07 -- 1984	0	--	--	--	07 -- 1984	--	HO Bb 70
38	6	X	45	11-01-1983	2	115	.02	6	11-01-1983	--	HO Bb 71
36	6	X	45	01-23-1975	10	135	.07	2	01-23-1975	--	HO Bb 72
19	6	X	55	08-22-1985	3	60	.05	6	08-22-1985	Q	HO Bb 73
18	6	X	25	12-19-1972	1	275	<.01	1	12-19-1972	--	HO Bb 74
21	6	X	40	07-27-1977	6	105	.06	2	07-27-1977	--	HO Bb 75
18	6	X	50	11-26-1973	10	90	.11	1	11-26-1973	--	HO Bb 76
37	6	X	40	01-25-1980	8	140	.06	2	01-25-1980	--	HO Bb 77
47	6	X	25	06-07-1979	4	160	.02	6	06-07-1979	--	HO Bb 78
19	6	X	40	10-18-1976	1	240	<.01	2	10-18-1976	--	HO Bb 79
78	--	X	50	12-15-1961	8	10	.80	1	12-15-1961	--	HO Bb 80
22	6	X	40	05-05-1974	12	40	.30	6	05-05-1974	--	HO Bb 81
21	6	X	35	05-18-1976	6	45	.13	2	05-18-1976	--	HO Bb 82
20	6	X	50	06-01-1973	15	0	--	2	06-01-1973	--	HO Bb 83
50	6	X	50	09-09-1968	3	110	.03	.5	09-09-1968	--	HO Bb 84
68	6	X	30	06-24-1975	2	195	.01	1	06-24-1975	--	HO Bb 85
32	6	X	50	05-20-1969	7	10	.70	1	05-20-1969	--	HO Bb 86
--	--	X	--	--	--	--	--	--	--	--	HO Bb 87
48	6	X	50	05 -- 1985	2	190	.01	3	05 -- 1985	Q	HO Bb 88
63	6	X	50	03-26-1977	2	10	.20	2	03-26-1977	--	HO Bb 89
21	6	X	45	07-28-1986	7	15	.47	3	07-28-1986	--	HO Bb 90
20	6	X	40	11-03-1975	10	--	--	2	11-03-1975	--	HO Bb 91
18	6	X	15	03-23-1978	2	185	.01	2	03-23-1978	--	HO Bb 92
45	6	X	74	09-28-1982	50	26	1.92	3	09-28-1982	--	HO Bb 93
19	6	X	40	04-26-1979	6	60	.10	2	04-26-1979	--	HO Bb 94
54	6	X	60	12-04-1980	10	260	.04	5	12-04-1980	--	HO Bb 95
19	6	X	65	05-01-1986	4	46	.09	3	05-01-1986	--	HO Bb 96
21	6	X	46	05-01-1986	12	19	.63	3	05-01-1986	--	HO Bb 97
19	6	X	65	09-25-1985	2	40	.05	6	09-25-1985	--	HO Bb 98
20	6	X	48	03-01-1977	8	4	2.0	2	03-01-1977	--	HO Bb 99
37	6	X	30	04-13-1976	10	70	.14	2	04-13-1976	--	HO Bb 100
29	6	X	30	03-22-1985	8	1	8.0	3	03-22-1985	--	HO Bb 101
73	6	X	45	02-25-1977	4	135	.03	2	02-25-1977	--	HO Bb 102
33	6	X	8	11-06-1975	10	92	.11	2	11-06-1975	--	HO Bb 103
19	6	X	40	04-14-1975	30	220	.14	1	04-14-1975	--	HO Bb 104
19	6	X	40	08-30-1978	15	185	.08	2	08-30-1978	--	HO Bb 105
19	6	X	50	06-11-1974	4	190	.02	1	06-11-1974	--	HO Bb 106
59	6	X	58	01-23-1986	10	8	1.25	3	01-23-1986	--	HO Bb 107
109	6	X	50	04-12-1977	7	135	.05	2	04-12-1977	--	HO Bb 108
25	6	X	50	02-27-1974	10	0	--	2	02-27-1974	--	HO Bb 109
92	6	X	31	05-16-1986	5	74	.07	3	05-16-1986	--	HO Bb 110
95	6	X	15	06-13-1983	8	18	.44	3	06-13-1983	--	HO Bb 111
22	6	X	50	09-06-1973	2	130	.02	1	09-06-1973	--	HO Bb 112
19	6	X	40	09-07-1976	2	225	.01	2	09-07-1976	--	HO Bb 113
60	6	X	25	07-22-1977	20	175	.11	4	07-22-1977	--	HO Bb 114
38	6	X	50	02-03-1986	7	15	.47	3	02-03-1986	--	HO Bb 115
--	--	X	Dry	02-03-1986	0	--	--	--	02-03-1986	--	HO Bb 116
--	--	X	Dry	02-03-1986	0	--	--	--	02-03-1986	--	HO Bb 117
--	--	X	Dry	02-03-1986	0	--	--	--	02-03-1986	--	HO Bb 118
--	--	X	Dry	02-03-1986	0	--	--	--	02-03-1986	--	HO Bb 119
--	--	X	Dry	02-03-1986	0	--	--	--	02-03-1986	--	HO Bb 120
113	6	X	60	07-31-1980	10	200	.05	3	07-31-1980	--	HO Bb 121
25	6	X	40	06-15-1978	60	65	.92	2	06-15-1978	--	HO Bb 122
73	6	X	40	04-29-1968	10	60	.17	.5	04-29-1968	--	HO Bb 123
43	6	X	40	02-19-1976	10	95	.11	2	02-19-1976	--	HO Bb 124
101	6	X	50	01-30-1976	4	150	.03	2	01-30-1976	--	HO Bb 125
73	6	X	35	05-26-1981	10	35	.29	2	05-26-1981	--	HO Bb 126
27	6	X	50	02-13-1978	4	170	.02	2	02-13-1978	--	HO Bb 127
19	6	X	45	04-14-1976	30	60	.50	2	04-14-1976	--	HO Bb 128
126	6	X	124	08-17-1977	7	76	.09	6	08-17-1977	--	HO Bb 129
60.5	6	X	30	12-08-1975	10	10	1.0	2	12-08-1975	--	HO Bb 130
116	6	X	60	12-14-1979	5	140	.04	2	12-14-1979	--	HO Bb 131
76	6	X	10	04-29-1983	6	52	.12	3	04-29-1983	--	HO Bb 132
45	6	X	24	10-17-1977	5	38	.13	6	10-17-1977	--	HO Bb 133
61	6	X	32	06-10-1982	30	103	.29	3	06-10-1982	--	HO Bb 134

Table 1.—Records of selected wells in Howard County—Continued

Well no.	Well permit no.	Owner or name	Driller	Date of construction	Altitude of land surface (ft)	Topo-graphic setting	Depth Drilled (ft)	Use of water	Geologic unit
HO Bb 135	HO-73-1859	Bennett, Dale R	A C Reider	02-16-1977	570	S	80	H	300MRGR
HO Bb 136	HO-73-0544	Yost, David J	L F Easterday	01-16-1974	560	U	200	H	300MRGR
HO Bb 137	HO-70-0123	Reeve, Landon Jr	L F Easterday	02-18-1970	560	H	220	H	300MRGR
HO Bb 138	HO-73-0578	Chapel Valley	L F Easterday	01-22-1974	560	H	100	I	300MRGR
HO Bb 139	HO-81-2142	Bender, William	L F Easterday	06-30-1987	665	S	140	U	300GLLS
HO Bb 140	HO-81-1733	Snapp, Hubert	L F Easterday	11-20-1986	645	S	300	H	300GLLS
HO Bb 141	HO-81-1612	Glenn, Raymond	Ralph Mayne	08-06-1986	595	H	310	H	300MRGR
HO Bb 142	HO-81-2044	Knill, Charles	Ralph Mayne	04-25-1987	750	H	145	H	300GLLS
HO Bb 143	HO-81-1774	Di Benedetto, Dennis	Robert Cline	04-10-1987	725	H	425	H	300GLLS
HO Bb 144	HO-81-1990	Mundy, Marty	Tri County	04-27-1987	580	H	225	H	300MRGR
HO Bb 145	HO-81-1622	Mergliano, Jodie	L F Easterday	09-26-1986	600	H	180	H	300MRGR
HO Bb 146	HO-81-2142	Bender, William	L F Easterday	06-30-1987	665	S	300	U	300GLLS
HO Bb 147	--	Glenn, Raymond	--	1986	595	H	--	U	300MRGR
HO Bb 148	--	Glenn, Raymond	--	1986	595	H	--	U	300MRGR
HO Bb 149	--	Glenn, Raymond	--	1986	595	H	--	U	300MRGR
HO Bb 150	HO-81-0765	Kauffman, Carl	Robert Cline	11-16-1984	730	H	400	H	300GLLS
HO Bb 151	HO-81-0765	Kauffman, Carl	Robert Cline	11-16-1984	735	H	300	U	300GLLS
HO Bb 152	HO-81-0788	Kauffman, Carl	Robert Cline	11-14-1984	730	H	525	A	300GLLS
HO Bb 153	HO-81-1615	Zinchiak, Thomas	W B Quynn	08-12-1986	600	H	300	H	300MRGR
HO Bb 154	--	Patuxent River St Park	--	--	565	H	66.2	U	300MRGR
HO Bb 155	HO-73-3632	Patuxent River St Park	Westminster	07-29-1980	565	H	203	H	300MRGR
HO Bb 156	HO-73-0309	Hajek, Lee	L F Easterday	07-04-1973	760	H	100	H,S	300MRGR
HO Bb 157	HO-81-2688	--	Ralph Mayne	04-29-1988	695	H	265	H	300PRTB
HO Bb 158	HO-81-2310	Becraft, Arnold	Ralph Mayne	09-23-1987	605	S	245	H	300MRGR
HO Bb 159	HO-81-2598	K B Properties Inc	Ralph Mayne	03-16-1988	570	S	245	H	300MRGR
HO Bb 160	HO-73-0576	Ziehm, Robert	Ralph Mayne	03-06-1974	580	S	64	H	300PLGV
HO Bc 1	HO-00-7668	Eyere, Harry	L F Easterday	04-18-1951	585	H	106	H	300MRGR
HO Bc 2	HO-00-3353	Warfield, Edwin	Dewey Brown	11-10-1948	565	H	102	H	300MRGR
HO Bc 3	HO-00-3281	Brightwell, Will	Dewey Brown	10-21-1948	500	V	86	H	300MRGR
HO Bc 4	HO-00-6346	Butler, Leo	T N Smith	08- -1950	445	S	115	U	300SKVL
HO Bc 5	HO-00-3464	Rippeon, Harry	Dewey Brown	12-10-1949	580	S	82	H	300SKVL
HO Bc 6	HO-01-0690	Tremla, Frank O	Edward Brown	07-24-1952	600	H	24.7	H	300SKVL
HO Bc 7	--	Clarks, Thomas G	Dewey Brown	1951	550	F	35.5	H	300SKVL
HO Bc 8	--	Mt Gregory U M Church	Edward Brown	1941	585	S	78	H	300SKVL
HO Bc 9	--	Wright, Thomas H	--	--	580	H	28.1	H	300SKVL
HO Bc 10	--	Mathis, Elisa	Dewey Brown	1945	450	S	43	H	300SKVL
HO Bc 11	--	Mathis, Herbert	Harry Green	1950	530	H	62	H	300SKVL
HO Bc 12	--	Hearn, F M	--	1936	480	H	65	H,S	300SKVL
HO Bc 13	HO-69-0037	Lucas, Edgar M	L F Easterday	09-09-1968	535	S	360	U	300MRGR
HO Bc 14	HO-69-0041	Lucas, Edgar M	L F Easterday	09-12-1968	530	S	140	H,S	300MRGR
HO Bc 15	HO-69-0037	Lucas, Edgar M	L F Easterday	09-09-1968	535	S	60	H,S	300MRGR
HO Bc 16	HO-73-0806	Hawkesworth, Roger W J	G E Harr Sons	08-22-1974	565	H	125	H	300MRGR
HO Bc 17	HO-73-0357	Jamke, Peter J	Joseph Mayne	07-11-1973	580	H	140	H	300MRGR
HO Bc 18	HO-73-1302	Ferguson, James R	Ralph Mayne	02-17-1976	605	H	80	H	300SKVL
HO Bc 19	HO-72-0011	Hirka, Stephen	L F Easterday	07-20-1971	545	H	125	H	300UMFC
HO Bc 20	HO-72-0020	Reedy, Paul E	L F Easterday	09-09-1971	560	H	120	H	300UMFC
HO Bc 21	HO-73-0249	Parker, James T	L F Easterday	05-16-1973	510	S	100	U	300MRGR
HO Bc 22	HO-73-0478	Parker, James T	L F Easterday	10-02-1973	510	S	140	H	300MRGR
HO Bc 23	HO-73-0496	Haynes, John	Joseph Mayne	11-12-1973	525	S	140	H	300MRGR
HO Bc 24	HO-73-0212	Stevens, William T	L F Easterday	05-18-1973	530	S	160	H	300MRGR
HO Bc 25	HO-73-0433	Rupsis, Thomas F	Dillon Bros	10-15-1973	535	S	200	H	300MRGR
HO Bc 26	HO-73-0210	Peters, Jerome G	L F Easterday	05-17-1973	535	S	120	H	300MRGR
HO Bc 27	HO-73-0211	Kelly, Lawrence K	L F Easterday	05-17-1973	540	S	180	H	300MRGR
HO Bc 28	HO-73-0654	Gillis, Herman	L F Easterday	04-30-1974	565	H	160	H	300MRGR
HO Bc 29	HO-73-0463	Peters, James R	C A Cromwell	10-17-1973	565	H	125	H	300MRGR
HO Bc 30	HO-73-0816	Kinsley, Homan B	Joseph Mayne	09-15-1974	565	H	80	H	300MRGR
HO Bc 31	HO-73-0706	Krajewski, Thomas M	Westminster	05-29-1974	555	H	340	H	300MRGR
HO Bc 32	HO-73-0599	Taylor, Alan R Jr	John Greene	03-26-1974	540	H	205	H	300MRGR
HO Bc 33	HO-73-0815	Davis, Daniel M	Joseph Mayne	10-05-1974	565	H	90	H	300MRGR
HO Bc 34	HO-73-0814	Rodgers, Gene C	Joseph Mayne	09-16-1974	555	H	105	H	300MRGR
HO Bc 35	HO-73-0740	Hairfield, Carl F Jr	Joseph Mayne	08-16-1974	560	H	245	H	300MRGR
HO Bc 36	HO-73-1540	Keene, John M	Dillon Bros	07-16-1976	565	H	150	H	300MRGR
HO Bc 37	HO-73-1348	Zimmerman, Theodore H	Joseph Mayne	05-17-1976	565	H	185	H	300MRGR
HO Bc 38	--	Patrick, James M	--	1911	520	S	57.8	U	300MRGR
HO Bc 39	HO-03-3898	Patrick, James M	Joseph Mayne	03-31-1959	520	S	79	H	300MRGR
HO Bc 40	HO-73-0788	Mullinix, Gene	L F Easterday	08-07-1974	530	S	225	S	300MRGR
HO Bc 41	HO-73-1622	Evans, Roger H	Dillon Bros	12-01-1976	605	H	150	H	300SKVL
HO Bc 42	HO-73-1621	Marshall, Walter C	Dillon Bros	12-02-1976	600	H	150	H	300SKVL
HO Bc 43	HO-73-1620	Shipley, Wayne	Dillon Bros	10-16-1976	605	H	125	H	300SKVL
HO Bc 44	HO-73-1594	Boetker, John K	L F Easterday	08-30-1976	610	S	165	H	300SKVL
HO Bc 45	HO-73-1619	Brian, Michael J	Dillon Bros	10-15-1976	605	S	150	H	300SKVL
HO Bc 46	HO-73-1542	Ingram, Earl R	Dillon Bros	08-04-1976	605	S	150	H	300SKVL
HO Bc 47	HO-73-0437	Cumberland, William T	John Greene	01-15-1974	590	H	300	H	300MRGR
HO Bc 48	HO-73-0006	West, William E	Westminster	07-14-1972	565	H	340	H	300MRGR
HO Bc 49	HO-73-0857	Ball, Edward E	L F Easterday	10-22-1974	665	H	180	H	300MRGR

Casing			Water level		Aquifer test					Other data available	Well no.
Depth (ft)	Diameter (in.)	Finish	Depth, ft below land surface	Date measured	Yield (gal/min)	Drawdown (ft)	Specific capacity [(gal/min)/ft]	Hours pumped	Date		
39	6	X	33	02-16-1977	10	42	0.24	6	02-16-1977	--	HO Bb 135
108	6	X	50	01-16-1974	5	150	.03	1	01-16-1974	--	HO Bb 136
18	6	X	40	02-18-1970	1	180	.01	1	02-18-1970	--	HO Bb 137
21	6	X	30	01-22-1974	8	70	.11	1	01-22-1974	Q	HO Bb 138
43	6	X	23	06-30-1987	12	4	3.0	3	06-30-1987	--	HO Bb 139
59	6	X	30	11-20-1986	10	27	.37	3	11-20-1986	--	HO Bb 140
20	6	X	45	08-06-1986	1	265	<.01	6	08-06-1986	--	HO Bb 141
20	6	X	35	04-25-1987	10	0	--	3	04-25-1987	--	HO Bb 142
62	6	X	48	04-10-1987	3.5	133	.03	6	04-10-1987	--	HO Bb 143
88	6	X	40	04-27-1987	12	0	--	3	04-27-1987	--	HO Bb 144
89	6	X	47	09-26-1986	10	43	.23	3	09-26-1981	--	HO Bb 145
--	--	X	Dry	06-30-1987	0	--	--	--	06-30-1987	--	HO Bb 146
--	--	X	Dry	1986	0	--	--	--	1986	--	HO Bb 147
--	--	X	Dry	1986	0	--	--	--	1986	--	HO Bb 148
--	--	X	Dry	1986	0	--	--	--	1986	--	HO Bb 149
65	6	X	80	11-16-1984	3	76	.04	6	11-16-1984	--	HO Bb 150
--	--	X	Dry	11-16-1984	0	--	--	--	11-16-1984	--	HO Bb 151
59	6	X	80	11-14-1984	1	445	<.01	1	11-14-1984	--	HO Bb 152
50	6	X	35	08-12-1986	11	4	2.75	3	08-12-1986	--	HO Bb 153
66.2	36	W	56.65 S	05-23-1988	--	--	--	--	--	O	HO Bb 154
112	6	X	126	07-29-1980	6.75	44	.15	3	07-29-1980	Q	HO Bb 155
18	6	X	40	07-04-1973	20	60	.33	1	07-04-1973	Q	HO Bb 156
24	6	X	55	04-29-1988	3	72	.04	6	04-29-1988	--	HO Bb 157
68	6	X	55	09-23-1987	3	80	.04	6	09-23-1987	--	HO Bb 158
79	6	X	25	03-16-1988	5	64	.08	3	03-16-1988	--	HO Bb 159
20	6	X	30	03-06-1974	10	34	.29	2	03-06-1974	Q	HO Bb 160
--	6	-	70	04-18-1951	5	--	--	--	04-18-1951	--	HO Bc 1
95	6	X	70	11-10-1948	--	--	--	--	--	--	HO Bc 2
10	6	X	57.80 S	05-07-1952	--	--	--	--	--	--	HO Bc 3
20	6	X	40	08 -- 1950	--	--	--	--	--	--	HO Bc 4
70	6	X	23.50 S	05-07-1952	--	--	--	--	--	--	HO Bc 5
19	6	X	20.80 S	07-24-1952	4	--	--	1	08-15-1952	--	HO Bc 6
22	6	X	20.89 S	08-29-1952	--	--	--	--	--	--	HO Bc 7
--	6	-	14.13 S	09-29-1987	--	--	--	--	--	O,Q	HO Bc 8
28.1	48	W	19.50 S	09-11-1952	--	--	--	--	--	--	HO Bc 9
--	6	-	22	09-11-1952	--	--	--	--	--	--	HO Bc 10
--	6	-	20	1950	--	--	--	--	--	--	HO Bc 11
--	6	-	12	09-12-1952	--	--	--	--	--	--	HO Bc 12
--	--	X	--	--	6	--	--	--	09-09-1968	--	HO Bc 13
69	6	X	40	09-12-1968	3	100	.03	.5	09-12-1968	--	HO Bc 14
30	6	X	25	09-09-1968	50	35	1.43	.5	09-09-1968	--	HO Bc 15
41	6	X	47.20 S	04-07-1980	15	95	.16	6	08-22-1974	--	HO Bc 16
58	6	X	47.90 S	04-08-1980	6	80	.07	2	07-11-1973	--	HO Bc 17
21	6	X	40.80 S	04-08-1980	10	45	.22	2	02-17-1976	--	HO Bc 18
89	6	X	55.70 S	04-07-1980	10	75	.13	1	07-20-1971	--	HO Bc 19
18	6	X	63.80 S	04-07-1980	10	80	.12	1	09-09-1971	--	HO Bc 20
38	6	X	24.00 S	04-08-1980	10	72	.14	2	05-16-1973	L	HO Bc 21
60	6	X	--	--	4	--	--	1	10-02-1973	--	HO Bc 22
63	6	X	38.70 S	04-08-1980	10	95	.11	2	11-12-1973	--	HO Bc 23
37	6	X	54.00 S	04-08-1980	10	116	.09	2	05-18-1973	--	HO Bc 24
38	6	X	50.20 S	04-16-1980	15	85	.18	6	10-15-1973	Q	HO Bc 25
38	6	X	40	05-17-1973	10	80	.12	2	05-17-1973	--	HO Bc 26
34	6	X	45.70 S	04-10-1980	2	--	--	2	05-17-1973	--	HO Bc 27
57	6	X	43.10 S	04-17-1980	5	110	.05	1	04-30-1974	--	HO Bc 28
39	6	X	44.30 S	04-10-1980	7	90	.08	2	10-17-1973	--	HO Bc 29
35	6	X	33.60 S	07-18-1980	10	30	.33	2	--	--	HO Bc 30
104	6	X	35.00 S	04-10-1980	2.5	21	.12	7	05-29-1974	--	HO Bc 31
69	6	X	20.20 S	04-10-1980	8	160	.05	2	03-26-1974	--	HO Bc 32
35	6	X	26.80 S	04-23-1980	10	60	.17	2	10-05-1974	--	HO Bc 33
27	6	X	30	09-18-1974	7	65	.11	2	09-18-1974	--	HO Bc 34
78	6	X	60	08-16-1974	5	175	.03	2	08-16-1974	--	HO Bc 35
40	6	X	37.60 S	04-17-1980	8	90	.09	6	07-16-1976	--	HO Bc 36
81	6	X	39.00 S	04-10-1980	5	135	.04	2	05-17-1976	--	HO Bc 37
--	6	W	24.41 S	06-30-1980	--	--	--	--	--	O	HO Bc 38
42	6	X	22.50[1] S	04-01-1980	10	0	--	1.5	03-31-1974	--	HO Bc 39
50	6	X	17.30 S	04-08-1980	15	195	.08	1	08-07-1974	--	HO Bc 40
36	6	X	34.80 S	04-07-1980	5	110	.05	6	12-01-1976	--	HO Bc 41
35	6	X	31.90 S	04-07-1980	5	110	.05	6	12-02-1976	--	HO Bc 42
40	6	X	27.10 S	04-07-1980	20	20	1.0	1	10-16-1976	--	HO Bc 43
73	6	X	36.50 S	04-07-1980	10	125	.08	2	08-30-1976	--	HO Bc 44
35	6	X	46.70 S	04-07-1980	8	105	.08	6	10-15-1976	--	HO Bc 45
46	6	X	50.80 S	04-07-1980	3	105	.03	6	08-04-1976	--	HO Bc 46
70	6	X	46.50 S	04-09-1980	3	--	--	2	01-15-1974	--	HO Bc 47
102	6	X	38.30 S	04-10-1980	2	229	.01	12	07-14-1972	O	HO Bc 48
94	6	X	51.10 S	04-15-1980	8	140	.06	1	10-22-1974	--	HO Bc 49

[1] Recently pumped.

Table 1.—Records of selected wells in Howard County—Continued

Well no.	Well permit no.	Owner or name	Driller	Date of construction	Altitude of land surface (ft)	Topo-graphic setting	Depth Drilled (ft)	Use of water	Geologic unit
HO Bc 50	HO-73-1799	Clement, Leonard K	L F Easterday	01-25-1977	530	S	105	H	300MRGR
HO Bc 51	HO-73-0197	Vincent, John C	L F Easterday	03-27-1973	570	H	120	H	300MRGR
HO Bc 52	HO-73-0239	Cavaliere, Ralph L	Joseph Mayne	04-20-1973	570	H	82	H	300MRGR
HO Bc 53	HO-73-0338	Emory, Addison Jr	G E Harr Sons	08-23-1973	575	H	125	H	300MRGR
HO Bc 54	HO-73-0636	Kiernan, Sherwood C	Joseph Mayne	04-19-1974	565	S	85	H	300MRGR
HO Bc 55	HO-73-0382	Hornberger, Edward C	L F Easterday	09-04-1973	550	S	100	H	300MRGR
HO Bc 56	HO-73-0387	Dignan, Richard D	L F Easterday	09-05-1973	550	S	100	H	300MRGR
HO Bc 57	HO-73-1316	Weiss, William W	C A Cromwell	05-17-1976	545	H	200	H	300MRGR
HO Bc 58	HO-73-0206	Malinowski, Leo J	L F Easterday	07-05-1973	505	S	100	H	300MRGR
HO Bc 59	HO-70-0036	Debernardo, David	Harry Green	11-01-1969	550	S	77	H	300MRGR
HO Bc 60	HO-73-0384	Green, Richard W	Joseph Mayne	09-11-1973	565	S	120	H	300UMFC
HO Bc 61	HO-73-0011	Fletcher, John R	L F Easterday	07-24-1972	630	S	100	H	300MRGR
HO Bc 62	HO-73-0416	Ferguson, James R	L F Easterday	11-17-1973	600	S	200	H	300MRGR
HO Bc 63	HO-73-0804	Rosenbaum, Erik	C A Cromwell	09-26-1974	620	S	75	H	300SKVL
HO Bc 64	HO-73-1557	Cahill, Eugene B	L F Easterday	09-01-1976	550	S	125	H	300MRGR
HO Bc 65	HO-70-0191	Cain, Howard S	L F Easterday	08-06-1970	545	S	120	H	300MRGR
HO Bc 66	HO-73-0901	Rosenbaum, Per	C A Cromwell	12-16-1974	610	S	140	H	300SKVL
HO Bc 67	--	Pelton, Ronald W	--	--	492	V	57.3	H	--
HO Bc 68	HO-04-2313	C & P Telephone Co	G E Harr Sons	03-13-1961	640	S	141	C	300SKVL
HO Bc 69	--	Stoppenback, Theodore	--	--	642	S	--	H	300SKVL
HO Bc 70	--	Jones, Roscoe C	--	--	645	H	--	H	300SKVL
HO Bc 71	HO-73-2973	Albers, D W	Westminster	09-21-1978	600	S	277	H	300SKVL
HO Bc 72	--	Mullinix, Gene	--	--	535	S	--	H	300MRGR
HO Bc 73	HO-73-1733	Tamagni, Jack	Robert Cline	10-27-1976	590	H	200	H	300MRGR
HO Bc 74	HO-69-0129	Harless, Marion	L F Easterday	02-26-1969	565	S	160	H	300MRGR
HO Bc 75	HO-73-2611	Mackebee, Lester P	L F Easterday	03-30-1978	565	F	160	H	--
HO Bc 76	HO-71-0081	Dorsey, Charles A	Harry Green	03-16-1971	635	S	85	H	300SKVL
HO Bc 77	HO-73-2040	Smith, Robert L	A R Keyser	06-07-1977	590	H	100	H	300MRGR
HO Bc 78	--	Plemmons, Faun L	--	--	650	H	--	H	300SKVL
HO Bc 79	HO-73-1757	Livesay, David L	C A Cromwell	12-06-1976	645	H	140	H	300SKVL
HO Bc 80	HO-73-3203	Springlake Research	S Bollinger	03-28-1979	570	S	265	H	300MRGR
HO Bc 81	HO-73-2788	Springlake Research	L F Easterday	07-14-1978	575	S	85	H	300MRGR
HO Bc 82	HO-73-0959	Cook, Raymond	L F Easterday	04-10-1975	665	H	100	H	300SKVL
HO Bc 83	--	Brendle, William	--	--	545	U	--	H	300MRGR
HO Bc 84	--	Amoss, Edgar L	--	--	600	S	94	H	300MRGR
HO Bc 85	--	Freeman, Carl M	--	--	550	H	--	H	300MRGR
HO Bc 86	--	Bowman, Leland	--	--	590	F	--	H	300PLGV
HO Bc 87	--	Poth, Robert G	--	--	590	F	--	H	300PLGV
HO Bc 88	HO-73-0623	Theis, William R	Joseph Mayne	05-22-1974	545	S	105	H	300MRGR
HO Bc 89	HO-71-0094	Jackson, Harriett	Harry Green	03-16-1971	660	H	105	H	300MRGR
HO Bc 90	HO-73-0867	Pirrung, Harry G	Joseph Mayne	10-30-1974	650	H	200	H	300MRGR
HO Bc 91	HO-73-2867	Grimes, H Thomas	Joseph Mayne	08-08-1978	645	H	145	H	300MRGR
HO Bc 92	HO-73-3155	Ketterman, Olen L	Ralph Mayne	02-27-1979	620	S	185	H	300MRGR
HO Bc 93	HO-72-0216	Harbin, John M	Harry Green	06-15-1972	540	F	125	H	300UMFC
HO Bc 94	HO-73-3430	Smith, Michael L	Ralph Mayne	09-19-1979	625	S	185	H	300MRGR
HO Bc 95	HO-73-3184	Huber, Harry R	Ralph Mayne	04-18-1979	625	S	145	H	300MRGR
HO Bc 96	--	Jackson, John J	--	--	655	H	--	H	300MRGR
HO Bc 97	--	Snouffer, Charles	--	--	575	F	--	H	300PLGV
HO Bc 98	--	Christopher, William C	--	--	525	H	--	H	300MRGR
HO Bc 99	--	Giampoali, Virginia	--	--	565	S	185	H	300MRGR
HO Bc 100	--	Talley, Richard W	--	--	600	H	--	H	300MRGR
HO Bc 101	HO-73-2945	Cornett, Gene D	Joseph Mayne	09-05-1978	560	S	265	H	300MRGR
HO Bc 102	--	Rutz, Donald	--	--	560	H	--	H	300MRGR
HO Bc 103	--	Cole, John B	--	--	550	S	--	H	300MRGR
HO Bc 104	--	Cole, John B	--	--	540	S	--	H	300MRGR
HO Bc 105	--	Myers, David H	--	--	545	H	--	H	300MRGR
HO Bc 106	--	Abel, Philip R	--	--	550	H	--	H	300MRGR
HO Bc 107	--	Harriday, Herbert H	--	--	525	H	--	H	300MRGR
HO Bc 108	--	Hackett, Dorothy	--	--	640	S	--	H	300SKVL
HO Bc 109	--	Darsey, John W	--	--	640	S	--	H	300SKVL
HO Bc 110	--	Orem, Wilma H	--	--	515	S	--	H	300UMFC
HO Bc 111	--	Freeman, Carl M	--	--	585	H	--	H	300MRGR
HO Bc 112	HO-73-2251	Wolbert, James W	Joseph Mayne	08-15-1977	565	S	225	H	300MRGR
HO Bc 113	HO-73-0786	Moyers, Joe W	Joseph Mayne	08-16-1974	590	H	225	H	300MRGR
HO Bc 115	HO-73-2039	Bennett, Iris J	A R Keyser	06-07-1977	590	S	200	H	300MRGR
HO Bc 116	HO-73-1822	Hunt, Dennis H	Dillon Bros	03-08-1977	605	H	200	H	300SKVL
HO Bc 117	HO-73-1528	King, David T	Robert Cline	09-14-1976	560	H	350	H	300MRGR
HO Bc 118	HO-73-2350	Fitzgerald, Herbert Jr	C A Cromwell	10-08-1977	560	S	150	H	300MRGR
HO Bc 119	HO-73-1471	Moore, Hubert W	L F Easterday	07-27-1976	565	H	125	H	300MRGR
HO Bc 120	HO-73-3523	Heiges, Albert E	Keyser-Garver	01-30-1980	565	H	285	H	300MRGR
HO Bc 121	HO-73-0154	Austin, Gerald D	Tri County	03-31-1973	560	S	93	H	300MRGR
HO Bc 122	HO-73-0081	Freeman, Michael G	L F Easterday	10-09-1972	542	S	200	H	300MRGR
HO Bc 123	HO-73-0104	Anderson, Robert	L F Easterday	12-18-1972	550	H	300	H	300MRGR
HO Bc 124	HO-73-2912	Southern Pacific Comm	L F Easterday	07-31-1978	700	H	500	H	300SKVL

Casing			Water level		Aquifer test					Other data	Well
Depth (ft)	Diameter (in.)	Finish	Depth, ft below land surface	Date measured	Yield (gal/min)	Drawdown (ft)	Specific capacity [(gal/min)/ft]	Hours pumped	Date	available	no.
61	6	X	0.55 S	04-21-1980	30	65	0.46	2	01-25-1977	--	HO Bc 50
21	6	X	45.60 S	04-16-1980	12	90	.13	1	03-27-1973	--	HO Bc 51
21.5	6	X	40.20 S	04-09-1980	15	0	--	3	04-20-1973	--	HO Bc 52
54	6	X	32	08-23-1973	10	10	1.0	4	08-23-1973	--	HO Bc 53
21	6	X	41.20 S	04-08-1980	10	60	.17	2	04-19-1974	--	HO Bc 54
21	6	X	34.70 S	04-08-1980	15	--	--	1	09-04-1973	--	HO Bc 55
18	6	X	40.00 S	04-08-1980	15	70	.21	1	09-05-1973	--	HO Bc 56
72	6	X	42.00 S	04-08-1980	3	155	.02	4	05-17-1976	--	HO Bc 57
18	6	X	26.10 S	04-18-1980	30	60	.50	1	07-05-1973	--	HO Bc 58
25	6	X	15.20 S	04-07-1980	10	43	.23	2	11- -1969	--	HO Bc 59
26	6	X	9.25 S	04-08-1980	10	100	.10	2	09-11-1973	--	HO Bc 60
72	6	X	51.70 S	04-07-1980	20	55	.36	1	07-24-1972	--	HO Bc 61
125	6	X	31.40 S	04-08-1980	10	150	.07	1	11-17-1973	--	HO Bc 62
37	6	X	28.60 S	04-07-1980	50	45	1.11	1	09-26-1974	Q	HO Bc 63
24	6	X	54.30 S	04-07-1980	20	80	.25	2	09-01-1976	--	HO Bc 64
23	6	X	46.00 S	04-07-1980	15	85	.18	1	08-06-1970	--	HO Bc 65
71	6	X	40.10 S	07-11-1980	5	105	.05	1	12-16-1974	--	HO Bc 66
--	6	-	11.20 S	04-01-1980	--	--	--	--	--	--	HO Bc 67
80	6	X	30.60 S	04-01-1980	7	44	.16	24	03-13-1961	--	HO Bc 68
					5				03-30-1961		
--	6	-	31.96 S	04-01-1980	--	--	--	--	--	--	HO Bc 69
--	6	-	36.05 S	04-07-1980	--	--	--	--	--	--	HO Bc 70
86	6	X	24.70 S	04-07-1980	4	70	.06	6	09-21-1978	--	HO Bc 71
--	6	-	16.19 S	04-08-1980	--	--	--	--	--	--	HO Bc 72
123	6	X	53.10 S	04-08-1980	4	160	.02	1	10-27-1976	--	HO Bc 73
62	6	X	15.60 S	04-08-1980	10	100	.10	.5	02-26-1969	--	HO Bc 74
46	6	X	34.80 S	04-09-1980	10	105	.10	2	03-30-1978	--	HO Bc 75
27	6	X	35.80 S	04-09-1980	10	45	.22	3	03-16-1971	--	HO Bc 76
21	6	X	52.30 S	04-09-1980	15	70	.21	1	06-07-1977	--	HO Bc 77
--	6	-	37.92 S	04-11-1980	--	--	--	--	--	--	HO Bc 78
21	6	X	44.80 S	04-11-1980	3	115	.03	4	12-06-1976	--	HO Bc 79
101	6	X	34.50 S	04-11-1980	2	220	.01	6	03-28-1979	--	HO Bc 80
54	6	X	20.40 S	04-11-1980	15	73	.21	2	07-14-1978	--	HO Bc 81
18	6	X	63.80 S	04-18-1980	20	70	.29	1	04-10-1975	--	HO Bc 82
--	--	-	32.80 S	04-18-1980	--	--	--	--	--	--	HO Bc 83
--	--	-	42.10 S	04-21-1980	--	--	--	--	--	--	HO Bc 84
--	--	-	14.65 S	04-21-1980	--	--	--	--	--	--	HO Bc 85
--	--	-	36.63 S	07-09-1980	--	--	--	--	--	--	HO Bc 86
--	--	-	35.51 S	07-09-1980	--	--	--	--	--	--	HO Bc 87
32	6	X	42.60 S	04-17-1980	7	55	.13	2	05-22-1974	--	HO Bc 88
70	6	X	56.60 S	04-17-1980	10	50	.20	3	03-16-1971	--	HO Bc 89
36	6	X	40.70 S	04-17-1980	3	155	.02	2	10-30-1974	--	HO Bc 90
68	6	X	31.30 S	04-17-1980	10	85	.12	2	08-08-1978	--	HO Bc 91
69	6	X	41.00 S	04-17-1980	10	135	.07	8	02-27-1979	--	HO Bc 92
42	6	X	8.42 S	04-17-1980	10	90	.11	2	06-15-1972	--	HO Bc 93
98	6	X	44.20 S	04-17-1980	50	155	.32	3	09-19-1979	--	HO Bc 94
102	6	X	42.50 S	04-17-1980	20	105	.19	8	04-18-1979	--	HO Bc 95
--	6	-	51.60 S	04-22-1980	--	--	--	--	--	--	HO Bc 96
--	--	W	15.80 S	04-22-1980	--	--	--	--	--	--	HO Bc 97
--	--	W	14.41 S	04-22-1980	--	--	--	--	--	--	HO Bc 98
--	6	-	55.50 S	07-11-1980	--	--	--	--	--	--	HO Bc 99
--	6	-	74.22 S	07-18-1980	--	--	--	--	--	--	HO Bc 100
29	6	X	56.20 S	04-23-1980	4	205	.02	2	09-05-1978	--	HO Bc 101
--	6	-	44.70 S	04-23-1980	--	--	--	--	--	--	HO Bc 102
--	6	-	61.57 S	04-28-1980	--	--	--	--	--	--	HO Bc 103
--	--	W	42.80 S	04-28-1980	--	--	--	--	--	--	HO Bc 104
--	6	-	39.51 S	04-28-1980	--	--	--	--	--	--	HO Bc 105
--	6	-	41.88 S	04-28-1980	--	--	--	--	--	--	HO Bc 106
--	6	-	50.50 S	04-28-1980	--	--	--	--	--	--	HO Bc 107
--	6	-	45.94 S	04-28-1980	--	--	--	--	--	--	HO Bc 108
--	--	W	54.90 S	04-28-1980	--	--	--	--	--	--	HO Bc 109
--	6	-	48.60 S	05-05-1980	--	--	--	--	--	--	HO Bc 110
--	6	W	57.15 S	06-09-1980	--	--	--	--	--	--	HO Bc 111
48	6	X	44.90 S	06-09-1980	4	175	.02	2	08-15-1977	--	HO Bc 112
54	6	X	60	08-16-1974	5	120	.04	2	08-16-1974	--	HO Bc 113
31	6	X	35	06-07-1977	15	160	.09	1	06-07-1977	--	HO Bc 115
42	6	X	35	03-08-1977	10	140	.07	6	03-08-1977	--	HO Bc 116
109	6	X	51	09-14-1976	2	299	.01	1	09-14-1976	--	HO Bc 117
40	6	X	50	10-08-1977	15	90	.17	5	10-08-1977	--	HO Bc 118
36	6	X	32.90 S	07-09-1980	15	85	.18	2	07-27-1976	--	HO Bc 119
60	6	X	43.50 S	07-09-1980	20	160	.12	3	01-30-1980	--	HO Bc 120
50	6	X	36.50 S	07-18-1980	10	40	.25	3	03-31-1973	--	HO Bc 121
66	6	X	35.80 S	07-11-1980	3	160	.02	2	10-09-1972	--	HO Bc 122
29	6	X	60	12-18-1972	1	240	<.01	2	12-18-1972	--	HO Bc 123
25	6	X	30.90 S	06-25-1980	3	150	.02	3	07-31-1978	--	HO Bc 124
					2	420	<.01	6	10-10-1985		

Table 1.—Records of selected wells in Howard County—Continued

Well no.	Well permit no.	Owner or name	Driller	Date of construction	Altitude of land surface (ft)	Topo-graphic setting	Depth Drilled (ft)	Use of water	Geologic unit
HO Bc 125	HO-73-1361	Fleishell, John R	Joseph Mayne	06-23-1976	555	H	105	H	300MRGR
HO Bc 126	HO-73-0506	Cleary, Thomas C	Ralph Mayne	10-26-1973	525	S	80	H	300MRGR
HO Bc 127	HO-73-2094	Conlon, Jane T	L F Easterday	06-23-1977	590	S	145	H	300MRGR
HO Bc 128	--	Smith, Lawrence C	--	--	560	H	--	H	300MRGR
HO Bc 129	--	Ambers, Augustus	--	--	605	H	--	H	300SKVL
HO Bc 130	--	Carver, Gary P	--	--	585	H	--	H	300MRGR
HO Bc 131	--	Dorsey, Paul A	--	--	660	H	--	H	300SKVL
HO Bc 132	HO-73-0822	Scott, Wesley W	L F Easterday	09-26-1974	585	S	100	H	300MRGR
HO Bc 133	HO-73-0663	Higgins, Patrick J	Dillon Bros	05-01-1974	645	H	150	H	300MRGR
HO Bc 134	HO-05-1347	Lisbon Methodist Ch	Dewey Brown	04-25-1963	562	H	103	H	300MRGR
HO Bc 135	--	Odell, Earl D	--	--	520	S	--	H	300MRGR
HO Bc 136	--	Smith, Leroy L	--	--	555	F	--	H	300PLGV
HO Bc 137	--	Jordan, David C Jr	--	--	550	S	--	H	300MRGR
HO Bc 138	HO-73-2951	Rosser, Luther H	L F Easterday	09-20-1978	500	S	100	H	--
HO Bc 139	HO-73-3429	Fichter, George L	Ralph Mayne	09-19-1979	645	H	145	H	300SKVL
HO Bc 140	HO-73-2703	Leblanc, Donald J	Ralph Mayne	05-08-1978	570	S	225	H	300MRGR
HO Bc 141	HO-73-0470	Springer, Stephen B	C A Cromwell	10-10-1973	560	H	100	H	300MRGR
HO Bc 143	HO-73-0883	Lisbon Elem School	Westminster	11-27-1974	560	F	351	T	300MRGR
HO Bc 144	HO-73-1866	Mauzy, Keith	L F Easterday	03-10-1977	550	H	110	H	300MRGR
HO Bc 145	HO-73-4236	Pimentel, Derek	Joseph Mayne	08-05-1982	575	H	350	H	300MRGR
HO Bc 146	HO-73-0513	Duke, Charles Jr	L F Easterday	01-27-1974	505	H	160	H	300MRGR
HO Bc 147	HO-73-1038	Rankin, Tom M	Joseph Mayne	06-23-1975	495	S	265	H	300MRGR
HO Bc 148	HO-73-1287	Queen, Clarence	Dillon Bros	01-14-1976	550	U	150	H	300MRGR
HO Bc 149	HO-73-2815	Haynes, John	Joseph Mayne	06-06-1978	560	U	300	H	300MRGR
HO Bc 150	HO-81-0100	Haines, John	L F Easterday	06-08-1983	555	U	160	H	300MRGR
HO Bc 151	HO-73-3612	Campanile, Mike	L F Easterday	06-06-1980	580	H	160	H	300MRGR
HO Bc 152	HO-81-0649	--	Ralph Mayne	08-20-1984	630	S	200	H	300SKVL
HO Bc 153	HO-72-0201	Wheeler, James	L F Easterday	06-17-1972	485	S	80	H	300MRGR
HO Bc 154	HO-81-0052	Dorsey, Mike J	Ralph Mayne	05-02-1983	585	H	185	H	300MRGR
HO Bc 155	HO-73-0771	Parrish, Robert E	L F Easterday	07-25-1974	540	S	125	H	300MRGR
HO Bc 156	HO-73-2216	Haneschlayer, James	L F Easterday	08-26-1977	515	S	365	H	300MRGR
HO Bc 157	HO-73-1419	Duke, Stewart	Harley Drlg	06-09-1976	545	S	100	H	300MRGR
HO Bc 158	HO-73-4311	Kain, Richard	G E Harr Sons	11-17-1982	495	S	250	H	300MRGR
HO Bc 159	HO-73-4311	Kain, Richard	G E Harr Sons	11-17-1982	495	S	175	U	300MRGR
HO Bc 160	HO-73-2090	Mollock, John W	Joseph Mayne	08-04-1977	505	S	265	H	300MRGR
HO Bc 161	HO-73-1598	Simmel, Vincent	L F Easterday	08-31-1976	500	S	165	H	300MRGR
HO Bc 162	HO-73-1669	Wampler, Yvonne D	Robert Cline	11-03-1976	500	S	300	H	300SKVL
HO Bc 163	HO-73-1446	Streaker, Howard	L F Easterday	06-04-1976	540	H	120	H	300SKVL
HO Bc 164	HO-73-1025	Hogue, Paul	Dillon Bros	08-04-1975	550	F	100	H	300MRGR
HO Bc 165	HO-73-1676	Houk, Albert E	Westminster	11-19-1976	545	H	280	H	300MRGR
HO Bc 166	HO-73-1676	Houk, Albert E	Westminster	11-18-1976	545	H	109	U	300MRGR
HO Bc 167	HO-73-3263	Iglehart, John	Ralph Mayne	05-25-1979	560	H	265	H	300MRGR
HO Bc 168	HO-73-0793	Riggs, Eugene	L F Easterday	08-08-1974	515	S	165	H	300MRGR
HO Bc 169	HO-73-2635	Hill, Gordon	Joseph Mayne	03-22-1978	550	S	205	H	300MRGR
HO Bc 170	HO-73-0682	Garland, Garry	L F Easterday	06-27-1974	485	S	300	H	300MRGR
HO Bc 171	HO-73-2028	Brubaker, George A	Westminster	05-09-1977	500	S	125	H	300MRGR
HO Bc 172	HO-81-1137	Mettle, Joseph	Joseph Mayne	09-05-1985	540	S	225	H	300MRGR
HO Bc 173	HO-73-1708	--	L F Easterday	12-09-1976	615	H	240	H	300SKVL
HO Bc 174	HO-73-3101	Allen, Kenneth	Ralph Mayne	12-22-1978	570	H	145	H	300SKVL
HO Bc 175	HO-73-3102	Gray, John H	Ralph Mayne	05-08-1979	610	U	325	H	300SKVL
HO Bc 177	HO-73-2406	Wright, James W	L F Easterday	11-18-1977	475	H	140	H	300SKVL
HO Bc 178	HO-81-1364	Regan, Matthew	Joseph Mayne	05-07-1986	455	S	165	H	300SKVL
HO Bc 179	HO-81-1403	Lucas, Peter	Joseph Mayne	05-06-1986	395	V	145	H	300SKVL
HO Bc 180	HO-81-0325	Schuster, Louis	Joseph Mayne	11-10-1983	410	S	140	H	300SKVL
HO Bc 181	HO-81-0520	Smith, Dennis	Joseph Mayne	05-10-1984	490	H	203	A	300SKVL
HO Bc 182	HO-81-1150	Smith, Dennis	L F Easterday	10-18-1985	490	H	200	U	300SKVL
HO Bc 183	HO-81-1150	Smith, Dennis	L F Easterday	10-18-1985	490	H	200	A,H	300SKVL
HO Bc 184	HO-81-0842	Donovan, Richard C	Joseph Mayne	01-25-1985	490	S	185	H	300SKVL
HO Bc 185	HO-05-0637	Glenwood Baptist Ch	Dewey Brown	03-15-1963	510	H	86	H	300SKVL
HO Bc 186	HO-73-3958	Lanning, James	Joseph Mayne	07-23-1981	435	S	145	C,H	300SKVL
HO Bc 187	HO-73-3117	Glenwood Post Office	Joseph Mayne	04-24-1979	545	S	145	C	300SKVL
HO Bc 188	HO-73-1495	Glenwood Gardens	L F Easterday	05-27-1976	540	S	400	C,I	300SKVL
HO Bc 190	HO-67-0023	Glenwood Middle School	Edward Brown	07-26-1966	585	F	80	T	300SKVL
HO Bc 191	HO-67-0024	Glenwood Middle School	Edward Brown	10-19-1966	585	F	125	T	300SKVL
HO Bc 192	HO-73-0882	Bushy Park Elem School	Westminster	12-05-1974	585	F	248	T	300SKVL
HO Bc 193	HO-81-1425	Cooney	Ralph Mayne	04-29-1986	610	S	145	H	300SKVL
HO Bc 194	HO-65-0485	Ridgely, Worthington	Dewey Brown	07-24-1965	605	H	53	H,S	300SKVL
HO Bc 195	HO-81-1147	Lyles, Alonza R	L F Easterday	08-27-1985	610	H	140	H	300SKVL
HO Bc 196	HO-73-0874	--	G E Harr Sons	11-21-1974	560	S	125	H	300SKVL
HO Bc 197	HO-73-3386	Washington	A C Reider	09-14-1979	600	U	50	H	300SKVL
HO Bc 198	HO-73-4316	Landscape Develop Co	L F Easterday	11-23-1982	580	H	300	I	300MRGR
HO Bc 199	HO-73-3769	Landscape Develop Co	L F Easterday	03-18-1981	560	H	300	I	300MRGR
HO Bc 200	HO-73-2044	Landscape Develop Co	L F Easterday	05-16-1977	555	S	200	I	300MRGR
HO Bc 201	HO-73-0107	Graves, Marshall	Dewey Brown	11-09-1972	570	H	67	H,S	300SKVL

Casing			Water level		Aquifer test					Other data	
Depth (ft)	Diameter (in.)	Finish	Depth, ft below land surface	Date measured	Yield (gal/min)	Drawdown (ft)	Specific capacity [(gal/min)/ft]	Hours pumped	Date	available	Well no.
23	6	X	50.70 S	07-02-1980	8	65	0.12	2	06-23-1976	--	HO Bc 125
20	6	X	29.90 S	07-02-1980	10	40	.25	2	10-26-1973	--	HO Bc 126
99	6	X	51.60 S	07-02-1980	30	105	.29	2	06-23-1977	--	HO Bc 127
--	6	-	33.36 S	07-02-1980	--	--	--	--	--	--	HO Bc 128
--	6	-	51.99 S	07-02-1980	--	--	--	--	--	--	HO Bc 129
--	6	-	55.75 S	07-02-1980	--	--	--	--	--	--	HO Bc 130
--	6	-	40.90 S	07-02-1980	--	--	--	--	--	--	HO Bc 131
18	6	X	30.80 S	07-07-1980	25	50	.50	2	09-26-1974	--	HO Bc 132
100	6	X	49.30 S	07-07-1980	10	40	.25	6	05-01-1974	--	HO Bc 133
87	6	X	65	04-25-1963	6	20	.30	.5	04-25-1963	--	HO Bc 134
--	6	-	31.10 S	07-09-1980	--	--	--	--	--	--	HO Bc 135
--	--	W	2.25 S	07-09-1980	--	--	--	--	--	--	HO Bc 136
--	6	-	31.28 S	07-11-1980	--	--	--	--	--	--	HO Bc 137
30	6	X	22.20 S	07-11-1980	20	80	.25	2	09-20-1978	--	HO Bc 138
84	6	X	30	09-19-1979	15	115	.13	4	09-19-1979	--	HO Bc 139
67	6	X	10.80 S	07-17-1980	3	205	.01	8	05-08-1978	--	HO Bc 140
21	6	X	36.20 S	07-18-1980	20	60	.33	2	10-10-1973	--	HO Bc 141
108	6	X	113	11-27-1974	12	90	.13	18	11-27-1974	--	HO Bc 143
38	6	X	40	03-10-1977	10	70	.14	2	03-10-1977	--	HO Bc 144
33	6	X	40	08-05-1982	4	55	.07	3	08-05-1982	--	HO Bc 145
18	6	X	50	01-27-1974	3	110	.03	1	01-27-1974	--	HO Bc 146
48	6	X	45	06-23-1975	6	215	.03	2	06-23-1975	--	HO Bc 147
30	6	X	30	01-14-1976	10	70	.14	6	01-14-1976	--	HO Bc 148
58	6	X	65	06-06-1978	1	230	<.01	3	06-06-1978	--	HO Bc 149
66	6	X	32	06-08-1983	8	24	.33	3	06-08-1983	--	HO Bc 150
68	6	X	60	06-06-1980	10	100	.10	2	06-06-1980	--	HO Bc 151
22	6	X	51	08-20-1984	9	0	--	3	08-20-1984	--	HO Bc 152
52	6	X	25	06-17-1972	50	55	.91	1	06-17-1972	--	HO Bc 153
59	6	X	78	05-02-1983	6	107	.06	3	05-02-1983	--	HO Bc 154
23	6	X	40	07-25-1974	10	85	.12	1	07-25-1974	--	HO Bc 155
85	6	X	65	08-26-1977	2	295	.01	2	08-26-1977	--	HO Bc 156
40	6	X	25	06-09-1976	20	70	.29	1	06-09-1976	Q	HO Bc 157
100	6	X	47	11-17-1982	2.65	182.10	.01	6	11-17-1982	--	HO Bc 158
--	--	X	Dry	11-17-1982	0	--	--	--	11-17-1982	--	HO Bc 159
112	6	X	55	08-04-1977	4	210	.02	2	08-04-1977	--	HO Bc 160
115	6	X	40	08-31-1976	15	125	.12	2	08-31-1976	--	HO Bc 161
58	6	X	40	11-03-1976	2	260	.01	1	11-03-1976	--	HO Bc 162
26	6	X	30	06-04-1976	20	90	.22	2	06-04-1976	--	HO Bc 163
40	6	X	40	08-04-1975	15	20	.75	6	08-04-1975	--	HO Bc 164
95	6	X	98	11-19-1976	4	90	.04	6	11-19-1976	--	HO Bc 165
--	--	X	Dry	11-18-1976	0	--	--	--	11-18-1976	--	HO Bc 166
88	6	X	75	05-25-1979	5	190	.03	6	05-25-1979	--	HO Bc 167
75	6	X	40	08-08-1974	3	125	.02	1	08-08-1974	--	HO Bc 168
28	6	X	55	03-22-1978	7	145	.05	2	03-22-1978	--	HO Bc 169
80	6	X	50	06-27-1974	1	250	<.01	1	06-27-1974	--	HO Bc 170
48	6	X	51	05-09-1977	20	23	.87	6	05-09-1977	--	HO Bc 171
61	6	X	64	09-05-1985	9	47	.19	3	09-05-1985	Q	HO Bc 172
35	6	X	50	12-09-1976	10	190	.05	2	12-09-1976	--	HO Bc 173
37	6	X	45	12-22-1978	10	100	.10	8	12-22-1978	--	HO Bc 174
30	6	X	25	05-08-1979	2	300	.01	6	05-08-1979	--	HO Bc 175
59	6	X	65	11-18-1977	10	75	.13	2	11-18-1977	--	HO Bc 177
65	6	X	61	05-07-1986	12	33	.36	3	05-07-1986	--	HO Bc 178
41	6	X	24	05-06-1986	12	4	3.0	3	10-05-1987	--	HO Bc 179
27	6	X	35	11-10-1983	10	3	3.33	3	11-10-1983	--	HO Bc 180
21	6	X	51	05-10-1984	12	5	2.40	3	05-10-1984	--	HO Bc 181
--	6	X	57.40 S	10-05-1987	3.5	--	--	--	10 -- 1985	--	HO Bc 182
19	6	X	50	10-18-1985	7	150	.05	3	10-18-1985	--	HO Bc 183
25	6	X	50	01-25-1985	10	15	.67	3	01-25-1985	--	HO Bc 184
50	6	X	58.82 S	10-05-1987	4	20	.20	.5	03-15-1963	O	HO Bc 185
48	6	X	30	07-23-1981	9	60	.15	3	07-23-1981	--	HO Bc 186
62	6	X	45	04-24-1979	10	100	.10	4	04-24-1979	Q	HO Bc 187
55	6	X	4	05-27-1976	6	396	.02	2	05-27-1976	--	HO Bc 188
38	6	X	36	07-26-1966	30	--	--	3	07-26-1966	--	HO Bc 190
50	6	X	45	10-19-1966	8	--	--	2	10-19-1966	--	HO Bc 191
69	6	X	90	12-05-1974	12	90	.13	12	12-05-1974	--	HO Bc 192
28	6	X	11	04-29-1986	9	4	2.25	3	04-29-1986	--	HO Bc 193
37	--	X	35	07-24-1965	7	5	1.40	1	07-24-1965	--	HO Bc 194
51	6	X	52	08-27-1985	7	88	.08	3	08-27-1985	--	HO Bc 195
62	6	X	17	11-21-1974	10	2	5.0	6	11-21-1974	--	HO Bc 196
32	6	X	30	09-14-1979	6	5	1.20	6	09-14-1979	--	HO Bc 197
29	6	X	69	11-23-1982	7	231	.03	3	11-23-1982	--	HO Bc 198
40	6	X	50	03-18-1981	7	250	.03	4	03-18-1981	--	HO Bc 199
31	6	X	45	05-16-1977	6	155	.04	2	05-16-1977	--	HO Bc 200
22	6	X	45	11-09-1972	4	10	.40	1	11-09-1972	--	HO Bc 201

Table 1.—Records of selected wells in Howard County—Continued

Well no.	Well permit no.	Owner or name	Driller	Date of construction	Altitude of land surface (ft)	Topo-graphic setting	Depth Drilled (ft)	Use of water	Geologic unit
HO Bc 202	HO-73-2668	Dickson, Fred	Westminster	06-02-1978	570	H	160	H	300SKVL
HO Bc 203	HO-73-2025	Coover, Fred L	G E Harr Sons	06-02-1977	620	S	300	H	300SKVL
HO Bc 204	HO-73-2025	Coover, Fred L	G E Harr Sons	06-02-1977	620	S	300	U	300SKVL
HO Bc 205	HO-73-1190	Brown,,Charles T	Robert Cline	10-31-1975	605	S	100	H	300SKVL
HO Bc 206	HO-73-1266	Luke, Michael	Robert Cline	12-18-1975	605	S	100	H	300SKVL
HO Bc 207	HO-73-1326	--	L F Easterday	02-20-1976	610	S	120	H	300SKVL
HO Bc 208	HO-73-2711	Piekarski, Casey A	L F Easterday	05-04-1978	590	H	125	H	300SKVL
HO Bc 209	HO-73-1119	Lawson, David W	G E Harr Sons	01-07-1976	590	S	150	H	300SKVL
HO Bc 210	HO-73-0007	Kramer, Fulton A	G E Harr Sons	08-26-1972	600	S	100	H	300SKVL
HO Bc 211	HO-73-0753	Hewitt, Leroy	Dillon Bros	07-17-1974	590	S	150	H	300SKVL
HO Bc 212	HO-73-1792	Howard Co Dept Pub Wks	Westminster	12-29-1976	605	S	150	H	300SKVL
HO Bc 213	HO-73-2825	Duncan, Phillip L	Roy Harley	07-11-1978	560	F	150	H	300SKVL
HO Bc 214	HO-81-0379	Feldman, Alexander	Keyser-Garver	02-02-1984	550	H	400	H	300SKVL
HO Bc 215	HO-73-4246	Friedel	L F Easterday	08-19-1982	520	H	140	H	300SKVL
HO Bc 216	HO-81-1194	Garonzik, Harry	Joseph Mayne	10-31-1985	570	S	305	H	300SKVL
HO Bc 217	HO-81-1194	Garonzik, Harry	Joseph Mayne	10-31-1985	570	S	280	U	300SKVL
HO Bc 218	HO-81-1194	Garonzik, Harry	Joseph Mayne	10-31-1985	570	S	350	U	300SKVL
HO Bc 219	HO-81-0061	Read, Robert E	Joseph Mayne	04-25-1983	540	S	165	H	300SKVL
HO Bc 220	HO-81-0681	Glaslocke, James	Joseph Mayne	09-18-1984	570	H	305	H	300SKVL
HO Bc 221	HO-73-4133	Migrock, Thomas	L F Easterday	04-08-1982	570	U	140	H	300SKVL
HO Bc 222	HO-73-4302	Boyd, Joseph	Westminster	10-29-1982	565	H	128	H	300SKVL
HO Bc 223	HO-73-4365	Binkley, Todd	L F Easterday	01-04-1983	545	U	220	H	300SKVL
HO Bc 224	HO-81-0504	Regnier, John	L F Easterday	04-25-1984	545	H	140	H	300SKVL
HO Bc 225	HO-73-3140	--	Ralph Mayne	03-19-1979	550	S	145	H	300SKVL
HO Bc 226	HO-81-0554	Sapp, Gordon B	S Bollinger	07-06-1984	560	H	125	H	300SKVL
HO Bc 227	HO-73-3212	Dickson, Fred	Westminster	04-17-1979	540	H	130	H	300SKVL
HO Bc 228	HO-81-0970	Bythrow, Peter	Ralph Mayne	04-12-1985	550	U	140	H	300SKVL
HO Bc 229	HO-81-0691	Shepherd of the Glen	G E Harr Sons	12-13-1984	585	U	150	H	300SKVL
HO Bc 230	HO-81-0691	Shepherd of the Glen	G E Harr Sons	12-13-1984	585	U	300	U	300SKVL
HO Bc 231	HO-81-0972	Gilbert, Dan	L F Easterday	05-10-1985	610	S	160	H	300SKVL
HO Bc 232	HO-73-0253	--	L F Easterday	06-18-1973	570	U	120	H	300SKVL
HO Bc 233	HO-73-3328	Arold, Ed	G E Harr Sons	07-16-1979	580	W	200	H	300SKVL
HO Bc 234	HO-81-0680	Hutchison, Michael	Joseph Mayne	08-22-1984	575	U	245	H	300SKVL
HO Bc 235	HO-73-2806	Roscoe, George S	Westminster	06-27-1978	470	U	251	H	300SKVL
HO Bc 236	HO-73-0827	Sturges, David A	Westminster	11-08-1974	580	H	145	H	300SKVL
HO Bc 237	HO-73-3729	Speight, Robert I	L F Easterday	11-12-1980	560	S	80	H	300SKVL
HO Bc 238	HO-81-1568	Hobbs, Charles	L F Easterday	07-15-1986	550	H	400	H	300SKVL
HO Bc 239	HO-73-3738	Smith, Jack	S Bollinger	02-26-1981	575	S	165	H	300SKVL
HO Bc 240	HO-73-2548	Darling, John E	W W Reichart	02-02-1978	590	S	125	H	300SKVL
HO Bc 241	HO-81-0612	Pryor, James N	L F Easterday	07-20-1984	590	S	160	H	300SKVL
HO Bc 242	HO-81-1136	Huntsberger, Beverly	L F Easterday	11-13-1985	600	H	260	H	300SKVL
HO Bc 243	HO-81-0510	Schaeffer, Benjamin F	Joseph Mayne	05-03-1984	570	U	123	H	300SKVL
HO Bc 244	HO-81-1068	Nicola, Ron & Nancy	Ralph Mayne	07-02-1985	580	U	165	H	300SKVL
HO Bc 245	HO-73-1181	--	L F Easterday	11-05-1975	590	U	140	H	300SKVL
HO Bc 246	HO-73-1120	Airulla, Phillip L	L F Easterday	07-07-1975	595	F	105	H	300SKVL
HO Bc 247	HO-73-0737	Airulla, Phillip L	L F Easterday	07-17-1974	595	F	170	U	300SKVL
HO Bc 248	HO-02-6907	Glenelg High School	Edward Brown	05-29-1957	570	F	110	T	300SKVL
HO Bc 249	HO-02-8474	Glenelg High School	Edward Brown	09-27-1957	570	F	138	T	300SKVL
HO Bc 250	HO-73-1886	Meacham, David S	Alton Keyser	03-21-1977	575	S	100	H	300SKVL
HO Bc 251	HO-81-0603	--	G E Harr Sons	07-07-1984	580	U	200	H	300SKVL
HO Bc 252	HO-73-0730	Judge, Joseph	L F Easterday	07-02-1974	605	U	100	H	300SKVL
HO Bc 253	HO-73-1308	Walk, Richard J	Keyser-Garver	03-18-1976	590	U	300	H	300SKVL
HO Bc 254	HO-81-0720	Gethsemane Baptist Ch	Westminster	09-14-1984	580	U	178	H	300SKVL
HO Bc 255	HO-73-1901	Stadter, James T	Joseph Mayne	03-15-1977	580	H	145	H	300SKVL
HO Bc 256	HO-73-2947	Brantley Develop Corp	Joseph Mayne	11-08-1978	565	S	125	H	300SKVL
HO Bc 257	HO-73-2468	--	Joseph Mayne	02-21-1978	565	S	180	H	300SKVL
HO Bc 258	HO-81-0704	Cabral, John L	Joseph Mayne	09-14-1984	565	H	112	H	300SKVL
HO Bc 259	HO-73-1049	Niewiadomsky, Hans	L F Easterday	06-26-1975	540	H	140	H	300SKVL
HO Bc 260	HO-73-0688	Kight	L F Easterday	07-22-1974	570	H	125	H	300SKVL
HO Bc 261	HO-73-1075	Somerlock, Raymond	L F Easterday	08-19-1975	575	H	144	H	300SKVL
HO Bc 262	HO-73-3646	Moore, James W	L F Easterday	09-05-1980	605	H	160	H	300SKVL
HO Bc 263	HO-73-3692	Whitt, D	L F Easterday	08-30-1980	535	H	160	H	300SKVL
HO Bc 265	HO-81-0301	Stromberg, A L	Joseph Mayne	10-31-1983	575	F	163	H	300SKVL
HO Bc 266	HO-81-0187	Schaeffer, Donald	Keyser-Garver	07-14-1983	565	F	203	H	300SKVL
HO Bc 267	HO-81-0187	Schaeffer, Donald L	Keyser-Garver	07-14-1983	565	F	85	U	300SKVL
HO Bc 268	HO-73-2757	Bissell, David T	Westminster	05-26-1978	565	H	253	H	300SKVL
HO Bc 269	HO-81-0263	Smith	Joseph Mayne	09-15-1983	550	S	240	H	300SKVL
HO Bc 270	HO-81-0077	--	Westminster	05-05-1983	575	H	235	H	300SKVL
HO Bc 271	HO-73-3281	Sharp, Lawton T	Joseph Mayne	06-01-1979	545	H	205	H	300SKVL
HO Bc 272	HO-81-1007	--	Joseph Mayne	05-20-1985	510	H	165	H	300SKVL
HO Bc 273	HO-73-2863	Heath, Jerry J	Ralph Mayne	08-04-1978	560	S	185	H	300SKVL
HO Bc 274	HO-73-0927	Howard, Charles	L F Easterday	03-21-1975	540	U	105	H	300SKVL
HO Bc 275	HO-73-2356	Brindza, George A	Ralph Mayne	12-11-1977	510	H	145	H	300SKVL
HO Bc 276	HO-73-0523	Anderson, Alvin	Ralph Mayne	12-19-1973	580	S	100	H	300SKVL
HO Bc 277	HO-73-4230	Gardner, Ronald C	Westminster	07-27-1982	605	H	145	H	300SKVL

Casing			Water level		Aquifer test					Other	
Depth (ft)	Diameter (in.)	Finish	Depth, ft below land surface	Date measured	Yield (gal/min)	Drawdown (ft)	Specific capacity [(gal/min)/ft]	Hours pumped	Date	data available	Well no.
23	6	X	30	06-02-1978	7.5	15	0.50	6	06-02-1978	--	HO Bc 202
42	6	X	58	06-02-1977	1	217	<.01	6	06-02-1977	Q	HO Bc 203
--	--	X	Dry	06-02-1977	0	--	--	--	06-02-1977	--	HO Bc 204
37	6	X	27	10-31-1975	10	73	.14	1	10-31-1975	--	HO Bc 205
90	6	X	28	12-18-1975	10	72	.14	1	12-18-1975	--	HO Bc 206
56	6	X	30	02-20-1976	20	90	.22	1	02-20-1976	--	HO Bc 207
19	6	X	40	05-04-1978	10	85	.12	2	05-04-1978	--	HO Bc 208
80	6	X	30	01-07-1976	6	110	.05	6	01-07-1976	--	HO Bc 209
61	6	X	28	08-26-1972	10	62	.16	6	08-26-1972	--	HO Bc 210
26	6	X	40	07-17-1974	5	80	.06	6	07-17-1974	--	HO Bc 211
50	6	X	55	12-29-1976	9	80	.11	6	12-29-1976	--	HO Bc 212
74	6	X	30	07-11-1978	10	24	.42	4	07-11-1978	--	HO Bc 213
86	6	X	25	02-02-1984	2	70	.03	6	02-02-1984	--	HO Bc 214
47	6	X	37	08-19-1982	10	15.5	.65	--	08-19-1982	--	HO Bc 215
21	6	X	49	10-31-1985	2	216	.01	6	10-31-1985	--	HO Bc 216
--	--	X	Dry	10-31-1985	0	--	--	--	10-31-1985	--	HO Bc 217
--	--	X	Dry	10-31-1985	0	--	--	--	10-31-1985	--	HO Bc 218
62	6	X	20	04-25-1983	6	22	.27	3	04-25-1983	--	HO Bc 219
21	6	X	18	09-18-1984	5.5	104	.05	6	09-18-1984	--	HO Bc 220
37	6	X	19	04-08-1982	12	10	1.20	3	04-08-1982	--	HO Bc 221
42.7	6	X	45	10-29-1982	20	6	3.33	3	10-29-1982	--	HO Bc 222
19	6	X	25	01-04-1983	10	16	.62	3	01-04-1983	--	HO Bc 223
32	6	X	22	04-25-1984	12	7	1.71	3	04-25-1984	--	HO Bc 224
22	6	X	35	03-19-1979	10	110	.09	6	03-19-1979	--	HO Bc 225
19	6	X	25	07-06-1984	12	2	6.0	3	07-06-1984	--	HO Bc 226
77	6	X	64	04-17-1979	30	32	.94	4.5	04-17-1979	--	HO Bc 227
26	6	X	25	04-12-1985	9	0	--	3	04-12-1985	--	HO Bc 228
80	6	X	21.3	12-13-1984	4.62	65.6	.07	3	12-13-1984	--	HO Bc 229
--	--	X	Dry	12-13-1984	0	--	--	--	12-13-1984	--	HO Bc 230
21	6	X	29	05-10-1985	8	6	1.33	3	05-10-1985	--	HO Bc 231
45	6	X	28	06-18-1973	10	92	.11	2	06-18-1973	--	HO Bc 232
48	6	X	25	07-16-1979	12	150	.08	6	07-16-1979	--	HO Bc 233
68	6	X	8	08-22-1984	12	33	.36	3	08-22-1984	--	HO Bc 234
62	6	X	78	06-27-1978	3	112	.03	6	06-27-1978	--	HO Bc 235
47	6	X	30	11-08-1974	12	110	.11	7	11-08-1974	--	HO Bc 236
47	6	X	20	11-12-1980	60	60	1.0	3	11-12-1980	--	HO Bc 237
31	6	X	37	07-15-1986	3	116	.03	6	07-15-1986	--	HO Bc 238
32	6	X	30	02-26-1981	50	135	.37	3	02-26-1981	--	HO Bc 239
40	6	X	40	02-02-1978	12	85	.14	1	02-02-1978	--	HO Bc 240
53	6	X	32	07-20-1984	12	2	6.0	3	07-20-1984	--	HO Bc 241
45	6	X	115	11-13-1985	8	35	.23	3	11-13-1985	--	HO Bc 242
41	6	X	20	05-03-1984	12	0	--	3	05-03-1984	--	HO Bc 243
44	6	X	27	07-02-1985	10	0	--	3	07-02-1985	--	HO Bc 244
53	6	X	50	11-05-1975	8	90	.09	2	11-05-1975	--	HO Bc 245
45	6	X	40	07-07-1975	30	65	.46	2	07-07-1975	Q	HO Bc 246
44	6	X	39.35 S	10-16-1987	3	130	.02	1	07-17-1974	L,O	HO Bc 247
81	--	X	21	05-29-1957	15	57	.26	1	05-29-1957	--	HO Bc 248
59	--	X	20	09-27-1957	20	27	.74	1.5	09-27-1957	--	HO Bc 249
63	6	X	30	03-21-1977	20	65	.31	2	03-21-1977	--	HO Bc 250
65	6	X	18	07-07-1984	8	13	.62	3	07-07-1984	--	HO Bc 251
73	6	X	40	07-02-1974	10	60	.17	1	07-02-1974	--	HO Bc 252
62	6	X	30	03-18-1976	4	10	.40	2	03-18-1976	--	HO Bc 253
84	6	X	43	09-14-1984	15	21	.71	3	09-14-1984	--	HO Bc 254
60	6	X	45	03-15-1977	15	95	.16	2	03-15-1977	--	HO Bc 255
51	6	X	45	11-08-1978	11	75	.15	2	11-08-1978	--	HO Bc 256
22	6	X	55	02-21-1978	10	0	--	2	02-21-1978	--	HO Bc 257
62	6	X	43	09-14-1984	12	0	--	3	09-14-1984	--	HO Bc 258
83	6	X	30	06-26-1975	20	110	.18	2	06-26-1975	--	HO Bc 259
67	6	X	40	07-22-1974	5	85	.06	1	07-22-1974	--	HO Bc 260
97	6	X	50	08-19-1975	4	94	.04	2	08-19-1975	--	HO Bc 261
63	6	X	60	09-05-1980	4	100	.04	2	09-05-1980	--	HO Bc 262
101	6	X	30	08-30-1980	50	130	.38	2	08-30-1980	--	HO Bc 263
23	6	X	14	10-31-1983	12	49	.24	3	10-31-1983	--	HO Bc 265
59	6	X	19	07-14-1983	10	99	.10	3	07-14-1983	--	HO Bc 266
--	--	X	Dry	07-14-1983	0	--	--	--	07-14-1983	--	HO Bc 267
79	6	X	187	05-26-1978	25	3	8.33	6	05-26-1978	--	HO Bc 268
36	6	X	25	09-15-1983	12	25	.48	3	09-15-1983	--	HO Bc 269
39.3	6	X	42	05-05-1983	15	36	.42	3	05-05-1983	--	HO Bc 270
28	6	X	55	06-01-1979	5	150	.03	2	06-01-1979	--	HO Bc 271
41	6	X	25	05-20-1985	12	2	6.0	3	05-20-1985	--	HO Bc 272
70	6	X	35	08-04-1978	10	150	.07	8	08-04-1978	--	HO Bc 273
58	6	X	30	03-21-1975	10	75	.13	1	03-21-1975	--	HO Bc 274
21	6	X	50	12-11-1977	4	95	.04	4	12-11-1977	--	HO Bc 275
30	6	X	50	12-19-1973	4	50	.08	2	12-19-1973	--	HO Bc 276
106	6	X	67	07-27-1982	16.2	6	2.70	3	07-27-1982	--	HO Bc 277

Table 1.—Records of selected wells in Howard County—Continued

Well no.	Well permit no.	Owner or name	Driller	Date of construction	Altitude of land surface (ft)	Topo-graphic setting	Depth Drilled (ft)	Use of water	Geologic unit
HO Bc 278	HO-81-0806	Braun, Donald R	Joseph Mayne	12-19-1984	530	S	245	H	300SKVL
HO Bc 279	HO-81-1072	Cohen, Allen	Ralph Mayne	07-17-1985	520	S	160	H	300SKVL
HO Bc 280	HO-81-1301	Shea	Ralph Mayne	01-12-1986	580	S	110	H	300SKVL
HO Bc 281	HO-73-3026	Grayson, Floyd	Dillon Bros	11-08-1978	575	U	200	H	300SKVL
HO Bc 282	HO-73-2558	Boley, Morris V Jr	Dillon Bros	02-06-1978	560	S	150	H	300SKVL
HO Bc 283	HO-73-1545	Mazer	Westminster	08-11-1976	585	H	98	H	300SKVL
HO Bc 284	HO-73-1536	Galdan, Burnie	L F Easterday	07-22-1976	585	H	300	H	300SKVL
HO Bc 285	HO-73-4010	Richardson, Page W	Ralph Mayne	10-14-1981	560	S	265	H	300SKVL
HO Bc 286	HO-73-3758	Starcher, Richard	Joseph Mayne	12-10-1980	540	H	185	H	300SKVL
HO Bc 287	HO-81-2017	Jackson, Robert G	Joseph Mayne	04-13-1987	620	H	265	H	300SKVL
HO Bc 288	HO-81-1768	Bryant, Donald	Tri County	12-11-1986	570	H	140	H	300SKVL
HO Bc 289	HO-81-1670	Black, Duane	Ralph Mayne	10-22-1986	565	F	220	H	300SKVL
HO Bc 290	HO-81-1805	--	Tri County	01-21-1987	575	S	115	H	300SKVL
HO Bc 291	HO-81-1805	--	Tri County	01 -- 1987	575	S	--	U	300SKVL
HO Bc 292	HO-81-2015	--	Joseph Mayne	04-13-1987	580	S	120	H	300SKVL
HO Bc 293	HO-81-1848	Seelinger, Joseph	L F Easterday	01-19-1987	585	H	200	H	300SKVL
HO Bc 294	HO-81-1856	Thurman, Bob	Ralph Mayne	02-02-1987	565	S	140	H	300SKVL
HO Bc 295	HO-81-1903	Thurman, Bob	Ralph Mayne	02-02-1987	555	S	140	A	300SKVL
HO Bc 296	HO-81-1904	Thurman, Bob	Ralph Mayne	02-02-1987	560	H	200	A	300SKVL
HO Bc 297	HO-81-1905	Thurman, Bob	Ralph Mayne	02-02-1987	560	H	280	A	300SKVL
HO Bc 298	HO-81-2191	O'Donnell, Charles H	Joseph Mayne	07-22-1987	565	H	245	H	300SKVL
HO Bc 299	HO-81-2043	Connell, Douglas	L F Easterday	05-20-1987	610	H	160	H	300SKVL
HO Bc 300	HO-81-2083	Demarco, William R	Joseph Mayne	05-27-1987	485	H	165	H	300SKVL
HO Bc 301	HO-73-1011	Howath, Tombarney	Dewey Brown	05-30-1975	520	H	175	H	300SKVL
HO Bc 302	HO-81-2352	C & P Telephone Co	Ralph Mayne	10-23-1987	610	H	165	H	300SKVL
HO Bc 303	HO-88-0639	Union Chapel	Westminster	06-01-1989	580	S	177	H	300SKVL
HO Bc 304	HO-81-0508	Swisher, Kyle	Joseph Mayne	05-08-1984	565	F	103	H	300SKVL
HO Bd 1	--	Md State Highway Admin	--	1846	630	S	48	U	300MRGR
HO Bd 2	HO-00-6247	Transcontinental Gas	Md Drilling	08 -- 1950	365	F	202	H	300CCKV
HO Bd 3	HO-00-6247	Transcontinental Gas	Md Drilling	08 -- 1950	365	F	203	H	300CCKV
HO Bd 4	--	Ireland, Carroll	Edward Brown	1950	535	S	173	H	400BLMR
HO Bd 5	HO-00-7266	Newcomer, Earle	Edward Brown	01-23-1951	560	H	50	H	300LCRV
HO Bd 6	HO-00-1001	Amoss, C O	Edward Brown	12-03-1946	500	S	68	H	300SKVL
HO Bd 7	HO-00-4991	Miles, James	Edward Brown	01-16-1950	520	S	80	H	300MRGR
HO Bd 8	HO-00-3373	Zoller, J M Jr	Edward Brown	12-10-1948	430	H	124	H	300PGMT
HO Bd 9	HO-00-3329	Anderson, Catherine H	J Edmondson	10-22-1948	600	H	54.5	H	300SKVL
HO Bd 10	--	Ruth, Stephen W	Edmondson	1948	630	H	103	H	300LCRV
HO Bd 11	--	Dorsey, Romulos	Dewey Brown	1938	445	V	65	H	300LCRV
HO Bd 12	--	Garner, Charles R	Randallstown	1941	565	S	68	H	300STRS
HO Bd 13	HO-00-5672	Frank, Edward R Jr	J Edmondson	04-04-1950	545	H	50	H	400BLMR
HO Bd 14	--	University Of Md Farm	--	--	375	S	110	H,S	300CCKV
HO Bd 16	HO-73-0444	Lentz, John J	L F Easterday	11-14-1973	495	S	300	H	300LCRV
HO Bd 17	HO-73-0444	Lentz, John J	L F Easterday	11 -- 1973	500	S	260	U	300LCRV
HO Bd 19	HO-81-0407	McCabe, James J	Westminster	02-01-1984	580	F	103	H	300SKVL
HO Bd 20	HO-73-3984	Alger, Muriel	L F Easterday	09-17-1981	590	F	100	H	300SKVL
HO Bd 21	HO-73-4175	--	Westminster	06-03-1982	405	S	328	H	300LCRV
HO Bd 22	HO-81-2233	Polise, Louis	Ralph Mayne	09-01-1987	595	H	205	H	300MRGR
HO Bd 23	HO-81-1863	Sheets, Thomas Jr	L F Easterday	02-10-1987	585	S	160	H	300SKVL
HO Bd 24	HO-81-0232	Ho Co Bur of Highways	Joseph Mayne	09-02-1983	600	F	300	H	300LCRV
HO Bd 25	HO-73-4122	Ho Co Bur of Highways	Keyser-Garver	03-01-1982	585	S	350	H	300LCRV
HO Bd 26	HO-81-1729	Kramer, Wayne	L F Easterday	12-09-1986	610	H	400	H,S	300LCRV
HO Bd 27	HO-81-2101	Harris, Charles	Joseph Mayne	06-15-1987	620	H	325	H	300LCRV
HO Bd 28	HO-81-1503	Kelley, Ronald L	Joseph Mayne	06-17-1986	620	H	205	H	300LCRV
HO Bd 29	HO-81-0930	Myers, Richard	Ralph Mayne	03-26-1985	600	H	300	H	300MRGR
HO Bd 30	HO-73-4168	Nelson, Robert	L F Easterday	05-11-1982	620	S	400	H	300LCRV
HO Bd 31	HO-71-0109	Nelson, Robert	L F Easterday	04-12-1971	620	S	300	S	300LCRV
HO Bd 32	HO-73-0633	Fyock, Jack	Dillon Bros	04-22-1974	615	U	150	H	300MRGR
HO Bd 33	HO-81-1326	Herwig, Jeffrey	G E Harr Sons	02-26-1986	585	H	275	H	300MRGR
HO Bd 34	HO-81-0960	Blaney, Jerome	Westminster	04-12-1985	535	H	378	H	300MRGR
HO Bd 35	HO-81-2041	--	Joseph Mayne	05-22-1987	550	S	305	H	300UMFC
HO Bd 36	HO-81-0794	Keating, Joseph	Joseph Mayne	11-27-1984	555	V	305	H	300MRGR
HO Bd 37	HO-81-1513	Atkins, Eugene	Ralph Mayne	06-13-1986	605	H	245	H	300UMFC
HO Bd 38	HO-81-0983	Johnson, Herbert	Ralph Mayne	05-10-1985	605	F	160	H	300MRGR
HO Bd 39	HO-81-1135	Fyock, Jack	L F Easterday	09-06-1985	625	H	140	H	300MRGR
HO Bd 40	HO-67-0182	Ten Oaks Liquors	W Edmondson	12-15-1966	630	F	92	C	300MRGR
HO Bd 41	HO-73-1948	Laycock	G E Harr Sons	04-25-1977	630	H	200	H	300UMFC
HO Bd 42	HO-73-2615	--	Ralph Mayne	07-11-1978	635	H	185	H	300UMFC
HO Bd 43	HO-81-1569	Sullivan, Hanson	Ralph Mayne	07-28-1986	640	H	180	H	300MRGR
HO Bd 44	HO-81-1059	Rouiller, Charles	Ralph Mayne	06-11-1985	630	S	145	H	300MRGR
HO Bd 45	HO-69-0216	Glenelg Methodist Ch	L F Easterday	06-16-1969	620	S	100	H	300SKVL
HO Bd 46	HO-73-2095	--	L F Easterday	06-23-1977	605	S	120	H	300SKVL
HO Bd 47	HO-73-2166	--	L F Easterday	08-03-1977	620	S	100	H	300SKVL
HO Bd 48	HO-73-0413	Pipes, Harold	Ralph Mayne	01-08-1974	600	H	200	H	300SKVL
HO Bd 49	HO-81-0058	Pipes, Fred	S Bollinger	04-21-1983	600	F	85	H	300SKVL

Casing			Water level		Aquifer test					Other	
Depth (ft)	Diameter (in.)	Finish	Depth, ft below land surface	Date measured	Yield (gal/min)	Drawdown (ft)	Specific capacity [(gal/min)/ft]	Hours pumped	Date	data available	Well no.
45	6	X	23	12-19-1984	10	23	0.43	3	12-19-1984	--	HO Bc 278
59	6	X	30	07-17-1985	10	0	--	3	07-17-1985	--	HO Bc 279
48	6	X	32	01-12-1986	9	0	--	3	01-12-1986	--	HO Bc 280
21	6	X	30	11-08-1978	8	95	.08	6	11-08-1978	--	HO Bc 281
40	6	X	35	02-06-1978	9	65	.14	6	02-06-1978	--	HO Bc 282
39	6	X	50	08-11-1976	30	40	.75	6	08-11-1976	--	HO Bc 283
19	6	X	60	07-22-1976	1	240	<.01	3	07-22-1976	--	HO Bc 284
40	6	X	55	10-14-1981	2	210	.01	5	10-14-1981	--	HO Bc 285
82	6	X	60	12-10-1980	7	120	.06	3	12-10-1980	--	HO Bc 286
20	6	X	39	04-13-1987	5.5	17	.32	3	04-13-1987	--	HO Bc 287
60	6	X	30	12-11-1986	10	0	--	3	12-11-1986	--	HO Bc 288
19	6	X	20	10-22-1986	3	165	.02	6	10-22-1986	--	HO Bc 289
45	6	X	46	01-21-1987	15	0	--	3	01-21-1987	--	HO Bc 290
--	--	X	Dry	01 -- 1987	0	--	--	--	01 -- 1987	--	HO Bc 291
92	6	X	16	04-13-1987	12	0	--	3	04-13-1987	--	HO Bc 292
45	6	X	40	01-19-1987	15	160	.09	2	01-19-1987	--	HO Bc 293
28	6	X	40	02-02-1987	10	0	--	3	02-02-1987	Q	HO Bc 294
30	6	X	Dry	02-02-1987	0	--	--	--	02-02-1987	--	HO Bc 295
28	6	X	50	02-02-1987	.1	150	<.01	--	02-02-1987	--	HO Bc 296
28	6	X	50	02-02-1987	.25	230	<.01	--	02-02-1987	--	HO Bc 297
38	6	X	44	07-22-1987	8.5	20	.42	3	07-22-1987	--	HO Bc 298
20	6	X	30	05-20-1987	10	2	5.0	3	05-20-1987	--	HO Bc 299
43	6	X	55	05-27-1987	9	0	--	3	05-27-1987	--	HO Bc 300
28	6	X	45	05-30-1975	5	125	.04	2	05-30-1975	--	HO Bc 301
33	6	X	28	10-23-1987	10	0	--	3	10-23-1987	--	HO Bc 302
20.6	6	X	25	06-01-1989	17	1	17.0	3	06-01-1989	--	HO Bc 303
31	6	X	23	05-08-1984	15	0	--	3	05-08-1984	Q	HO Bc 304
48	60	W	39.53 S	10-24-1946	--	--	--	--	--	O	HO Bd 1
15	6	X	18	08 -- 1950	40	133	.30	20	08 -- 1950	--	HO Bd 2
16	6	X	18	08 -- 1950	40	133	.30	11	08 -- 1950	Q	HO Bd 3
58	6	X	30	1950	5	--	--	--	1950	Q	HO Bd 4
30	6	X	16	01-23-1951	5	24	.21	1	01-23-1951	--	HO Bd 5
32	--	X	40	12-03-1946	10	8	1.25	1	12-03-1946	--	HO Bd 6
56	6	X	12.60 S	06-20-1952	5	--	--	.5	01-16-1950	--	HO Bd 7
30	6	X	60	12-10-1948	10	30	.33	1	12-10-1948	--	HO Bd 8
33	6	X	34.20 S	--	20	--	--	1	10-22-1948	Q	HO Bd 9
--	6	-	50	07-24-1952	--	--	--	--	--	--	HO Bd 10
--	6	-	--	--	--	--	--	--	--	--	HO Bd 11
--	6	-	30.90 S	07-24-1952	--	--	--	--	--	--	HO Bd 12
--	6	-	20	04-04-1950	20	0	--	1.5	04-04-1950	--	HO Bd 13
--	6	-	90	1953	--	--	--	--	--	--	HO Bd 14
30	6	X	40	11-14-1973	1	260	<.01	2	11-14-1973	C	HO Bd 16
--	6	X	--	--	.25	--	--	--	11 -- 1973	--	HO Bd 17
87	6	F	30	02-01-1984	20	52	.38	3	02-01-1984	--	HO Bd 19
19	6	X	20	09-17-1981	60	80	.75	2	09-17-1981	--	HO Bd 20
81.2	6	X	66	06-03-1982	6.1	95	.06	4.5	06-03-1982	--	HO Bd 21
92	6	X	40	09-01-1987	10	11	.91	3	09-01-1987	--	HO Bd 22
76	6	X	20	02-10-1987	10	38	.26	3	02-10-1987	--	HO Bd 23
48	6	X	27	09-02-1983	5	91	.05	6	09-02-1983	--	HO Bd 24
41	6	X	27.8	03-01-1982	7	235.2	.03	12	03-01-1982	--	HO Bd 25
39	6	X	45	12-09-1986	2	77	.03	6	12-09-1986	--	HO Bd 26
69	6	X	20	06-15-1987	6	60	.10	3	06-15-1987	--	HO Bd 27
61	6	X	31	06-17-1986	10	64	.16	3	06-17-1986	--	HO Bd 28
53	6	X	25	03-26-1985	9	25	.36	3	03-26-1985	--	HO Bd 29
48	6	X	50	05-11-1982	2	350	.01	3	05-11-1982	--	HO Bd 30
61	6	X	40	04-12-1971	1	260	<.01	1	04-12-1971	--	HO Bd 31
80	6	X	25	04-22-1974	20	25	.80	6	04-22-1974	--	HO Bd 32
48	6	X	25.75	02-26-1986	15	77	.19	3	02-26-1986	--	HO Bd 33
121	6	X	38	04-12-1985	10	290	.03	3	04-12-1985	--	HO Bd 34
66	6	X	10	05-22-1987	2.4	193	.01	6	05-22-1987	--	HO Bd 35
35	6	X	7	11-27-1984	6	83	.07	3	11-27-1984	--	HO Bd 36
48	6	X	20	06-13-1986	5	85	.06	3	06-13-1986	--	HO Bd 37
85	6	X	46	05-10-1985	9	6	1.50	3	05-10-1985	--	HO Bd 38
43	6	X	40	09-06-1985	8	5	1.60	3	09-06-1985	--	HO Bd 39
72	6	X	32	12-15-1966	11	8	1.37	4	12-15-1966	--	HO Bd 40
70	6	X	51	04-25-1977	3	129	.02	6	04-25-1977	--	HO Bd 41
21	6	X	50	07-11-1978	6	135	.04	6	07-11-1978	--	HO Bd 42
110	6	X	30	07-28-1986	6	40	.15	3	07-28-1986	--	HO Bd 43
58	6	X	20	06-11-1985	10	0	--	3	06-11-1985	--	HO Bd 44
33	6	X	30	06-16-1969	30	70	.43	.5	06-16-1969	--	HO Bd 45
24	6	X	25	06-23-1977	8	95	.08	2	06-23-1977	--	HO Bd 46
40	6	X	45	08-03-1977	12	55	.22	2	08-03-1977	--	HO Bd 47
34	6	X	65	01-08-1974	3	135	.02	2	01-08-1974	--	HO Bd 48
26	6	X	30	04-21-1983	12	1	12.0	3	04-21-1983	--	HO Bd 49

Table 1.—Records of selected wells in Howard County—Continued

Well no.	Well permit no.	Owner or name	Driller	Date of construction	Altitude of land surface (ft)	Topo-graphic setting	Depth Drilled (ft)	Use of water	Geologic unit
HO Bd 50	HO-81-0317	Menz, Bruce	L F Easterday	11-17-1983	585	H	160	H	300SKVL
HO Bd 51	HO-81-0312	Pipes, Fred	S Bollinger	11-21-1983	570	H	85	H	300SKVL
HO Bd 52	HO-73-3274	Manley, Sidney G	Ralph Mayne	07-05-1979	560	F	50	H	300SKVL
HO Bd 53	HO-81-0060	Neville, Joseph	S Bollinger	04-22-1983	595	H	165	H	300SKVL
HO Bd 54	HO-81-1710	Halsor, J W	Ralph Mayne	11-17-1986	600	S	145	H	300SKVL
HO Bd 55	HO-73-3851	--	Dillon Bros	04-16-1981	580	S	145	H	300SKVL
HO Bd 56	HO-81-0085	Curington, Terry G	Westminster	05-19-1983	565	H	115	H	300SKVL
HO Bd 57	HO-81-0230	--	Westminster	08-23-1983	570	H	214	H	300SKVL
HO Bd 58	HO-73-3850	--	Dillon Bros	05-06-1981	585	F	245	H	300SKVL
HO Bd 59	HO-73-3038	Hurd, William	Md Drilling	01-09-1978	580	S	128	H	300SKVL
HO Bd 60	HO-73-0697	Sewell, Arnold	Ralph Mayne	08-08-1974	600	H	64	H	300SKVL
HO Bd 61	HO-73-0577	Rhine, John L	L F Easterday	12-13-1973	595	S	100	S	300SKVL
HO Bd 62	HO-81-0532	U Chesapeake Fm Cr Svc	Westminster	05-18-1984	565	S	103	C	300MRGR
HO Bd 63	HO-73-2185	John Wilson Lumber Co	L F Easterday	07-19-1977	600	H	100	H	300UMFC
HO Bd 64	HO-81-0756	Lindenhof Nursery	L F Easterday	11-09-1984	540	S	260	I	300SKVL
HO Bd 65	HO-81-0999	Lindenhof Nursery	L F Easterday	05-02-1985	540	S	300	I	300SKVL
HO Bd 66	HO-73-3950	Nido, Jay	Ralph Mayne	08-14-1981	580	H	145	H	300SKVL
HO Bd 67	HO-73-2694	Wisch, Robert E	Westminster	05-23-1978	570	S	160	H	300SKVL
HO Bd 68	HO-73-2091	--	L F Easterday	07-13-1977	570	U	100	H	300SKVL
HO Bd 69	HO-73-2026	Allen, John C	Westminster	04-29-1977	550	S	275	H	300SKVL
HO Bd 70	HO-73-4217	Ohlmacher, John	Westminster	07-20-1982	570	H	278	H	300SKVL
HO Bd 71	HO-73-1367	Lancaster, Bruce	Dillon Bros	06-01-1976	530	H	125	H	300SKVL
HO Bd 72	HO-73-1944	Ahlquist, David	Alton Keyser	04-18-1977	560	H	75	H	300SKVL
HO Bd 73	HO-73-1993	Fox, Herbert	L F Easterday	05-24-1977	515	H	260	H	300SKVL
HO Bd 74	HO-73-0856	Feldman, A G	Joseph Mayne	11-01-1974	510	H	240	H	300SKVL
HO Bd 75	HO-73-1047	--	L F Easterday	07-31-1975	540	H	145	H	300SKVL
HO Bd 76	HO-81-0326	--	L F Easterday	11-15-1983	560	S	160	H	300SKVL
HO Bd 77	HO-73-0502	Hackett, Lew	L F Easterday	01-28-1974	575	S	80	H	300SKVL
HO Bd 78	HO-81-0158	Swift, William W	G E Harr Sons	07-15-1983	570	S	100	H	300SKVL
HO Bd 79	HO-81-1369	Breeden, Ernest	Ralph Mayne	03-25-1986	545	H	100	H	300SKVL
HO Bd 80	HO-73-1943	--	L F Easterday	04-22-1977	510	H	100	H	300SKVL
HO Bd 81	HO-73-2289	Arrington, Neville	L F Easterday	10-07-1977	525	H	120	H	300SKVL
HO Bd 82	HO-73-0978	Zindel, Butch	L F Easterday	04-17-1975	550	H	120	H	300SKVL
HO Bd 83	HO-81-1672	Burford, Rodney	Joseph Mayne	10-10-1986	605	H	325	H	300MRGR
HO Bd 84	HO-81-0674	Young, Irvin L	L F Easterday	11-02-1984	595	S	300	H	300UMFC
HO Bd 85	HO-73-1664	Frye, Verlin	Keyser-Garver	10-22-1976	590	S	283	H	300UMFC
HO Bd 86	HO-81-1199	Gross, Edward J	Ralph Mayne	10-11-1985	620	S	260	C	300MRGR
HO Bd 87	HO-73-4094	Ten Oaks Plaza	L F Easterday	02-24-1982	630	F	300	C	300MRGR
HO Bd 88	HO-73-4141	Ten Oaks Plaza	L F Easterday	03-03-1982	630	F	260	C	300MRGR
HO Bd 89	HO-73-4095	Eyre Bus Service Inc	L F Easterday	02-24-1982	630	F	300	C	300MRGR
HO Bd 90	HO-70-0021	Nixon's Farm	L F Easterday	08-27-1969	505	S	300	H	300LCRV
HO Bd 91	HO-73-3853	Campbell, Donald L	Ralph Mayne	04-16-1981	440	S	325	A,H	300LCRV
HO Bd 92	HO-81-0233	Farina, Glenn	Ralph Mayne	08-18-1983	515	S	200	H	300LCRV
HO Bd 93	HO-73-3327	Dieck, William F	Westminster	07-11-1979	530	H	177	H	300MRGR
HO Bd 94	HO-81-1426	Grimes, Larry	Joseph Mayne	04-30-1986	550	H	105	H	300MRGR
HO Bd 95	HO-70-0008	Howard Co Fair Assoc	L F Easterday	07-18-1969	530	S	100	C	300SKVL
HO Bd 96	HO-81-0423	Howard Co Fair Assoc	L F Easterday	04-16-1984	505	V	100	C	300SKVL
HO Bd 97	HO-81-1023	Sybert, Cornelius	L F Easterday	07-05-1985	545	H	300	H	300SKVL
HO Bd 98	HO-73-0718	--	G E Harr Sons	08-12-1974	505	H	200	H	300LCRV
HO Bd 99	HO-81-1124	Slack, George	Ralph Mayne	08-09-1985	605	H	240	H	300LCRV
HO Bd 100	HO-81-0298	Lookingland, Alfred W	Westminster	11-02-1983	585	H	205	H	300LCRV
HO Bd 101	HO-81-0468	--	Ralph Mayne	04-12-1984	620	H	300	H	300LCRV
HO Bd 102	HO-67-0246	St James Methodist Ch	Edward Brown	05-11-1967	625	H	250	H	300LCRV
HO Bd 103	HO-73-2537	--	L F Easterday	02-24-1978	650	S	120	H	--
HO Bd 104	HO-73-3318	Sandosky, Harry	L F Easterday	03-20-1980	660	H	180	H	--
HO Bd 105	HO-73-2505	Skroupa	L F Easterday	02-16-1978	610	H	180	H	300MRGR
HO Bd 106	HO-73-3961	Dreyer, Horst A	S Bollinger	07-21-1981	585	S	145	H	300UMFC
HO Bd 107	HO-73-3023	Dillard, Gene	L F Easterday	12-21-1978	565	S	180	H	300UMFC
HO Bd 108	HO-73-3362	Mitchell, Bill	L F Easterday	06-27-1979	650	H	400	H	300LCRV
HO Bd 109	HO-81-1563	Day, Michael	Ralph Mayne	06-27-1986	645	H	360	H	300LCRV
HO Bd 110	HO-81-0783	Fee, Barry	Westminster	11-09-1984	645	H	203	H	300LCRV
HO Bd 111	HO-81-2005	Crest Lawn Mem Gardens	G E Harr Sons	05-20-1987	645	H	300	C	300LCRV
HO Bd 112	HO-73-2371	Crest Lawn Mem Gardens	Dillon Bros	11-11-1977	600	S	125	H	300LCRV
HO Bd 113	HO-73-1709	Hutchinson, Willis S	Dillon Bros	11-02-1976	585	S	150	H	300LCRV
HO Bd 114	HO-81-1171	Gallina, Sam S	Ralph Mayne	09-20-1985	620	S	305	H	300LCRV
HO Bd 115	HO-73-1562	--	Westminster	09-09-1976	620	S	336	H	300LCRV
HO Bd 116	HO-81-2057	Warfield, J Gordon	L F Easterday	05-11-1987	585	S	300	H	300LCRV
HO Bd 117	HO-73-0830	Stafford, Robert	Joseph Mayne	10-28-1974	580	S	200	H	300LCRV
HO Bd 118	HO-73-1932	Zimmerman, Carl	L F Easterday	04-22-1977	600	S	145	H	300LCRV
HO Bd 119	HO-81-1162	Nacci, Peter J	L F Easterday	09-23-1985	600	S	300	H	300LCRV
HO Bd 120	HO-73-2701	Early, Jeremiah C	Joseph Mayne	06-11-1978	525	S	305	H	300LCRV
HO Bd 121	HO-73-2701	Early, Jeremiah C	Joseph Mayne	06-11-1978	525	S	425	U	300LCRV
HO Bd 122	HO-73-2701	Early, Jeremiah C	Joseph Mayne	06-11-1978	535	S	350	U	300LCRV
HO Bd 123	HO-73-2701	Early, Jeremiah C	Joseph Mayne	06-11-1978	540	S	185	U	300LCRV
HO Bd 124	HO-73-0462	--	L F Easterday	10-08-1973	585	S	200	H	300LCRV

Casing			Water level		Aquifer test					Other data available	Well no.
Depth (ft)	Diameter (in.)	Finish	Depth, ft below land surface	Date measured	Yield (gal/min)	Drawdown (ft)	Specific capacity [(gal/min)/ft]	Hours pumped	Date		
21	6	X	34	11-17-1983	12	1	12.0	3	11-17-1983	--	HO Bd 50
41	6	X	21	11-21-1983	15	1	15.0	3	11-21-1983	--	HO Bd 51
20	6	X	30	07-05-1979	20	20	1.0	3	07-05-1979	--	HO Bd 52
38	6	X	36	04-22-1983	4	74	.05	3	04-22-1983	--	HO Bd 53
38	6	X	27	11-17-1986	6	38	.16	3	11-17-1986	--	HO Bd 54
42	6	X	30	04-16-1981	20	45	.44	6	04-16-1981	--	HO Bd 55
53	6	X	23	05-19-1983	12.8	4	3.20	3	05-19-1983	--	HO Bd 56
91	6	X	28	08-23-1983	17.1	45	.38	3	08-23-1983	--	HO Bd 57
45	6	X	40	05-06-1981	6	160	.04	6	05-06-1981	--	HO Bd 58
41	6	X	36	01-09-1978	75	44	1.70	2	01-09-1978	--	HO Bd 59
30	6	X	40	08-08-1974	8	24	.33	2	08-08-1974	--	HO Bd 60
35	6	X	30	12-13-1973	30	70	.43	1	12-13-1973	--	HO Bd 61
63	6	X	8	05-18-1984	15	23	.65	3	05-18-1984	--	HO Bd 62
25	6	X	40	07-19-1977	40	60	.67	2	07-19-1977	--	HO Bd 63
48	6	X	50	11-09-1984	5	210	.02	3	11-09-1984	--	HO Bd 64
38	6	X	50	05-02-1985	6	250	.02	3	05-02-1985	--	HO Bd 65
20	6	X	80	08-14-1981	15	65	.23	4	08-14-1981	--	HO Bd 66
56	6	X	37	05-23-1978	6	68	.09	6	05-23-1978	--	HO Bd 67
19	6	X	25	07-13-1977	20	75	.27	2	07-13-1977	--	HO Bd 68
72	6	X	74	04-29-1977	20	177	.11	6	04-29-1977	--	HO Bd 69
64.3	6	X	44	07-20-1982	8.5	158	.05	3	07-20-1982	--	HO Bd 70
35	6	X	35	06-01-1976	20	35	.57	6	06-01-1976	--	HO Bd 71
21	6	X	25	04-18-1977	40	40	1.0	2	04-18-1977	--	HO Bd 72
71	6	X	40	05-24-1977	10	220	.05	3	05-24-1977	--	HO Bd 73
93	6	X	45	11-01-1974	12	190	.06	2	11-01-1974	--	HO Bd 74
95	6	X	45	07-31-1975	20	100	.20	1	07-31-1975	--	HO Bd 75
61	6	X	23	11-15-1983	5	31	.16	3	11-15-1983	--	HO Bd 76
21	6	X	30	01-28-1974	10	50	.20	1	01-28-1974	Q	HO Bd 77
36	6	X	25	07-15-1983	17.1	2	8.55	3	07-15-1983	--	HO Bd 78
19	6	X	25	03-25-1986	10	0	--	3	03-25-1986	--	HO Bd 79
19	6	X	40	04-22-1977	50	60	.83	2	04-22-1977	--	HO Bd 80
74	6	X	30	10-07-1977	30	90	.33	2	10-07-1977	--	HO Bd 81
20	6	X	45	04-17-1975	10	75	.13	1	04-17-1975	--	HO Bd 82
50	6	X	27	10-10-1986	4	127	.03	3	10-10-1986	--	HO Bd 83
26	6	X	50	11-02-1984	20	250	.08	4	11-02-1984	--	HO Bd 84
46	6	X	15	10-22-1976	3	10	.30	2	10-22-1976	--	HO Bd 85
30	6	X	55	10-11-1985	7	0	--	3	10-11-1985	--	HO Bd 86
86	6	X	45	02-24-1982	6	255	.02	3	02-24-1982	--	HO Bd 87
75	6	X	40	03-03-1982	1	220	<.01	3	03-03-1982	--	HO Bd 88
61	6	X	40	02-24-1982	20	260	.08	3	02-24-1982	--	HO Bd 89
42	6	X	70	08-27-1969	2	230	.01	1	08-27-1969	--	HO Bd 90
64	6	X	60	04-16-1981	2	265	.01	6	04-16-1981	--	HO Bd 91
28	6	X	25	08-18-1983	9	175	.05	3	08-18-1983	--	HO Bd 92
62	6	X	73	07-11-1979	6	49	.12	4	07-11-1979	--	HO Bd 93
51	6	X	15	04-30-1986	12	20	.60	3	04-30-1986	--	HO Bd 94
35	6	X	28	07-18-1969	15	72	.21	1	07-18-1969	--	HO Bd 95
27	6	X	20	04-16-1984	60	80	.75	2	04-16-1984	--	HO Bd 96
61	6	X	45	07-05-1985	2	125	.02	6	07-05-1985	--	HO Bd 97
25	6	X	29	08-12-1974	10	5	2.0	6	08-12-1974	--	HO Bd 98
66	6	X	40	08-09-1985	2	130	.02	6	08-09-1985	--	HO Bd 99
43	6	X	40	11-02-1983	9.2	34	.27	3	11-02-1983	--	HO Bd 100
28	6	X	32	04-12-1984	3	268	.01	6	04-12-1984	--	HO Bd 101
81	6	X	40	05-11-1967	2.5	--	--	2	05-11-1967	--	HO Bd 102
58	6	X	35	02-24-1978	12	85	.14	2	02-24-1978	--	HO Bd 103
89	6	X	40	03-20-1980	4	140	.03	2	03-20-1980	--	HO Bd 104
61	6	X	70	02-16-1978	8	110	.07	2	02-16-1978	--	HO Bd 105
20	6	X	35	07-21-1981	14	110	.13	2	07-21-1981	--	HO Bd 106
20	6	X	40	12-21-1978	4	140	.03	2	12-21-1978	--	HO Bd 107
65	6	X	50	06-27-1979	1	350	<.01	4	06-27-1979	--	HO Bd 108
56	6	X	45	06-27-1986	2	215	.01	6	06-27-1986	--	HO Bd 109
56.6	6	X	48	11-09-1984	7	78	.09	3	11-09-1984	--	HO Bd 110
52	6	X	67.5	05-20-1987	2.31	169.2	.01	6	05-20-1987	--	HO Bd 111
36	6	X	35	11-11-1977	4	85	.05	6	11-11-1977	--	HO Bd 112
35	6	X	35	11-02-1976	6	90	.07	6	11-02-1976	--	HO Bd 113
44	6	X	48	09-20-1985	2	107	.02	6	09-20-1985	--	HO Bd 114
61	6	X	215	09-09-1976	3.5	93	.04	6	09-09-1976	--	HO Bd 115
78	6	X	44	05-11-1987	2	52	.04	6	05-11-1987	--	HO Bd 116
43	6	X	45	10-28-1974	5	150	.03	2	10-28-1974	--	HO Bd 117
52	6	X	40	04-22-1977	5	105	.05	2	04-22-1977	--	HO Bd 118
68	6	X	30	09-23-1985	3	70	.04	6	09-23-1985	--	HO Bd 119
28	6	X	65	06-11-1978	1	240	<.01	1	06-11-1978	--	HO Bd 120
--	--	X	Dry	06-11-1978	0	--	--	--	06-11-1978	--	HO Bd 121
--	--	X	Dry	06-11-1978	0	--	--	--	06-11-1978	--	HO Bd 122
--	--	X	Dry	06-11-1978	0	--	--	--	06-11-1978	--	HO Bd 123
44	6	X	75	10-08-1973	3	125	.02	1	10-08-1973	--	HO Bd 124

Table 1.—Records of selected wells in Howard County—Continued

Well no.	Well permit no.	Owner or name	Driller	Date of construction	Altitude of land surface (ft)	Topo-graphic setting	Depth Drilled (ft)	Use of water	Geologic unit
HO Bd 125	HO-73-0659	Boies	L F Easterday	06-20-1974	605	S	300	H	300LCRV
HO Bd 126	HO-81-1197	Sowers, Harry T	W W Reichart	10-31-1985	600	S	600	H	300LCRV
HO Bd 127	HO-81-1197	Sowers, Harry T	W W Reichart	10-31-1985	605	S	300	U	300LCRV
HO Bd 128	HO-81-1197	Sowers, Harry T	W W Reichart	10-31-1985	605	S	300	U	300LCRV
HO Bd 129	HO-81-1197	Sowers, Harry T	W W Reichart	10-31-1985	605	S	425	U	300LCRV
HO Bd 130	HO-81-0218	Feaga, J Emerson	W W Reichart	08-04-1983	625	H	300	H	300LCRV
HO Bd 131	HO-73-1433	Pallan, Thomas D	H Edmondson	04-26-1976	605	S	100	H	300LCRV
HO Bd 132	HO-73-2245	Ramsburg, Everett	Joseph Mayne	08-22-1977	600	S	105	H	300LCRV
HO Bd 133	--	Ramsburg, Everett	Joseph Mayne	1977	600	S	--	U	300LCRV
HO Bd 134	--	Ramsburg, Everett	Joseph Mayne	1977	600	S	--	U	300LCRV
HO Bd 135	--	Ramsburg, Everett	Joseph Mayne	1977	600	S	--	U	300LCRV
HO Bd 136	--	Ramsburg, Everett	Joseph Mayne	1977	600	S	--	U	300LCRV
HO Bd 137	HO-73-3550	Ramsburg, Everett	Westminster	02-06-1980	585	S	425	H	300LCRV
HO Bd 138	HO-81-2117	Martin, Gerald	Joseph Mayne	09-10-1987	555	S	140	H	300LCRV
HO Bd 139	HO-73-2375	Klein, Peter	Westminster	11-07-1977	610	H	477	H	300LCRV
HO Bd 140	HO-73-1027	Klein, Peter	A P Edmondson	06-07-1975	610	H	100	U	300LCRV
HO Bd 141	HO-73-1171	Taylor, Herman	A P Edmondson	11-10-1975	615	H	90	U	300LCRV
HO Bd 142	HO-73-3925	Taylor, Herman	Westminster	06-30-1981	615	H	503	H	300LCRV
HO Bd 143	HO-81-2062	Horman, Caroline	Ralph Mayne	05-05-1987	620	H	205	H	300LCRV
HO Bd 144	HO-81-1082	--	Westminster	07-05-1985	560	S	175	H	300LCRV
HO Bd 145	HO-73-4173	Chastant, Lloyd J	L F Easterday	05-13-1982	560	S	140	H	300STRS
HO Bd 146	HO-73-3931	Chastant, Lloyd J	L F Easterday	08-18-1981	570	H	400	U	300STRS
HO Bd 147	HO-73-3931	Chastant, Lloyd J	L F Easterday	08-18-1981	570	H	150	U	300STRS
HO Bd 148	HO-73-3931	Chastant, Lloyd J	L F Easterday	08-18-1981	570	H	250	U	300STRS
HO Bd 149	HO-73-2779	Chastant, Lloyd J	L F Easterday	06-15-1978	570	H	160	U	300STRS
HO Bd 150	HO-81-0679	Horman, Austin	L F Easterday	08-29-1984	625	H	400	H	300LCRV
HO Bd 151	HO-81-0735	Horman, Austin	L F Easterday	01-28-1985	620	H	500	U	300LCRV
HO Bd 152	--	Horman, Austin	L F Easterday	1984	615	H	--	U	300LCRV
HO Bd 153	--	Horman, Austin	L F Easterday	1984	615	H	--	U	300LCRV
HO Bd 154	HO-73-3613	--	Joseph Mayne	06-05-1980	445	S	225	H	400BLMR
HO Bd 155	HO-73-2112	Montgomery, Paul	Joseph Mayne	06-14-1977	455	S	305	H	400BLMR
HO Bd 156	HO-81-1553	Grayson, Floyd	L F Easterday	07-01-1986	445	S	140	H	400BLMR
HO Bd 157	HO-73-1960	Kochis, Paul	L F Easterday	08-03-1977	458	S	160	H	400BLMR
HO Bd 158	HO-73-0713	Dressel, Michael	Dillon Bros	06-30-1974	441	H	200	H	400BLMR
HO Bd 159	HO-73-1942	Beal, Robert	L F Easterday	04-07-1977	425	S	140	H	400BLMR
HO Bd 160	HO-73-0957	Hoyer, Leroy	Dillon Bros	05-05-1975	425	S	200	H	400BLMR
HO Bd 161	HO-73-0975	--	L F Easterday	04-17-1975	400	S	240	H	400BLMR
HO Bd 162	HO-73-2314	Kohr, Richard	Westminster	09-21-1977	480	H	202	H	300STRS
HO Bd 163	HO-73-1794	--	L F Easterday	01-25-1977	490	H	200	H	300STRS
HO Bd 164	HO-73-3749	Goldsmith, Don	S Bollinger	12-08-1980	510	H	400	H	300STRS
HO Bd 165	HO-73-2535	Grayson, Floyd	Dillon Bros	02-28-1978	505	S	200	H	300LCRV
HO Bd 166	HO-73-1328	Scheel, Albert Jr	L F Easterday	02-12-1976	515	S	140	H	300LCRV
HO Bd 167	HO-73-2461	Vendemia, Salvatore	Alton Keyser	12-23-1977	565	S	215	H	300LCRV
HO Bd 168	HO-73-3206	--	L F Easterday	04-23-1979	580	S	300	H	300LCRV
HO Bd 169	HO-81-1687	Rosewag, Charles F	Joseph Mayne	10-01-1986	570	H	105	H	300LCRV
HO Bd 170	HO-73-0221	Schramm, Henry	G E Harr Sons	04-18-1973	520	S	150	H	300LCRV
HO Bd 171	HO-73-1430	Sanetrik, Raymond	Harley Drlg	05-21-1976	510	S	150	U	300LCRV
HO Bd 172	HO-73-2845	Mercer, Philip T	Md Drilling	07-26-1978	500	S	130	H	300LCRV
HO Bd 173	HO-73-2566	Droppa, Larry D	C C Campbell	04-04-1978	545	S	245	H	300LCRV
HO Bd 174	HO-73-2011	--	Joseph Mayne	05-12-1977	585	H	325	H	300LCRV
HO Bd 175	HO-81-0009	Osborn, Hamish	Ralph Mayne	03-17-1983	440	S	190	H	400BLMR
HO Bd 176	HO-73-3992	Toles, John S	L F Easterday	09-21-1981	455	S	120	H	400BLMR
HO Bd 177	HO-73-0422	Hoffman, W	Dillon Bros	04-05-1974	485	S	250	H	400BLMR
HO Bd 178	HO-73-3582	Maeze, Cale	L F Easterday	03-28-1980	415	S	160	H	400BLMR
HO Bd 179	HO-73-2304	Brown, Johnson	G E Harr Sons	10-10-1977	390	S	175	H	400BLMR
HO Bd 180	HO-81-1087	Setzer, Donald	L F Easterday	07-03-1986	420	S	180	H	300LCRV
HO Bd 181	HO-81-0577	Launder, William J	L F Easterday	07-10-1984	430	S	300	H	300LCRV
HO Bd 182	HO-81-1687	Rosewag, Charles F	Joseph Mayne	10-01-1986	570	H	325	U	300LCRV
HO Bd 183	HO-81-2184	Sanetrik, Raymond	Westminster	07-22-1987	510	S	178	H	300LCRV
HO Bd 184	HO-81-2184	Sanetrik, Raymond	Westminster	07-22-1987	510	S	253	U	300LCRV
HO Bd 185	HO-73-1654	--	G E Harr Sons	12-06-1976	385	S	310	H	400BLMR
HO Bd 186	HO-73-2799	Mahendra, Sha	Dillon Bros	06-12-1978	400	H	250	H	300STRS
HO Bd 187	HO-73-1383	Montgomery, Paul	Joseph Mayne	04-01-1976	419	S	165	H	400BLMR
HO Bd 189	HO-73-3985	Jackson, Michael	L F Easterday	08-31-1988	420	H	460	H,S	300STRS
HO Bd 190	HO-73-2625	Fisher, John H Jr	G E Harr Sons	06-09-1981	420	H	450	H	300STRS
HO Bd 191	HO-81-1066	Lloyd, Thomas	L F Easterday	07-01-1985	390	H	300	H	300LCRV
HO Bd 192	HO-73-0721	Dobbyn, Ronald C	L F Easterday	07-17-1974	405	S	200	H	400BLMR
HO Bd 193	HO-73-0920	Chaney, Harry M	L F Easterday	02-04-1975	420	S	120	H	400BLMR
HO Bd 194	HO-72-0240	Snively, William F	Harry Green	08-01-1972	480	H	165	H	400BLMR
HO Bd 195	HO-81-0010	Glasgow, William	L F Easterday	03-18-1983	490	S	160	H	400BLMR
HO Bd 196	HO-73-3597	--	S Bollinger	05-06-1980	480	S	105	H	400BLMR
HO Bd 197	HO-73-1718	Kraus, John P	G E Harr Sons	01-28-1977	500	H	225	H	400BLMR
HO Bd 198	HO-73-4131	Pongsiri, Dhara	L F Easterday	03-31-1982	430	S	220	H	400BLMR
HO Bd 199	HO-73-0425	Malayaman, Chutiporn	L F Easterday	02-28-1984	455	S	300	H	400BLMR

Casing			Water level		Aquifer test					Other	
Depth (ft)	Diameter (in.)	Finish	Depth, ft below land surface	Date measured	Yield (gal/min)	Drawdown (ft)	Specific capacity [(gal/min)/ft]	Hours pumped	Date	data available	Well no.
23	6	X	50	06-20-1974	2	250	0.01	1	06-20-1974	--	HO Bd 125
20	6	X	30	10-31-1985	1	470	<.01	8	10-31-1985	--	HO Bd 126
--	--	X	Dry	10-31-1985	0	--	--	--	10-31-1985	--	HO Bd 127
--	--	X	--	--	--	--	--	--	--	--	HO Bd 128
--	--	X	Dry	10-31-1985	0	--	--	--	10-31-1985	--	HO Bd 129
53	6	X	45	08-04-1983	1	230	<.01	7	08-04-1983	--	HO Bd 130
28	6	X	35	04-26-1976	8	5	1.60	6	04-26-1976	--	HO Bd 131
22	6	X	35	08-22-1977	6	65	.09	2	08-22-1977	--	HO Bd 132
--	--	X	Dry	1977	0	--	--	--	1977	--	HO Bd 133
--	--	X	Dry	1977	0	--	--	--	1977	--	HO Bd 134
--	--	X	Dry	1977	0	--	--	--	1977	--	HO Bd 135
--	--	X	Dry	1977	0	--	--	--	1977	--	HO Bd 136
43	6	X	100	02-06-1980	3	189	.02	6	02-06-1980	--	HO Bd 137
48	6	X	24	09-10-1987	5	76	.07	3	09-10-1987	--	HO Bd 138
43	6	X	50	11-07-1977	3.5	374	.01	6	11-07-1977	--	HO Bd 139
35	6	X	35	06-07-1975	6	15	.40	2	06-07-1975	--	HO Bd 140
30	6	X	41.33 S	06-29-1988	12	5	2.40	3	11-10-1975	O	HO Bd 141
62.5	6	X	100	06-30-1981	4.75	324	.01	6	06-30-1981	--	HO Bd 142
34	6	X	40	05-05-1987	6	65	.09	3	05-05-1987	--	HO Bd 143
117	6	X	40	07-05-1985	12	43	.28	3	07-05-1985	--	HO Bd 144
39	6	X	42	05-13-1982	40	98	.41	3	05-13-1982	--	HO Bd 145
19	6	X	55	08-18-1981	1	345	<.01	6	08-18-1981	--	HO Bd 146
--	--	X	Dry	08-18-1981	0	--	--	--	08-18-1981	--	HO Bd 147
--	--	X	Dry	08-18-1981	0	--	--	--	08-18-1981	--	HO Bd 148
23	6	X	35	06-15-1978	6	125	.05	2	06-15-1978	--	HO Bd 149
61	6	X	44	08-29-1984	3	71	.04	6	08-29-1984	Q	HO Bd 150
46	6	X	48.60 S	08-19-1988	1	480	<.01	6.5	01-28-1985	L,O	HO Bd 151
--	--	X	Dry	1984	0	--	--	--	1984	--	HO Bd 152
--	--	X	Dry	1984	0	--	--	--	1984	--	HO Bd 153
40	6	X	60	06-05-1980	10	160	.06	2	06-05-1980	--	HO Bd 154
53	6	X	45	06-14-1977	2	255	.01	2	06-14-1977	--	HO Bd 155
22	6	X	22	07-01-1986	8	21	.38	3	07-01-1986	--	HO Bd 156
22	6	X	30	08-03-1977	4	130	.03	3	08-03-1977	--	HO Bd 157
38	6	X	40	06-30-1974	2	160	.01	6	06-30-1974	--	HO Bd 158
38	6	X	40	04-07-1977	8	100	.08	2	04-07-1977	--	HO Bd 159
37	6	X	40	05-05-1975	8	150	.05	6	05-05-1975	--	HO Bd 160
20	6	X	15	04-17-1975	5	225	.02	2	04-17-1975	--	HO Bd 161
32	6	X	37	09-21-1977	8	162	.05	6	09-21-1977	--	HO Bd 162
49	6	X	40	01-25-1977	4	160	.02	2	01-25-1977	--	HO Bd 163
21	6	X	60	12-08-1980	1	340	<.01	6	12-08-1980	--	HO Bd 164
43	6	X	35	02-28-1978	15	40	.38	6	02-28-1978	--	HO Bd 165
106	6	X	30	02-12-1976	50	110	.45	2	02-12-1976	--	HO Bd 166
62	6	X	40	12-23-1977	8	170	.05	3	12-23-1977	--	HO Bd 167
26	6	X	40	04-23-1979	2	260	.01	2	04-23-1979	--	HO Bd 168
65	6	X	46	10-01-1986	12	10	1.20	3	10-01-1986	--	HO Bd 169
30	6	X	21	04-18-1973	50	119	.42	6	04-18-1973	--	HO Bd 170
65	6	X	27.92 S	11-03-1988	5	110	.05	3	05-21-1976	O	HO Bd 171
38	6	X	35	07-26-1978	6	60	.10	3	07-26-1978	--	HO Bd 172
73	6	X	40	04-04-1978	3	80	.04	6	04-04-1978	--	HO Bd 173
58	6	X	55	05-12-1977	1	265	<.01	2	05-13-1977	--	HO Bd 174
58	6	X	38	03-17-1983	6	152	.04	3	03-17-1983	--	HO Bd 175
26	6	X	30	09-21-1981	20	90	.22	2	09-21-1981	--	HO Bd 176
30	6	X	50	04-05-1974	2	190	.01	2	04-05-1974	--	HO Bd 177
39	6	X	20	03-28-1980	6	140	.04	3	03-28-1980	--	HO Bd 178
42	6	X	27	10-10-1977	4	123	.03	4	10-10-1977	--	HO Bd 179
132	6	X	34	07-03-1986	9	50	.18	3	07-03-1986	--	HO Bd 180
20	6	X	24	07-10-1984	10	68	.15	6	07-10-1984	--	HO Bd 181
--	--	X	Dry	10-01-1986	0	--	--	--	10-01-1986	--	HO Bd 182
90	6	X	51	07-22-1987	5	51	.10	3	07-22-1987	--	HO Bd 183
--	--	X	Dry	07-22-1987	0	--	--	--	07-22-1987	--	HO Bd 184
55	6	X	40	12-06-1976	9	235	.04	4	12-06-1976	--	HO Bd 185
36	6	X	40	06-12-1978	7	135	.05	6	06-12-1978	--	HO Bd 186
47	6	X	55	04-01-1976	6	105	.06	2	04-01-1976	--	HO Bd 187
28	6	X	90	08-31-1981	25	370	.07	6	08-31-1981	--	HO Bd 189
42	6	X	--	--	3	93	.03	6	03-21-1978	--	HO Bd 190
			74	06-09-1981	1	326	<.01	3	06-09-1981		
81	6	X	42	07-01-1985	8	144	.06	3	07-01-1985	--	HO Bd 191
19	6	X	10	07-17-1974	10	190	.05	2	07-17-1974	--	HO Bd 192
25	6	X	45	02-04-1975	5	75	.07	1	02-04-1975	--	HO Bd 193
28	6	X	35	08-01-1972	5	125	.04	2.5	08-01-1972	--	HO Bd 194
34	6	X	30	03-18-1983	10	9	1.11	3	03-18-1983	--	HO Bd 195
21	6	X	10	05-06-1980	20	95	.21	2	05-06-1980	--	HO Bd 196
40	6	X	32	01-28-1977	3	168	.02	6	01-28-1977	--	HO Bd 197
28	6	X	26	03-31-1982	12	20	.60	3	03-31-1982	--	HO Bd 198
23	6	X	26	02-28-1984	4	41	.10	3	02-28-1984	--	HO Bd 199

Table 1.—Records of selected wells in Howard County—Continued

Well no.	Well permit no.	Owner or name	Driller	Date of construction	Altitude of land surface (ft)	Topo-graphic setting	Depth Drilled (ft)	Use of water	Geologic unit
HO Bd 200	HO-73-0443	Malayaman, Chutiporn	L F Easterday	02-27-1984	455	S	400	U	400BLMR
HO Bd 201	HO-73-3341	--	Ralph Mayne	08-14-1979	440	S	125	H	400BLMR
HO Bd 202	HO-81-0079	Lee, James W	Ralph Mayne	11-15-1984	475	H	165	H	400BLMR
HO Bd 203	HO-73-1204	Mamaril, A G	G E Harr Sons	12-20-1975	485	S	175	H	400BLMR
HO Bd 204	HO-73-1401	Kitchen, Clarence	C C Campbell	04-05-1976	495	H	145	H	400BLMR
HO Bd 205	HO-73-0330	Wolf, John J	L F Easterday	01-14-1973	510	H	200	H	400BLMR
HO Bd 206	HO-81-0711	Kovach, Mark	Ralph Mayne	09-11-1984	490	H	205	H	400BLMR
HO Bd 207	HO-73-1870	Matthias, Dennis H	L F Easterday	04-12-1977	465	H	240	H	400BLMR
HO Bd 208	HO-73-1139	Brown, Harold G	Westminster	09-14-1975	440	U	398	H	400BLMR
HO Bd 209	HO-81-0619	Haines, William E	Ralph Mayne	07-16-1984	500	H	305	H	400BLMR
HO Bd 210	HO-81-1341	--	Tri County	02-20-1986	520	H	200	H	400BLMR
HO Bd 211	HO-81-0620	Weaver, Fred	Ralph Mayne	07-04-1984	510	U	200	H	400BLMR
HO Bd 212	HO-81-1371	Frey, Fred	Ralph Mayne	03-19-1986	500	S	180	H	400BLMR
HO Bd 213	HO-81-0386	Mikulis, Dwight	Ralph Mayne	01-05-1984	490	H	145	H	400BLMR
HO Bd 214	HO-73-1140	Glenelg Country School	Dillon Bros	09-18-1975	540	S	300	T	300STRS
HO Bd 215	HO-81-1113	Glenelg Country School	L F Easterday	08-22-1985	550	S	260	H	300STRS
HO Bd 216	HO-81-1686	Buescher, Thomas	Ralph Mayne	10-14-1986	520	S	405	H	300LCRV
HO Bd 217	HO-81-1567	Reuwer, Donald	Ralph Mayne	06-25-1986	565	H	200	U	300LCRV
HO Bd 218	HO-81-2151	McGovern, Kevin	Ralph Mayne	09-25-1987	560	S	400	H	300LCRV
HO Bd 219	HO-81-2151	McGovern, Kevin	Ralph Mayne	09-25-1987	575	S	--	U	300LCRV
HO Bd 220	HO-81-2151	McGovern, Kevin	Ralph Mayne	09-25-1987	580	S	--	U	300LCRV
HO Bd 221	HO-81-2151	McGovern, Kevin	Ralph Mayne	09-25-1987	580	S	--	U	300LCRV
HO Bd 222	HO-81-2151	McGovern, Kevin	Ralph Mayne	09-25-1987	575	S	--	U	300LCRV
HO Bd 223	HO-81-2151	McGovern, Kevin	Ralph Mayne	09-25-1987	570	S	--	U	300LCRV
HO Bd 224	HO-81-2151	McGovern, Kevin	Ralph Mayne	09-25-1987	565	S	--	U	300LCRV
HO Bd 225	HO-81-1943	--	Ralph Mayne	03-20-1987	600	H	205	H	300LCRV
HO Bd 226	HO-81-2211	--	Ralph Mayne	08-20-1987	615	H	405	H	300LCRV
HO Bd 227	HO-81-2211	--	Ralph Mayne	08-20-1987	620	H	--	U	300LCRV
HO Bd 228	HO-81-2211	--	Ralph Mayne	08-20-1987	620	H	--	U	300LCRV
HO Bd 229	HO-73-3927	Ludicke, Robert E	Joseph Mayne	06-01-1981	580	S	305	H	300LCRV
HO Bd 230	HO-81-0283	Pich, Michael W	Joseph Mayne	10-28-1983	605	H	500	H	300LCRV
HO Bd 231	HO-81-0283	Pich, Michael W	Joseph Mayne	10-28-1983	605	H	320	U	300LCRV
HO Bd 232	HO-81-0283	Pich, Michael W	Joseph Mayne	10-28-1983	605	H	260	U	300LCRV
HO Bd 233	HO-81-0283	Pich, Michael W	Joseph Mayne	10-28-1983	605	H	260	U	300LCRV
HO Bd 234	HO-73-0152	Shank, Walter	Dillon Bros	03-02-1973	595	S	250	H	300LCRV
HO Bd 235	HO-73-3174	Frederick, Daniel	L F Easterday	03-22-1979	595	S	180	H	300LCRV
HO Bd 236	HO-73-2480	Lye	Joseph Mayne	07-17-1978	620	H	456	H	300LCRV
HO Bd 237	HO-73-3228	--	L F Easterday	04-26-1979	620	H	300	H	300LCRV
HO Bd 238	HO-81-0446	Jacquez, Alan R	L F Easterday	04-26-1984	550	S	400	H	300MRGR
HO Bd 239	HO-73-4028	Wicks, Robert J	Dillon Bros	11-13-1981	590	H	245	H	300LCRV
HO Bd 240	HO-73-2173	Musgrove, William	L F Easterday	08-05-1977	620	H	120	H	300LCRV
HO Bd 241	HO-73-4140	Ward, Ronald	L F Easterday	03-23-1982	600	S	260	H	300LCRV
HO Bd 242	HO-73-3763	Hutton, John	S Bollinger	02-26-1981	575	S	350	H	300LCRV
HO Bd 243	HO-73-1325	Smith, Larry	L F Easterday	02-18-1976	550	S	260	H	300LCRV
HO Bd 244	HO-73-2085	Kebel, Bruce	Dillon Bros	10-14-1977	545	U	300	H	300LCRV
HO Bd 245	HO-73-4178	Feaga, W Harold	S Bollinger	05-19-1982	545	H	310	C,H	300LCRV
HO Bd 246	HO-73-1847	Rine, Mark	Westminster	03-10-1977	605	H	128	H	300LCRV
HO Bd 247	HO-73-3292	Conway, William A	Westminster	06-21-1979	580	H	529	H	300LCRV
HO Bd 248	HO-73-1474	--	Dillon Bros	06-03-1976	540	S	100	H	300LCRV
HO Bd 249	HO-73-1185	--	Dillon Bros	10-24-1975	530	S	150	H	300LCRV
HO Bd 250	HO-73-2078	--	Dillon Bros	09-16-1977	540	S	250	H	300LCRV
HO Bd 251	HO-73-2766	Hoffman, Herbert L	Westminster	05-23-1978	525	S	402	H	300LCRV
HO Bd 252	HO-73-1583	--	Westminster	08-26-1976	585	H	295	H	300LCRV
HO Bd 253	HO-73-1584	Roth, Norman	Westminster	08-26-1976	600	H	310	H	300LCRV
HO Bd 254	HO-73-1612	Jennings, Robert L	Ralph Mayne	09-23-1976	575	S	150	U	300LCRV
HO Bd 255	HO-73-3893	Jennings, Robert L	Ralph Mayne	05-04-1981	580	S	205	H	300LCRV
HO Bd 256	HO-73-2434	Barndt, Mary	Joseph Mayne	12-19-1977	585	S	205	H	300LCRV
HO Bd 257	HO-73-2434	Barndt, Mary	Joseph Mayne	12-19-1977	590	H	285	U	300LCRV
HO Bd 258	HO-73-2434	Barndt, Mary	Joseph Mayne	12-19-1977	590	H	245	U	300LCRV
HO Bd 259	HO-73-4134	Weber, Ronald Lee	Ralph Mayne	05-03-1982	560	H	265	H	300LCRV
HO Bd 260	HO-73-1105	Bennett, Clifford E	Westminster	08-13-1975	535	S	197	H	300LCRV
HO Bd 261	HO-81-0224	Martin, Clark	R Ardinger	09-08-1983	580	H	250	H	300LCRV
HO Bd 262	HO-81-0307	Russell, Joseph E	L F Easterday	10-20-1983	510	S	300	H	300LCRV
HO Bd 263	HO-73-2093	Russell, Joseph E	Westminster	06-07-1977	520	S	500	H	300LCRV
HO Bd 264	HO-73-1395	Haas, Harvey	Dillon Bros	06-01-1976	520	S	300	H	300LCRV
HO Bd 265	HO-73-1716	Walker, Gordon	Ralph Mayne	11-10-1976	540	H	145	H	300LCRV
HO Bd 266	HO-73-0046	Olson, Paul S	Harry Green	11-06-1972	540	H	185	H	300LCRV
HO Bd 267	HO-73-1386	Chizum, Dave	Westminster	05-21-1976	500	H	248	H	300LCRV
HO Bd 268	HO-73-1262	Frye, Austin	Dillon Bros	12-29-1975	460	S	200	H	300LCRV
HO Bd 269	HO-73-2048	Bates, David	L F Easterday	06-03-1977	450	S	140	H	300LCRV
HO Bd 270	HO-81-2754	Scrivener, Tom	L F Easterday	06-07-1988	525	H	160	U	300LCRV
HO Bd 271	HO-81-1650	Harrell, Henry	Joseph Mayne	09-08-1986	510	H	220	H	300LCRV
HO Bd 272	HO-81-2430	Kaulfuss, Jack	L F Easterday	12-01-1987	570	S	140	H	300SKVL
HO Bd 273	HO-81-1504	Johnson, Robert	Tri County	06-01-1986	530	H	125	H	300SKVL
HO Bd 274	HO-81-2377	Reigle, Tom	Ralph Mayne	11-20-1987	580	S	100	H	300SKVL

Casing			Water level		Aquifer test					Other	
Depth (ft)	Diameter (in.)	Finish	Depth, ft below land surface	Date measured	Yield (gal/min)	Drawdown (ft)	Specific capacity [(gal/min)/ft]	Hours pumped	Date	data available	Well no.
23	6	X	22.25 S	09-22-1988	1	360	<0.01	4	02-27-1984	O	HO Bd 200
20	6	X	25	08-14-1979	30	100	.30	4	08-14-1979	--	HO Bd 201
20	6	X	25	11-15-1984	6	30	.20	3	11-15-1984	--	HO Bd 202
49	6	X	37	12-20-1975	2	9	.22	6	12-20-1975	--	HO Bd 203
34	6	X	45	04-05-1976	10	95	.11	2	04-05-1976	--	HO Bd 204
55	6	X	50	01-14-1973	4	150	.03	1	01-14-1973	--	HO Bd 205
43	6	X	25	09-11-1984	10	15	.67	3	09-11-1984	--	HO Bd 206
28	6	X	40	04-12-1977	1	200	<.01	2	04-12-1977	--	HO Bd 207
50	6	X	70	09-14-1975	2	283	.01	6	09-14-1975	--	HO Bd 208
22	6	X	12	07-16-1984	1	68	.01	6	07-16-1984	--	HO Bd 209
46	6	X	33	02-20-1986	8	2	4.0	5	02-20-1986	--	HO Bd 210
28	6	X	22	07-04-1984	6	33	.18	3	07-04-1984	--	HO Bd 211
19	6	X	16	03-19-1986	8	39	.21	3	03-19-1986	--	HO Bd 212
38	6	X	31	01-05-1984	10	114	.09	3	01-05-1984	--	HO Bd 213
45	6	X	50	09-18-1975	4	210	.02	6	09-18-1975	--	HO Bd 214
75	6	X	50	08-22-1985	30	210	.14	3	08-22-1985	--	HO Bd 215
138	6	X	38	10-14-1986	1	222	<.01	6	10-14-1986	--	HO Bd 216
38	6	X	55	06-25-1986	4	55	.07	3	06-25-1986	--	HO Bd 217
25	6	X	140	09-25-1987	2	160	.01	6	09-25-1987	--	HO Bd 218
--	--	X	Dry	09-25-1987	0	--	--	--	09-25-1987	--	HO Bd 219
--	--	X	Dry	09-25-1987	0	--	--	--	09-25-1987	--	HO Bd 220
--	--	X	Dry	09-25-1987	0	--	--	--	09-25-1987	--	HO Bd 221
--	--	X	Dry	09-25-1987	0	--	--	--	09-25-1987	--	HO Bd 222
--	--	X	Dry	09-25-1987	0	--	--	--	09-25-1987	--	HO Bd 223
--	--	X	Dry	09-25-1987	0	--	--	--	09-25-1987	--	HO Bd 224
59	6	X	40	03-20-1987	5	50	.10	3	03-20-1987	--	HO Bd 225
78	6	X	60	08-20-1987	10	80	.13	3	08-20-1987	--	HO Bd 226
--	--	X	Dry	08-20-1987	0	--	--	--	08-20-1987	--	HO Bd 227
--	--	X	Dry	08-20-1987	0	--	--	--	08-20-1987	--	HO Bd 228
43	6	X	70	06-01-1981	3	190	.02	4	06-01-1981	--	HO Bd 229
44	6	X	35	10-28-1983	1.25	138	.01	6	10-28-1983	--	HO Bd 230
--	--	X	Dry	10-28-1983	0	--	--	--	10-28-1983	--	HO Bd 231
--	--	X	Dry	10-28-1983	0	--	--	--	10-28-1983	--	HO Bd 232
--	--	X	Dry	10-28-1983	0	--	--	--	10-28-1983	--	HO Bd 233
25	6	X	50	03-02-1973	1	200	<.01	6	03-02-1973	--	HO Bd 234
69	6	X	50	03-22-1979	3	130	.02	3	03-22-1979	--	HO Bd 235
98	6	X	51	07-17-1978	.75	389	<.01	3	07-17-1978	--	HO Bd 236
77	6	X	60	04-26-1979	1	240	<.01	4	04-26-1979	--	HO Bd 237
30	6	X	16	04-26-1984	2	164	.01	6	04-26-1984	--	HO Bd 238
32	6	X	35	11-13-1981	6	165	.04	6	11-13-1981	--	HO Bd 239
60	6	X	35	08-05-1977	30	85	.35	2	08-05-1977	--	HO Bd 240
68	6	X	29	03-23-1982	5	48	.10	3	03-23-1982	--	HO Bd 241
43	6	X	40	02-26-1981	6	310	.02	6	02-26-1981	--	HO Bd 242
61	6	X	40	02-18-1976	2	220	.01	2	02-18-1976	--	HO Bd 243
61	6	X	22.75 S	07-27-1988	1	220	<.01	3	10-14-1977	--	HO Bd 244
20	6	X	28	05-19-1982	1	195	.01	6	05-19-1982	--	HO Bd 245
66	6	X	24	03-10-1977	12	61	.20	6	03-10-1977	Q	HO Bd 246
64	6	X	116	06-21-1979	2.5	382	.01	6	06-21-1979	--	HO Bd 247
26	6	X	40	06-03-1976	20	20	1.0	6	06-03-1976	--	HO Bd 248
22	6	X	30	10-24-1975	10	70	.14	6	10-24-1975	--	HO Bd 249
24	6	X	40	09-16-1977	4	185	.02	6	09-16-1977	--	HO Bd 250
65	6	X	70	05-23-1978	2.5	150	.02	6	05-23-1978	--	HO Bd 251
61	6	X	47	08-26-1976	3	233	.01	6	08-26-1976	--	HO Bd 252
58	6	X	154	08-26-1976	5	71	.07	6	08-26-1976	--	HO Bd 253
21	6	X	40	09-23-1976	1	110	.01	2	09-23-1976	--	HO Bd 254
34	6	X	50	05-04-1981	2	155	.01	6	05-04-1981	--	HO Bd 255
43	6	X	55	12-19-1977	3	25	.12	6	12-19-1977	--	HO Bd 256
--	--	X	Dry	12-19-1977	0	--	--	--	12-19-1977	--	HO Bd 257
--	--	X	Dry	12-19-1977	0	--	--	--	12-19-1977	--	HO Bd 258
40	6	X	42	05-03-1982	5	223	.02	4	05-03-1982	--	HO Bd 259
68	6	X	25	08-13-1975	4	69	.06	7	08-13-1975	--	HO Bd 260
30	6	X	50	09-08-1983	4	33	.12	3	09-08-1983	--	HO Bd 261
34	6	X	30	10-20-1983	1	270	<.01	4	10-20-1983	--	HO Bd 262
55	6	X	240	06-07-1977	2	110	.02	6	06-07-1977	--	HO Bd 263
32	6	X	50	06-01-1976	1	250	<.01	6	06-01-1976	--	HO Bd 264
34	6	X	50	11-10-1976	4	95	.04	2	11-10-1976	--	HO Bd 265
62	6	X	40	11-06-1972	4.5	140	.03	3	11-06-1972	--	HO Bd 266
23	6	X	60	05-21-1976	3	72	.04	6	05-21-1976	--	HO Bd 267
55	6	X	40	12-29-1975	4	135	.03	6	12-29-1975	--	HO Bd 268
27	6	X	35	06-03-1977	8	105	.08	3	06-03-1977	--	HO Bd 269
65	6	X	37	06-07-1988	12	12	1.0	3	06-07-1988	--	HO Bd 270
85	6	X	48	09-08-1986	9	96	.09	3	09-08-1986	--	HO Bd 271
28	6	X	36	12-01-1987	12	6	2.0	3	12-01-1987	--	HO Bd 272
56	6	X	55	06-01-1986	7	25	.28	5	06-01-1986	--	HO Bd 273
51	6	X	50	11-20-1987	9	0	--	3	11-20-1987	--	HO Bd 274

Table 1.—Records of selected wells in Howard County—Continued

Well no.	Well permit no.	Owner or name	Driller	Date of construction	Altitude of land surface (ft)	Topo-graphic setting	Depth Drilled (ft)	Use of water	Geologic unit
HO Bd 275	HO-81-2228	Swift, Wayne	Joseph Mayne	09-28-1987	600	H	125	H	300SKVL
HO Bd 276	HO-81-2420	LeFaivre, J R	C C Campbell	12-10-1987	630	S	330	H	300LCRV
HO Bd 277	HO-81-2420	LeFaivre, J R	C C Campbell	12-10-1987	630	S	305	U	300LCRV
HO Bd 278	HO-81-2420	LeFaivre, J R	C C Campbell	12-10-1987	630	S	255	U	300LCRV
HO Bd 279	HO-81-2420	LeFaivre, J R	C C Campbell	12-10-1987	630	S	105	U	300LCRV
HO Bd 280	HO-81-2666	Feaga Contracting	Ralph Mayne	04-18-1988	610	H	300	H	--
HO Bd 281	HO-81-2674	Dorsey, Robert	L F Easterday	04-28-1988	565	S	240	U	300MRGR
HO Bd 282	HO-81-2460	Reimer Group Inc	Earth E & S	06-17-1988	600	H	345	U	300UMFC
HO Bd 283	HO-81-2461	Reimer Group Inc	Earth E & S	06-23-1988	600	H	400	U	300UMFC
HO Bd 284	HO-81-2462	Reimer Group Inc	Earth E & S	06-23-1988	600	H	340	U	300UMFC
HO Bd 285	HO-81-2463	Reimer Group Inc	Earth E & S	06-22-1988	600	H	245	U	300UMFC
HO Bd 286	HO-81-2470	Reimer Group Inc	Earth E & S	06-22-1988	600	H	225	U	300UMFC
HO Bd 287	HO-81-2471	Reimer Group Inc	Earth E & S	06-22-1988	600	H	265	U	300UMFC
HO Bd 288	HO-81-2686	Waddell, Donald	L F Easterday	05-13-1988	585	S	400	H	300UMFC
HO Bd 289	HO-73-2171	Boender, John	L F Easterday	08-09-1977	530	S	200	H	300LCRV
HO Bd 290	HO-73-3859	Cross, Herbert	L F Easterday	04-09-1981	565	H	400	H	300LCRV
HO Bd 291	HO-81-1724	Biggs, Elmer E	Joseph Mayne	12-17-1986	560	S	285	H	300LCRV
HO Bd 292	HO-81-1700	--	Ralph Mayne	10-20-1986	595	H	265	H	300LCRV
HO Bd 293	HO-81-1540	Cooper, John Jr	Ralph Mayne	07-14-1986	555	W	300	H	300LCRV
HO Bd 294	HO-81-1540	Cooper, John Jr	Ralph Mayne	07-14-1986	555	W	--	U	300LCRV
HO Bd 295	HO-81-1540	Cooper, John Jr	Ralph Mayne	07-14-1986	555	W	--	U	300LCRV
HO Bd 296	HO-81-1547	Behrens, Charles J Jr	Ralph Mayne	07-10-1986	600	H	140	H	300LCRV
HO Bd 297	HO-81-2720	Barnard Const Co	Ralph Mayne	05-21-1988	585	S	145	H	300LCRV
HO Bd 298	HO-81-2718	Barnard Const Co	Ralph Mayne	05-23-1988	590	H	165	U	300LCRV
HO Bd 299	HO-73-1431	W Friendship Elem Sch	Westminster	04-26-1976	575	H	310	T	300LCRV
HO Bd 300	HO-73-3107	Molesworth, M	Joseph Mayne	12-27-1978	565	H	125	H	300LCRV
HO Bd 301	HO-81-1166	Saulsbury, Bud	Joseph Mayne	10-22-1985	550	H	305	H	300LCRV
HO Bd 302	HO-81-1166	Saulsbury, Bud	Joseph Mayne	10-22-1985	550	H	300	U	300LCRV
HO Bd 303	HO-81-0964	Carapress, Mark	Joseph Mayne	05-02-1985	545	H	225	H	300LCRV
HO Bd 304	HO-81-0890	Kraeuter, Robert	Joseph Mayne	03-06-1985	500	H	320	H	300LCRV
HO Bd 305	HO-73-2955	Rosanova	L F Easterday	09-27-1978	555	H	120	H	300LCRV
HO Bd 306	HO-73-3190	--	Dillon Bros	04-19-1979	540	S	250	H	300LCRV
HO Bd 307	HO-73-3160	Smith, Robert	L F Easterday	05-09-1979	505	S	125	H	300LCRV
HO Bd 308	HO-73-3260	Hill, James J	Westminster	06-26-1979	550	S	504	H	300LCRV
HO Bd 309	HO-73-3734	Wright, Ernest E	S Bollinger	11-13-1980	550	H	250	H	300LCRV
HO Bd 310	HO-81-0931	--	L F Easterday	04-24-1985	505	H	300	H	300LCRV
HO Bd 311	HO-81-0315	Khan, Azim V	S Bollinger	11-03-1983	530	S	165	H	300LCRV
HO Bd 312	HO-81-0638	Aston, C	W W Reichart	08-06-1984	500	S	400	H	300LCRV
HO Bd 313	HO-73-3751	Hales, William	S Bollinger	01-16-1981	575	H	400	H	300LCRV
HO Bd 314	HO-81-2339	Miller, Thomas	Joseph Mayne	10-06-1987	500	W	185	H	300LCRV
HO Bd 315	HO-81-1829	Singley, Dwayne	Joseph Mayne	06-24-1987	545	W	325	H	300LCRV
HO Bd 316	HO-88-0004	Hagen, James	Joseph Mayne	06-24-1988	490	H	365	H	300LCRV
HO Bd 317	HO-81-2363	Patuxent Land Co	Joseph Mayne	11-09-1987	550	S	385	H	300LCRV
HO Bd 318	HO-81-2338	Chile	Joseph Mayne	10-06-1987	530	H	305	H	300LCRV
HO Bd 319	HO-73-0810	Saunders, David	A C Reider	09-25-1974	505	S	95	H	300LCRV
HO Bd 320	HO-73-1488	Janson, Keith	Dillon Bros	06-28-1976	565	H	150	H	300LCRV
HO Bd 321	HO-73-1768	Grayson, Floyd	Dillon Bros	02-22-1977	580	H	150	H	300LCRV
HO Bd 322	HO-73-2082	Grayson, Floyd	Dillon Bros	08-29-1977	510	S	125	H	300LCRV
HO Bd 323	HO-73-2899	Elder, William	Ralph Mayne	08-31-1978	550	H	325	H	300LCRV
HO Bd 324	HO-73-3845	Elder, William	L F Easterday	03-27-1981	550	H	320	H	300LCRV
HO Bd 325	HO-81-0256	Allen	L F Easterday	09-30-1983	475	V	300	H	300LCRV
HO Bd 326	HO-81-1829	Singley, Dwayne	Joseph Mayne	06-24-1987	545	W	380	U	300LCRV
HO Bd 327	HO-73-0487	Omer, Ferhat	Dillon Bros	10-29-1973	400	V	175	H	400BLMR
HO Bd 328	HO-73-0491	Heffner, Dennis	L F Easterday	10-19-1973	425	H	260	H	400BLMR
HO Bd 329	HO-73-0443	Sobus, Jerome	L F Easterday	10-18-1973	450	S	140	H	400BLMR
HO Bd 330	HO-73-4318	--	L F Easterday	11-23-1982	495	S	160	H	400BLMR
HO Bd 331	HO-73-4132	Beaz, Carl	L F Easterday	03-19-1982	505	H	360	H	400BLMR
HO Bd 332	HO-73-2910	--	L F Easterday	08-11-1978	425	S	180	H	400BLMR
HO Bd 333	HO-73-1904	Ring, Jim	Joseph Mayne	04-02-1977	465	S	200	H	400BLMR
HO Bd 334	HO-73-1362	Waskey, Charles M	G E Harr Sons	03-30-1976	485	H	300	H	400BLMR
HO Bd 335	HO-73-0648	Cadwell, Harry	L F Easterday	04-24-1974	445	S	160	H	400BLMR
HO Bd 336	HO-73-4366	Abel, Rodger	L F Easterday	01-20-1983	430	S	240	H	300STRS
HO Bd 337	HO-73-1087	Montgomery, Paul	Joseph Mayne	10-28-1975	450	S	265	H	300STRS
HO Bd 338	HO-73-1787	Calcutt, James K	Joseph Mayne	04-14-1977	460	S	185	H	300STRS
HO Bd 339	HO-73-0449	Churns, James W	Westminster	11-01-1973	475	S	113	H	400BLMR
HO Bd 340	HO-81-0700	Rowe, Richard	L F Easterday	10-01-1984	505	H	300	H	400BLMR
HO Bd 341	HO-73-0486	Mager, Harris	Dillon Bros	11-02-1973	495	H	250	H	400BLMR
HO Bd 342	HO-81-0597	Shryock, Jeffrey	Ralph Mayne	07-03-1984	525	H	300	H	400BLMR
HO Bd 343	HO-73-2862	Horensky, Robert	Westminster	07-19-1978	540	S	227	H	400BLMR
HO Bd 344	HO-73-0461	Fleegle, Donald C	L F Easterday	10-10-1973	530	H	280	H	400BLMR
HO Bd 345	HO-81-2138	Bassler, David	Ralph Mayne	06-24-1987	520	S	165	H	400BLMR
HO Bd 346	HO-81-2378	Whittaker, Marvin	Ralph Mayne	11-17-1987	535	S	225	H	300STRS
HO Bd 347	HO-73-2934	Younkin, William A	L F Easterday	09-20-1978	515	S	100	H	300STRS
HO Bd 348	HO-73-1296	Sealing, Leroy Jr	Joseph Mayne	01-15-1976	570	H	265	H	300LCRV
HO Bd 349	HO-81-2547	Goldsmith, Don	H Edmondson	02-16-1988	510	H	290	H	400BLMR

Casing			Water level		Aquifer test					Other	
Depth (ft)	Diameter (in.)	Finish	Depth, ft below land surface	Date measured	Yield (gal/min)	Drawdown (ft)	Specific capacity [(gal/min)/ft]	Hours pumped	Date	data available	Well no.
23	6	X	44	09-28-1987	12	0	--	3	09-28-1987	--	HO Bd 275
62	6	X	40	12-10-1987	3.2	144	0.02	6	12-10-1987	--	HO Bd 276
--	--	X	--	--	.75	--	--	--	12-10-1987	--	HO Bd 277
--	--	X	Dry	12-10-1987	0	--	--	--	12-10-1987	--	HO Bd 278
--	--	-	Dry	12-10-1987	0	--	--	--	12-10-1987	--	HO Bd 279
107	6	X	40	04-18-1988	2	165	.01	6	04-18-1988	--	HO Bd 280
54	6	X	38	04-28-1988	5	79	.06	3	04-28-1988	--	HO Bd 281
51	6	X	30	06-15-1988	15	15	1.0	72	06-15-1988	--	HO Bd 282
62	6	X	29	06-23-1988	2.3	161	.01	6	06-23-1988	--	HO Bd 283
--	6	X	--	--	.5	--	--	--	06-23-1988	--	HO Bd 284
65	6	X	29	06-22-1988	20	17	1.18	3	06-22-1988	--	HO Bd 285
62	6	X	30	06-22-1988	20	28	.71	3	06-22-1988	--	HO Bd 286
61	6	X	31	06-22-1988	20	10	2.0	3	06-22-1988	--	HO Bd 287
26	6	X	33	05-13-1988	3	155	.02	6	05-13-1988	--	HO Bd 288
58	6	X	40	08-09-1977	5	160	.03	2	08-09-1977	--	HO Bd 289
42	6	X	40	04-09-1981	1	360	<.01	6	04-09-1981	--	HO Bd 290
51	6	X	47	12-17-1986	5.5	63	.09	3	12-17-1986	--	HO Bd 291
19	6	X	27	10-20-1986	3	178	.02	6	10-20-1986	--	HO Bd 292
21	6	X	26	07-14-1986	3	184	.02	6	07-14-1986	--	HO Bd 293
--	--	X	Dry	07-14-1986	0	--	--	--	07-14-1986	--	HO Bd 294
--	--	X	Dry	07-14-1986	0	--	--	--	07-14-1986	--	HO Bd 295
42	6	X	40	07-10-1986	9	5	1.80	3	07-10-1986	--	HO Bd 296
51	6	X	33	05-21-1988	10	0	--	3	05-21-1988	--	HO Bd 297
45	6	X	37	05-23-1988	10	1	10.0	3	05-23-1988	--	HO Bd 298
59	6	X	19	04-26-1976	20	162	.12	12	04-26-1976	--	HO Bd 299
40	6	X	35	12-27-1978	10	90	.11	2	12-27-1978	--	HO Bd 300
79	6	X	44	10-22-1985	2.75	139	.02	6	10-22-1985	--	HO Bd 301
--	--	X	Dry	10-22-1985	0	--	--	--	10-22-1985	--	HO Bd 302
46	6	X	31	05-02-1985	10	19	.53	3	05-02-1985	--	HO Bd 303
37	6	X	35	03-06-1985	2.5	157	.02	6	03-06-1985	--	HO Bd 304
20	6	X	32	09-27-1978	10	88	.11	2	09-27-1978	--	HO Bd 305
30	6	X	30	04-19-1979	5	170	.03	6	04-19-1979	--	HO Bd 306
34	6	X	40	05-09-1979	6	85	.07	2	05-09-1979	--	HO Bd 307
64	6	X	72	06-26-1979	2	368	.01	6	06-26-1979	--	HO Bd 308
66	6	X	45	11-13-1980	10	205	.05	2	11-13-1980	--	HO Bd 309
40	6	X	31	04-24-1985	4	95	.04	3	04-24-1985	--	HO Bd 310
55	6	X	28	11-03-1983	8	74	.11	3	11-03-1983	--	HO Bd 311
48	6	X	25	08-06-1984	1	350	<.01	7	08-06-1984	--	HO Bd 312
30	6	X	31	01-16-1981	6	369	.02	10	01-16-1981	--	HO Bd 313
40	6	X	25	10-06-1987	10	10	1.0	3	10-06-1987	--	HO Bd 314
45	6	X	15	06-24-1987	2	202	.01	6	06-24-1987	--	HO Bd 315
39	6	X	33	06-24-1988	5	63	.08	3	06-24-1988	--	HO Bd 316
58	6	X	55	11-09-1987	1	230	<.01	7	11-09-1987	--	HO Bd 317
39	6	X	50	10-06-1987	3.5	107	.03	6	10-06-1987	--	HO Bd 318
19	6	X	40	09-25-1974	3	0	--	6	09-25-1974	--	HO Bd 319
28	6	X	35	06-28-1976	6	90	.07	6	06-28-1976	--	HO Bd 320
35	6	X	35	02-22-1977	4	90	.04	6	02-22-1977	--	HO Bd 321
70	6	X	40	08-29-1977	6	45	.13	6	08-29-1977	--	HO Bd 322
57	6	X	25	08-31-1978	1	300	<.01	8	08-31-1978	--	HO Bd 323
48	6	X	60	03-27-1981	1	260	<.01	2	03-27-1981	--	HO Bd 324
47	6	X	40	09-30-1983	5	260	.02	2	09-30-1983	Q	HO Bd 325
--	--	X	Dry	06-24-1987	0	--	--	--	06-24-1987	--	HO Bd 326
35	6	X	40	10-29-1973	6	120	.05	6	10-29-1973	--	HO Bd 327
88	6	X	40	10-19-1973	3	220	.01	2	10-19-1973	--	HO Bd 328
48	6	X	30	10-18-1973	3	110	.03	2	10-18-1973	--	HO Bd 329
29	6	X	41	11-23-1982	12	12	1.0	3	11-23-1982	--	HO Bd 330
40	6	X	45	03-19-1982	40	315	.13	3	03-19-1982	--	HO Bd 331
19	6	X	10	08-11-1978	3	170	.02	3	08-11-1978	--	HO Bd 332
46	6	X	45	04-02-1977	7	150	.05	2	04-02-1977	--	HO Bd 333
21	6	X	50	03-30-1976	2	220	.01	6	03-30-1976	--	HO Bd 334
29	6	X	40	04-24-1974	3	120	.02	1	04-24-1974	--	HO Bd 335
38	6	X	125	01-20-1983	3	0	--	6	01-20-1983	--	HO Bd 336
28	6	X	45	10-28-1975	6	215	.03	2	10-28-1975	--	HO Bd 337
28	6	X	45	04-14-1977	10	135	.07	2	04-14-1977	--	HO Bd 338
33	6	X	37	11-01-1973	12	25	.48	8	11-01-1973	--	HO Bd 339
41	6	X	100	10-01-1984	2	200	.01	3	10-01-1984	--	HO Bd 340
35	6	X	50	11-02-1973	1	200	<.01	6	11-02-1973	--	HO Bd 341
26	6	X	5	07-03-1984	1	77	.01	6	07-03-1984	--	HO Bd 342
58	6	X	71	07-19-1978	7	94	.07	6	07-19-1978	--	HO Bd 343
28	6	X	40	10-10-1973	2	240	.01	2	10-10-1973	--	HO Bd 344
19	6	X	20	06-24-1987	12	0	--	3	06-24-1987	--	HO Bd 345
29	6	X	35	11-17-1987	5	40	.13	3	11-17-1987	--	HO Bd 346
19	6	X	15	09-20-1978	20	85	.24	2	09-20-1978	--	HO Bd 347
88	6	X	40	01-15-1976	2	220	.01	2	01-15-1976	--	HO Bd 348
40	6	X	13	02-16-1988	12	77	.16	3	02-16-1988	--	HO Bd 349

Table 1.—Records of selected wells in Howard County—Continued

Well no.	Well permit no.	Owner or name	Driller	Date of construction	Altitude of land surface (ft)	Topo-graphic setting	Depth Drilled (ft)	Use of water	Geologic unit
HO Bd 350	HO-81-2504	Waddell, Donald	L F Easterday	03-10-1988	585	S	400	U	300UMFC
HO Bd 351	HO-73-0834	W Friendship Shop Ctr	G E Harr Sons	09-19-1974	495	S	150	C	300LCRV
HO Bd 352	HO-72-0250	Welling, James	L F Easterday	06-26-1972	605	H	80	H,S	300SKVL
HO Bd 353	HO-73-1868	Repetti, John R	Westminster	05-18-1977	600	W	415	H	300LCRV
HO Bd 354	HO-73-1868	Repetti, John R	Westminster	05-18-1977	605	S	--	U	300LCRV
HO Bd 355	HO-73-1868	Repetti, John R	Westminster	05-18-1977	605	S	--	U	300LCRV
HO Bd 356	HO-73-4149	Spittel's Crab House	L F Easterday	04-20-1982	480	S	200	C	300STRS
HO Bd 357	HO-05-6668	Twin Oaks Horse Center	Edward Brown	03-18-1964	480	W	49	U	400BLMR
HO Bd 358	HO-81-0323	Nastasi, Joseph	Joseph Mayne	11-03-1983	505	S	163	A,H	300LCRV
HO Bd 359	HO-81-0655	Nastasi, Joseph	Joseph Mayne	08-01-1984	505	S	105	A	300LCRV
HO Bd 360	HO-81-0655	Nastasi, Joseph	Joseph Mayne	08-01-1984	505	S	220	U	300LCRV
HO Bd 361	HO-72-0156	Baker, Jack L	Westminster	03-11-1972	510	S	501	H	300LCRV
HO Bd 362	HO-73-0458	Hartner, John A	L F Easterday	10-23-1973	500	H	480	H	400BLMR
HO Bd 363	HO-05-4010	Franciscan Friars	G E Harr Sons	10-29-1963	455	W	230	R	400BLMR
HO Bd 364	HO-71-0059	Md State Highway Admin	L F Easterday	10-28-1970	540	S	250	H	300SKVL
HO Bd 365	HO-81-2641	Fleming, Susan	L F Easterday	04-13-1988	540	H	200	H	300LCRV
HO Bd 366	HO-81-0659	Kollar, Bernie	Joseph Mayne	08-08-1984	570	H	265	H	300LCRV
HO Bd 367	HO-81-1266	Dorsch, Joseph U Jr	Joseph Mayne	01-08-1986	535	S	305	H	300LCRV
HO Bd 368	HO-81-0677	Davis, Thomas D	Joseph Mayne	08-28-1984	550	H	325	H	300LCRV
HO Bd 369	HO-81-0677	Davis, Thomas D	Joseph Mayne	08-28-1984	550	H	320	U	300LCRV
HO Bd 370	HO-81-1028	Vithoven, K A	L F Easterday	05-28-1985	565	W	400	H	300LCRV
HO Bd 371	HO-81-0959	Pinnix, Duane	Joseph Mayne	04-23-1985	560	H	245	H	300LCRV
HO Bd 372	HO-81-1396	Wrobel, Alan	Joseph Mayne	05-05-1986	510	S	305	H	300LCRV
HO Bd 373	HO-81-1396	Wrobel, Alan	Joseph Mayne	05-05-1986	510	S	280	U	300LCRV
HO Bd 374	HO-81-1396	Wrobel, Alan	Joseph Mayne	05-05-1986	510	S	200	U	300LCRV
HO Bd 375	HO-81-1339	Nefferdorf, Stephen	Joseph Mayne	04-30-1986	480	W	285	H	300LCRV
HO Bd 376	HO-81-1339	Nefferdorf, Stephen	Joseph Mayne	04-30-1986	475	W	320	U	300LCRV
HO Bd 377	HO-81-1339	Nefferdorf, Stephen	Joseph Mayne	04-30-1986	475	W	300	U	300LCRV
HO Bd 378	HO-81-1339	Nefferdorf, Stephen	Joseph Mayne	04-30-1986	480	W	200	U	300LCRV
HO Bd 379	HO-81-1339	Nefferdorf, Stephen	Joseph Mayne	04-30-1986	480	W	220	U	300LCRV
HO Bd 380	HO-81-1187	Garrett, Robert	Joseph Mayne	09-30-1985	490	S	285	H	300LCRV
HO Bd 381	HO-81-0942	Goodman, Ted	Joseph Mayne	04-30-1985	535	H	185	H	300LCRV
HO Bd 382	HO-81-0607	Howard Co Dept of Rec	Westminster	06-27-1984	585	H	177	H	300MRGR
HO Bd 383	HO-71-0104	Harless, Marion	L F Easterday	02-15-1971	525	S	200	S	300UMFC
HO Bd 384	HO-81-2492	Nixon's Farm	L F Easterday	03-08-1988	525	H	300	H	300LCRV
HO Bd 385	HO-81-2492	Nixon's Farm	L F Easterday	03-08-1988	525	H	200	U	300LCRV
HO Bd 386	--	Glenelg Country School	L F Easterday	--	550	H	--	T	300STRS
HO Bd 387	HO-88-0079	Haynes, Joseph	G E Harr Sons	08-16-1988	500	S	300	U	400BLMR
HO Bd 388	HO-88-0003	DGB Inc	Ralph Mayne	07-06-1988	475	S	385	U	400BLMR
HO Bd 389	HO-88-0145	Varney, Kennal	W W Reichart	09-09-1988	465	S	300	U	300LCRV
HO Bd 390	--	Pipes, Fred	Ralph Mayne	06-18-1979	600	H	125	H	300SKVL
HO Bd 391	HO-88-0040	Bare, Ronald L	Joseph Mayne	07-12-1988	490	S	200	H	300LCRV
HO Bd 392	HO-88-0486	Crest Lawn Mem Gardens	L F Easterday	03-31-1989	565	V	220	C	300LCRV
HO Bd 393	HO-88-0598	Wrightler, William	W B Quynn	06-08-1989	605	H	320	H,S	300SKVL
HO Bd 394	HO-88-0599	Wrightler, William	W B Quynn	06-14-1989	600	H	160	H	300SKVL
HO Bd 395	HO-81-2667	Cochran, Roger	Robert Cline	04-18-1988	590	H	150	H	300SKVL
HO Bd 396	HO-88-0701	Wrightler, William	W B Quynn	06-09-1989	580	S	110	S	300SKVL
HO Bd 397	HO-88-0600	Wrightler, William	W B Quynn	06-06-1989	570	S	400	H	300SKVL
HO Bd 398	HO-88-0702	Howard Co Fair Assoc	L F Easterday	06-12-1989	510	S	400	C	300SKVL
HO Bd 399	HO-88-0466	Willow Springs Ltd	Ralph Mayne	03-25-1989	585	H	260	I	300MRGR
HO Bd 400	HO-88-0469	Willow Springs Ltd	Ralph Mayne	03-30-1989	535	S	145	I	300MRGR
HO Bd 401	HO-73-3049	Van Horn, John	L F Easterday	12-12-1978	515	W	180	H	400BLMR
HO Bd 402	HO-73-2079	Holtz, Al	Dillon Bros	06-13-1977	550	S	145	H	300LCRV
HO Bd 403	HO-73-4000	Belz, Paul D	S Bollinger	11-05-1981	560	H	410	H	300LCRV
HO Bd 404	HO-81-1094	D'Andrea, Roger	Ralph Mayne	07-11-1985	540	H	165	H	300SKVL
HO Bd 405	HO-71-0179	Rosewag, Nicholas	L F Easterday	08-19-1971	590	H	58	H	300LCRV
HO Bd 406	HO-73-3964	Foley, Gerald E	Ralph Mayne	08-14-1981	545	S	85	A	300LCRV
HO Bd 407	HO-88-0069	Cavey, Norman C Jr	Westminster	09-19-1988	480	V	128	H	300LCRV
HO Bd 408	HO-88-0465	Willow Springs Ltd	Ralph Mayne	03-25-1989	545	S	205	I	300MRGR
HO Bd 409	HO-88-0467	Willow Springs Ltd	Ralph Mayne	03-30-1989	425	S	145	I	300SKVL
HO Bd 410	HO-88-0468	Willow Springs Ltd	Ralph Mayne	03-30-1989	425	S	205	I	300SKVL
HO Be 1	--	Hammond	--	--	360	S	13.5	H	300OELL
HO Be 2	HO-00-4740	Patterson, Edgar A	J Edmondson	09-17-1949	430	H	55	H	400BLMR
HO Be 3	HO-00-1002	Blackburn, Melvin	Edward Brown	12-14-1946	445	V	140	H	300LCRV
HO Be 4	HO-00-2789	Harbin, George	Edward Brown	06-30-1948	450	V	78	H	300LCRV
HO Be 5	--	John David Engineering	Edward Brown	07 -- 1952	390	H	--	U	300ELCC
HO Be 6	HO-00-3548	Harbin, George	Dillon Bros	01-01-1949	480	H	148	H	300OELL
HO Be 7	HO-00-1027	Dance, F Earl	C L Benson	12-14-1946	480	H	46.5	H	300OELL
HO Be 8	--	Dorsey, Ed	L F Easterday	06 -- 1952	505	S	83	H	300LCRV
HO Be 9	--	Powell, Thomas	Reynolds	1946	395	V	18	H	300LCRV
HO Be 10	--	Myers, A E	--	--	480	H	40	H	300STRS

Casing			Water level		Aquifer test					Other data	
Depth (ft)	Diameter (in.)	Finish	Depth, ft below land surface	Date measured	Yield (gal/min)	Drawdown (ft)	Specific capacity [(gal/min)/ft]	Hours pumped	Date	available	Well no.
20	6	X	31	03-10-1988	2	183	0.01	6	03-10-1988	--	HO Bd 350
35	6	X	30	09-19-1974	7	2	3.50	6	09-19-1974	--	HO Bd 351
35	6	X	20	06-26-1972	75	60	1.25	1	06-26-1972	--	HO Bd 352
56	6	X	41	05-18-1977	15	319	.05	6	05-18-1977	--	HO Bd 353
--	--	X	Dry	05-18-1977	0	--	--	--	05-18-1977	--	HO Bd 354
--	--	X	Dry	05-18-1977	0	--	--	--	05-18-1977	--	HO Bd 355
31	6	X	45	04-20-1982	8	155	.05	3	04-20-1982	--	HO Bd 356
29	6	X	21	03-18-1964	18	--	--	1	03-18-1964	--	HO Bd 357
47	6	X	28	11-03-1983	10	3	3.33	3	11-03-1983	--	HO Bd 358
41	6	X	27	08-01-1984	12	3	4.0	3	08-01-1984	--	HO Bd 359
--	--	X	Dry	08-01-1984	0	--	--	--	08-01-1984	--	HO Bd 360
120	6	X	130	03-11-1972	1	370	<.01	9	03-11-1972	--	HO Bd 361
38	6	X	40	10-23-1973	3	440	.01	2	10-23-1973	--	HO Bd 362
152	6	X	25	10-29-1963	15	50	.30	2	10-29-1963	--	HO Bd 363
45	6	X	27	10-28-1970	20	1	20.0	8	10-28-1970	--	HO Bd 364
54	6	X	40	04-13-1988	10	32	.31	3	04-13-1988	--	HO Bd 365
48	6	X	50	08-08-1984	12	0	--	3	08-08-1984	--	HO Bd 366
77	6	X	28	01-08-1986	6.5	88	.07	3	01-08-1986	--	HO Bd 367
47	6	X	32	08-28-1984	1.5	186	.01	6	08-28-1984	--	HO Bd 368
--	--	X	Dry	08-28-1984	0	--	--	--	08-28-1984	--	HO Bd 369
27	6	X	45	05-28-1985	2	50	.04	6	05-28-1985	--	HO Bd 370
26	6	X	39	04-23-1985	4	96	.04	3	04-23-1985	--	HO Bd 371
29	6	X	40	05-05-1986	2.5	149	.02	6	05-05-1986	--	HO Bd 372
--	--	X	Dry	05-05-1986	0	--	--	--	05-05-1986	--	HO Bd 373
--	--	X	Dry	05-05-1986	0	--	--	--	05-05-1986	--	HO Bd 374
41	6	X	27	04-30-1986	6.5	94	.07	3	04-30-1986	--	HO Bd 375
--	--	X	Dry	04-30-1986	0	--	--	--	04-30-1986	--	HO Bd 376
--	--	X	Dry	04-30-1986	0	--	--	--	04-30-1986	--	HO Bd 377
--	--	X	Dry	04-30-1986	0	--	--	--	04-30-1986	--	HO Bd 378
--	--	X	Dry	04-30-1986	0	--	--	--	04-30-1986	--	HO Bd 379
44	6	X	40	09-30-1985	2	138	.01	6	09-30-1985	--	HO Bd 380
35	6	X	39	04-30-1985	10	1	10.0	3	04-30-1985	--	HO Bd 381
106	6	X	112	06-27-1984	6	23	.26	3	06-27-1984	--	HO Bd 382
36	6	X	30	02-15-1971	8	170	.05	1	02-15-1971	--	HO Bd 383
58	6	X	37	03-08-1988	3	64	.05	6	03-08-1988	--	HO Bd 384
--	--	X	Dry	03-08-1988	0	--	--	--	03-08-1988	--	HO Bd 385
--	6	X	--	--	--	--	--	--	--	--	HO Bd 386
40	6	X	15	08-16-1988	4	217	.02	3	08-16-1988	--	HO Bd 387
58	6	X	52	07-06-1988	2	168	.01	6	07-06-1988	--	HO Bd 388
46	6	X	45	09-09-1988	4	200	.02	5	09-09-1988	--	HO Bd 389
26	6	X	45	06-18-1979	20	80	.25	5	06-18-1979	Q	HO Bd 390
42	6	X	38	07-12-1988	15	5	3.0	3	07-12-1988	--	HO Bd 391
31	6	X	45	03-31-1989	10	175	.06	3	03-31-1989	--	HO Bd 392
78	6	X	23	06-08-1989	14	49	.29	3	06-08-1989	--	HO Bd 393
38	6	X	35	06-14-1989	35	125	.28	2	06-14-1989	--	HO Bd 394
55	6	X	24	04-18-1988	10	50	.20	3	04-18-1988	--	HO Bd 395
43	6	X	14	06-09-1989	100	86	1.16	2	06-09-1989	--	HO Bd 396
68	6	X	13	06-06-1989	4	178	.02	3	06-06-1989	--	HO Bd 397
43	6	X	52	06-12-1989	10	348	.03	3	06-12-1989	--	HO Bd 398
46	6	X	15	03-25-1989	15	245	.06	3	03-25-1989	--	HO Bd 399
43	6	X	5	03-30-1989	60	140	.43	3	03-30-1989	--	HO Bd 400
30	6	X	50	12-12-1978	8	130	.06	2	12-12-1978	Q	HO Bd 401
36	6	X	40	06-13-1977	12	90	.13	6	06-13-1977	Q	HO Bd 402
20	6	X	25	11-05-1981	2	385	.01	6	11-05-1981	Q	HO Bd 403
43	6	X	45	07-11-1985	9	1	9.0	3	07-11-1985	Q	HO Bd 404
52	6	X	40	08-19-1971	6	18	.33	4	08-19-1971	Q	HO Bd 405
46	6	X	35	08-14-1981	20	50	.40	4	08-14-1981	Q	HO Bd 406
33.2	6	G	7	09-19-1988	15	17	.88	3	09-19-1988	--	HO Bd 407
40	4	Screened from 40 to 50 ft.									
80	4	Screened from 80 to 90 ft.									
110	4	Screened from 110 to 120 ft.									
128	4										
23	6	X	5	03-25-1989	60	200	.30	3	03-25-1989	--	HO Bd 408
43	6	X	5	03-30-1989	30	140	.21	3	03-30-1989	--	HO Bd 409
33	6	X	6	03-30-1989	4	199	.02	3	03-30-1989	--	HO Bd 410
8	--	W	8.33 S	01-12-1950	--	--	--	--	--	--	HO Be 1
--	6	X	30	09-17-1949	10	0	--	1	09-17-1949	--	HO Be 2
25	--	X	31	12-14-1946	1	--	--	--	12-14-1946	--	HO Be 3
45	6	X	35	06-30-1948	5	--	--	--	06-30-1948	--	HO Be 4
--	6	-	11.04 S	07-13-1952	--	--	--	--	--	--	HO Be 5
--	6	-	42	01-01-1949	.5	--	--	--	01-01-1949	--	HO Be 6
40	6	X	25	12-14-1946	15	5	3.0	4	12-14-1946	--	HO Be 7
--	6	-	22.10 S	07-24-1952	--	--	--	--	--	--	HO Be 8
18	10	W	7.84 S	07-24-1952	--	--	--	--	--	--	HO Be 9
40	60	W	36	03 -- 1951	--	--	--	--	--	--	HO Be 10

Table 1.—Records of selected wells in Howard County—Continued

Well no.	Well permit no.	Owner or name	Driller	Date of construction	Altitude of land surface (ft)	Topo-graphic setting	Depth Drilled (ft)	Use of water	Geologic unit
HO Be 11	--	Schek, C W	--	--	515	H	362	H,S	300LCRV
HO Be 12	--	Smith, H D	--	--	435	H	49	H	400BLMR
HO Be 13	--	Stackhouse, S T	--	1917	515	H	65	U	400BLMR
HO Be 14	HO-00-4993	Henderson, Brice W	Edward Brown	01-06-1950	390	S	43	H	300OELL
HO Be 15	--	Reed, Harvey S	C Petticord	1941	420	H	30	H,S	300OELL
HO Be 16	HO-00-0946	Shreve, A L	T Owings	11-07-1946	505	H	82	H	400BLMR
HO Be 17	HO-00-8972	Thomas, Harry G	Edward Brown	10-30-1951	400	S	94	U	300OELL
HO Be 18	--	Doughoregan Manor	Schultz	1914	505	H	306	H,S	400BLMR
HO Be 19	HO-73-1186	Appitito, Alfred F Jr	Westminster	10-10-1975	435	V	194	H	300STRS
HO Be 20	HO-05-2313	The Enchanted Forest	Edward Brown	05-28-1963	400	S	90	C	300OELL
HO Be 21	HO-73-3971	Blumer, John P	S Bollinger	09-04-1981	420	S	125	H	400BLMR
HO Be 22	HO-81-0477	--	Joseph Mayne	04-11-1984	400	S	163	H	400BLMR
HO Be 23	HO-73-4298	Davis, Paige	John Shaff	--	380	H	250	H	400BLMR
HO Be 24	HO-73-3207	Howard County Landfill	Westminster	05-04-1979	510	S	300	L	300LCRV
HO Be 25	HO-73-3207	Howard County Landfill	Westminster	05-04-1979	510	S	85	U	300LCRV
HO Be 26	HO-70-0102	Doll, Charles	L F Easterday	03-25-1970	545	H	220	H	300LCRV
HO Be 27	HO-73-1408	Orr, Raymond	Dillon Bros	06-11-1976	545	H	255	H	300STRS
HO Be 28	HO-73-1617	Rhudy, Robert	G E Harr Sons	12-11-1976	545	S	250	H	300LCRV
HO Be 29	HO-73-0468	Vecera, Vincent	L F Easterday	04-16-1974	585	H	300	H	300LCRV
HO Be 30	HO-73-3608	Rachuba, Lawrence	G E Harr Sons	06-05-1980	530	S	200	H	300LCRV
HO Be 31	HO-73-3608	Rachuba, Lawrence	G E Harr Sons	06-05-1980	530	S	300	U	300LCRV
HO Be 32	HO-73-3608	Rachuba, Lawrence	G E Harr Sons	06-05-1980	530	S	600	U	300LCRV
HO Be 33	HO-73-1272	Rachuba, Lawrence	G E Harr Sons	03-11-1976	480	S	350	S	300CCKV
HO Be 34	HO-73-1354	Vecera, Michael P	L F Easterday	05-01-1976	570	H	140	H	300LCRV
HO Be 35	HO-73-1628	Dear, Norman H	H Edmondson	11-05-1976	520	H	140	H	300STRS
HO Be 36	HO-81-0227	Wright, Danny	Ralph Mayne	08-23-1983	510	S	300	H,S	300LCRV
HO Be 37	HO-81-2018	Sisters of Bon Secours	G E Harr Sons	05-12-1987	550	S	300	T	--
HO Be 38	HO-71-0054	Sisters of Bon Secours	G E Harr Sons	10-19-1970	500	V	150	T	400BLMR
HO Be 39	HO-66-0001	Sisters of Bon Secours	G E Harr Sons	07-09-1965	500	V	225	T	400BLMR
HO Be 40	HO-05-5013	Sisters of Bon Secours	G E Harr Sons	11-13-1963	500	V	63	T	400BLMR
HO Be 41	HO-81-1753	Sisters of Bon Secours	G E Harr Sons	05-12-1987	500	V	300	T	400BLMR
HO Be 42	HO-81-1753	Sisters of Bon Secours	G E Harr Sons	05-12-1987	500	V	300	U	400BLMR
HO Be 43	HO-81-1753	Sisters of Bon Secours	G E Harr Sons	05-12-1987	500	V	400	U	400BLMR
HO Be 44	HO-05-5012	Sisters of Bon Secours	G E Harr Sons	11-13-1963	550	H	137	U	400BLMR
HO Be 45	HO-05-4517	Sisters of Bon Secours	G E Harr Sons	11-13-1963	510	S	65	U	400BLMR
HO Be 46	HO-73-3329	Ratliff, Cliff	L F Easterday	06-25-1979	525	S	200	H	300LCRV
HO Be 47	HO-73-3234	DiMarco, Rosario	L F Easterday	06-21-1979	545	S	400	H	300LCRV
HO Be 48	HO-73-3234	DiMarco, Rosario	Md Drilling	06-01-1979	545	S	395	U	300LCRV
HO Be 49	HO-73-3852	Pruitt, Richard A	L F Easterday	04-16-1981	540	H	260	H	400BLMR
HO Be 50	HO-73-2729	Smink, Warren	G E Harr Sons	02-15-1979	495	H	300	H	400BLMR
HO Be 51	HO-73-3951	Covey, Robert L	S Bollinger	07-21-1981	440	U	105	H	400BLMR
HO Be 52	HO-81-0952	--	Joseph Mayne	04-08-1985	480	U	145	H	400BLMR
HO Be 53	HO-81-0418	Asher, Gene	Westminster	02-28-1984	460	F	278	H	400BLMR
HO Be 54	HO-81-1351	Tompkins, William H	Joseph Mayne	02-26-1986	465	H	325	H	400BLMR
HO Be 55	HO-81-1372	Richardson, Norbert	Ralph Mayne	03-27-1986	425	H	360	H	400BLMR
HO Be 56	HO-81-1920	Reese, Randy	Ralph Mayne	04-11-1987	445	H	300	H	400BLMR
HO Be 57	HO-81-1107	Dymek, Joseph	G E Harr Sons	09-05-1985	445	U	225	H	400BLMR
HO Be 58	HO-73-2236	Merkle, Arthur	L F Easterday	08-12-1977	445	H	100	H	400BLMR
HO Be 59	HO-73-0183	--	Tri County	03-16-1973	430	U	85	H	400BLMR
HO Be 60	HO-81-0238	Carey, Thomas J Jr	L F Easterday	08-24-1983	420	H	240	H	400BLMR
HO Be 61	HO-81-0912	Beahm, George	G E Harr Sons	03-19-1985	440	S	300	H	400BLMR
HO Be 62	HO-81-0912	Beahm, George	G E Harr Sons	03-19-1985	440	S	200	U	400BLMR
HO Be 63	HO-81-0912	Beahm, George	G E Harr Sons	03-19-1985	440	S	200	U	400BLMR
HO Be 64	HO-73-1454	--	Joseph Mayne	05-12-1976	445	H	200	H	400BLMR
HO Be 65	HO-73-1137	--	Joseph Mayne	10-01-1975	420	S	85	H	400BLMR
HO Be 66	HO-81-1770	Grace, Patrick	G E Harr Sons	03-05-1987	445	H	300	H	400BLMR
HO Be 67	HO-73-1745	Szeliga, Louis	Joseph Mayne	01-03-1977	430	S	145	H	400BLMR
HO Be 68	HO-73-1749	Brady, James	Joseph Mayne	12-31-1976	370	S	125	H	400BLMR
HO Be 69	HO-73-3861	Taylor, Scott	L F Easterday	05-01-1981	405	H	180	H	400BLMR
HO Be 70	HO-73-3693	Zile, Russell	L F Easterday	10-16-1980	375	S	120	H	400BLMR
HO Be 71	HO-73-2657	Richards, Charles	L F Easterday	04-11-1978	350	S	140	H	400BLMR
HO Be 72	HO-73-1610	Fisher, Jack	Dillon Bros	09-21-1976	400	H	150	H	400BLMR
HO Be 73	HO-73-3007	DiMartino, Joe	L F Easterday	11-01-1978	415	H	160	H	400BLMR
HO Be 74	HO-73-2402	Richards, Charles	Westminster	11-18-1977	405	H	583	U	400BLMR
HO Be 75	HO-73-2097	McCullough, James S Jr	Dillon Bros	06-24-1977	350	S	277	H	400BLMR
HO Be 76	HO-73-3837	Bustard, Tom	L F Easterday	05-06-1981	465	S	240	H	300STRS
HO Be 77	HO-73-4337	Pellicot, Bruce D	Westminster	12-14-1982	495	H	126	H	300LCRV
HO Be 78	HO-73-4117	Patapsco Valley St Pk	L F Easterday	03-08-1982	340	W	150	H	400BLMR
HO Be 79	HO-73-1307	Halloman, Oliver	L F Easterday	02-03-1976	470	H	100	H	300OELL
HO Be 80	HO-73-2109	Sater, Harold	C C Campbell	07-28-1977	460	S	165	H	300OELL
HO Be 81	HO-73-3942	Smith, Margaret	Dillon Bros	07-10-1981	290	V	245	H	400BLMR
HO Be 82	HO-73-0832	Clements, Roy H	Dillon Bros	11-22-1974	275	V	150	H	400BLMR
HO Be 83	HO-73-4264	Hall, David	L F Easterday	09-07-1982	350	S	220	H	400BLMR
HO Be 84	HO-73-1089	Knight, Stephen	L F Easterday	08-22-1975	425	H	120	H	400BLMR

Casing			Water level		Aquifer test					Other	
Depth (ft)	Diameter (in.)	Finish	Depth, ft below land surface	Date measured	Yield (gal/min)	Drawdown (ft)	Specific capacity [(gal/min)/ft]	Hours pumped	Date	data available	Well no.
--	48	-	22.00 S	07-24-1952	--	--	--	--	--	--	HO Be 11
--	48	W	39	07- -1948	--	--	--	--	--	--	HO Be 12
--	--	-	60	1950	--	--	--	--	--	--	HO Be 13
25	--	X	1	01-06-1950	4	21	0.19	0.5	01-06-1950	--	HO Be 14
30	6	W	8	07-26-1952	--	--	--	--	--	--	HO Be 15
23	6	X	30	11-07-1946	20	10	2.0	.5	11-07-1946	--	HO Be 16
72	6	X	55	10-30-1951	10	13	.77	2	10-30-1951	--	HO Be 17
60	6	X	12.5	1914	24	--	--	--	1914	--	HO Be 18
61	6	X	F S	10-15-1975	4	194	.02	4	10-10-1975	--	HO Be 19
34	6	X	28	05-28-1963	20	--	--	1	05-28-1963	--	HO Be 20
20	6	X	30	09-04-1981	30	95	.32	2	09-04-1981	Q	HO Be 21
40	6	X	38	04-11-1984	15	11	1.36	3	04-11-1984	--	HO Be 22
42	6	X	38	11-18-1982	56	78	.72	3	11-11-1982	--	HO Be 23
58	6	X	59	05-04-1979	10	57	.18	6	05-04-1979	--	HO Be 24
--	--	X	Dry	05-04-1979	0	--	--	--	05-04-1979	--	HO Be 25
76	6	X	40	03-25-1970	2	180	.01	1	03-25-1970	--	HO Be 26
37	6	X	40	06-11-1976	2	185	.01	6	06-11-1976	--	HO Be 27
57	6	X	40	12-11-1976	15	190	.08	6	12-11-1976	--	HO Be 28
32	6	X	40	04-16-1974	1	260	<.01	2	04-16-1974	--	HO Be 29
65	6	X	34	06-05-1980	9	116	.08	6	06-05-1980	--	HO Be 30
--	--	X	Dry	06-05-1980	0	--	--	--	06-05-1980	--	HO Be 31
--	--	X	Dry	06-05-1980	0	--	--	--	06-05-1980	--	HO Be 32
20	6	X	30	03-11-1976	5	310	.02	6	03-11-1976	Q	HO Be 33
24	6	X	30	05-01-1976	4	110	.04	2	05-01-1976	--	HO Be 34
120	6	X	22	11-05-1976	8	58	.14	8	11-05-1976	--	HO Be 35
123	6	X	36	08-23-1983	5	264	.02	3	08-23-1983	--	HO Be 36
68	6	X	44.25	05-12-1987	6.66	192.42	.03	8	05-12-1987	--	HO Be 37
15	6	X	15	10-19-1970	30	125	.24	4	10-19-1970	--	HO Be 38
22.5	6	X	11	07-09-1965	15	189	.08	4	07-09-1965	--	HO Be 39
21.7	6	X	15	11-13-1963	30	10	3.0	24	11-13-1963	--	HO Be 40
45	6	X	17	05-12-1987	14.28	15.42	.93	8	05-12-1987	--	HO Be 41
--	--	X	Dry	05-12-1987	0	--	--	--	05-12-1987	--	HO Be 42
--	--	X	Dry	05-12-1987	0	--	--	--	05-12-1987	--	HO Be 43
70.5	6	X	45	11-13-1963	5	80	.06	3	11-13-1963	--	HO Be 44
17.2	6	X	Dry	11-13-1963	0	--	--	--	11-13-1963	--	HO Be 45
--	6	X	10	06-25-1979	3	190	.02	3	06-25-1979	--	HO Be 46
70	6	X	4	06-21-1979	2	396	.01	3	06-21-1979	--	HO Be 47
--	--	X	Dry	06-01-1979	0	--	--	--	06-01-1979	--	HO Be 48
19	6	X	30	04-16-1981	4	230	.02	2	04-16-1981	--	HO Be 49
73	6	X	32	02-15-1979	4	13	.31	6	02-15-1979	--	HO Be 50
20	6	X	25	07-21-1981	20	80	.25	3	07-21-1981	--	HO Be 51
33	6	X	31	04-08-1985	10	1	10.0	3	04-08-1985	--	HO Be 52
59.7	6	X	30	02-28-1984	8	137	.06	3	02-28-1984	--	HO Be 53
23	6	X	48	02-26-1986	2.5	124	.02	6	02-26-1986	--	HO Be 54
20	6	X	60	03-27-1986	1	260	<.01	6	03-27-1986	--	HO Be 55
62	6	X	35	04-11-1987	9	70	.13	3	04-11-1987	--	HO Be 56
40	6	X	22	09-05-1985	15	12.83	1.17	3	09-05-1985	--	HO Be 57
27	6	X	40	08-12-1977	15	60	.25	2	08-12-1977	--	HO Be 58
44	6	X	16	03-16-1973	20	9	2.22	4	03-16-1973	--	HO Be 59
19	6	X	48	08-24-1983	10	93	.11	3	08-24-1983	--	HO Be 60
60	6	X	37	03-19-1985	5.35	243.5	.02	3	03-19-1985	--	HO Be 61
--	--	X	Dry	03-19-1985	0	--	--	--	03-19-1985	--	HO Be 62
--	--	X	Dry	03-19-1985	0	--	--	--	03-19-1985	--	HO Be 63
27	6	X	45	05-12-1976	15	150	.10	2	05-12-1976	--	HO Be 64
20	6	X	25	10-01-1975	9	55	.16	2	10-01-1975	--	HO Be 65
95	6	X	55	03-05-1987	2.5	182.16	.01	6	03-05-1987	--	HO Be 66
36	6	X	40	01-03-1977	9	100	.09	2	01-03-1977	--	HO Be 67
30	6	X	45	12-31-1976	5	75	.07	2	12-31-1976	--	HO Be 68
29	6	X	40	05-01-1981	6	140	.04	5	05-01-1981	--	HO Be 69
33	6	X	40	10-16-1980	12	80	.15	2	10-16-1980	--	HO Be 70
33	6	X	35	04-11-1978	8	105	.08	2	04-11-1978	--	HO Be 71
36	6	X	40	09-21-1976	8	95	.08	6	09-21-1976	--	HO Be 72
34	6	X	30	11-01-1978	5	130	.04	3	11-01-1978	--	HO Be 73
42	6	X	40.48 S	10-19-1988	1.5	0	--	6	11-18-1977	L,O	HO Be 74
62	6	X	91	06-24-1977	5	109	.05	6	06-24-1977	--	HO Be 75
214	6	F	40	05-06-1981	4	140	.03	8	05-06-1981	--	HO Be 76
45.2	6	X	38	12-14-1982	20	2	10.0	3	12-14-1982	--	HO Be 77
21	6	X	30	03-08-1982	7	120	.06	2	03-08-1982	--	HO Be 78
45	6	X	30	02-03-1976	10	70	.14	2	02-03-1976	--	HO Be 79
46	6	X	30	07-28-1977	4	40	.10	6	07-28-1977	--	HO Be 80
20	6	X	12	07-10-1981	1	233	<.01	6	07-10-1981	--	HO Be 81
35	6	X	30	11-22-1974	15	90	.17	6	11-22-1974	--	HO Be 82
19	6	X	45	09-07-1982	20	175	.11	3	09-07-1982	--	HO Be 83
38	6	X	40	08-22-1975	3	80	.04	2	08-22-1975	--	HO Be 84

Table 1.—Records of selected wells in Howard County—Continued

Well no.	Well permit no.	Owner or name	Driller	Date of construction	Altitude of land surface (ft)	Topo-graphic setting	Depth Drilled (ft)	Use of water	Geologic unit
HO Be 85	HO-73-0798	Ashburn, Marion	Dillon Bros	08-16-1974	415	H	150	H	400BLMR
HO Be 86	HO-73-4300	Richards, Charles	L F Easterday	11-02-1982	370	V	300	H	400BLMR
HO Be 87	HO-73-3198	Sears, C Jim	Westminster	03-29-1979	465	H	310	H	400BLMR
HO Be 88	HO-73-4205	McCullough, Francis	L F Easterday	06-21-1982	505	H	200	H	400BLMR
HO Be 89	HO-81-0767	Stackhouse, Tracy	L F Easterday	11-21-1984	525	H	340	H	400BLMR
HO Be 90	HO-81-1438	Lawson, Ross	G E Harr Sons	08-14-1986	470	W	100	U	400BLMR
HO Be 91	HO-81-0583	Lawson, Ross	Dillon Bros	07-06-1984	465	W	125	H	400BLMR
HO Be 92	HO-73-1855	Barth, Clara	L F Easterday	02-07-1977	480	H	80	H	400BLMR
HO Be 93	HO-73-0664	Wheatley	G E Harr Sons	03-16-1974	490	H	100	H	400BLMR
HO Be 94	HO-73-0795	Ensley, Thomas	John Wells	08-09-1974	485	H	112	H	400BLMR
HO Be 95	HO-73-3757	Lassotovitch, Eric	Joseph Mayne	12-08-1980	410	H	325	H	300ELCC
HO Be 96	HO-73-4299	Applebaum, Jeff	L F Easterday	11-09-1982	400	S	140	Q	300OELL
HO Be 97	HO-81-1053	Martin, Jerry	G E Harr Sons	09-03-1985	405	S	300	H	300OELL
HO Be 98	HO-73-0907	Mathews, Milton	Dillon Bros	06-20-1975	400	S	65	H	300OELL
HO Be 99	HO-73-3658	Reed, Frank	Ralph Mayne	08-21-1980	405	H	165	H	300OELL
HO Be 100	HO-81-1188	Johnson	Westminster	10-04-1985	450	H	115	H	300OELL
HO Be 101	HO-73-3020	Hagan, Jerry	Dillon Bros	11-01-1978	450	H	200	H	300OELL
HO Be 102	HO-02-7627	Md State Highway Admin	G E Harr Sons	12-09-1957	465	H	99	U	300OELL
HO Be 103	HO-73-1987	Fred Allnutt Inc	Westminster	04-13-1977	477	H	125	U	400BLMR
HO Be 104	HO-73-1986	Barth, Richard	L F Easterday	04-20-1977	480	H	180	H	400BLMR
HO Be 105	HO-73-4334	Jones, Carlee M	Dillon Bros	02-12-1983	465	H	100	H	300OELL
HO Be 106	HO-73-4375	Ellicott City Vet Clin	L F Easterday	01-24-1983	475	H	45	U	400BLMR
HO Be 107	HO-73-3956	Smith, Charles H	Joseph Mayne	07-21-1981	445	H	200	H	300OELL
HO Be 108	HO-73-3661	Fenner, Robert L	Joseph Mayne	08-18-1980	440	H	185	H	300OELL
HO Be 109	HO-73-4373	Crist, Douglas	L F Easterday	01-17-1983	465	H	160	H	300OELL
HO Be 110	HO-05-6707	Kiwanis Cl of Ell City	Edward Brown	04-09-1964	460	H	230	H	400BLMR
HO Be 111	HO-81-0985	Ziegler, Charles	Westminster	05-14-1985	520	S	103	H	400BLMR
HO Be 112	HO-81-0547	Homer, John	Westminster	06-09-1984	465	S	453	H	300LCRV
HO Be 113	HO-73-3413	--	L F Easterday	09-20-1979	535	H	300	H	300LCRV
HO Be 114	HO-03-9658	Turf Valley Ctry Club	Edward Brown	08-19-1960	425	F	65	I	300LCRV
HO Be 115	HO-03-9659	Turf Valley Ctry Club	Edward Brown	08-27-1960	415	V	117	I	300LCRV
HO Be 116	HO-03-3320	Turf Valley Ctry Club	G E Harr Sons	03-02-1959	430	S	250	C,R	300LCRV
HO Be 117	HO-65-0194	Turf Valley Ctry Club	G E Harr Sons	09-10-1964	425	V	82	H	400BLMR
HO Be 118	HO-66-0279	Turf Valley Ctry Club	G E Harr Sons	05-02-1966	415	V	122	H	300LCRV
HO Be 119	HO-03-3321	Turf Valley Ctry Club	G E Harr Sons	03-23-1959	420	S	313	C,R	300LCRV
HO Be 120	HO-03-9657	Turf Valley Ctry Club	Edward Brown	08-12-1960	465	S	95	I	300STRS
HO Be 121	HO-81-0985	Ziegler, Charles	Westminster	05-14-1985	520	S	453	U	400BLMR
HO Be 122	HO-81-0985	Ziegler, Charles	Westminster	05-14-1985	520	S	228	U	400BLMR
HO Be 123	HO-73-0277	Friendly Inn	L F Easterday	06-08-1973	445	F	80	C	300LCRV
HO Be 124	HO-73-2517	Cramer	L F Easterday	03-10-1978	485	H	100	H	300STRS
HO Be 125	HO-73-0517	Stump, John A	Joseph Mayne	11-12-1973	465	H	80	H	400BLMR
HO Be 126	HO-81-0347	Lee, Hong Koo	Joseph Mayne	10-30-1984	465	H	260	H	400BLMR
HO Be 127	HO-67-0034	Doughoregan Manor	Edward Brown	08-04-1966	465	F	200	U	400BLMR
HO Be 128	--	Doughoregan Manor	Edward Brown	1966	465	F	150	U	400BLMR
HO Be 129	--	Doughoregan Manor	Edward Brown	1966	480	F	200	U	400BLMR
HO Be 130	HO-67-0043	Doughoregan Manor	Edward Brown	08-24-1966	440	W	200	H	400BLMR
HO Be 131	HO-81-1782	--	Joseph Mayne	12-17-1986	485	H	150	H	400BLMR
HO Be 132	HO-71-0093	Bell, Arthur	L F Easterday	03-03-1971	420	H	120	U	300OELL
HO Be 133	HO-67-0155	Doughoregan Manor	Edward Brown	11-02-1966	500	H	150	U	400BLMR
HO Be 134	HO-02-6916	Doughoregan Manor	G E Harr Sons	07-05-1957	500	H	250	U	400BLMR
HO Be 135	HO-73-3887	Midence, Fernando	L F Easterday	05-18-1981	410	S	200	H	400BLMR
HO Be 136	HO-69-0122	Doughoregan Manor	L F Easterday	02-03-1969	465	F	360	H	400BLMR
HO Be 137	HO-69-0122	Doughoregan Manor	L F Easterday	02-06-1969	465	F	200	H	400BLMR
HO Be 138	HO-69-0195	Doughoregan Manor	L F Easterday	10-14-1969	470	F	120	H	400BLMR
HO Be 139	HO-66-0371	Doughoregan Manor	Edward Brown	06-23-1966	465	H	150	H	400BLMR
HO Be 140	HO-73-3930	Carr, George W	Westminster	06-12-1981	415	S	202	H,S	300OELL
HO Bf 1	--	Maryland Water Works	--	--	290	V	127.6	U	300OELL
HO Bf 2	--	Maryland Water Works	--	--	295	V	200	U	300OELL
HO Bf 3	--	Maryland Water Works	--	--	295	V	--	U	300OELL
HO Bf 4	HO-00-5132	--	F B Rogers	01-15-1950	260	V	28	U	300ELCC
HO Bf 5	--	Park, James	--	--	375	S	65	U	300MWSG
HO Bf 6	HO-00-0771	--	F B Rogers	08-28-1946	360	S	60	U	300MWSG
HO Bf 7	HO-00-0635	Ellicott City Motor Co	Edward Brown	08-05-1946	350	S	69	U	300OELL
HO Bf 8	HO-00-5776	Maryland Natl Guard	G E Harr Sons	05-10-1950	405	H	106	U	300MWSG
HO Bf 9	--	Buell's Restaurant	Edward Brown	06-13-1952	355	U	--	U	300OELL
HO Bf 10	HO-00-3643	Devlin, R W	Edward Brown	03-25-1949	475	S	45	U	300OELL
HO Bf 11	HO-00-1846	Grimm, Mrs	Edward Brown	12 -- 1948	455	S	39	U	300OELL
HO Bf 12	HO-00-5353	Ramsberg, Alvia	Edward Brown	03-04-1950	430	S	68	U	300OELL
HO Bf 13	--	Kuhn, John C	--	05 -- 1952	460	H	55.7	H	400BLMR
HO Bf 14	--	Kerwin, William	--	--	470	H	25.7	H	300OELL
HO Bf 15	--	Nazbrod, Clarence	Edmondson	1945	350	S	50	U	300OELL
HO Bf 16	--	Stevens, Harry	Edward Brown	1952	455	H	--	U	300MWSG
HO Bf 17	--	Jett, A C	--	--	385	H	27	H,S	300MWSG
HO Bf 18	HO-00-3599	Buell, E	Edward Brown	02-03-1949	435	H	50	U	300OELL
HO Bf 19	HO-00-4583	Kaiser, Fred	Edward Brown	12-17-1949	435	S	90	H	300OELL

Casing			Water level		Aquifer test					Other	
Depth (ft)	Diameter (in.)	Finish	Depth, ft below land surface	Date measured	Yield (gal/min)	Drawdown (ft)	Specific capacity [(gal/min)/ft]	Hours pumped	Date	data available	Well no.
23	6	X	40	08-16-1974	2	110	0.02	6	08-16-1974	--	HO Be 85
35	6	X	14	11-02-1982	4	286	.01	3	11-02-1982	--	HO Be 86
48	6	X	60	03-29-1979	3	116	.03	6	03-29-1979	--	HO Be 87
32	6	X	98	06-21-1982	7	10	.70	3	06-21-1982	Q	HO Be 88
19	6	X	45	11-21-1984	1	295	<.01	3	11-21-1984	--	HO Be 89
40	6	X	7	08-14-1986	14.28	18.42	.78	3	08-14-1986	--	HO Be 90
60	6	X	10	07-06-1984	10	95	.11	3	07-06-1984	--	HO Be 91
19	6	X	40	02-07-1977	60	40	1.50	2	02-07-1977	--	HO Be 92
20	6	X	11	03-16-1974	15	79	.19	6	03-16-1974	--	HO Be 93
25	6	X	32	08-09-1974	15	68	.22	3	08-09-1974	--	HO Be 94
21	6	X	65	12-08-1980	1	255	<.01	6	12-08-1980	--	HO Be 95
47	6	X	55	11-09-1982	10	85	.12	3	11-09-1982	Q	HO Be 96
78	6	X	10	09-03-1985	2.5	229.83	.01	6	09-03-1985	--	HO Be 97
30	6	X	30	06-20-1975	10	15	.67	6	06-20-1975	--	HO Be 98
35	6	X	25	08-21-1980	10	140	.07	5	08-21-1980	--	HO Be 99
45.6	6	X	28	10-04-1985	15	20	.75	3	10-04-1985	--	HO Be 100
33	6	X	35	11-01-1978	15	90	.17	--	11-01-1978	--	HO Be 101
54.3	6	X	28	12-09-1957	10	12	.83	4	12-09-1957	--	HO Be 102
43	6	X	24.05 S	11-03-1988	20	11	1.82	6	04-13-1977	O	HO Be 103
38	6	X	40	04-20-1977	4	140	.03	2	04-20-1977	--	HO Be 104
60	6	X	30	02-12-1983	15	40	.38	4	02-12-1983	--	HO Be 105
42	6	X	30	01-24-1983	30	20	1.50	3	01-24-1983	--	HO Be 106
43	6	X	45	07-21-1981	3	140	.02	6	07-21-1981	--	HO Be 107
23	6	X	45	08-18-1980	10	135	.07	3	08-18-1980	--	HO Be 108
54	6	X	63	01-17-1983	10	0	--	3	01-17-1983	Q	HO Be 109
53	6	X	24	04-09-1964	3	--	--	1	04-09-1964	--	HO Be 110
59	6	X	35	05-14-1985	20	7	2.86	3	05-14-1985	--	HO Be 111
62	6	X	45	06-09-1984	15	145	.10	3	06-09-1984	Q	HO Be 112
60	6	X	60	09-18-1979	1	240	<.01	2	09-20-1988	--	HO Be 113
40	6	X	32	08-19-1960	20	8	2.50	1	08-27-1960	--	HO Be 114
78	6	X	58	08-27-1960	10	26	.38	1	08-27-1960	--	HO Be 115
4	6	X	10	03-02-1959	12	205	.06	48	03-02-1959	--	HO Be 116
11	6	X	30	09-10-1964	1.5	45	.03	3	09-10-1964	--	HO Be 117
37	6	X	22	05-02-1966	50	93	.54	4	05-02-1966	--	HO Be 118
20.2	6	X	10	03-23-1959	10	205	.05	48	03-23-1969	--	HO Be 119
22	6	X	24	08-12-1960	15	--	--	4	08-12-1960	--	HO Be 120
--	--	X	Dry	05-14-1985	0	--	--	--	05-14-1985	--	HO Be 121
--	--	X	Dry	05-14-1985	0	--	--	--	05-14-1985	--	HO Be 122
58	6	X	15	06-08-1973	10	65	.15	2	06-08-1973	--	HO Be 123
86	6	X	65	03-10-1978	50	35	1.43	3	03-10-1978	--	HO Be 124
36	6	X	30	11-12-1973	8	0	--	2	11-12-1973	--	HO Be 125
27	6	X	33	10-30-1984	4.5	143	.03	3	10-30-1984	--	HO Be 126
23	6	X	28	08-04-1966	3	--	--	2	08-04-1966	--	HO Be 127
34	6	X	--	--	3.5	--	--	--	1966	--	HO Be 128
34	34	X	--	--	3.5	--	--	--	1966	--	HO Be 129
28	6	X	30	08-24-1966	30	--	--	4	08-24-1966	--	HO Be 130
38	6	X	36	12-17-1986	12	3	4.0	3	12-17-1986	--	HO Be 131
15	6	X	32.29 S	03-01-1989	3	90	.03	1	03-03-1971	--	HO Be 132
35	6	X	36	11-02-1966	3.5	--	--	2	11-02-1966	--	HO Be 133
24	6	X	21	07-05-1957	15	124	.12	9	07-05-1957	--	HO Be 134
35	6	X	40	05-18-1981	20	160	.12	2	05-18-1981	--	HO Be 135
30	6	X	60	02-03-1969	12	300	.04	.5	02-03-1969	--	HO Be 136
26	6	X	60	02-06-1969	12	140	.09	.5	02-06-1969	--	HO Be 137
41	6	X	35	10-14-1969	10	85	.12	1	10-14-1969	--	HO Be 138
48	6	X	36	06-23-1966	10	--	--	2	06-23-1966	--	HO Be 139
73	6	X	88	06-12-1981	5	62	.08	4	06-12-1981	Q	HO Be 140
--	8	-	5.51 S	10-25-1946	--	--	--	--	--	--	HO Bf 1
--	8	-	--	--	--	--	--	--	--	--	HO Bf 2
--	8	-	--	--	60	--	--	--	09-11-1945	--	HO Bf 3
28	6	O	9.61 S	01-12-1950	5	--	--	--	01-15-1950	Q	HO Bf 4
--	6	-	20.20 S	01-12-1950	--	--	--	--	--	--	HO Bf 5
60	6	O	20	08-28-1946	8	--	--	--	08-28-1946	--	HO Bf 6
30	--	X	28	08-05-1946	15	22	.68	1.5	08-05-1946	--	HO Bf 7
--	6	-	9	05-10-1950	10	54	.19	18	05-10-1950	Q	HO Bf 8
--	6	-	65	07-13-1952	11	--	--	--	07-13-1952	--	HO Bf 9
30	6	X	22	03-25-1949	8	8	1.0	1	03-25-1949	--	HO Bf 10
25	6	X	8.12 S	07-14-1952	--	--	--	--	--	--	HO Bf 11
25	6	X	6.88 S	07-15-1952	6	23	.26	1	03-04-1950	--	HO Bf 12
--	--	-	18.90 S	07-28-1952	--	--	--	--	--	--	HO Bf 13
25.7	24	W	16.90 S	07-28-1952	--	--	--	--	--	--	HO Bf 14
--	--	-	18	1945	--	--	--	--	--	--	HO Bf 15
--	6	-	16.53 S	07-28-1952	15	--	--	--	07-28-1952	--	HO Bf 16
27	36	W	20	1952	--	--	--	--	--	--	HO Bf 17
35	6	X	18	02-03-1949	6	--	--	.5	02-03-1949	--	HO Bf 18
45	6	X	50	12-17-1949	10	30	.33	1	12-17-1949	--	HO Bf 19

Table 1.—Records of selected wells in Howard County—Continued

Well no.	Well permit no.	Owner or name	Driller	Date of construction	Altitude of land surface (ft)	Topo-graphic setting	Depth Drilled (ft)	Use of water	Geologic unit
HO Bf 20	HO-00-7546	Zepp, Edgar	Edward Brown	03-14-1951	410	S	40	H	300OELL
HO Bf 21	HO-00-3430	Hinton, Jules	Edward Brown	04-21-1949	370	S	40	U	300OELL
HO Bf 22	--	Ivy, Fulton	L Jenkins	01 -- 1952	400	H	21	U	300MWSG
HO Bf 23	HO-00-2452	Moylen, J E	F B Rogers	04-12-1948	380	H	90	U	300MWSG
HO Bf 24	HO-00-2451	Kammer, Henry	F B Rogers	04-03-1948	380	H	83	U	300MWSG
HO Bf 25	HO-00-7454	St John's Episcopal Ch	Edward Brown	03-07-1951	430	H	100	U	300MWSG
HO Bf 26	HO-00-1517	Clark, Edward	Edward Brown	07-08-1947	380	S	68	H	300MWSG
HO Bf 27	HO-00-8821	Gaither, Irwin	Edward Brown	11-16-1951	435	S	67	U	300MWSG
HO Bf 28	--	Shultz Convalescent Hm	C E Downin	--	410	H	120	U	300MWSG
HO Bf 29	--	Clark, Ed	Edward Brown	1930	430	H	103	H,S	300MWSG
HO Bf 30	--	Henry	Edward Brown	1929	395	F	90	U	300MWSG
HO Bf 31	HO-00-2238	Buell's Restaurant	F B Rogers	01-30-1948	355	U	65	U	300OELL
HO Bf 32	--	Natwick, J	Washington	1935	415	S	750	U	300MWSG
HO Bf 33	--	Brennan & Merz	--	1820	340	H	110	U	300ELCC
HO Bf 34	--	Patapsco Valley St Pk	--	1942	220	V	200	U	300CCKV
HO Bf 36	--	Brennan & Merz	--	--	280	S	75	H	300ELCC
HO Bf 37	HO-68-0143	Patapsco Valley St Pk	G E Harr Sons	02-07-1968	280	S	200	U	300CCKV
HO Bf 38	HO-68-0143	Patapsco Valley St Pk	G E Harr Sons	02-09-1968	275	S	202	U	300CCKV
HO Bf 39	HO-68-0219	Patapsco Valley St Pk	L F Easterday	05-20-1968	265	S	200	H	300LCRV
HO Bf 40	HO-73-1961	Dyson, Lawrence	L F Easterday	07-08-1977	430	S	100	H	400BLMR
HO Bf 41	HO-73-1979	Oliver, Reid	Dillon Bros	05-24-1977	460	F	145	H	400BLMR
HO Bf 42	HO-05-6498	Patapsco Valley St Pk	G E Harr Sons	02-28-1964	230	V	195	U	300CCKV
HO Bf 43	HO-05-6499	Patapsco Valley St Pk	G E Harr Sons	02-28-1964	230	V	195	U	300CCKV
HO Bf 44	HO-05-6500	Patapsco Valley St Pk	G E Harr Sons	02-28-1964	230	V	270	U	300CCKV
HO Bf 45	HO-73-3922	Bierman, William	L F Easterday	07-01-1981	480	S	220	H	300OELL
HO Bf 46	HO-73-3662	Gary Memorial Meth Ch	Dillon Bros	09-10-1980	260	H	300	H	300STRS
HO Bf 47	HO-73-3843	Rome, Bernard	L F Easterday	03-24-1981	460	H	300	H	300STRS
HO Bf 48	HO-73-4158	Boyd, Daniel	G E Harr Sons	05-08-1982	460	H	100	H	400BLMR
HO Bf 49	HO-73-4158	Boyd, Daniel	G E Harr Sons	05-08-1982	460	H	500	U	400BLMR
HO Bf 50	HO-73-0395	Reinhardt, Edwin L	Westminster	09-11-1973	470	H	130	H	400BLMR
HO Bf 51	HO-73-0809	Bolanowski	Dillon Bros	10-14-1974	465	H	150	U	400BLMR
HO Bf 52	HO-81-1376	Roemer, Larry	L F Easterday	04-03-1986	450	H	180	H	400BLMR
HO Bf 53	HO-81-0998	Kefauver, Mary	L F Easterday	04-29-1985	465	H	200	H	400BLMR
HO Bf 54	HO-73-0802	Seybold, Eugene	Joseph Mayne	01-08-1975	410	S	160	H	400BLMR
HO Bf 55	HO-73-1054	Couthlin, Gerald	A C Reider	07-21-1975	425	H	55	H	400BLMR
HO Bf 56	HO-73-1690	Clark, William	A C Reider	11-11-1976	445	W	190	H	400BLMR
HO Bf 57	HO-73-4232	Phelps, Ronald	Westminster	08-16-1982	410	S	250	H	400BLMR
HO Bf 58	HO-73-0441	Palmer, John	Joseph Mayne	09-10-1973	380	H	160	H	300LCRV
HO Bf 59	HO-73-3153	Donaldson, Thomas E	Dillon Bros	04-05-1979	420	S	205	H	400BLMR
HO Bf 60	HO-81-1923	Duvall, Doug	L F Easterday	03-10-1987	420	H	200	H	400BLMR
HO Bf 61	HO-73-2507	May, James	L F Easterday	03-22-1978	440	S	140	H	400BLMR
HO Bf 62	HO-73-3660	Hild, Jack	S Bollinger	10-10-1980	430	S	165	H	300STRS
HO Bf 63	HO-73-4034	Sprainis, Andrew Jr	Westminster	11-25-1981	430	S	279	H	300STRS
HO Bf 64	HO-73-1926 HO-73-2665	Roswell, Richard	L F Easterday	04-07-1978	425	H	300	H	400BLMR
HO Bf 65	HO-01-6144	Patapsco Valley St Pk	G E Harr Sons	09-08-1954	425	H	129	U	300MWSG
HO Bf 66	HO-02-6038	Patapsco Valley St Pk	G E Harr Sons	02-25-1957	420	H	174	U	300MWSG
HO Bf 67	HO-02-6318	Patapsco Valley St Pk	G E Harr Sons	03-14-1957	425	H	161	U	300MWSG
HO Bf 68	HO-81-0584	Eklof, G W Jr	Joseph Mayne	06-12-1984	370	H	300	H	300MWSG
HO Bf 69	--	Eklof, G W Jr	--	--	365	H	40.5	U	300MWSG
HO Bf 70	HO-73-3912	Bell, Mark	Joseph Mayne	05-19-1981	265	H	245	H	300MWSG
HO Bf 71	HO-81-0488	Kamakoti & Tirupati	G E Harr Sons	04-17-1984	205	H	300	U	300MWSG
HO Bf 72	HO-81-0488	Kamakoti & Tirupati	G E Harr Sons	04-17-1984	205	H	300	U	300MWSG
HO Bf 73	HO-81-0488	Kamakoti & Tirupati	G E Harr Sons	04-17-1984	205	H	200	U	300MWSG
HO Bf 74	HO-81-0506	Kamakoti & Tirupati	G E Harr Sons	04-17-1984	205	H	175	U	300MWSG
HO Bf 75	HO-73-2803	Mowers	L F Easterday	06-30-1978	400	F	120	H	300MWSG
HO Bf 76	HO-73-2113	Tarasca, Louis	Dillon Bros	07-07-1977	385	H	125	H	300MWSG
HO Bf 77	HO-73-0447	Tarasca, Louis	Dillon Bros	11-15-1973	380	W	100	H	300MWSG
HO Bf 78	HO-68-0026	Wurtzer, Mary K	G E Harr Sons	09-28-1967	400	H	145	U	300MWSG
HO Bf 79	HO-81-1237	McGinty, Edward F Jr	G E Harr Sons	04-15-1986	295	S	200	H	300ELCC
HO Bf 81	HO-73-0021	Suter, Charles	L F Easterday	08-01-1972	330	S	200	H	300OELL
HO Bf 82	HO-81-0353	--	L F Easterday	12-23-1983	210	S	200	H	300OELL
HO Bf 83	HO-73-0042	Harrison, Joseph	L F Easterday	08-25-1972	225	H	200	H	300OELL
HO Bf 84	HO-73-3645	Hollenbeck, R Gary	Dillon Bros	08-12-1980	205	S	200	H	300OELL
HO Bf 85	HO-00-5353	Ramsburg, Alvia	Edward Brown	03-19-1950	430	S	47	U	300OELL
HO Bf 86	HO-73-2015	Wurtger, Mary K	Ralph Mayne	05-18-1977	385	H	145	I	300MWSG
HO Cc 1	--	Fisher, Carl O	Edward Brown	1945	470	S	100	H,S	300LCRV
HO Cc 2	HO-73-3904	Grant, David G	Joseph Mayne	05-07-1981	520	H	165	H	--
HO Cc 3	HO-73-1455	Grant, David G	L F Easterday	07-15-1976	520	H	400	U	300SKVL
HO Cc 4	HO-81-0615	Schultz, Arden	G E Harr Sons	07-10-1984	505	S	125	H	300SKVL
HO Cc 5	HO-73-0380	Smith, Charles	C A Cromwell	09-01-1973	450	S	125	H	300SKVL
HO Cc 6	HO-73-1633	Odonnell, John G Jr	Ralph Mayne	09-29-1976	485	H	194	H	300SKVL
HO Cc 7	HO-73-4130	Brown, James F	Joseph Mayne	03-16-1982	450	S	145	H	300SKVL

Casing			Water level		Aquifer test					Other	
Depth (ft)	Diameter (in.)	Finish	Depth, ft below land surface	Date measured	Yield (gal/min)	Drawdown (ft)	Specific capacity [(gal/min)/ft]	Hours pumped	Date	data available	Well no.
26	6	X	9.99 S	08-07-1952	10	10	1.0	0.5	03-14-1951	--	HO Bf 20
25	6	X	17.60 S	08-07-1952	10	6	1.67	1	04-21-1949	--	HO Bf 21
21	48	W	7.04 S	08-07-1952	--	--	--	--	--	--	HO Bf 22
--	6	X	40	04-12-1948	3	--	--	--	04-12-1948	--	HO Bf 23
--	6	X	52.71 S	08-07-1952	8	--	--	--	04-03-1948	--	HO Bf 24
35	6	X	24	03-07-1951	10	34	.29	1.5	03-07-1951	--	HO Bf 25
55	6	X	35	07-08-1947	--	--	--	--	--	--	HO Bf 26
40	6	X	28	11-16-1951	3	--	--	.5	11-16-1951	--	HO Bf 27
--	6	-	--	--	--	--	--	--	--	--	HO Bf 28
--	6	-	--	--	10	--	--	--	1930	--	HO Bf 29
--	6	-	40	1929	10	--	--	--	1929	--	HO Bf 30
--	6	-	30	01-30-1948	3	--	--	--	01-30-1948	--	HO Bf 31
--	8	-	16.2 S	07-21-1952	--	--	--	--	--	--	HO Bf 32
110	48	W	38.80 S	04-03-1953	--	--	--	--	--	--	HO Bf 33
--	--	-	--	--	5	--	--	--	1942	--	HO Bf 34
--	240	W	7.72 S	04-03-1953	--	--	--	--	--	--	HO Bf 36
30	6	X	20.33 S	02-27-1968	.15	162	<.01	8	02-07-1968	--	HO Bf 37
12	6	X	12.63 S	06-29-1988	.25	--	--	1	02-09-1968	L,O	HO Bf 38
20	6	X	20	05-20-1968	6	180	.03	.5	05-20-1968	--	HO Bf 39
34	6	X	50	07-08-1977	30	50	.60	2	07-08-1977	--	HO Bf 40
28	6	X	40	05-24-1977	15	40	.38	6	05-24-1977	--	HO Bf 41
56	6	X	70	02-28-1964	8	65	.12	8	02-28-1964	--	HO Bf 42
72.2	6	X	75	02-28-1964	9	65	.14	8	02-28-1964	--	HO Bf 43
41.1	6	X	75	02-28-1964	8.5	55	.15	8	02-28-1964	--	HO Bf 44
26	6	X	30	07-01-1981	1	190	.01	2	07-01-1981	--	HO Bf 45
25	6	X	40	09-10-1980	20	60	.33	6	09-10-1980	--	HO Bf 46
26	6	X	55	03-24-1981	1	245	<.01	2	03-24-1981	--	HO Bf 47
50	6	X	37	05-08-1982	10	31	.32	3	05-08-1982	--	HO Bf 48
--	--	X	Dry	05-08-1982	0	--	--	--	05-08-1982	--	HO Bf 49
37	6	X	49	09-11-1973	22	53	.42	3	09-11-1973	--	HO Bf 50
23	6	X	26.47 S	06-29-1988	1	100	.01	6	10-14-1974	O	HO Bf 51
43	6	X	26	04-03-1986	12	44	.27	3	04-03-1986	--	HO Bf 52
28	6	X	55	04-29-1985	2	145	.01	3	04-29-1988	--	HO Bf 53
21	6	X	30	01-08-1975	4	125	.03	2	01-08-1975	--	HO Bf 54
22	6	X	20	07-21-1975	15	10	1.50	6	07-21-1975	--	HO Bf 55
28	6	X	42	11-11-1976	17	143	.12	6	11-11-1976	Q	HO Bf 56
27	6	X	35	08-16-1982	11.9	173	.07	3	08-16-1982	--	HO Bf 57
94	6	X	65	09-10-1973	5	95	.05	2	09-10-1973	--	HO Bf 58
20	6	X	30	04-05-1979	15	90	.17	6	04-05-1979	--	HO Bf 59
18	6	X	41	03-10-1987	6	39	.15	3	03-10-1987	--	HO Bf 60
19	6	X	25	03-22-1978	12	115	.10	2	03-22-1978	--	HO Bf 61
21	6	X	45	10-10-1980	15	120	.13	2	10-10-1980	--	HO Bf 62
57	6	X	70	11-25-1981	2.5	149	.02	6	11-25-1981	--	HO Bf 63
29	6	X	40	06-03-1977	6	105	.06	2	06-03-1977	--	HO Bf 64
55.1	6	X	50	09-08-1954	5	30	.17	10	09-08-1954	--	HO Bf 65
102	6	X	30	02-25-1957	2.5	70	.04	5	02-25-1957	--	HO Bf 66
62.4	6	X	24.27 S	10-05-1988	11	56	.20	4	03-14-1957	O	HO Bf 67
80	6	X	45	06-12-1984	4	75	.05	3	06-12-1984	Q	HO Bf 68
40.5	36	W	31.48 S	11-03-1988	--	--	--	--	--	O	HO Bf 69
34	6	X	55	05-19-1981	5	130	.04	3	05-19-1981	--	HO Bf 70
51	6	X	45	04-17-1984	5.2	247	.02	4	04-17-1984	--	HO Bf 71
--	--	X	Dry	04-17-1984	0	--	--	--	04-17-1984	--	HO Bf 72
--	--	X	Dry	04-17-1984	0	--	--	--	04-17-1984	--	HO Bf 73
55	6	X	45	04-17-1984	3	110	.03	3	04-17-1984	--	HO Bf 74
64	6	X	20	06-30-1978	20	100	.20	3	06-30-1978	--	HO Bf 75
33	6	X	35	07-07-1977	7	80	.09	6	07-07-1977	--	HO Bf 76
35	6	X	4	11-15-1973	25	66	.38	6	11-15-1973	Q	HO Bf 77
25	6	X	40.24 S	10-05-1988	6.5	70	.09	4	09-28-1967	O	HO Bf 78
29	6	X	30	04-15-1986	4	159	.03	3	04-15-1986	--	HO Bf 79
45	6	X	50	08-01-1972	8	150	.05	1	08-01-1972	Q	HO Bf 81
20	6	X	35	12-23-1983	4	165	.02	3	12-23-1983	--	HO Bf 82
18	6	X	30	08-25-1972	5	170	.03	1	08-25-1972	--	HO Bf 83
20	6	X	30	08-12-1980	3	160	.02	6	08-12-1980	--	HO Bf 84
30	6	X	18	03-19-1950	5	16	.31	1	03-19-1950	--	HO Bf 85
66	6	X	30	05-18-1977	10	115	.09	2	05-18-1977	--	HO Bf 86
--	6	-	40	1945	3	--	--	--	1945	Q	HO Cc 1
26	6	X	55	05-07-1981	4	75	.05	3	05-07-1981	--	HO Cc 2
106	6	X	60	07-15-1976	1	340	<.01	3	07-15-1976	--	HO Cc 3
47	6	X	25	07-10-1984	14.28	10.75	1.33	3	07-10-1984	--	HO Cc 4
41	6	X	45	09-01-1973	12	75	.16	2	09-01-1973	--	HO Cc 5
78	6	X	50	09-29-1976	2	144	.01	2	09-29-1976	--	HO Cc 6
56	6	X	30	03-16-1982	10	<.01	--	3	03-16-1982	--	HO Cc 7

Table 1.—Records of selected wells in Howard County—Continued

Well no.	Well permit no.	Owner or name	Driller	Date of construction	Altitude of land surface (ft)	Topo-graphic setting	Depth Drilled (ft)	Use of water	Geologic unit
HO Cc 8	HO-73-3567	Brown, Thomas	Joseph Mayne	03-31-1980	455	S	145	H	300SKVL
HO Cc 9	HO-73-0690	Ridgway, Siobhan	L F Easterday	07-17-1974	470	S	120	H	300MRGR
HO Cc 10	HO-73-0490	Parker, R Joseph	L F Easterday	12-18-1973	470	H	300	H	300MRGR
HO Cc 11	HO-81-0275	Watzin, James	L F Easterday	09-29-1983	430	S	120	H	300SKVL
HO Cc 12	HO-81-0249	Branthover, J Brian	L F Easterday	09-27-1983	470	H	140	H	300SKVL
HO Cc 13	HO-81-0725	Joseph, Dennis	Joseph Mayne	10-01-1984	490	H	205	H	300MRGR
HO Cc 14	HO-73-1365	McInteer, John	L F Easterday	03-23-1976	495	H	200	H	300MRGR
HO Cc 15	HO-73-0205	Reese, Robert	G E Harr Sons	04-20-1973	505	H	175	U	300MRGR
HO Cc 16	HO-73-0205	Reese, Robert	G E Harr Sons	09-21-1973	505	H	175	H	300MRGR
HO Cc 17	HO-73-0234	Ryan, Richard M	G E Harr Sons	04-23-1973	520	H	175	U	300UMFC
HO Cc 18	HO-73-0234	Ryan, Richard M	G E Harr Sons	09-20-1973	520	H	150	H	300UMFC
HO Cc 19	HO-81-1061	Smith, Lawrence	Joseph Mayne	10-02-1985	505	H	205	H	300UMFC
HO Cc 20	HO-81-1049	Ayersman, Randy	L F Easterday	06-12-1985	485	H	300	H	300UMFC
HO Cc 21	HO-81-0064	Amirault, Gary	Ralph Mayne	04-22-1983	475	H	200	H	300UMFC
HO Cc 22	HO-73-4154	--	L F Easterday	05-07-1982	470	H	300	H	300UMFC
HO Cc 23	HO-73-3781	Rosenberg, Elliot	Joseph Mayne	01-19-1981	420	S	165	H	300MRGR
HO Cc 24	HO-73-3319	Morrill, James	L F Easterday	07-03-1979	450	H	120	H	300MRGR
HO Cc 25	HO-73-3201	Johnson, Wesley R	L F Easterday	05-09-1979	470	H	280	H	300MRGR
HO Cc 26	HO-81-1241	Thompson, Carl A	L F Easterday	01-08-1986	490	H	300	H	300MRGR
HO Cc 27	HO-73-4219	--	Joseph Mayne	07-08-1982	480	H	265	H	300MRGR
HO Cc 28	HO-81-0978	Lewis, Kenneth A	Joseph Mayne	04-25-1985	440	S	185	H	300MRGR
HO Cc 29	HO-73-1131	Scherer, J Otto	G E Harr Sons	10-29-1975	445	H	105	H	300LCRV
HO Cc 30	HO-73-0128	Bruffey, Margaret	L F Easterday	03-05-1973	455	S	160	H	300SKVL
HO Cc 31	HO-73-0127	Gibbons	L F Easterday	03-05-1973	445	S	120	U	300SKVL
HO Cc 32	HO-73-0453	Gibbons	L F Easterday	09-20-1973	445	S	210	H	300SKVL
HO Cc 33	HO-73-1298	Kornos, John	Joseph Mayne	01-22-1976	445	S	245	H	300LCRV
HO Cc 34	HO-73-3723	Pendelton, Robert K	S Bollinger	12-08-1980	490	S	225	H	300LCRV
HO Cc 35	HO-81-0215	Lane, Helen R	Joseph Mayne	08-05-1983	470	S	300	H	300LCRV
HO Cc 36	HO-73-1258	Cissel, C Claude	Joseph Mayne	12-02-1975	465	S	200	H	300LCRV
HO Cc 37	HO-72-0199	Oler, Robert S	Harry Green	05-19-1972	470	S	285	U	300LCRV
HO Cc 38	HO-73-0600	Oler, Robert S	L F Easterday	08-14-1974	460	W	280	H	300LCRV
HO Cc 39	HO-73-0275	Leishear, Reginald	Dewey Brown	09-27-1973	520	S	125	H	300UMFC
HO Cc 40	HO-73-0177	O'Halloran, Michael	L F Easterday	03-26-1973	540	H	220	H	300MRGR
HO Cc 41	HO-73-1252	Wiedel, Verdan P	L F Easterday	12-18-1975	545	H	200	H	300MRGR
HO Cc 42	HO-81-2009	Jeffery, Michelle	Tri County	05-22-1987	500	S	175	H	300SKVL
HO Cc 43	HO-81-1864	--	Ralph Mayne	03-07-1987	515	U	200	H	300SKVL
HO Cc 44	HO-81-2385	Learmouth, Robert	Ralph Mayne	11-09-1987	470	H	165	H	300SKVL
HO Cc 45	HO-81-1631	--	Joseph Mayne	09-22-1986	440	S	225	H	300SKVL
HO Cc 46	HO-81-1628	Sauers, Robert	Ralph Mayne	08-15-1986	450	H	165	H	300UMFC
HO Cc 47	HO-81-1629	Marchegiani, Lucio	Ralph Mayne	08-15-1986	490	H	165	H	300MRGR
HO Cc 48	HO-73-0923	Smith, Charles	John Greene	02-19-1975	480	H	165	H	300SKVL
HO Cc 49	HO-73-0924	Smith, Charles	John Greene	02-19-1975	480	H	125	H	300SKVL
HO Cc 50	HO-88-0460	Thompson, Carl A	L F Easterday	04-18-1989	490	H	400	A	300MRGR
HO Cc 51	HO-88-0549	Thompson, Carl	L F Easterday	04-18-1989	470	S	100	A	300MRGR
HO Cc 52	HO-88-0550	Thompson, Carl	L F Easterday	04-18-1989	470	S	140	A	300MRGR
HO Cd 1	HO-00-6349	Brown, L W	Edward Brown	09-21-1950	580	H	75	H	300LCRV
HO Cd 2	HO-00-0596	Brown, Leroy	Edward Brown	06-27-1946	575	H	90	H	300LCRV
HO Cd 3	HO-00-9095	Adams, Andrew N	Edward Brown	01-05-1952	550	H	200	H,I	300LCRV
HO Cd 4	HO-00-9061	Maher, Thomas	Harry Green	10-24-1951	485	H	40	H	400BLMR
HO Cd 5	HO-00-2798	Hinkson, Mrs George	Edward Brown	06-25-1948	420	H	160	H	400BLMR
HO Cd 6	HO-00-0390	Bell, Dorsey	T N Smith	04-21-1946	595	S	99	H	300LCRV
HO Cd 7	HO-00-0835	Shillinger, J E	Edward Brown	10-16-1946	470	H	100	H	300LCRV
HO Cd 8	--	Wettern, William	F B Rogers	1947	465	H	33	H	400BLMR
HO Cd 9	--	Keedy, Eldridge	F B Rogers	03 -- 1948	470	S	28	H	400BLMR
HO Cd 10	--	Clark, Allen C	--	--	485	S	65	S	400BLMR
HO Cd 11	--	Maszaros, Michael	--	--	495	S	36.7	H,S	300LCRV
HO Cd 12	--	Randall, Louis	--	--	505	H	65	H,S	400BLMR
HO Cd 13	HO-00-5128	Hopkins United Meth Ch	F B Rogers	01-27-1950	555	S	65	U	300STRS
HO Cd 14	--	Mobley, Dorothy	Edward Brown	1947	400	V	22	R	300LCRV
HO Cd 15	--	McCandless, Wilson B	--	--	380	H	50	H,S	300LCRV
HO Cd 16	--	White, Robert	--	1925	510	H	40	U	300LCRV
HO Cd 17	--	Brown, Oliver	--	--	500	H	50	H,S	300LCRV
HO Cd 18	--	St Marks Church	--	1926	500	F	49	H	400BLMR
HO Cd 19	HO-81-1572	U S Geological Survey	G E Harr Sons	07-10-1986	473.53	H	150	U	300LCRV
HO Cd 20	HO-81-1573	U S Geological Survey	G E Harr Sons	07-10-1986	425.70	W	100	U	300LCRV
HO Cd 21	HO-81-1574	U S Geological Survey	G E Harr Sons	07-10-1986	434.18	W	100	U	300LCRV
HO Cd 22	HO-81-1575	U S Geological Survey	G E Harr Sons	07-11-1986	445	S	100	U	300LCRV
HO Cd 23	HO-81-1576	U S Geological Survey	G E Harr Sons	07-14-1986	445	S	100	U	300LCRV
HO Cd 24	HO-81-1577	U S Geological Survey	G E Harr Sons	07-14-1986	470	S	150	U	300LCRV
HO Cd 25	HO-81-1578	U S Geological Survey	G E Harr Sons	07-14-1986	470.90	H	98	U	300LCRV
HO Cd 26	HO-81-1579	U S Geological Survey	G E Harr Sons	07-14-1986	469.94	H	150	U	300LCRV
HO Cd 27	HO-81-1580	U S Geological Survey	G E Harr Sons	07-22-1986	450	H	100	U	300LCRV
HO Cd 28	--	U S Geological Survey	G E Harr Sons	07-22-1986	453.11	S	50	U	300LCRV

Casing			Water level		Aquifer test					Other	
Depth (ft)	Diameter (in.)	Finish	Depth, ft below land surface	Date measured	Yield (gal/min)	Drawdown (ft)	Specific capacity [(gal/min)/ft]	Hours pumped	Date	data available	Well no.
70	6	X	55	03-31-1980	15	85	0.18	2	03-31-1980	--	HO Cc 8
30	6	X	40	07-17-1974	20	80	.25	1	07-17-1974	--	HO Cc 9
99	6	X	40	12-18-1973	2	260	.01	2	12-18-1973	--	HO Cc 10
52	6	X	35	09-29-1983	12	11	1.09	3	09-29-1983	--	HO Cc 11
48	6	X	27	09-27-1983	10	33	.30	3	09-27-1983	Q	HO Cc 12
83	6	X	25	10-01-1984	10	22	.45	3	10-01-1984	--	HO Cc 13
66	6	X	50	03-23-1976	4	150	.03	2	03-27-1976	--	HO Cc 14
54	6	X	38	04-20-1973	15	127	.12	4	04-20-1973	--	HO Cc 15
45	6	X	28	09-21-1973	4	137	.03	6	09-21-1973	--	HO Cc 16
30	6	X	26.80 S	11-30-1987	5	130	.04	4	04-23-1973	O	HO Cc 17
44	6	X	44	09-20-1973	2	96	.02	6	09-20-1973	--	HO Cc 18
75	6	X	28	10-02-1985	9	14	.64	3	10-02-1985	--	HO Cc 19
61	6	X	25	06-12-1985	3	103	.03	6	06-12-1985	--	HO Cc 20
30	6	X	19	04-22-1983	6	181	.03	3	04-22-1983	--	HO Cc 21
37	6	X	28	05-07-1982	2	124	.02	6	05-07-1982	--	HO Cc 22
40	6	X	40	01-19-1981	10	120	.08	3	01-19-1981	--	HO Cc 23
40	6	X	30	07-03-1979	15	90	.17	3	07-03-1979	--	HO Cc 24
19	6	X	30	05-09-1979	6	250	.02	4	05-09-1979	--	HO Cc 25
50	6	X	43	01-08-1986	10	18	.56	3	01-08-1986	--	HO Cc 26
51	6	X	20	07-08-1982	4	40	.10	3	07-08-1982	--	HO Cc 27
47	6	X	37	04-25-1985	6	78	.08	3	04-25-1985	--	HO Cc 28
34	6	X	25	10-29-1975	9	4	2.25	6	10-29-1975	--	HO Cc 29
70	6	X	45	03-05-1973	15	115	.13	1	03-05-1973	--	HO Cc 30
36	6	X	40	03-05-1973	10	80	.12	1	03-05-1973	--	HO Cc 31
94	6	X	40	09-20-1973	3	170	.02	2	09-20-1973	--	HO Cc 32
41	6	X	45	01-22-1976	2	195	.01	2	01-22-1976	--	HO Cc 33
32	6	X	40	12-08-1980	3	185	.02	3	12-08-1980	--	HO Cc 34
65	6	X	25	08-05-1983	2.5	98	.03	6	08-05-1983	--	HO Cc 35
61	6	X	40	12-02-1975	10	155	.06	2	12-02-1975	--	HO Cc 36
51	6	X	47.97 S	12-01-1987	1	100	.01	3	05-19-1972	O	HO Cc 37
20	6	X	40	08-14-1974	20	240	.08	1	08-14-1974	Q	HO Cc 38
36	6	X	20	09-27-1973	15	105	.14	2	09-27-1973	--	HO Cc 39
63	6	X	60	03-26-1973	3	160	.02	2	03-26-1973	--	HO Cc 40
49	6	X	50	12-18-1975	4	150	.03	2	12-18-1975	--	HO Cc 41
76	6	X	43	05-22-1987	15	0	--	3	05-22-1987	--	HO Cc 42
33	6	X	36	03-07-1987	9	24	.37	3	03-07-1987	--	HO Cc 43
78	6	X	68	11-09-1987	10	0	--	3	11-09-1987	--	HO Cc 44
59	6	X	34	09-22-1986	3	75	.04	3	09-22-1986	--	HO Cc 45
22	6	X	35	08-15-1986	9	0	--	3	08-15-1986	--	HO Cc 46
40	6	X	25	08-15-1986	9	5	1.80	3	08-15-1986	--	HO Cc 47
20	6	X	50	02-19-1975	7	50	.14	5	02-19-1975	--	HO Cc 48
21	6	X	60	02-19-1975	12	30	.40	4	02-19-1975	--	HO Cc 49
56	6	X	78	04-18-1989	4	322	.01	3	04-18-1989	--	HO Cc 50
42	6	X	65	04-18-1989	100	35	2.86	3	04-18-1989	--	HO Cc 51
56	6	X	64	04-18-1989	22	76	.29	3	04-18-1989	--	HO Cc 52
--	6	-	32	09-21-1950	5	28	.18	1	09-21-1950	--	HO Cd 1
45	6	X	30	06-27-1946	--	--	--	--	--	--	HO Cd 2
86	6	X	16.80 S	05-27-1952	8	--	--	1	01-05-1952	--	HO Cd 3
18	6	X	8.62 S	05-28-1952	10	6	1.67	1	10-24-1951	--	HO Cd 4
55	6	X	65	06-25-1948	2	--	--	--	06-25-1948	--	HO Cd 5
74.2	6	X	15.5	04-21-1946	--	--	--	--	--	--	HO Cd 6
45	6	X	45	10-16-1946	--	--	--	--	--	--	HO Cd 7
--	6	-	5	1947	10	--	--	--	1947	--	HO Cd 8
--	6	-	8	03 -- 1948	--	--	--	--	--	--	HO Cd 9
--	48	W	35	08-15-1952	--	--	--	--	--	--	HO Cd 10
--	48	W	15.30 S	08-15-1952	--	--	--	--	--	--	HO Cd 11
65	48	W	28.5	08-15-1952	--	--	--	--	--	--	HO Cd 12
45	6	X	47.70 S	12-16-1952	2	--	--	--	01-27-1950	--	HO Cd 13
--	6	-	8.51 S	08-27-1952	35	--	--	--	1947	--	HO Cd 14
--	6	-	10	08 -- 1952	--	--	--	--	--	--	HO Cd 15
40	48	W	35	1952	--	--	--	--	--	--	HO Cd 16
50	48	W	--	--	--	--	--	--	--	--	HO Cd 17
29	48	W	--	--	--	--	--	--	--	--	HO Cd 18
49	6	O									
50	6	X	57.43 S	08-26-1986	--	--	--	--	--	O	HO Cd 19
30	6	X	9.68 S	08-26-1986	--	--	--	--	--	O,Q	HO Cd 20
55	6	X	17.24 S	08-26-1986	--	--	--	--	--	O ,Q	HO Cd 21
--	--	-	--	--	--	--	--	--	--	--	HO Cd 22
--	--	-	--	--	--	--	--	--	--	--	HO Cd 23
--	--	-	--	--	--	--	--	--	--	--	HO Cd 24
60	6	X	44.90 S	08-26-1986	--	--	--	--	--	O,Q	HO Cd 25
106	6	X	50.27 S	08-26-1986	--	--	--	--	--	O,Q	HO Cd 26
--	--	-	--	--	--	--	--	--	--	--	HO Cd 27
--	6	S	34.38 S	10-08-1986	--	--	--	--	--	O,Q	HO Cd 28
41	3.5	Screened from 41 to 46 ft.									

Table 1.—Records of selected wells in Howard County—Continued

Well no.	Well permit no.	Owner or name	Driller	Date of construction	Altitude of land surface (ft)	Topo-graphic setting	Depth Drilled (ft)	Use of water	Geologic unit
HO Cd 29	--	U S Geological Survey	G E Harr Sons	07-14-1986	470.34	S	80	U	300LCRV
HO Cd 30	HO-81-0050	Wilson, Larry	Ralph Mayne	04-30-1983	515	H	300	H	300LCRV
HO Cd 31	HO-81-0114	Clark, Stephen D	G E Harr Sons	06-02-1983	520	H	300	H	300LCRV
HO Cd 32	HO-81-1384	Heath, James	Ralph Mayne	04-10-1986	500	H	160	H	300LCRV
HO Cd 33	HO-73-3478	Kratz, Annabelle	L F Easterday	11-06-1979	505	S	200	H	400BLMR
HO Cd 34	HO-73-2200	Pascoe, W L	L F Easterday	08-16-1977	440	F	220	H	400BLMR
HO Cd 35	HO-72-0194	Triadelphia Advent Ch	L F Easterday	05-12-1972	480	H	140	H	400BLMR
HO Cd 36	HO-72-0243	Krieger, Howard	L F Easterday	08-24-1972	475	S	100	U	300LCRV
HO Cd 37	HO-81-1555	Westerlund, Van	L F Easterday	07-09-1986	485	H	400	H	300LCRV
HO Cd 38	HO-73-2998	Camp, Craig	Ralph Mayne	10-13-1978	485	S	285	H	300LCRV
HO Cd 39	HO-73-1108	Billey, Stephen	L F Easterday	08-26-1975	510	S	425	H	300LCRV
HO Cd 40	HO-73-0529	Condino, Burton	Dillon Bros	11-28-1973	505	H	275	H	300LCRV
HO Cd 41	HO-73-1112	High, Douglass	L F Easterday	08-19-1975	510	S	120	U	300LCRV
HO Cd 42	HO-73-4041	High, Douglass	L F Easterday	11-05-1981	510	S	240	H	300LCRV
HO Cd 43	HO-81-0109	Clarke, John F	Robert Cline	05-19-1983	480	S	300	H	300LCRV
HO Cd 44	HO-73-3882	Norcutt, Larry	Westminster	05-06-1981	450	S	450	H	300LCRV
HO Cd 45	HO-03-3721	Gould, Douglas J	Dewey Brown	04-10-1959	480	S	100	H	300LCRV
HO Cd 46	HO-81-1583	Fulford	G E Harr Sons	09-08-1986	465	S	350	H	300LCRV
HO Cd 47	HO-73-3933	Levine, Richard D	Ralph Mayne	07-07-1981	475	H	325	H	300STRS
HO Cd 48	HO-73-3858	Black, Charles	Joseph Mayne	04-13-1981	480	S	100	H	300STRS
HO Cd 49	HO-73-3524	Proia, Donald S	L F Easterday	01-23-1980	410	V	240	H,S	300STRS
HO Cd 50	HO-73-0375	Rowell, Peter A	L F Easterday	04-15-1974	450	F	240	H	300LCRV
HO Cd 51	HO-81-1108	Atkerson, Ted	Joseph Mayne	10-29-1985	400	S	145	H	300CCKV
HO Cd 52	HO-81-1108	Atkerson, Ted	Joseph Mayne	10-29-1985	400	S	260	U	300CCKV
HO Cd 53	HO-81-1108	Atkerson, Ted	Joseph Mayne	10-29-1985	400	S	325	U	300CCKV
HO Cd 54	HO-81-1108	Atkerson, Ted	Joseph Mayne	10-29-1985	400	S	260	U	300CCKV
HO Cd 55	HO-81-1108	Atkerson, Ted	Joseph Mayne	10-29-1985	400	S	100	U	300CCKV
HO Cd 56	HO-81-1140	Atkerson, Ted	Joseph Mayne	10-29-1985	400	S	265	H	300CCKV
HO Cd 57	HO-81-1140	Atkerson, Ted	Joseph Mayne	10-29-1985	400	S	325	U	300CCKV
HO Cd 58	HO-81-1140	Atkerson, Ted	Joseph Mayne	10-29-1985	400	S	200	U	300CCKV
HO Cd 59	HO-81-1140	Atkerson, Ted	Joseph Mayne	10-29-1985	400	S	240	U	300CCKV
HO Cd 60	HO-81-1140	Atkerson, Ted	Joseph Mayne	10-29-1985	400	S	240	U	300CCKV
HO Cd 61	HO-81-1140	Atkerson, Ted	Joseph Mayne	10-29-1985	400	S	220	U	300CCKV
HO Cd 62	HO-81-1140	Atkerson, Ted	Joseph Mayne	10-29-1985	400	S	240	U	300CCKV
HO Cd 63	HO-81-1185	Monroe, Henry	Joseph Mayne	10-18-1985	400	S	105	H	300CCKV
HO Cd 64	HO-81-1185	Monroe, Henry	Joseph Mayne	10-18-1985	400	S	325	U	300CCKV
HO Cd 65	HO-81-0836	--	Joseph Mayne	03-14-1985	445	H	125	H	300LCRV
HO Cd 66	HO-81-0925	Mathison, Chip	Joseph Mayne	03-18-1985	440	S	188	H	300CCKV
HO Cd 67	HO-81-1335	--	Joseph Mayne	01-07-1987	470	S	245	H	300CCKV
HO Cd 68	HO-81-1327	McDonough, John	L F Easterday	05-15-1986	505	S	300	H	300LCRV
HO Cd 69	HO-81-0855	Tiderman, Charles W	Joseph Mayne	02-20-1985	540	H	205	H	300LCRV
HO Cd 70	HO-81-0773	Sharma, Khemraj	Ralph Mayne	11-15-1984	525	H	205	H	300LCRV
HO Cd 71	HO-81-0270	Humphrey, Mark	L F Easterday	09-30-1983	495	S	220	H	300LCRV
HO Cd 72	HO-81-0650	Wood, Joseph	L F Easterday	08-08-1984	530	H	240	H	300LCRV
HO Cd 73	HO-81-0918	Nichols, James S	Joseph Mayne	04-04-1985	540	H	300	U	300LCRV
HO Cd 74	HO-81-1445	Orndorff, Robert	Ralph Mayne	05-08-1986	545	H	245	H	300LCRV
HO Cd 75	HO-81-0216	Maultsby, Fred	Joseph Mayne	08-04-1983	505	H	260	H	300LCRV
HO Cd 76	HO-81-0304	Ward, Ted	Joseph Mayne	11-07-1983	495	S	220	H	300LCRV
HO Cd 77	HO-81-0922	Nichols, James S	Joseph Mayne	03-29-1985	510	S	305	H	300LCRV
HO Cd 78	HO-81-2386	U S Geological Survey	ATEC	11-24-1987	425.58	W	31	U	300LCRV
HO Cd 79	HO-81-2387	U S Geological Survey	ATEC	11-24-1987	452.37	S	55	U	300LCRV
HO Cd 82	HO-73-3434	Colfman, Donald	Ralph Mayne	09-21-1978	430	S	305	H	300CCKV
HO Cd 83	HO-73-1940	Bryan, Ronald K	L F Easterday	05-06-1977	525	H	260	H	300LCRV
HO Cd 84	HO-73-1940	Bryan, Ronald K	L F Easterday	05-06-1977	525	H	--	U	300LCRV
HO Cd 85	HO-73-1940	Bryan, Ronald K	L F Easterday	05-06-1977	525	H	--	U	300LCRV
HO Cd 86	HO-73-0446	Chambler, Jim	L F Easterday	04-16-1974	470	S	120	H	300STRS
HO Cd 87	HO-73-1781	Driskill, Don	Alton Keyser	01-06-1977	530	H	100	H	300LCRV
HO Cd 88	HO-73-1070	Bouna, John	Joseph Mayne	07-17-1975	560	H	110	H	300LCRV
HO Cd 89	HO-73-3789	Howard, Kenneth M Jr	L F Easterday	02-13-1981	570	H	120	H	300LCRV
HO Cd 90	HO-81-1599	Jung, Joyce W	W W Reichart	09-19-1986	545	S	300	H	300LCRV
HO Cd 91	HO-81-1599	Jung, Joyce W	W W Reichart	09-19-1986	545	S	400	U	300LCRV
HO Cd 92	HO-81-0406	Wilson, Gil	L F Easterday	02-07-1984	500	S	400	H	300LCRV
HO Cd 93	HO-73-3865	Roddy, Patrick	L F Easterday	04-16-1981	520	H	260	A,H	300LCRV
HO Cd 94	HO-73-3866	Roddy, Patrick	L F Easterday	04-16-1981	520	H	260	A	300LCRV
HO Cd 95	HO-73-0474	Matthews, William D	Westminster	11-01-1973	530	H	190	H	300LCRV
HO Cd 96	HO-73-1074	Lewis, Flavia D	L F Easterday	11-03-1975	500	S	160	H	300LCRV
HO Cd 97	HO-73-0163	Parr, August	L F Easterday	1973	510	H	180	H	300LCRV
HO Cd 98	HO-73-1427	Thompson, Robert	L F Easterday	08-10-1976	480	S	400	H	300LCRV
HO Cd 99	HO-73-1618	Cornelius, Robert	L F Easterday	10-08-1976	470	S	300	H	300LCRV
HO Cd 100	HO-04-3936	St Louis Catholic Ch	R Leister	08-08-1961	470	H	76	T	400BLMR
HO Cd 101	HO-68-0189	Toyota Village	Dewey Brown	03-28-1968	485	H	121	C	400BLMR

Casing			Water level		Aquifer test					Other data available	Well no.
Depth (ft)	Diameter (in.)	Finish	Depth, ft below land surface	Date measured	Yield (gal/min)	Drawdown (ft)	Specific capacity [(gal/min)/ft]	Hours pumped	Date		
--	6	S	48.61 S	10-09-1986	--	--	--	--	--	O	HO Cd 29
63	3.5	Screened from 63 to 68 ft.									
69	6	X	17	04-30-1983	1	283	<0.01	6	04-30-1983	--	HO Cd 30
120	6	X	42	06-02-1983	3.26	233	.01	6	06-02-1983	--	HO Cd 31
38	6	X	30	04-10-1986	10	0	--	3	04-10-1986	--	HO Cd 32
49	6	X	40	11-06-1979	5	160	.03	2	11-06-1979	--	HO Cd 33
27	6	X	25	08-16-1977	3	195	.02	4	08-16-1977	--	HO Cd 34
26	6	X	50	05-12-1972	5	90	.06	1	05-12-1972	--	HO Cd 35
43	6	X	20	08-24-1972	20	80	.25	1	08-24-1972	--	HO Cd 36
38	6	X	71	07-09-1986	2	73	.03	6	07-09-1986	--	HO Cd 37
					4	110	.04	3	06-19-1987		
39	6	X	30	10-13-1978	3	255	.01	6	10-13-1978	--	HO Cd 38
26	6	X	45	08-26-1975	1	380	<.01	1	08-26-1975	--	HO Cd 39
35	6	X	40	11-28-1973	1	235	<.01	6	11-28-1973	--	HO Cd 40
28	6	X	25	08-19-1975	10	95	.11	1	08-19-1975	--	HO Cd 41
30	6	X	45	11-05-1981	4	195	.02	4	11-05-1981	--	HO Cd 42
53	6	X	40	05-19-1983	3	116	.03	6	05-19-1983	--	HO Cd 43
43	6	X	75	05-06-1981	5	343	.01	6	05-06-1981	--	HO Cd 44
70	6	X	60	04-10-1959	6	10	.60	.5	04-10-1959	--	HO Cd 45
115	6	X	60	09-08-1986	13.63	165	.08	3	09-08-1986	--	HO Cd 46
40	6	X	185	07-07-1981	20	140	.14	6	07-07-1981	--	HO Cd 47
83	6	X	30	04-13-1981	15	30	.50	2	04-13-1981	--	HO Cd 48
46	6	X	60	01-23-1980	3	180	.02	3	01-23-1980	--	HO Cd 49
68	6	X	30	04-15-1974	50	210	.24	1	04-15-1974	--	HO Cd 50
34	6	X	24	10-29-1985	10	22	.45	3	10-29-1985	--	HO Cd 51
--	--	X	Dry	10-29-1985	0	--	--	--	10-29-1985	--	HO Cd 52
--	--	X	Dry	10-29-1985	0	--	--	--	10-29-1985	--	HO Cd 53
--	--	X	Dry	10-29-1985	0	--	--	--	10-29-1985	--	HO Cd 54
--	--	X	Dry	10-29-1985	0	--	--	--	10-29-1985	--	HO Cd 55
62	6	X	24	10-29-1985	6	87	.07	3	10-29-1985	--	HO Cd 56
--	--	X	Dry	10-29-1985	0	--	--	--	10-29-1985	--	HO Cd 57
--	--	X	Dry	10-29-1985	0	--	--	--	10-29-1985	--	HO Cd 58
--	--	X	Dry	10-29-1985	0	--	--	--	10-29-1985	--	HO Cd 59
--	--	X	Dry	10-29-1985	0	--	--	--	10-29-1985	--	HO Cd 60
--	--	X	Dry	10-29-1985	0	--	--	--	10-29-1985	--	HO Cd 61
--	--	X	Dry	10-29-1985	0	--	--	--	10-29-1985	--	HO Cd 62
64	6	X	20	10-18-1985	10	7	1.43	3	10-18-1985	--	HO Cd 63
--	--	X	Dry	10-18-1985	0	--	--	--	10-18-1985	--	HO Cd 64
66	6	X	53	03-14-1985	10	6	1.67	3	03-14-1985	--	HO Cd 65
169	6	X	44	03-18-1985	6.5	98	.07	3	03-18-1985	--	HO Cd 66
108	6	X	75	01-07-1987	12	43	.28	3	01-07-1987	--	HO Cd 67
58	6	X	42	05-15-1986	3	58	.05	6	05-15-1986	--	HO Cd 68
67	6	X	36	02-20-1985	10	12	.83	3	02-20-1985	--	HO Cd 69
58	6	X	50	11-15-1984	7	10	.70	3	11-15-1984	--	HO Cd 70
38	6	X	25	09-30-1983	10	120	.08	3	09-30-1983	--	HO Cd 71
61	6	X	35	08-08-1984	4	85	.05	3	08-08-1984	--	HO Cd 72
86	6	X	28	04-04-1985	4	145	.03	3	04-04-1985	--	HO Cd 73
58	6	X	35	05-08-1986	5	35	.14	3	05-08-1986	--	HO Cd 74
63	6	X	55	08-04-1983	6	52	.12	3	08-04-1983	--	HO Cd 75
61	6	X	25	11-07-1983	5	93	.05	3	11-07-1983	--	HO Cd 76
75	6	X	24	03-29-1985	4	145	.03	3	03-29-1985	--	HO Cd 77
--	6	S	8.26 S	12-02-1987	--	--	--	--	--	O,Q	HO Cd 78
9	3.5	Screened from 9 to 19 ft.									
--	6	S	27.63 S	01-22-1988	--	--	--	--	--	O,Q	HO Cd 79
43	3.5	Screened from 43 to 53 ft.									
54	6	X	30	09-21-1978	5	275	.02	4	09-21-1978	--	HO Cd 82
22	6	X	50	05-06-1977	2	210	.01	3	05-06-1977	--	HO Cd 83
--	--	X	Dry	05-06-1977	0	--	--	--	05-06-1977	--	HO Cd 84
--	--	X	Dry	05-06-1977	0	--	--	--	05-06-1977	--	HO Cd 85
19	6	X	30	04-16-1974	25	90	.28	1	04-16-1974	--	HO Cd 86
35	6	X	30	01-06-1977	20	65	.31	2	01-06-1977	--	HO Cd 87
76	6	X	25	07-17-1975	10	80	.12	2	07-17-1975	--	HO Cd 88
68	6	X	40	02-13-1981	10	80	.12	3	02-13-1981	--	HO Cd 89
41	6	X	25	09-19-1986	2	250	.01	7.5	09-19-1986	--	HO Cd 90
--	--	X	Dry	09-19-1986	0	--	--	--	09-19-1986	--	HO Cd 91
61	6	X	30	02-07-1984	2	158	.01	6	02-07-1984	--	HO Cd 92
69	6	X	75	04-16-1981	30	185	.16	3	04-16-1981	--	HO Cd 93
75	6	X	60	04-16-1981	30	200	.15	3	04-16-1981	--	HO Cd 94
85	6	X	70	11-01-1973	5	115	.04	7	11-01-1973	--	HO Cd 95
19	6	X	34	11-03-1975	5	126	.04	2	11-03-1975	--	HO Cd 96
84	6	X	40	1973	4	140	.03	2	1973	--	HO Cd 97
48	6	X	50	08-10-1976	2	350	.01	2	08-10-1976	--	HO Cd 98
58	6	X	60	10-08-1976	2	240	.01	3	10-08-1976	--	HO Cd 99
56	6	X	12	08-08-1961	25	28	.89	2	08-08-1961	--	HO Cd 100
80	6	X	60	03-28-1968	1	30	.03	1	03-28-1968	--	HO Cd 101

Table 1.—Records of selected wells in Howard County—Continued

Well no.	Well permit no.	Owner or name	Driller	Date of construction	Altitude of land surface (ft)	Topo-graphic setting	Depth Drilled (ft)	Use of water	Geologic unit
HO Cd 102	HO-73-2565	Raymo Car Service	Alton Keyser	02-16-1978	485	H	150	C	400BLMR
HO Cd 103	HO-65-0341	Citizens National Bank	Edward Brown	02-12-1965	485	H	110	C	400BLMR
HO Cd 104	HO-71-0065	Exxon Corporation	Harry Green	12-04-1970	485	H	75	C	400BLMR
HO Cd 105	HO-71-0055	Clarksville Post Offic	L F Easterday	10-19-1970	480	S	120	C	400BLMR
HO Cd 106	HO-81-0917	Sandy Spring Natl Bank	L F Easterday	04-29-1985	485	H	300	C	400BLMR
HO Cd 107	HO-03-9540	Howard Co Gateway Sch	Edward Brown	09-01-1960	485	H	180	T	400BLMR
HO Cd 108	HO-04-0794	Howard Co Gateway Sch	Edward Brown	11-02-1960	485	H	180	T	400BLMR
HO Cd 109	HO-73-2515	C & P Telephone Co	Keyser-Garver	02-21-1978	490	H	200	H	400BLMR
HO Cd 110	HO-73-4350	Clarksville Center	Westminster	12-20-1982	480	H	303	C	400BLMR
HO Cd 111	HO-72-0118	Linden Linthicum Ch	Harry Green	02-15-1972	490	H	225	H	400BLMR
HO Cd 112	HO-73-4062	Kendall, Hugh R	Joseph Mayne	12-04-1981	485	H	300	H	400BLMR
HO Cd 113	HO-05-1635	Clarksville Elem Sch	Edward Brown	05-23-1963	490	H	110	T	400BLMR
HO Cd 114	HO-05-1636	Clarksville Elem Sch	Edward Brown	05-28-1963	490	H	85	T	400BLMR
HO Cd 115	HO-73-4092	Langenfelder, Conrad J	L F Easterday	11-27-1982	460	H	140	H	400BLMR
HO Cd 116	HO-73-2384	Langenfelder, Conrad J	L F Easterday	02-02-1978	430	W	160	S	400BLMR
HO Cd 117	HO-73-4309	West, Donna	Westminster	11-05-1982	400	S	228	H	400BLMR
HO Cd 118	HO-73-3199	Vetick, Leonard	Joseph Mayne	04-11-1979	375	S	185	H	400BLMR
HO Cd 119	HO-73-3954	Adams, Edwin O Jr	Ralph Mayne	08-07-1981	535	H	205	H	300LCRV
HO Cd 120	HO-81-0509	Kibler, Ray	Joseph Mayne	05-09-1984	550	H	320	H	300LCRV
HO Cd 121	HO-81-1207	--	Ralph Mayne	10-21-1985	530	S	200	H	300LCRV
HO Cd 122	HO-73-1496	James, R D	Ralph Mayne	07-09-1976	540	S	137	H	300LCRV
HO Cd 123	HO-81-0424	Dunn, James F	Joseph Mayne	02-21-1984	540	S	400	H	300LCRV
HO Cd 124	HO-81-0424	Dunn, James F	Joseph Mayne	02-21-1984	540	S	320	U	300LCRV
HO Cd 125	HO-73-4016	Smith, Glee T	Ralph Mayne	10-19-1981	550	H	265	H	300LCRV
HO Cd 126	HO-73-2186	Grive, Dave	L F Easterday	08-03-1977	550	S	300	H	300LCRV
HO Cd 127	HO-73-1438	Jeffries, James L	L F Easterday	07-20-1976	550	H	180	H	300LCRV
HO Cd 128	HO-81-1058	Stuart, John	L F Easterday	06-25-1985	565	H	300	A,H	300LCRV
HO Cd 129	HO-81-1304	Stuart, John	L F Easterday	06-25-1985	565	H	256	A	300LCRV
HO Cd 130	HO-73-0485	Burns, Gordon	G E Harr Sons	10-25-1973	535	H	250	H	300LCRV
HO Cd 131	HO-73-0545	Taylor, William M	L F Easterday	05-17-1974	510	S	160	H	300LCRV
HO Cd 132	HO-73-2936	Currano, Allen	L F Easterday	09-20-1978	545	U	160	H	300LCRV
HO Cd 133	HO-73-0209	Tranchittella, Nicola	L F Easterday	04-13-1973	530	H	200	H	300LCRV
HO Cd 134	HO-73-4121	White, Robert	Joseph Mayne	02-25-1982	510	F	300	H	300LCRV
HO Cd 135	HO-73-2207	Bassler, Frederick	Ralph Mayne	07-28-1977	495	H	325	H	300LCRV
HO Cd 136	HO-73-1882	Wilson, Edwin	L F Easterday	03-17-1977	530	S	120	H	300LCRV
HO Cd 137	HO-73-0521	Storck, Fred	Ralph Mayne	04-15-1974	545	U	100	H	300LCRV
HO Cd 138	HO-81-0461	Duhamel, Mark	L F Easterday	04-24-1984	580	H	400	U	300LCRV
HO Cd 139	HO-81-0675	Hallowell, Richard	Joseph Mayne	09-17-1984	585	H	305	H	300LCRV
HO Cd 140	HO-81-0675	Hallowell, Richard	Joseph Mayne	09-17-1984	585	H	265	U	300LCRV
HO Cd 141	HO-73-1656	Ryder, Douglas E	L F Easterday	09-28-1976	580	H	220	H	300LCRV
HO Cd 142	HO-81-0189	Becraft, Rod A	Joseph Mayne	07-21-1983	580	H	300	H	300LCRV
HO Cd 143	HO-81-0189	Becraft, Rod A	Joseph Mayne	07-21-1983	580	H	260	U	300LCRV
HO Cd 144	HO-81-0189	Becraft, Rod A	Joseph Mayne	07-21-1983	580	H	260	U	300LCRV
HO Cd 145	HO-81-1055	Curtis, Robin K	Joseph Mayne	07-01-1985	565	U	145	H	300LCRV
HO Cd 146	HO-81-1492	Simmons, Ben	Ralph Mayne	05-30-1986	565	H	300	H	300LCRV
HO Cd 147	HO-73-4294	Kimmel, Jeffrey	Joseph Mayne	11-15-1982	500	S	320	H	300LCRV
HO Cd 148	HO-81-0199	May, Rebecca	L F Easterday	09-08-1983	525	H	280	H	300LCRV
HO Cd 149	HO-81-0538	Whitman, James E Jr	Ralph Mayne	05-18-1984	540	H	180	H	300LCRV
HO Cd 150	HO-73-2922	Hammond, Roy	Ralph Mayne	09-08-1978	560	H	205	H	300LCRV
HO Cd 151	HO-73-2898	Paulitzky, Robert J	Westminster	08-14-1978	560	S	277	H	300LCRV
HO Cd 152	HO-68-0003	Brown's Chapel Church	Harry Green	08 -- 1967	605	H	100	H	300LCRV
HO Cd 153	HO-81-1518	Wertz, William V	Joseph Mayne	07-09-1986	605	H	365	H	300LCRV
HO Cd 154	HO-73-0903	Brown, Clyde H	Joseph Mayne	12-09-1974	570	H	125	H	300MRGR
HO Cd 155	HO-73-0267	Seafone, James C	L F Easterday	11-08-1973	590	H	240	H	300LCRV
HO Cd 156	HO-81-0841	Summerfield, Ervin D	W W Reichart	02-05-1985	585	H	600	H	300LCRV
HO Cd 157	HO-81-0841	Summerfield, Ervin D	W W Reichart	02-05-1985	585	H	300	U	300LCRV
HO Cd 158	HO-81-0841	Summerfield, Ervin D	W W Reichart	02-05-1985	585	H	400	U	300LCRV
HO Cd 159	HO-81-0557	Duhamel, Mark	L F Easterday	05-01-1984	580	H	300	H	300LCRV
HO Cd 160	HO-73-0260	Kramer, Lee H	Dillon Bros	08-15-1973	585	H	250	H	300LCRV
HO Cd 161	HO-73-1370	Martin, Richard	L F Easterday	04-12-1976	560	S	300	U	300LCRV
HO Cd 162	HO-73-4064	Martin, Richard	L F Easterday	11-25-1981	555	S	200	H	300LCRV
HO Cd 163	HO-73-1775	Kastner, Gary R	Ralph Mayne	12-28-1976	545	S	245	H	300LCRV
HO Cd 164	HO-73-2677	Walker, Gordon	Ralph Mayne	04-26-1978	540	S	165	H	300LCRV
HO Cd 165	HO-81-1191	Souder Builders Inc	Ralph Mayne	11-01-1985	555	S	265	U	300LCRV
HO Cd 166	HO-73-0843	Becker, Rudolph	C A Cromwell	11-01-1974	585	H	250	H	300LCRV
HO Cd 167	HO-72-0108	Dayton Rod & Gun Club	G E Harr Sons	12-14-1971	525	S	154	H	300LCRV
HO Cd 168	HO-73-1009	Krause, Vernon	L F Easterday	07-02-1975	465	S	240	H	300LCRV
HO Cd 169	HO-73-3535	GYC Builders	S Bollinger	01-21-1980	425	S	105	H	400BLMR
HO Cd 170	HO-73-2730	Ellicott Enterprises	Westminster	06-19-1978	465	H	352	T	400BLMR
HO Cd 171	HO-73-2232	Clarksville Middle Sch	G E Harr Sons	07-26-1977	455	H	200	T	400BLMR
HO Cd 172	HO-73-1578	Reeves, Dennis	L F Easterday	09-10-1976	515	S	100	H	300LCRV
HO Cd 173	HO-73-4398	Harris, Walter	L F Easterday	02-23-1983	500	H	400	H	300LCRV
HO Cd 174	HO-73-4212	Wong, Peter	Joseph Mayne	07-06-1982	450	S	220	H	300LCRV
HO Cd 175	HO-73-2238	Lintz, Marvin	Westminster	08-24-1977	500	H	425	U	300LCRV

Casing			Water level		Aquifer test					Other	
Depth (ft)	Diameter (in.)	Finish	Depth, ft below land surface	Date measured	Yield (gal/min)	Drawdown (ft)	Specific capacity [(gal/min)/ft]	Hours pumped	Date	data available	Well no.
51	6	X	20	02-16-1978	15	125	0.12	4	02-16-1978	Q	HO Cd 102
54	6	X	33	02-12-1965	2	--	--	2	02-12-1965	--	HO Cd 103
50	6	X	35	12-04-1970	10	25	.40	2	12-04-1970	--	HO Cd 104
47	6	X	30	10-19-1970	10	90	.11	1	10-19-1970	--	HO Cd 105
29	6	X	50	04-29-1985	20	250	.08	3	04-29-1985	--	HO Cd 106
38	6	X	38	09-01-1960	4	--	--	1	09-01-1960	--	HO Cd 107
38	6	X	47	11-02-1960	4	--	--	1	11-02-1960	--	HO Cd 108
62	6	X	40	02-21-1978	10	10	1.0	2	02-21-1978	--	HO Cd 109
52	6	X	60	12-20-1982	7	175	.04	6	12-20-1982	--	HO Cd 110
23	6	X	35	02-15-1972	1	185	.01	4	02-15-1972	--	HO Cd 111
26	6	X	40	12-04-1981	10	180	.06	4	12-04-1981	--	HO Cd 112
28	6	X	34	05-23-1963	8	--	--	1	05-23-1963	--	HO Cd 113
32	6	X	30	05-28-1963	8	--	--	1	05-28-1963	--	HO Cd 114
33	6	X	35	11-27-1982	12	105	.11	2	11-27-1982	--	HO Cd 115
20	6	X	20	02-02-1978	7	140	.05	3	02-02-1978	--	HO Cd 116
48.8	6	X	61	11-05-1982	12	91	.13	5	11-05-1982	--	HO Cd 117
21	6	X	25	04-11-1979	7	0	--	2	04-11-1979	--	HO Cd 118
40	6	X	50	08-07-1981	2	155	.01	4	08-07-1981	--	HO Cd 119
64	6	X	40	05-09-1984	2	115	.02	6	05-09-1984	--	HO Cd 120
28	6	X	25	10-21-1985	7	25	.28	3	10-21-1985	--	HO Cd 121
25	6	X	40	07-09-1976	2	97	.02	2	07-09-1976	--	HO Cd 122
47	6	X	45	02-21-1984	1.25	195	.01	6	02-21-1984	--	HO Cd 123
--	--	X	Dry	02-21-1984	0	--	--	--	02-21-1984	--	HO Cd 124
82	6	X	40	10-19-1981	2	225	.01	5	10-19-1981	--	HO Cd 125
45	6	X	45	08-03-1977	1	255	<.01	3	08-03-1977	--	HO Cd 126
71	6	X	50	07-20-1976	3	130	.02	2	07-20-1976	--	HO Cd 127
27	6	X	18	06-25-1985	5	67	.07	3	06-25-1985	--	HO Cd 128
68	6	X	--	--	--	--	--	--	--	--	HO Cd 129
31	6	X	48	10-25-1973	2	15	.13	6	10-25-1973	--	HO Cd 130
20	6	X	15	05-17-1974	3	145	.02	2	05-17-1974	--	HO Cd 131
67	6	X	60	09-20-1978	8	100	.08	3	09-20-1978	--	HO Cd 132
52	6	X	50	04-13-1973	6	150	.04	1	04-13-1973	--	HO Cd 133
103	6	X	48	02-25-1982	2	82	.02	6	02-25-1982	--	HO Cd 134
--	6	X	50	07-28-1977	1	275	<.01	2	07-28-1977	--	HO Cd 135
28	6	X	20	03-17-1977	9	100	.09	3	03-17-1977	--	HO Cd 136
24	6	X	30	04-15-1974	10	70	.14	2	04-15-1974	--	HO Cd 137
62	6	X	13	04-24-1984	1	131	.01	6	04-24-1984	--	HO Cd 138
38	6	X	25	09-17-1984	5	110	.05	3	09-17-1984	--	HO Cd 139
--	--	X	Dry	09-17-1984	0	--	--	--	09-17-1984	--	HO Cd 140
23	6	X	50	09-28-1976	4	170	.02	2	09-28-1976	--	HO Cd 141
34	6	X	25	07-21-1983	2	131	.02	6	07-21-1983	--	HO Cd 142
--	--	X	Dry	07-21-1983	0	--	--	--	07-21-1983	--	HO Cd 143
--	--	X	Dry	07-21-1983	0	--	--	--	07-21-1983	--	HO Cd 144
61	6	X	27	07-01-1985	10	28	.36	5	07-01-1985	--	HO Cd 145
65	6	X	32	05-30-1986	3	173	.02	6	05-30-1986	--	HO Cd 146
60	6	X	38	11-15-1982	3	57	.05	6	11-15-1982	--	HO Cd 147
68	6	X	43	09-08-1983	3	127	.02	6	09-08-1983	--	HO Cd 148
48	6	X	17	05-18-1984	6	163	.04	3	05-18-1984	--	HO Cd 149
52	6	X	40	09-08-1978	2	165	.01	8	09-08-1978	--	HO Cd 150
61	6	X	50	08-14-1978	3.5	155	.02	6	08-14-1978	--	HO Cd 151
47	6	X	35	08 -- 1967	9	55	.16	4	08 -- 1967	--	HO Cd 152
68	6	X	45	07-09-1986	14	258	.05	6	07-09-1986	--	HO Cd 153
61	6	X	35	12-09-1974	8	85	.09	2	12-09-1974	--	HO Cd 154
36	6	X	40	11-08-1973	1	200	<.01	2	11-08-1973	--	HO Cd 155
42	6	X	130	02-05-1985	.4	470	<.01	1	02-05-1985	--	HO Cd 156
--	--	X	Dry	02-05-1985	0	--	--	--	02-05-1985	--	HO Cd 157
--	--	X	Dry	02-05-1985	0	--	--	--	02-05-1985	--	HO Cd 158
64	6	X	14	05-01-1984	.5	134	<.01	6	05-01-1984	--	HO Cd 159
40	6	X	40	08-15-1973	6	40	.15	6	08-15-1973	--	HO Cd 160
19	6	X	23.88 S	12-22-1987	1	30	.03	2	04-12-1976	O	HO Cd 161
26	6	X	30	11-25-1981	4	170	.02	4	11-25-1981	--	HO Cd 162
26	6	X	35	12-28-1976	1	210	<.01	2	12-28-1976	--	HO Cd 163
30	6	X	40	04-26-1978	10	125	.08	6	04-26-1978	--	HO Cd 164
59	6	X	21	11-01-1985	4	39	.10	3	11-01-1985	--	HO Cd 165
74	6	X	35	11-01-1974	3	215	.01	2	11-01-1974	--	HO Cd 166
60	6	X	29	12-14-1971	8	125	.06	4	12-14-1971	--	HO Cd 167
69	6	X	50	07-02-1975	6	190	.03	1	07-02-1975	--	HO Cd 168
50	6	X	20	01-21-1980	40	85	.47	2	01-21-1980	--	HO Cd 169
39	6	X	35.5	06-19-1978	5	43.50	.11	10	06-19-1978	--	HO Cd 170
33	10	X	13	07-26-1977	20	4	5.0	24	07-26-1977	--	HO Cd 171
53	6										
40	6	X	40	09-10-1976	20	60	.33	2	09-10-1976	--	HO Cd 172
48	6	X	48	02-23-1983	2	352	.01	3	02-23-1983	--	HO Cd 173
38	6	X	15	07-06-1982	4	66	.06	3	07-06-1982	--	HO Cd 174
60	6	X	245	08-24-1977	2.5	45	.06	6	08-24-1977	--	HO Cd 175

Table 1.—Records of selected wells in Howard County—Continued

Well no.	Well permit no.	Owner or name	Driller	Date of construction	Altitude of land surface (ft)	Topo-graphic setting	Depth Drilled (ft)	Use of water	Geologic unit
HO Cd 176	HO-73-2551	Lintz, Marvin	Westminster	02-03-1978	500	H	478	H	300LCRV
HO Cd 177	HO-73-0383	Culpepper, Glen E	Ralph Mayne	10-29-1973	480	H	300	H	300LCRV
HO Cd 178	HO-81-1240	Hipp, Mark	L F Easterday	12-18-1985	480	H	300	U	300LCRV
HO Cd 179	HO-73-2397	Hewitt, Thomas A	L F Easterday	05-22-1978	485	H	405	H	300LCRV
HO Cd 180	HO-81-1060	Hewitt, Thomas A	L F Easterday	07-09-1985	470	H	300	H	300LCRV
HO Cd 181	HO-81-0928	Hopkins, M M Jr	L F Easterday	04-04-1985	465	H	300	H	300LCRV
HO Cd 182	HO-81-0174	Hoffmann, Dennis	Joseph Mayne	07-14-1983	440	S	203	H	300LCRV
HO Cd 183	HO-73-4291	Collins, Paul	Ralph Mayne	10-25-1982	395	H	300	H	300LCRV
HO Cd 184	HO-72-0169	McClure, Charles F	L F Easterday	04-05-1972	360	H	220	U	300LCRV
HO Cd 185	HO-73-4085	McClure, Charles F	Joseph Mayne	12-23-1981	360	H	340	H	300LCRV
HO Cd 186	HO-73-4085	McClure, Charles F	Joseph Mayne	12-23-1981	360	H	300	U	300LCRV
HO Cd 187	HO-73-3047	McCarthy, John	L F Easterday	06-27-1978	355	S	140	H	300LCRV
HO Cd 188	HO-73-3047	McCarthy, John	L F Easterday	06-27-1978	345	S	--	U	300LCRV
HO Cd 189	HO-73-3047	McCarthy, John	L F Easterday	06-27-1978	350	S	--	U	300LCRV
HO Cd 190	HO-73-3047	McCarthy, John	L F Easterday	06-27-1978	350	S	--	U	300LCRV
HO Cd 191	HO-73-2269	McCarthy, John	L F Easterday	12-29-1977	340	S	505	U	300LCRV
HO Cd 192	HO-73-1725	Rosquist, David E	Joseph Mayne	11-10-1976	355	H	285	H	300LCRV
HO Cd 193	HO-73-0772	Bickett, Larry	L F Easterday	08-05-1974	395	S	300	H	300LCRV
HO Cd 194	HO-81-1054	Loynott, William	Ralph Mayne	06-13-1985	440	S	245	H	300LCRV
HO Cd 195	HO-73-4030	Shaw, Jeffrey	Dillon Bros	11-09-1981	470	H	405	H	300LCRV
HO Cd 196	HO-81-1559	Phillip, Chester	Tri County	06-21-1986	470	S	300	H	300LCRV
HO Cd 197	HO-73-1060	Zimmerman, Larry	L F Easterday	07-10-1975	445	H	220	H	300LCRV
HO Cd 198	HO-73-1504	Burrhus, Ken	Dillon Bros	07-12-1976	425	H	175	H	300LCRV
HO Cd 199	HO-81-0373	Luhn, Linda	L F Easterday	03-19-1984	440	S	400	H	300LCRV
HO Cd 200	HO-73-3286	Hankin, Norman	Westminster	06-20-1979	435	S	516.5	H	300LCRV
HO Cd 201	HO-73-0691	Townsend, Robert	L F Easterday	09-10-1974	400	H	305	H	300LCRV
HO Cd 202	HO-73-2485	Patrick, John	L F Easterday	02-15-1978	480	H	260	H	300LCRV
HO Cd 203	HO-73-3624	Urbas, John R	L F Easterday	07-03-1980	490	H	180	H	300LCRV
HO Cd 204	HO-73-0495	Sloun, Roy F	Joseph Mayne	10-29-1973	500	H	300	H	300LCRV
HO Cd 205	HO-73-2913	--	Westminster	08-14-1978	495	H	445	H	300LCRV
HO Cd 206	HO-73-0825	Stern, Melvin S	Joseph Mayne	09-16-1974	500	H	205	H	300CCKV
HO Cd 207	HO-73-2008	Maloney, Jack	L F Easterday	05-06-1977	475	S	300	H	300LCRV
HO Cd 208	HO-73-1352	Mazur, Ray	Robert Cline	03-30-1976	475	S	200	H	300LCRV
HO Cd 209	HO-73-3808	Schroeder, Norbert W	Ralph Mayne	03-10-1981	505	H	325	H	300LCRV
HO Cd 210	HO-81-0539	Hickernell, Robert	Keyser-Garver	06-19-1984	490	H	185	H	300CCKV
HO Cd 211	HO-81-1206	Surrette, Robert	L F Easterday	11-25-1985	470	U	133	H	300CCKV
HO Cd 212	HO-73-0967	Edwards, Howard D	Joseph Mayne	06-27-1975	510	S	160	H	300STRS
HO Cd 213	HO-73-1257	Faulstich, Albert J Jr	Joseph Mayne	03-01-1976	525	S	180	H	300STRS
HO Cd 214	HO-81-1598	--	L F Easterday	08-15-1986	500	S	160	H	300STRS
HO Cd 215	HO-81-1598	--	L F Easterday	08-15-1986	500	S	220	U	300STRS
HO Cd 216	HO-81-1526	Ebal, Timothy	Joseph Mayne	07-01-1986	520	H	260	H	300STRS
HO Cd 217	HO-73-2311	McCunn Assoc of Md	Ralph Mayne	03-09-1978	540	H	205	U	400BLMR
HO Cd 218	HO-73-2329	--	Ralph Mayne	10-14-1977	525	H	205	H	400BLMR
HO Cd 219	HO-73-3457	Middleton, William A	Ralph Mayne	12-12-1979	520	S	365	U	--
HO Cd 220	HO-81-0844	Proctor, Stoy	Joseph Mayne	01-29-1985	490	S	320	H	400BLMR
HO Cd 221	HO-68-0083	Hopkins United Meth Ch	Edward Brown	12-21-1967	555	S	127	T	300STRS
HO Cd 222	HO-73-2460	--	C A Cromwell	12-29-1977	555	S	125	H	300STRS
HO Cd 223	HO-73-3110	--	W W Reichart	01-26-1979	510	S	400	H	400BLMR
HO Cd 224	HO-73-3180	Finnegan, John	G E Harr Sons	04-02-1979	545	H	150	H	400BLMR
HO Cd 225	HO-73-3398	--	W W Reichart	11-09-1979	520	S	150	H	400BLMR
HO Cd 226	HO-81-0913	Crain, Billy M	W W Reichart	08-19-1985	490	U	200	H	400BLMR
HO Cd 227	HO-81-0913	Crain, Billy M	W W Reichart	08-19-1985	490	U	100	U	400BLMR
HO Cd 228	HO-73-4244	Wolk	Westminster	09-08-1982	455	S	493	H	400BLMR
HO Cd 229	HO-81-0094	--	W W Reichart	05-31-1983	450	S	600	H	400BLMR
HO Cd 230	HO-81-0167	--	W W Reichart	09-06-1983	445	S	500	U	400BLMR
HO Cd 231	HO-81-0167	--	W W Reichart	09-06-1983	445	S	400	U	400BLMR
HO Cd 232	HO-81-0781	--	W W Reichart	12-21-1984	510	S	250	H	400BLMR
HO Cd 233	HO-81-0343	--	W W Reichart	12-09-1983	525	H	375	H	400BLMR
HO Cd 234	HO-81-1532	Yep, Sam	Joseph Mayne	07-24-1986	465	U	205	H	400BLMR
HO Cd 235	HO-81-1548	Shaw, Charles H & Sons	L F Easterday	06-23-1986	460	H	300	U	400BLMR
HO Cd 236	HO-81-1453	Vant Hoff, Rudolf	Joseph Mayne	06-02-1986	435	S	185	H	400BLMR
HO Cd 237	HO-73-1211	Payne, Vernon	Joseph Mayne	10-29-1975	545	S	185	H	300STRS
HO Cd 238	HO-73-1490	Pattey, Richard	Joseph Mayne	06-21-1976	510	S	165	H	300STRS
HO Cd 239	HO-73-4249	Owings, Harwood W	L F Easterday	08-25-1982	515	W	100	H	400BLMR
HO Cd 241	--	Owings, Harwood W	L F Easterday	08 -- 1982	510	S	--	U	400BLMR
HO Cd 242	HO-81-0543	Frazer, Kelly	Joseph Mayne	06-08-1984	460	S	100	H	300CCKV
HO Cd 243	HO-81-0989	Bowman, John	Ralph Mayne	06-05-1985	415	S	140	H	300CCKV
HO Cd 244	HO-73-1905	--	Joseph Mayne	05-03-1977	485	S	125	H	400BLMR
HO Cd 245	HO-81-0805	Wenzel, John	Ralph Mayne	12-11-1984	525	H	240	H	400BLMR
HO Cd 246	HO-73-2550	Heath, James	Ralph Mayne	03-08-1978	510	U	285	H	400BLMR
HO Cd 247	HO-04-5080	Boarman's Market	Edward Brown	11-17-1961	520	F	125	C	400BLMR
HO Cd 248	HO-73-4202	Highland Vet Hospital	Joseph Mayne	07-30-1982	520	S	165	C,H	400BLMR
HO Cd 249	HO-73-4048	Highland Post Office	Keyser-Garver	11-06-1981	510	S	205	C,H	400BLMR
HO Cd 250	HO-81-0398	Faith Baptist Church	Joseph Mayne	02-22-1984	495	H	93	H	400BLMR
HO Cd 251	HO-81-0075	Emrich, Walter	L F Easterday	05-10-1983	465	S	140	H	400BLMR

Casing			Water level		Aquifer test					Other	
Depth (ft)	Diameter (in.)	Finish	Depth, ft below land surface	Date measured	Yield (gal/min)	Drawdown (ft)	Specific capacity [(gal/min)/ft]	Hours pumped	Date	data available	Well no.
59	6	X	175	02-03-1978	2.25	271	0.01	6	02-03-1978	--	HO Cd 176
54	6	X	150	10-29-1973	10	150	.07	2	10-29-1973	--	HO Cd 177
36	6	X	40	12-18-1985	7	73	.10	3	12-18-1985	--	HO Cd 178
57	6	X	40	05-22-1978	1	365	<.01	2	05-22-1978	--	HO Cd 179
50	6	X	33	07-09-1985	2	101	.02	6	07-09-1985	--	HO Cd 180
32	6	X	43	04-04-1985	5	90	.06	3	04-04-1985	--	HO Cd 181
30	6	X	25	07-14-1983	12	3	4.0	3	07-14-1983	--	HO Cd 182
40	6	X	50	10-25-1982	1	250	<.01	6	10-25-1982	--	HO Cd 183
26	6	X	46.90 S	01-21-1988	2	180	.01	1	04-05-1972	--	HO Cd 184
51	6	X	45	12-23-1981	1	125	.01	6	12-23-1981	--	HO Cd 185
--	--	X	Dry	12-23-1981	0	--	--	--	12-23-1981	--	HO Cd 186
39	6	X	20	06-27-1978	10	120	.08	3	06-27-1978	--	HO Cd 187
--	--	X	Dry	06-27-1978	0	--	--	--	06-27-1978	--	HO Cd 188
--	--	X	Dry	06-27-1978	0	--	--	--	06-27-1978	--	HO Cd 189
--	--	X	Dry	06-27-1978	0	--	--	--	06-27-1978	--	HO Cd 190
49	6	X	13.87 S	01-21-1988	1	455	<.01	2	12-29-1977	O	HO Cd 191
56	6	X	55	11-10-1976	2	225	.01	2	11-10-1976	--	HO Cd 192
21	6	X	50	08-05-1974	1	250	<.01	1	08-05-1974	--	HO Cd 193
48	6	X	30	06-13-1985	2	60	.03	6	06-13-1985	--	HO Cd 194
56	6	X	60	11-09-1981	15	300	.05	6	11-09-1981	--	HO Cd 195
77	6	X	25	06-21-1986	6	85	.07	3	06-21-1986	--	HO Cd 196
48	6	X	50	04-10-1975	2	170	.01	1	07-10-1975	--	HO Cd 197
26	6	X	36	07-12-1976	2.5	134	.02	6	07-12-1976	--	HO Cd 198
58	6	X	24	03-19-1984	1	118	.01	6	03-19-1984	--	HO Cd 199
54	6	X	57	06-20-1979	1.5	373	<.01	6	06-20-1979	--	HO Cd 200
23	6	X	50	09-10-1974	1	255	<.01	1	09-10-1974	--	HO Cd 201
25	6	X	30	02-15-1978	4	230	.02	4	02-15-1978	--	HO Cd 202
19	6	X	30	07-03-1980	3	150	.02	3	07-03-1980	--	HO Cd 203
78	6	X	150	10-29-1973	5	150	.03	2	10-29-1973	--	HO Cd 204
67	6	X	69	08-14-1978	2	235	.01	6	08-14-1978	--	HO Cd 205
36	6	X	45	09-16-1974	10	155	.06	2	09-16-1974	Q	HO Cd 206
47	6	X	40	05-06-1977	2	260	.01	3	05-06-1977	--	HO Cd 207
69	6	X	30	03-30-1976	5	170	.03	1	03-30-1976	--	HO Cd 208
58	6	X	40	03-10-1981	7	285	.02	6	03-10-1981	--	HO Cd 209
59	6	X	60	06-19-1984	13	5	2.60	3	06-19-1984	--	HO Cd 210
127	6	X	37	11-25-1985	10	11	.91	3	11-25-1985	--	HO Cd 211
36	6	X	40	06-27-1975	8	115	.07	2	06-27-1975	--	HO Cd 212
48	6	X	40	03-01-1976	10	135	.07	2	03-01-1976	--	HO Cd 213
28	6	X	35	08-15-1986	10	16	.62	3	08-15-1986	--	HO Cd 214
--	--	X	Dry	08-15-1986	0	--	--	--	08-15-1986	--	HO Cd 215
64	6	X	28	07-01-1986	5	116	.04	3	07-01-1986	--	HO Cd 216
38	6	X	35.99 S	01-22-1988	10	175	.06	8	03-09-1978	O	HO Cd 217
44	6	X	50	10-14-1977	4	155	.03	2	10-14-1977	--	HO Cd 218
40	6	X	30	12-12-1979	2	335	.01	8	12-12-1979	--	HO Cd 219
49	6	X	24	01-29-1985	5.5	90	.06	3	01-29-1985	--	HO Cd 220
90	6	X	105	12-21-1967	3	--	--	--	12-21-1967	--	HO Cd 221
41	6	X	35	12-29-1977	25	85	.29	2	12-29-1977	--	HO Cd 222
35	6	X	30	01-26-1979	1.5	370	<.01	--	01-26-1979	--	HO Cd 223
63	6	X	32	04-02-1979	15	93	.16	6	04-02-1979	--	HO Cd 224
34	6	X	35	11-09-1979	5	115	.04	1	11-09-1979	--	HO Cd 225
39	6	X	1	08-19-1985	9	21	.43	3.5	08-19-1985	--	HO Cd 226
--	--	X	Dry	08-19-1985	0	--	--	--	08-19-1985	--	HO Cd 227
46.8	6	X	56	09-08-1982	1	362	<.01	6	09-08-1982	--	HO Cd 228
29	6	X	22	05-31-1983	.75	418	<.01	7	05-31-1983	--	HO Cd 229
23	6	X	23	09-06-1983	.5	412	<.01	8	09-06-1983	--	HO Cd 230
--	--	X	Dry	09-06-1983	0	--	--	--	09-06-1983	--	HO Cd 231
39	6	X	20	12-21-1984	3	180	.02	8	12-21-1984	--	HO Cd 232
38	6	X	35	12-09-1983	1.5	315	<.01	6	12-09-1983	--	HO Cd 233
39	6	X	40	07-24-1986	10	65	.15	3	07-24-1986	--	HO Cd 234
24	6	X	31	06-23-1986	3	95	.03	6	06-23-1986	--	HO Cd 235
41	6	X	31	06-02-1986	12	22	.55	3	06-02-1986	--	HO Cd 236
61	6	X	45	10-29-1975	10	135	.07	2	10-29-1975	--	HO Cd 237
71	6	X	40	06-21-1976	5	120	.04	2	06-21-1976	--	HO Cd 238
28	6	X	17	08-25-1982	12	0	--	3	08-25-1982	--	HO Cd 239
--	--	X	Dry	08 -- 1982	0	--	--	--	08 -- 1982	--	HO Cd 241
69	6	X	45	06-08-1984	12	6	2.0	3	06-08-1984	--	HO Cd 242
19	6	X	12	06-05-1985	10	4	2.50	3	06-05-1985	--	HO Cd 243
44	6	X	35	05-03-1977	10	85	.12	2	05-03-1977	--	HO Cd 244
58	6	X	33	12-11-1984	2	117	.02	6	12-11-1984	--	HO Cd 245
50	6	X	30	03-08-1978	1	255	<.01	8	03-08-1978	--	HO Cd 246
36	6	X	48	11-17-1961	7	--	--	1	11-17-1961	--	HO Cd 247
64	6	X	30	07-30-1982	12	10	1.20	3	07-30-1982	--	HO Cd 248
61	6	X	25	11-06-1981	10	155	.06	4	11-06-1981	Q	HO Cd 249
65	6	X	25	02-22-1984	15	5	3	3	02-22-1984	--	HO Cd 250
66	6	X	21	05-10-1983	10	2	5	3	05-10-1983	--	HO Cd 251

Table 1.—Records of selected wells in Howard County—Continued

Well no.	Well permit no.	Owner or name	Driller	Date of construction	Altitude of land surface (ft)	Topo-graphic setting	Depth Drilled (ft)	Use of water	Geologic unit
HO Cd 252	HO-81-0549	Marrie, Michael	Joseph Mayne	06-06-1984	515	H	303	H	400BLMR
HO Cd 253	--	U S Geological Survey	USGS	05-25-1988	456.61	S	1	U	300LCRV
HO Cd 254	HO-81-2141	G W Smith Associates	Tri County	06-30-1987	565	S	150	H	300LCRV
HO Cd 255	HO-81-1940	Wilburn, Donald	Ralph Mayne	04-14-1987	510	S	305	H	300LCRV
HO Cd 256	HO-81-2200	Warfield, Jean	Tri County	07-31-1987	440	H	175	H	300LCRV
HO Cd 257	HO-81-1692	Krieger, Howard	L F Easterday	02-04-1987	460	U	80	H	300LCRV
HO Cd 258	HO-81-1692	Krieger, Howard	L F Easterday	02 -- 1987	460	U	--	U	300LCRV
HO Cd 259	HO-81-2084	Lewis, Fred	Joseph Mayne	06-03-1987	460	S	400	H	300LCRV
HO Cd 260	HO-81-2422	RAO Group Inc	Joseph Mayne	12-02-1987	505	S	385	H	300LCRV
HO Cd 261	HO-81-2423	RAO Group Inc	Joseph Mayne	12-02-1987	500	S	225	H	300LCRV
HO Cd 262	HO-81-2335	Howard Estate Develop	L F Easterday	10-21-1987	410	S	300	U	400BLMR
HO Cd 263	HO-73-3338	Ray, Douglas	L F Easterday	07-17-1979	445	H	120	H	400BLMR
HO Cd 264	HO-73-2306	Creamer, Patrick	L F Easterday	09-28-1977	510	H	440	H	400BLMR
HO Cd 265	HO-73-0679	Kuebler, Gary L	Joseph Mayne	05-09-1978	360	S	225	H	300LCRV
HO Cd 266	HO-81-0935	Mt Zion U Methodist Ch	L F Easterday	04-02-1985	520	F	260	H	400BLMR
HO Cd 267	HO-81-0580	Barrow, David	L F Easterday	06-26-1984	505	H	200	H	400BLMR
HO Cd 268	HO-73-4384	Lutton, Clyde E	L F Easterday	02-25-1983	460	S	400	H	400BLMR
HO Cd 269	HO-73-2150	Deitrick, Samuel	L F Easterday	08-05-1977	485	S	180	H	400BLMR
HO Cd 270	HO-73-4036	Hall, Lee	L F Easterday	11-25-1981	485	S	213	U	400BLMR
HO Cd 271	HO-81-1478	--	L F Easterday	06-18-1986	475	H	300	H	400BLMR
HO Cd 272	HO-73-3934	Tyson, Norman E	L F Easterday	07-08-1981	425	S	100	H	400BLMR
HO Cd 273	HO-81-0438	Pickett, Mifflin	Ralph Mayne	03-06-1984	420	S	145	H	400BLMR
HO Cd 274	HO-73-3940	Botanical Decorators	Ralph Mayne	06-29-1981	460	S	215	C,I	300LCRV
HO Cd 275	HO-73-2981	--	L F Easterday	10-27-1978	460	H	200	H	400BLMR
HO Cd 276	HO-73-2976	Kottapalli, S	L F Easterday	10-17-1978	445	S	160	H	400BLMR
HO Cd 277	HO-73-1253	Greer, Joel	L F Easterday	04-05-1976	410	S	100	H	400BLMR
HO Cd 278	HO-73-2385	Sorrell, Gary	L F Easterday	02-21-1978	405	H	160	H	400BLMR
HO Cd 279	HO-73-1681	--	L F Easterday	10-14-1976	385	S	80	H	400BLMR
HO Cd 280	HO-81-0429	Britton, Raymond J	Joseph Mayne	03-02-1984	490	S	223	H	300LCRV
HO Cd 281	HO-81-1090	Britton	Joseph Mayne	12-18-1985	490	U	205	H	300LCRV
HO Cd 282	HO-81-0262	Farley	Joseph Mayne	09-27-1983	505	H	420	H	300LCRV
HO Cd 283	HO-73-3030	--	Westminster	11-09-1978	470	S	151	H	300LCRV
HO Cd 284	HO-73-3031	--	Westminster	11-17-1978	475	S	453	H	300LCRV
HO Cd 285	HO-73-3031	--	Westminster	11-17-1978	475	S	150	U	300LCRV
HO Cd 286	HO-81-0712	--	L F Easterday	10-12-1984	470	H	400	H	300LCRV
HO Cd 287	HO-73-4379	Balcerzak, Steve	L F Easterday	02-28-1983	445	S	240	H	300LCRV
HO Cd 288	HO-73-2411	--	Westminster	06-01-1978	505	H	353	H	300LCRV
HO Cd 289	HO-73-1764	Boland, Timothy	Dillon Bros	01-05-1977	500	F	200	H	300LCRV
HO Cd 290	--	U S Geological Survey	USGS	04-04-1988	456.61	S	5	U	300LCRV
HO Cd 291	--	U S Geological Survey	USGS	04-06-1988	456.61	S	9.8	U	300LCRV
HO Cd 292	--	U S Geological Survey	USGS	04-06-1988	456.61	S	13.8	U	300LCRV
HO Cd 293	HO-81-1869	Dolecek, Quentin	G E Harr Sons	03-25-1987	585	S	200	H	300LCRV
HO Cd 294	HO-81-1662	--	Joseph Mayne	10-22-1986	585	H	305	H	300LCRV
HO Cd 295	HO-81-1975	Hines, Ronald	Joseph Mayne	03-17-1987	605	H	205	H	300MRGR
HO Cd 296	HO-81-2050	Eckert, Thomas Jr	Joseph Mayne	05-14-1987	560	S	345	H	300LCRV
HO Cd 297	HO-81-1814	Kottapalli, Rao	Joseph Mayne	03-06-1987	515	H	205	H	300LCRV
HO Cd 298	HO-81-1814	Kottapalli, Rao	Joseph Mayne	03-06-1987	515	H	365	U	300LCRV
HO Cd 299	HO-81-1913	Sines, Ernest R	Joseph Mayne	03-04-1987	565	S	385	H	300LCRV
HO Cd 300	HO-81-1913	Sines, Ernest R	Joseph Mayne	03-04-1987	565	S	400	U	300MRGR
HO Cd 301	HO-81-1913	Sines, Ernest R	Joseph Mayne	03-04-1987	565	S	340	U	300LCRV
HO Cd 302	HO-81-2089	Stevens, Charles J	Joseph Mayne	06-01-1987	545	H	305	H	300LCRV
HO Cd 303	HO-81-1969	Munger, Perry W	Joseph Mayne	04-07-1987	500	S	160	H	300LCRV
HO Cd 304	HO-81-2070	--	L F Easterday	06-10-1987	510	H	160	H	300LCRV
HO Cd 305	HO-81-2069	McDonough Builders	L F Easterday	06-10-1987	515	H	160	H	300LCRV
HO Cd 306	HO-81-2108	Polaris Developers	L F Easterday	09-02-1987	520	H	200	H	400BLMR
HO Cd 307	HO-81-1985	Williams, Jerome	L F Easterday	04-06-1987	470	U	160	H	400BLMR
HO Cd 308	HO-81-2111	RCM Corporation	Ralph Mayne	06-19-1987	450	S	265	H	300LCRV
HO Cd 309	HO-81-1773	Jacobs, Frank	L F Easterday	12-31-1986	420	H	400	H	300CCKV
HO Cd 310	HO-81-1818	Highland Developmnt Co	Joseph Mayne	03-06-1987	450	S	365	H	300CCKV
HO Cd 311	HO-81-1816	Highland Developmnt Co	Joseph Mayne	02-20-1987	505	S	285	H	300LCRV
HO Cd 312	HO-81-1861	Highland Developmnt Co	Joseph Mayne	02-06-1987	505	H	405	H	300LCRV
HO Cd 313	HO-81-1842	Shorb	Joseph Mayne	02-02-1987	485	H	385	H	300LCRV
HO Cd 314	HO-81-1842	Shorb	Joseph Mayne	02-02-1987	490	H	365	U	300LCRV
HO Cd 315	HO-81-1858	Sunderland, G	Joseph Mayne	01-20-1987	410	S	300	H	300LCRV
HO Cd 316	HO-81-1746	Suess, Joseph	Joseph Mayne	11-17-1986	495	H	400	H	300LCRV
HO Cd 317	HO-81-1797	Howes, Robert	L F Easterday	12-31-1986	505	H	300	H	400BLMR
HO Cd 318	HO-81-1823	Michael, Brian K	W W Reichart	12-30-1986	540	H	150	H	400BLMR
HO Cd 319	HO-81-2047	O'Hare, Joseph	Ralph Mayne	04-27-1987	510	S	205	U	400BLMR
HO Cd 320	HO-81-1582	Van Stone, Jeffrey	Joseph Mayne	07-22-1987	465	H	225	H	400BLMR
HO Cd 321	HO-81-1833	Newburn Development	Joseph Mayne	01-09-1987	448.71	H	324	H	400BLMR
HO Cd 322	HO-81-1851	Newburn Development	Joseph Mayne	01-09-1987	425	S	324	H	400BLMR
HO Cd 323	HO-81-1726	Brenton, Jeffrey	Ralph Mayne	11-11-1986	430	S	205	H	400BLMR
HO Cd 324	HO-81-1626	Parlette, Paul	L F Easterday	10-14-1986	450	H	400	H	400BLMR
HO Cd 325	HO-81-1756	--	L F Easterday	12-24-1986	480	H	260	H	400BLMR
HO Cd 326	HO-81-1973	--	Joseph Mayne	07-06-1987	485	H	142	H	300LCRV

Casing			Water level		Aquifer test					Other	
Depth (ft)	Diameter (in.)	Finish	Depth, ft below land surface	Date measured	Yield (gal/min)	Drawdown (ft)	Specific capacity [(gal/min)/ft]	Hours pumped	Date	data available	Well no.
85	6	X	28	06-06-1984	1.75	132	0.01	6	06-06-1984	--	HO Cd 252
--	--	Z	--	--	--	--	--	--	--	--	HO Cd 253
66	6	X	18	06-30-1987	4	47	.09	3	06-30-1987	--	HO Cd 254
53	6	X	20	04-14-1987	3	175	.02	6	04-14-1987	--	HO Cd 255
73	6	X	20	07-31-1987	6	83	.07	3	07-31-1987	--	HO Cd 256
53	6	X	20.20 S	12-01-1987	12	6	2.0	3	02-04-1987	--	HO Cd 257
--	6	X	Dry	02 -- 1987	0	--	--	--	02 -- 1987	--	HO Cd 258
45	6	X	32	06-03-1987	1.6	208	.01	6	06-03-1987	--	HO Cd 259
55	6	X	45	12-02-1987	10	25	.40	3	12-02-1987	--	HO Cd 260
43	6	X	45	12-02-1987	10	0	--	3	12-02-1987	--	HO Cd 261
36	6	X	25	10-21-1987	12	2	6.0	3	10-21-1987	--	HO Cd 262
54	6	X	20	07-17-1979	8	100	.08	3	07-17-1979	--	HO Cd 263
55	6	X	60	09-28-1977	2	380	.01	5	09-28-1977	--	HO Cd 264
71	6	X	75	05-09-1978	6	140	.04	2	05-09-1978	--	HO Cd 265
66	6	X	55	04-02-1985	25	205	.12	3	04-02-1985	--	HO Cd 266
75	6	X	10	06-26-1984	10	120	.08	3	06-26-1984	--	HO Cd 267
40	6	X	12	02-25-1983	1	131	.01	6	02-25-1983	--	HO Cd 268
19	6	X	60	08-05-1977	3	120	.02	3	08-05-1977	--	HO Cd 269
206	6	F	14.35 S	02-18-1988	3	183	.02	3	11-25-1981	O	HO Cd 270
105	6	X	16	06-18-1986	6	93	.06	3	06-18-1986	--	HO Cd 271
29	6	X	28	07-08-1981	15	72	.21	3	07-08-1981	--	HO Cd 272
28	6	X	15	03-06-1984	6	130	.05	3	03-06-1984	--	HO Cd 273
53	6	X	35	06-29-1981	6	180	.03	5	06-29-1981	--	HO Cd 274
28	6	X	25	10-27-1978	2	175	.01	3	10-27-1978	--	HO Cd 275
20	6	X	25	10-17-1978	3	135	.02	3	10-17-1978	--	HO Cd 276
29	6	X	30	04-05-1976	20	70	.29	1	04-05-1976	--	HO Cd 277
43	6	X	35	02-21-1978	3	125	.02	3	02-21-1978	--	HO Cd 278
30	6	X	30	10-14-1976	20	50	.40	2	10-14-1976	--	HO Cd 279
70	6	X	5	03-02-1984	9	100	.09	3	03-02-1984	--	HO Cd 280
73	6	X	10	12-18-1985	4	130	.03	3	12-18-1985	--	HO Cd 281
82	6	X	40	09-27-1983	1	125	.01	6	09-27-1983	--	HO Cd 282
41	6	X	62	11-09-1978	7	2	3.50	6	11-09-1978	--	HO Cd 283
82	6	X	86	11-17-1978	3	264	.01	6	11-17-1978	--	HO Cd 284
--	--	X	Dry	11-17-1978	0	--	--	--	11-17-1978	--	HO Cd 285
26	6	X	26	10-12-1984	2	84	.02	6	10-12-1984	--	HO Cd 286
79	6	X	49	02-28-1983	6	54	.11	3	02-28-1983	--	HO Cd 287
88	6	X	95	06-01-1978	3	221	.01	6	06-01-1978	--	HO Cd 288
98	6	X	35	01-05-1977	5	135	.04	6	01-05-1977	--	HO Cd 289
--	--	Z	--	--	--	--	--	--	--	--	HO Cd 290
--	--	Z	--	--	--	--	--	--	--	--	HO Cd 291
--	--	Z	--	--	--	--	--	--	--	--	HO Cd 292
50	6	X	34	03-25-1987	6	101.80	.06	3	03-25-1987	--	HO Cd 293
69	6	X	49	10-22-1986	4.5	121	.04	3.5	10-22-1986	--	HO Cd 294
70	6	X	33	03-17-1987	6.5	68	.10	3	03-17-1987	--	HO Cd 295
60	6	X	28	05-14-1987	3	160	.02	6	05-14-1987	--	HO Cd 296
128	6	X	35	03-06-1987	7.5	48	.16	3	03-06-1987	--	HO Cd 297
--	--	X	Dry	03-06-1987	0	--	--	--	03-06-1987	--	HO Cd 298
53	6	X	35	03-04-1987	1.25	236	.01	6	03-04-1987	--	HO Cd 299
--	--	X	Dry	03-04-1987	0	--	--	--	03-04-1987	--	HO Cd 300
--	--	X	Dry	03-04-1987	0	--	--	--	03-04-1987	--	HO Cd 301
51	6	X	35	06-01-1987	12	70	.17	3	06-01-1987	--	HO Cd 302
140	6	X	34	04-07-1987	10	13	.77	3	04-07-1987	--	HO Cd 303
123	6	X	46	06-10-1987	12	17	.71	3	06-10-1987	--	HO Cd 304
124	6	X	59	06-10-1987	12	3	4.0	3	06-10-1987	--	HO Cd 305
33	6	X	28	09-02-1987	10	11	.91	3	09-02-1987	--	HO Cd 306
142	6	X	25	04-06-1987	12	15	.80	3	04-06-1987	--	HO Cd 307
58	6	X	40	06-19-1987	4	110	.04	3	06-19-1987	--	HO Cd 308
33	6	X	29	12-31-1986	12	6	2.0	3	12-31-1986	--	HO Cd 309
124	6	X	55	03-06-1987	10	13	.77	3	03-06-1987	--	HO Cd 310
38	6	X	35	02-20-1987	12	31	.39	3	02-20-1987	--	HO Cd 311
61	6	X	55	02-06-1987	1.6	244	.01	6	02-06-1987	--	HO Cd 312
59	6	X	42	02-02-1987	4.25	252	.02	3	02-02-1987	--	HO Cd 313
--	--	X	Dry	02-02-1987	0	--	--	--	02-02-1987	--	HO Cd 314
63	6	X	30	01-20-1987	3	161	.02	6	01-20-1987	--	HO Cd 315
60	6	X	61	11-17-1986	.5	279	<.01	6	11-17-1986	--	HO Cd 316
25	6	X	50	12-31-1986	3	250	.01	3	12-31-1986	--	HO Cd 317
22	6	X	21	12-30-1986	10	4	2.50	3.5	12-20-1986	--	HO Cd 318
46	6	X	30	04-27-1987	4	90	.04	3	04-27-1987	--	HO Cd 319
21	6	X	36	07-22-1987	7.5	18	.42	3	07-22-1987	--	HO Cd 320
32	6	X	78	01-09-1987	12	0	--	3	01-09-1987	--	HO Cd 321
40	6	X	88	01-09-1987	12	3	4.0	3	01-09-1987	--	HO Cd 322
18	6	X	35	11-11-1986	10	25	.40	3	11-11-1986	--	HO Cd 323
24	6	X	28	10-14-1986	2	51	.04	6	10-14-1986	--	HO Cd 324
116	6	X	32	12-24-1986	7	90	.08	3	12-24-1986	--	HO Cd 325
58	6	X	43	07-06-1987	6	50	.12	3	07-06-1987	--	HO Cd 326

Table 1.—Records of selected wells in Howard County—Continued

Well no.	Well permit no.	Owner or name	Driller	Date of construction	Altitude of land surface (ft)	Topo-graphic setting	Depth Drilled (ft)	Use of water	Geologic unit
HO Cd 327	HO-81-2193	Lilly, Floyd E	A & H Drilling	08-12-1987	505	F	400	H	300LCRV
HO Cd 328	HO-81-1603	--	Tri County	07-25-1986	465	U	150	H	300LCRV
HO Cd 329	HO-73-1223	Tracor Hydronautics	G E Harr Sons	01-29-1976	490	H	350	T	300LCRV
HO Cd 330	HO-65-0385	Tracor Hydronautics	G E Harr Sons	05-21-1965	485	S	357	T	300LCRV
HO Cd 331	HO-73-2032	Melbane, William	L F Easterday	05-17-1977	615	H	300	H	300LCRV
HO Cd 332	HO-73-0585	Shoemaker, Lewis	L F Easterday	02-01-1974	610	H	300	H	300LCRV
HO Cd 333	HO-73-1377	--	Ralph Mayne	08-16-1976	560	S	135	H	300LCRV
HO Cd 334	HO-81-0898	Vlach, Wilbur M	Ralph Mayne	02-21-1985	590	H	200	H	300LCRV
HO Cd 335	HO-81-2099	Schmid, Rudy	Ralph Mayne	06-15-1987	595	S	300	H	300LCRV
HO Cd 336	HO-81-2088	Mott, Lynn	Ralph Mayne	06-01-1987	620	H	245	H	300LCRV
HO Cd 337	HO-81-2088	Mott, Lynn	Ralph Mayne	06-01-1987	615	S	--	U	300LCRV
HO Cd 338	HO-81-1320	Ford, Ronald	Ralph Mayne	02-03-1986	620	H	220	H	--
HO Cd 339	HO-73-0439	Bowman, Ronald	L F Easterday	09-28-1973	625	H	300	H	300LCRV
HO Cd 340	HO-04-9220	Md State Highway Admin	A R Keyser	10-10-1962	580	F	280	H	300LCRV
HO Cd 341	HO-88-0061	U S Geological Survey	ATEC	08-17-1988	453	S	33	U	300LCRV
HO Cd 342	HO-88-0062	U S Geological Survey	ATEC	08-17-1988	434.27	S	27	U	300LCRV
HO Cd 343	HO-81-1552	--	W W Reichart	06-20-1986	505	H	475	H	300LCRV
HO Cd 344	HO-81-1845	Kardesh, David	Ralph Mayne	01-01-1987	505	H	245	H	300STRS
HO Cd 345	HO-81-0962	Hearle, Robert	Joseph Mayne	04-17-1985	495	S	265	H	300STRS
HO Cd 346	HO-81-0969	Prushansky, Harry A	Ralph Mayne	06-11-1985	470	H	275	H	300STRS
HO Cd 347	HO-81-0916	Prettyman, George	Ralph Mayne	03-13-1985	450	S	160	H	300STRS
HO Cd 348	HO-81-0753	Meade, James E	L F Easterday	10-16-1984	465	H	360	H	400BLMR
HO Cd 349	HO-81-0889	--	Ralph Mayne	02-26-1985	445	S	160	H	300LCRV
HO Cd 350	HO-73-0420	Rettaliata, John F	L F Easterday	10-01-1973	440	H	76	H,S	300LCRV
HO Cd 351	HO-73-4021	Tempchin, William	Ralph Mayne	10-19-1981	435	S	100	H	300LCRV
HO Cd 352	HO-81-0714	Wallace	Ralph Mayne	09-18-1984	460	H	260	H	400BLMR
HO Cd 353	HO-81-0787	--	Ralph Mayne	11-16-1984	465	S	165	H	400BLMR
HO Cd 354	HO-81-1002	Willett, Robert	Ralph Mayne	05-25-1985	490	H	180	H	400BLMR
HO Cd 355	HO-81-0851	Weaver, Fred	Ralph Mayne	02-06-1985	485	F	160	H	400BLMR
HO Cd 356	HO-73-0482	University of Md Farm	G E Harr Sons	10-29-1973	445	S	200	U	300LCRV
HO Cd 357	HO-81-0949	Pue, Richard	L F Easterday	04-02-1985	505	F	200	I,S	400BLMR
HO Cd 358	HO-68-0244	Pue, Richard	L F Easterday	06-27-1968	505	F	200	H	400BLMR
HO Cd 359	HO-81-2273	Byron Builders	Joseph Mayne	10-01-1987	425	H	325	H	400BLMR
HO Cd 360	HO-81-2254	Byron Builders	Joseph Mayne	09-02-1987	380	S	185	H	400BLMR
HO Cd 361	HO-81-2258	--	L F Easterday	09-24-1987	370	H	200	H	400BLMR
HO Cd 362	HO-81-2308	Stubbs, Chris	Joseph Mayne	09-21-1987	420	S	365	U	400BLMR
HO Cd 363	HO-81-2261	Larson, Elizabeth	L F Easterday	10-09-1987	465	S	300	H	300LCRV
HO Cd 364	HO-81-2224	Shockey, Richard	L F Easterday	08-31-1987	430	S	400	H	300LCRV
HO Cd 365	HO-81-2224	Shockey, Richard	L F Easterday	08-31-1987	430	S	200	U	300LCRV
HO Cd 366	HO-81-2304	Bransom, Margaret	Joseph Mayne	09-18-1987	485	S	240	H	400BLMR
HO Cd 367	HO-81-2223	Specht, Lanny B	G E Harr Sons	09-22-1987	485	H	300	H	400BLMR
HO Cd 368	HO-81-2324	Collett Construction	H Edmondson	10-19-1987	505	H	250	U	300LCRV
HO Cd 369	HO-81-2255	Byron Builders	Joseph Mayne	09-02-1987	450	H	245	H	400BLMR
HO Cd 370	HO-88-0009	Rettaliata, John	Ralph Mayne	06-22-1988	470	H	205	H	400BLMR
HO Cd 371	HO-81-2648	Gapp, Scott	Ralph Mayne	04-05-1988	520	H	165	H	300STRS
HO Cd 372	HO-81-2247	Cravaritis, George	Ralph Mayne	08-31-1987	440	S	260	H	400BLMR
HO Cd 373	HO-81-2218	N V Homes	Keyser-Garver	09-17-1987	515	S	570	U	400BLMR
HO Cd 374	--	University of Md Farm	G E Harr Sons	10-15-1973	445	H	150	U	300LCRV
HO Cd 375	--	University of Md Farm	G E Harr Sons	10-15-1973	445	H	125	U	300LCRV
HO Cd 376	HO-81-2348	Kahn, Tariq	L F Easterday	10-15-1987	370	H	300	U	400BLMR
HO Cd 377	HO-73-3924	Ten Oaks Nursery	L F Easterday	05-28-1981	510	U	260	C,I	300LCRV
HO Cd 378	HO-73-1465	Davenport, Clint	Joseph Mayne	06-04-1976	560	H	205	U	300STRS
HO Cd 379	HO-81-2595	Davenport, Clint	L F Easterday	03-22-1988	560	H	400	H	300STRS
HO Cd 380	HO-81-2136	Mazziotti, Massimo	Ralph Mayne	06-26-1987	535	W	200	U	400BLMR
HO Cd 381	HO-81-2214	--	Keyser-Garver	08-19-1987	545	H	400	H	300STRS
HO Cd 382	HO-81-1441	Cummings, Brian	Joseph Mayne	06-11-1986	470	S	285	U	400BLMR
HO Cd 383	HO-81-2139	Cummings, Brian	Joseph Mayne	06-27-1987	470	S	400	H	400BLMR
HO Cd 384	HO-81-1534	Taylor, Michelle	Joseph Mayne	07-23-1986	450	S	305	H	400BLMR
HO Cd 385	HO-81-1133	Naeker, Lewis	L F Easterday	08-12-1985	395	S	100	H	300PGMT
HO Cd 386	HO-81-0728	Braga, Mark	W W Reichart	10-10-1984	445	S	125	H	300LCRV
HO Cd 387	HO-73-4009	Counts, Clarice	L F Easterday	10-13-1981	415	S	400	H	400BLMR
HO Cd 388	HO-81-2283	Suit, Lisa	L F Easterday	10-02-1987	555	S	400	H	400BLMR
HO Cd 389	HO-73-3877	Brown, Clyde H Jr	Joseph Mayne	04-27-1981	565	S	165	H	300MRGR
HO Ce 1	HO-00-6006	Hepding, J A	T N Smith	08-24-1951	360	S	50	U	300GLFD
HO Ce 2	--	Schneider	Harry Green	05 -- 1952	365	H	100	H	300SKVLS
HO Ce 3	--	Lewis, J C	--	--	300	V	22.6	U	300OELL
HO Ce 4	--	Mettie, Brady	--	1948	320	H	60	U	300GLFD
HO Ce 5	--	Brown, Louis	F B Rogers	1948	400	H	51	H,S	300GLFD
HO Ce 6	--	Seward, R E	Edward Brown	1950	380	H	50	H	300GLFD
HO Ce 7	--	Saumenig, Harry	--	1951	310	S	26.5	H	300OELL
HO Ce 8	--	Day, Walter E	Edward Brown	1945	410	F	38	H	300GLFD
HO Ce 9	--	Bassler, Benjamin F	Stauffer	1911	445	S	45	U	300GLFD

Casing			Water level		Aquifer test					Other	
Depth (ft)	Diameter (in.)	Finish	Depth, ft below land surface	Date measured	Yield (gal/min)	Drawdown (ft)	Specific capacity [(gal/min)/ft]	Hours pumped	Date	data available	Well no.
100	6	X	50	08-12-1987	3	350	0.01	2	08-12-1987	--	HO Cd 327
88	6	X	30	07-25-1986	7	20	.35	4	07-25-1987	--	HO Cd 328
65	6	X	19	01-29-1976	8	241	.03	7	01-29-1976	--	HO Cd 329
56	6	X	50	05-21-1965	6	34	.18	9	05-21-1965	--	HO Cd 330
39	6	X	35	05-17-1977	1	265	<.01	3	05-17-1977	--	HO Cd 331
54	6	X	50	02-01-1974	3	250	.01	1	02-01-1974	--	HO Cd 332
21	6	X	20	08-16-1976	6	115	.05	2	08-16-1976	--	HO Cd 333
62	6	X	29	02-21-1985	9	46	.20	3	02-21-1985	Q	HO Cd 334
63	6	X	15	06-15-1987	6	80	.07	3	06-15-1987	--	HO Cd 335
43	6	X	30	06-01-1987	6	56	.11	3	06-01-1987	--	HO Cd 336
--	--	X	Dry	06-01-1987	0	--	--	--	06-01-1987	--	HO Cd 337
48	6	X	25	02-03-1986	5	75	.07	3	02-03-1986	--	HO Cd 338
86	6	X	50	09-28-1973	1	250	<.01	1	09-28-1973	--	HO Cd 339
--	--	X	23	10-10-1962	15	177	.08	--	10-10-1962	--	HO Cd 340
--	6	S	28.12 S	08-18-1988	--	--	--	--	--	O,Q	HO Cd 341
25	3.5	Screened from 25 to 30 ft.									
--	6	S	23.66 S	08-18-1988	--	--	--	--	--	O,Q	HO Cd 342
20	3.5	Screened from 20 to 25 ft.									
159	6	X	83	06-20-1986	12	19	.63	3.5	06-20-1986	--	HO Cd 343
45	6	X	38	01-01-1987	10	37	.27	3	01-01-1987	Q	HO Cd 344
39	6	X	28	04-17-1985	4	108	.04	3	04-17-1985	--	HO Cd 345
18	6	X	29	06-11-1985	10	0	--	3	06-11-1985	--	HO Cd 346
28	6	X	37	03-13-1985	9	0	--	3	03-13-1985	--	HO Cd 347
48	6	X	43	10-16-1984	6	140	.04	3	10-16-1984	--	HO Cd 348
36	6	X	30	02-26-1985	9	10	.90	3	02-26-1985	--	HO Cd 349
45	6	X	40	10-01-1973	50	36	1.39	2	10-01-1973	--	HO Cd 350
82	6	X	35	10-19-1981	15	65	.23	2	10-19-1981	--	HO Cd 351
24	6	X	20	09-18-1984	3	15	.20	6	09-18-1984	--	HO Cd 352
59	6	X	24	11-16-1984	4	61	.07	3	11-16-1984	--	HO Cd 353
43	6	X	25	05-23-1985	7	15	.47	3	05-23-1985	--	HO Cd 354
45	6	X	15	02-06-1985	4	85	.05	3	02-06-1985	--	HO Cd 355
55	10	X	29	10-29-1973	100	2	50.0	8	10-29-1973	--	HO Cd 356
65	8										
54	6	X	55	04-02-1985	20	144	.14	4	04-02-1985	--	HO Cd 357
38	6	X	40	06-27-1968	2	160	.01	.5	06-27-1968	--	HO Cd 358
58	6	X	39	10-01-1987	2.4	168	.01	6	10-01-1987	--	HO Cd 359
50	6	X	31	09-02-1987	5	28	.18	3	09-02-1987	--	HO Cd 360
50	6	X	32	09-24-1987	6	38	.16	3	09-24-1987	--	HO Cd 361
31	6	X	35	09-21-1987	5.5	48	.11	3	09-21-1987	--	HO Cd 362
41	6	X	36	10-09-1987	5	106	.05	3	10-09-1987	--	HO Cd 363
90	6	X	40	08-31-1987	3	55	.05	3	08-31-1987	--	HO Cd 364
--	--	X	Dry	08-31-1987	0	--	--	--	08-31-1987	--	HO Cd 365
79	6	X	62	09-18-1987	20	138	.14	3	09-18-1987	--	HO Cd 366
118	6	X	33	09-22-1987	2.31	203.16	.01	6	09-22-1987	--	HO Cd 367
52	6	X	34	10-19-1987	8	106	.08	3	10-19-1987	--	HO Cd 368
40	6	X	47	09-02-1987	5.5	51	.11	3	09-02-1987	--	HO Cd 369
28	6	X	40	06-22-1988	5	5	1.0	3	06-22-1988	--	HO Cd 370
19	6	X	23	04-05-1988	6	8	.75	3	04-05-1988	--	HO Cd 371
31	6	X	25	08-31-1987	7	75	.09	3	08-31-1987	--	HO Cd 372
60	6	X	18	09-17-1987	1	198	.01	6	09-17-1987	--	HO Cd 373
--	--	X	Dry	10-15-1973	0	--	--	--	10-15-1973	--	HO Cd 374
--	--	X	--	--	25	--	--	--	10-15-1973	--	HO Cd 375
21	6	X	24	10-15-1987	10	88	.11	3	10-15-1987	--	HO Cd 376
28	6	X	40	05-28-1981	4	220	.02	4	05-28-1981	--	HO Cd 377
68	6	X	35	06-04-1976	3	165	.02	2	06-04-1976	--	HO Cd 378
58	6	X	90	03-22-1988	4	310	.01	3	03-22-1988	--	HO Cd 379
43	6	X	40	06-26-1987	9	45	.20	3	06-26-1987	--	HO Cd 380
82	6	X	42	08-19-1987	3	86	.03	6	08-19-1987	--	HO Cd 381
49	6	X	24	06-11-1986	4	127	.03	3	06-11-1986	--	HO Cd 382
45	6	X	24	06-27-1987	1	216	<.01	6	06-27-1987	--	HO Cd 383
43	6	X	24	07-23-1986	5.5	144	.04	3	07-23-1986	Q	HO Cd 384
19	6	X	20	08-12-1985	20	70	.29	3	08-12-1985	Q	HO Cd 385
47	6	X	25	10-10-1984	10	10	1.0	3	10-10-1984	Q	HO Cd 386
46	6	X	20	10-13-1981	6	380	.02	2	10-13-1981	Q	HO Cd 387
33	6	X	33	10-02-1987	4	100	.04	3	10-02-1987	Q	HO Cd 388
53	6	X	65	04-27-1981	8	85	.09	2	04-27-1981	Q	HO Cd 389
25	6	X	5	08-24-1951	--	--	--	--	--	--	HO Ce 1
6	6	X	24	05 -- 1952	2	--	--	--	05 -- 1952	--	HO Ce 2
22.6	36	W	15.20 S	08-22-1952	--	--	--	--	--	--	HO Ce 3
--	6	-	11	1948	--	--	--	--	--	--	HO Ce 4
29	6	X	17	1948	12	--	--	--	1948	--	HO Ce 5
25	6	X	15	1950	21	--	--	--	1950	--	HO Ce 6
26.5	36	W	20.10 S	08-22-1952	--	--	--	--	--	--	HO Ce 7
--	6	-	27	1945	5	--	--	--	1945	--	HO Ce 8
7	6	X	23	1952	--	--	--	--	--	--	HO Ce 9

Table 1.—Records of selected wells in Howard County—Continued

Well no.	Well permit no.	Owner or name	Driller	Date of construction	Altitude of land surface (ft)	Topo-graphic setting	Depth Drilled (ft)	Use of water	Geologic unit
HO Ce 10	--	Henard, Coy	Coy Henard	1947	455	S	18	U	300OELL
HO Ce 11	--	Biller, Louis	John Greene	1940	360	S	86	H	300OELL
HO Ce 12	--	Allview Country Club	--	--	340	W	20	U	300OELL
HO Ce 13	--	Corbitt, Paul C	--	1900	340	S	22.5	U	300OELL
HO Ce 14	--	Owings, M Dorsey	--	1925	405	H	34.5	U	300OELL
HO Ce 15	--	McIntosh, L J	--	--	355	S	20.1	U	300OELL
HO Ce 16	--	Dorsey	Peters	1925	400	H	22	H	300GLFD
HO Ce 17	--	Melin, C G	--	1942	285	S	50	H	300OELL
HO Ce 18	--	Shaw, Charles	F B Rogers	1947	460	F	74.5	H	300LCRV
HO Ce 19	--	Sterns, William C	Edward Brown	03 -- 1952	450	S	69	H	300OELL
HO Ce 20	--	Carroll, Charles	--	1910	395	H	90	H,S	400BLMR
HO Ce 21	HO-01-1988	Johns Hopkins Univ APL	Washington	04-06-1953	360	S	123	U	300SKVLS
HO Ce 22	HO-02-1089	W R Grace & Co	G E Harr Sons	10-14-1955	380	H	171	U	300OELL
HO Ce 23	HO-02-1211	W R Grace & Co	G E Harr Sons	11-01-1955	368.7	S	102.5	U	300OELL
HO Ce 24	--	W R Grace & Co	--	--	405	H	53	U	300OELL
HO Ce 26	--	Wood, R H JR	--	1955	440	S	98	H	300OELL
HO Ce 27	--	Woodall, R Earle	--	09 -- 1953	380	H	127	H	300OELL
HO Ce 29	--	Wollach, Ellsworth	--	--	465	H	75	H	300LCRV
HO Ce 30	--	Walker, Mrs William G	--	06 -- 1955	460	S	98	H	300LCRV
HO Ce 31	--	Baines, J N	Edward Brown	06 -- 1955	360	S	75	H	300OELL
HO Ce 32	--	Boyer	--	--	425	H	55.6	U	300OELL
HO Ce 33	--	Phillips, John W	--	--	405	S	85	H	300OELL
HO Ce 37	HO-02-1446	W R Grace & Co	G E Harr Sons	02-21-1956	392.86	S	205	U	300OELL
HO Ce 38	HO-01-1827	Johns Hopkins Univ APL	Washington	03-12-1953	430	H	125	U	300SKVLS
HO Ce 39	HO-02-0931 HO-03-2946	W R Grace & Co	G E Harr Sons	11-26-1958	401.7	H	355	U	300OELL
HO Ce 40	HO-02-2232	Johns Hopkins Univ APL	Washington	04-11-1956	365	S	121	T	300SKVLS
HO Ce 41	HO-02-1763	Allview Estates	Washington	01-21-1956	360	S	286	U	300GLFD
HO Ce 42	HO-02-2064	Allview Estates	Washington	03-29-1956	300	S	207	U	300GLFD
HO Ce 43	HO-03-1282	W R Grace & Co	G E Harr Sons	07-31-1958	405	H	382	U	300OELL
HO Ce 44	HO-03-5093 HO-05-3960	Allview Estates	Washington G E Harr Sons	10-19-1959 11-05-1963	310	S	347	U	300SKVLS
HO Ce 45	HO-05-1144	Allview Estates	G E Harr Sons	08-15-1961	360	S	198	U	300GLFD
HO Ce 46	HO-05-1268	Allview Estates	G E Harr Sons	04-25-1963	290	S	195	U	300GLFD
HO Ce 47	HO-03-2161	Johns Hopkins Univ APL	Harry Green	10-15-1958	370	W	115	U	300SKVLS
HO Ce 48	HO-03-2162	Johns Hopkins Univ APL	Harry Green	10-15-1958	365	S	112	T	300SKVLS
HO Ce 49	HO-05-0131	Johns Hopkins Univ APL	Edward Brown	03-18-1963	330	S	110	T	300SKVLS
HO Ce 50	--	Johns Hopkins Univ APL	Edward Brown	04 -- 1963	265	S	200	H	300SKVLS
HO Ce 51	HO-65-0411	Atholton High School	Edward Brown	07-03-1965	420	H	190	U	300GLFD
HO Ce 52	HO-66-0098	Atholton High School	Edward Brown	10-15-1965	420	H	164	U	300GLFD
HO Ce 53	HO-65-0410	Atholton High School	Edward Brown	04-26-1965	420	H	170	U	300GLFD
HO Ce 55	HO-73-3960	Rapelyea	L F Easterday	07-21-1981	350	S	160	H	400BLMR
HO Ce 56	HO-73-1853	Lewis Veterinary Hosp	L F Easterday	02-25-1977	440	U	100	C	300MRGR
HO Ce 57	HO-81-0295	--	Joseph Mayne	11-07-1983	330	V	220	H	400BLMR
HO Ce 58	HO-73-2492	Wakefield, Mark	G E Harr Sons	01-04-1978	425	H	150	U	400BLMR
HO Ce 59	HO-73-4392	McDonough, John	L F Easterday	03-23-1983	400	S	240	H	400BLMR
HO Ce 60	HO-81-0210	--	Joseph Mayne	08-03-1983	395	S	500	H	400BLMR
HO Ce 61	HO-81-0006	--	Joseph Mayne	07-12-1983	395	S	400	U	400BLMR
HO Ce 62	HO-81-0006	--	Joseph Mayne	07-12-1983	395	S	300	U	400BLMR
HO Ce 63	HO-81-0006	--	Joseph Mayne	07-12-1983	395	S	380	U	400BLMR
HO Ce 64	HO-81-0006	--	Joseph Mayne	07-12-1983	395	S	300	U	400BLMR
HO Ce 65	HO-81-0006	--	Joseph Mayne	07-12-1983	395	S	300	U	400BLMR
HO Ce 66	HO-81-0006	--	Joseph Mayne	07-12-1983	395	S	200	U	400BLMR
HO Ce 67	HO-73-0168	Sweeney, Tom	L F Easterday	09-15-1983	365	H	160	H	400BLMR
HO Ce 68	HO-73-0223	--	L F Easterday	08-13-1973	405	H	500	H	400BLMR
HO Ce 69	HO-81-1284	--	Joseph Mayne	03-26-1987	410	S	205	H	400BLMR
HO Ce 70	HO-81-1287	--	Joseph Mayne	03-24-1986	435	S	325	H	400BLMR
HO Ce 71	HO-81-1297	Waschak, Allan	Joseph Mayne	03-31-1986	455	S	205	H	400BLMR
HO Ce 72	HO-81-1299	--	Joseph Mayne	03-31-1986	470	H	185	H	400BLMR
HO Ce 73	HO-81-1299	--	Joseph Mayne	03-31-1986	470	H	380	U	400BLMR
HO Ce 74	HO-81-1299	--	Joseph Mayne	03-31-1986	470	H	325	U	400BLMR
HO Ce 75	HO-68-0054	Hobbits Glen Golf Club	G E Harr Sons	09-28-1967	435	W	227	U	300OELL
HO Ce 76	HO-71-0028	Hobbits Glen Golf Club	L F Easterday	08-31-1970	425	S	120	H	400BLMR
HO Ce 77	HO-73-4089	--	Joseph Mayne	02-22-1982	430	S	240	H	300LCRV
HO Ce 78	HO-81-2206	Jain, Kamal	Joseph Mayne	08-07-1987	400	H	345	H	400BLMR
HO Ce 79	HO-81-2206	Jain, Kamal	Joseph Mayne	08-07-1987	400	H	350	U	400BLMR
HO Ce 80	HO-73-2719	--	Joseph Mayne	06-15-1978	410	S	205	H	300OELL
HO Ce 81	HO-73-2648	Mikoloski, John	Joseph Mayne	04-05-1978	430	S	365	H	300OELL
HO Ce 82	HO-73-2449	Newburn, James L	Joseph Mayne	03-30-1978	445	S	265	H	300OELL
HO Ce 83	HO-73-2004	Felsecker, J	Joseph Mayne	06-04-1977	455	H	165	H	300OELL
HO Ce 84	HO-73-2814	Robinson, Donald E	Joseph Mayne	06-22-1978	445	H	305	H	300OELL
HO Ce 85	HO-73-1238	Cash, Frank L	Dillon Bros	12-08-1975	470	H	150	H	300OELL
HO Ce 86	HO-73-1244	Rekus, Richard R	Dillon Bros	12-18-1975	470	U	400	U	300LCRV
HO Ce 87	HO-73-3906	Rekus, Richard R	Joseph Mayne	05-21-1981	470	U	225	H	300LCRV

Casing			Water level		Aquifer test					Other	
Depth (ft)	Diameter (in.)	Finish	Depth, ft below land surface	Date measured	Yield (gal/min)	Drawdown (ft)	Specific capacity [(gal/min)/ft]	Hours pumped	Date	data available	Well no.
18	36	W	2	1952	--	--	--	--	--	--	HO Ce 10
--	6	-	20	1952	--	--	--	--	--	--	HO Ce 11
20	30	W	F S	08-25-1952	5 (Flow)	--	--	--	08-25-1952	--	HO Ce 12
22.5	48	W	13.12 S	08-25-1952	--	--	--	--	--	--	HO Ce 13
34.5	48	W	25.59 S	08-25-1952	--	--	--	--	--	--	HO Ce 14
20.1	36	W	12.48 S	08-25-1952	--	--	--	--	--	--	HO Ce 15
22	36	W	16	08-25-1952	--	--	--	--	--	--	HO Ce 16
--	6	-	--	--	--	--	--	--	--	--	HO Ce 17
--	6	-	41.23 S	08-25-1952	--	--	--	--	--	--	HO Ce 18
--	6	-	16.31 S	08-25-1952	--	--	--	--	--	--	HO Ce 19
--	6	-	--	--	--	--	--	--	--	--	HO Ce 20
36	6	X	5	04-06-1953	7	95	0.07	2	04-06-1953	--	HO Ce 21
39	6	X	11.62 S	10-17-1955	52.7	33.98	1.55	7	10-17-1955	C	HO Ce 22
51.9	8	X	11.60 S	11-02-1955	--	--	--	--	--	--	HO Ce 23
53	36	W	50.27 S	10-19-1955	3.5	--	--	--	10 -- 1955	--	HO Ce 24
--	6	-	22.40 S	11-02-1955	5	--	--	--	10-12-1955	--	HO Ce 26
--	6	-	--	--	10	--	--	--	10-19-1955	--	HO Ce 27
75	--	W	--	--	--	--	--	--	--	--	HO Ce 29
--	--	-	--	--	--	--	--	--	--	--	HO Ce 30
--	6	-	30	06 -- 1955	--	--	--	--	--	--	HO Ce 31
55.6	--	W	53.13 S	10-19-1955	--	--	--	--	--	--	HO Ce 32
--	--	-	--	--	4.5	--	--	--	10-21-1955	--	HO Ce 33
42	6	X	8.75	02-21-1956	15	109	.14	10.5	11-21-1955	C	HO Ce 37
					30	151.25	.20	6	02-21-1956		
51.4	6	X	31.38 S	05-01-1956	5	65	.08	9	03-12-1953	O	HO Ce 38
31	10	X	30	11-26-1958	30	73	.41	5	09-29-1955	--	HO Ce 39
42.3	6				9	285	.03	72	11-26-1958		
33	6	X	10	04-11-1956	20	77	.26	24	04-11-1956	--	HO Ce 40
28	8	X	5	01-21-1956	20	245	.08	8	01-21-1956	C,Q	HO Ce 41
207	8	O	12	03-29-1956	30	138	.22	12	03-29-1956	--	HO Ce 42
17.9	6	X	32	07-31-1958	15	283	.05	67.5	07-31-1958	--	HO Ce 43
38	8	X	22	11-05-1963	15	92	.16	8	10-19-1959	--	HO Ce 44
					11	278	.04	4	11-05-1963		
28	6	X	8	08-15-1961	30	22	1.36	24	08-15-1961	--	HO Ce 45
27.2	6	X	20	04-25-1963	40	55	.73	39	04-25-1963	--	HO Ce 46
51	6	X	8	10-15-1958	25	82	.30	24	10-15-1958	--	HO Ce 47
45	6	X	8	10-15-1958	75	24	3.13	24	10-15-1958	--	HO Ce 48
52	6	X	16	08 -- 1966	60	--	--	7	03-18-1963	--	HO Ce 49
40	6	X	--	--	1	--	--	--	08 -- 1966	--	HO Ce 50
54	6	X	22.57 S	10-15-1965	7	--	--	2	07-03-1965	--	HO Ce 51
58	6	X	24.30 S	10-20-1965	16	--	--	4	10-15-1965	C	HO Ce 52
52	6	X	52	04-26-1965	10	--	--	4	04-26-1965	--	HO Ce 53
26	6	X	35	07-21-1981	15	125	.12	2	07-21-1981	--	HO Ce 55
74	6	X	20	02-25-1977	60	80	.75	3	02-25-1977	--	HO Ce 56
30	6	X	17	11-07-1983	4	100	.04	3	11-07-1983	--	HO Ce 57
42	6	X	36	01-04-1978	20	89	.22	4	01-04-1978	--	HO Ce 58
26	6	X	27	03-23-1983	4	45	.09	3	03-23-1983	--	HO Ce 59
29	6	X	65	08-03-1983	.75	159	<.01	6	08-03-1983	--	HO Ce 60
23	6	X	25	07-12-1983	2	158	.01	8	07-12-1983	--	HO Ce 61
--	--	X	Dry	07-12-1983	0	--	--	--	07-12-1983	--	HO Ce 62
--	--	X	Dry	07-12-1983	0	--	--	--	07-12-1983	--	HO Ce 63
--	--	X	Dry	07-12-1983	0	--	--	--	07-12-1983	--	HO Ce 64
--	--	X	Dry	07-12-1983	0	--	--	--	07-12-1983	--	HO Ce 65
--	--	X	Dry	07-12-1983	0	--	--	--	07-12-1983	--	HO Ce 66
33	6	X	25	09-15-1983	6	39	.15	3	09-15-1983	--	HO Ce 67
75	6	X	40	08-13-1973	4	460	.01	2	08-13-1973	--	HO Ce 68
77	6	X	32	03-26-1986	8	107	.07	3	03-26-1987	--	HO Ce 69
57	6	X	25	03-24-1986	1.75	249	.01	6	03-24-1986	--	HO Ce 70
81	6	X	29	03-31-1986	6.5	114	.06	3	03-31-1986	--	HO Ce 71
24	6	X	38	03-31-1986	9	39	.23	3	03-31-1986	--	HO Ce 72
--	--	X	Dry	03-31-1986	0	--	--	--	03-31-1986	--	HO Ce 73
--	--	X	Dry	03-31-1986	0	--	--	--	03-31-1986	--	HO Ce 74
71.1	6	X	19.54 S	03-02-1988	13	152	.09	4	09-28-1967	L,O	HO Ce 75
78	6	X	50	08-31-1970	10	70	.14	1	08-31-1970	Q	HO Ce 76
42	6	X	45	02-22-1982	5	135	.04	4	02-22-1982	--	HO Ce 77
43	6	X	40	08-07-1987	6	82	.07	3	08-07-1987	--	HO Ce 78
--	--	X	Dry	08-07-1987	0	--	--	--	08-07-1987	--	HO Ce 79
24	6	X	45	06-15-1978	6	155	.04	2	06-15-1978	--	HO Ce 80
54	6	X	65	04-05-1978	1	295	<.01	4	04-05-1978	--	HO Ce 81
59	6	X	45	03-30-1978	10	215	.05	2	03-30-1978	--	HO Ce 82
68	6	X	45	06-04-1977	6	115	.05	2	06-04-1977	Q	HO Ce 83
52	6	X	65	06-22-1978	2	235	.01	3	06-22-1978	--	HO Ce 84
25	6	X	40	12-08-1975	4	110	.04	6	12-08-1975	--	HO Ce 85
31	6	X	50	12-18-1975	1	330	<.01	6	12-18-1975	--	HO Ce 86
58	6	X	65	05-21-1981	15	95	.16	2	05-21-1981	--	HO Ce 87

Table 1.—Records of selected wells in Howard County—Continued

Well no.	Well permit no.	Owner or name	Driller	Date of construction	Altitude of land surface (ft)	Topo-graphic setting	Depth Drilled (ft)	Use of water	Geologic unit
HO Ce 88	HO-81-1463	Poznanovic, Daniel	Joseph Mayne	05-29-1986	455	H	205	H	400BLMR
HO Ce 89	HO-73-3043	Lowenbach, Fred H	Joseph Mayne	03-26-1979	475	H	300	U	300LCRV
HO Ce 90	HO-73-3433	Lowenbach, Fred H	Joseph Mayne	09-11-1979	475	H	265	H	300LCRV
HO Ce 91	HO-73-3092	--	Joseph Mayne	01-17-1979	450	S	165	H	300LCRV
HO Ce 92	HO-73-3084	--	Joseph Mayne	12-18-1978	425	S	200	H	300OELL
HO Ce 93	HO-70-0065	Rolling Hills Bapt Ch	Harry Green	11 -- 1969	475	U	125	H	300LCRV
HO Ce 94	HO-73-1141	Tankersley, Clarke	Joseph Mayne	10-10-1975	410	H	185	H	300SKVLS
HO Ce 95	HO-73-2138	Preston Ct Cl For Pets	L F Easterday	06-09-1977	285	S	300	C	300SKVLS
HO Ce 96	HO-69-0190	Preston Ct Cl For Pets	Dewey Brown	05-15-1969	285	S	93	U	300SKVLS
HO Ce 97	HO-66-0008	Columbia Church of God	R B Luster	08-20-1965	325	H	90	U	300SKVLS
HO Ce 98	HO-73-1065	Connolley, John F	Joseph Mayne	07-21-1975	445	H	120	H	300OELL
HO Ce 99	HO-81-0479	Agreen, W	Keyser-Garver	04-12-1984	430	H	120	H	300OELL
HO Ce 100	HO-73-3295	--	L F Easterday	06-21-1979	385	S	100	H	300OELL
HO Ce 101	HO-73-1742	Luck, Dennis	L F Easterday	12-28-1976	360	H	160	H	300OELL
HO Ce 102	HO-73-0699	Carney, Robert M	Ralph Mayne	06-18-1974	375	S	160	H	300OELL
HO Ce 103	HO-73-1831	Walter, John	L F Easterday	02-15-1977	380	H	130	H	300SKVLS
HO Ce 104	HO-73-0734	Chambers, William M	Joseph Mayne	07-30-1974	345	S	245	H	300SKVLS
HO Ce 105	HO-73-1398	Carlson, Ken	Joseph Mayne	05-14-1976	325	H	280	H	300SKVLS
HO Ce 106	HO-73-0505	--	L F Easterday	12-11-1973	385	S	200	H	300SKVLS
HO Ce 107	HO-73-0535	Dean, Robin L	L F Easterday	12-19-1973	300	S	82	H	300SKVLS
HO Ce 108	HO-73-3700	Coker, Donald	Joseph Mayne	10-14-1980	435	H	225	H	300LCRV
HO Ce 109	HO-73-2108	Anderson, Lynn	Alton Keyser	06-10-1977	465	H	195	H	300LCRV
HO Ce 110	HO-81-0884	--	L F Easterday	03-04-1985	420	S	160	H	300OELL
HO Ce 111	HO-73-1134	Guldon, Burnal	L F Easterday	09-11-1975	425	S	200	H	300OELL
HO Ce 112	HO-81-2087	Banyas, Robert	L F Easterday	06-15-1987	410	S	160	H	300OELL
HO Ce 113	HO-81-0656	Grantham, Gary	L F Easterday	09-11-1984	380	H	200	A,H	300OELL
HO Ce 114	HO-81-0657	Grantham, Gary	L F Easterday	09-11-1984	380	H	200	A	300OELL
HO Ce 115	HO-81-0408	W R Grace & Co	G E Harr Sons	03-01-1984	350	S	300	T	300OELL
HO Ce 116	HO-81-0451	W R Grace & Co	G E Harr Sons	06-28-1984	355	S	300	T	300OELL
HO Ce 117	HO-72-0006	W R Grace & Co	L F Easterday	07-19-1971	275	G	500	T	300OELL
HO Ce 118	HO-73-4381	Peters, Larry	Joseph Mayne	02-02-1983	320	H	125	A	--
HO Ce 119	HO-73-4164	Peters, Larry	Joseph Mayne	05-11-1982	320	H	125	A,H	--
HO Ce 120	HO-81-0023	Gayleard, Fannie	L F Easterday	03-16-1983	345	H	300	H	300OELL
HO Ce 121	HO-81-0414	Klopp, Nicolas	Joseph Mayne	02-09-1984	375	H	300	H	300OELL
HO Ce 122	HO-81-0378	Mandava, Rao V	Joseph Mayne	10-11-1984	380	H	200	H	--
HO Ce 123	HO-81-1214	Bates, Andrew	L F Easterday	11-05-1985	340	U	300	H	300GLFD
HO Ce 124	HO-73-0192	Pancer, Morton	L F Easterday	04-13-1973	365	S	320	H	300GLFD
HO Ce 125	HO-81-0814	--	L F Easterday	01-16-1985	400	S	200	H	300GLFD
HO Ce 126	HO-73-2698	Southall, David	L F Easterday	08-17-1978	350	V	120	H	300GLFD
HO Ce 127	HO-73-0611	Clark, Marylash	Ralph Mayne	03-08-1974	400	U	64	H	300GLFD
HO Ce 128	HO-81-1501	Koloski, Richard	Joseph Mayne	06-10-1986	490	H	185	H	400BLMR
HO Ce 129	HO-81-1500	Abramson, David	Joseph Mayne	06-25-1986	460	S	165	H	400BLMR
HO Ce 130	HO-81-1411	--	Joseph Mayne	04-29-1986	490	H	145	H	400BLMR
HO Ce 131	HO-81-1228	Dorsch, Philip	L F Easterday	01-08-1986	470	U	100	H	300OELL
HO Ce 132	HO-73-3569	Chess, Frank S	Westminster	04-03-1980	465	H	85	H	300OELL
HO Ce 133	HO-73-2580	--	G E Harr Sons	03-02-1978	460	H	250	H	300OELL
HO Ce 134	HO-73-4023	Johnson, Dewitt C	L F Easterday	10-21-1981	425	U	300	H	300OELL
HO Ce 135	HO-73-3261	Green, John S Jr	Westminster	06-08-1979	320	S	376	H	300GLFD
HO Ce 136	HO-73-0407	Glover, James	Westminster	09-13-1973	320	S	145	H	300GLFD
HO Ce 137	HO-81-1045	Glunt	Joseph Mayne	06-14-1985	430	H	145	H	300GLFD
HO Ce 138	HO-73-0071	Farfara, George	Harry Green	11-06-1972	385	S	145	H	300GLFD
HO Ce 139	HO-73-0781	--	Joseph Mayne	08-07-1974	360	H	305	H	300SKVLS
HO Ce 140	HO-73-2325	--	Joseph Mayne	10-18-1977	335	S	185	H	300SKVLS
HO Ce 141	HO-73-3243	Merson, Michael D	Joseph Mayne	05-07-1979	320	W	145	H	300SKVLS
HO Ce 142	HO-73-3334	Nguyen, Vinh	Joseph Mayne	07-02-1979	290	H	185	H	300SKVLS
HO Ce 143	HO-73-0991	Bartusek, Donald L	Joseph Mayne	05-14-1975	300	S	205	H	300SKVLS
HO Ce 144	HO-73-0989	--	Joseph Mayne	05-14-1975	295	S	225	H	300SKVLS
HO Ce 145	HO-73-0328	Howard Co Voc School	Westminster	07-05-1973	485	H	250	U	300OELL
HO Ce 146	HO-73-4047	Rupp, Russell	L F Easterday	11-20-1982	430	H	300	H	300GLFD
HO Ce 147	HO-73-3811	Covenent Baptist Ch	L F Easterday	02-27-1981	430	H	160	U	300GLFD
HO Ce 148	HO-73-0285	Ellis, James P	John Greene	05-20-1973	400	H	120	H	300GLFD
HO Ce 149	HO-73-0208	Jones, Everett	L F Easterday	06-11-1973	400	H	160	H	300GLFD
HO Ce 150	HO-81-1378	Grove, John R	W W Reichart	03-27-1986	415	H	200	H	300GLFD
HO Ce 151	HO-73-0598	Demuth, Joy	Joseph Mayne	01-25-1974	415	F	60	H	300GLFD
HO Ce 152	HO-73-2473	Boyer, DeWitt	Ralph Mayne	11-28-1977	420	H	165	H	300GLFD
HO Ce 153	HO-70-0144	Boyer, DeWitt	Dewey Brown	04-30-1970	420	H	40	U	300GLFD
HO Ce 154	HO-73-4008	Gayleard, Fannie	L F Easterday	10-02-1981	345	H	200	U	300OELL
HO Ce 155	HO-73-4206	Barkley, David	L F Easterday	07-02-1982	380	F	180	H	300GLFD
HO Ce 156	HO-73-2818	Williams, Marvin	L F Easterday	08-30-1978	400	H	200	H	300GLFD
HO Ce 157	HO-73-3884	Wilson, James	Westminster	04-27-1981	400	H	377	H	300GLFD
HO Ce 158	HO-73-3884	Wilson, James	Westminster	04-27-1981	400	H	200	U	300GLFD
HO Ce 159	HO-73-0048	Marsh, Gene	L F Easterday	09-01-1972	370	H	100	H	300SKVLS
HO Ce 160	HO-81-0683	Miller, Nolan	L F Easterday	09-04-1984	410	H	300	H	300GLFD
HO Ce 161	HO-73-0606	--	Joseph Mayne	02-20-1974	380	S	220	H	300SKVLS
HO Ce 162	HO-73-0035	Bennett, Roy	L F Easterday	09-21-1972	370	S	200	U	300OELL

Casing			Water level		Aquifer test					Other	
Depth (ft)	Diameter (in.)	Finish	Depth, ft below land surface	Date measured	Yield (gal/min)	Drawdown (ft)	Specific capacity [(gal/min)/ft]	Hours pumped	Date	data available	Well no.
41	6	X	24	05-29-1986	6.5	88	0.07	3	05-29-1986	--	HO Ce 88
78	6	X	45	03-26-1979	2	250	.01	4	03-26-1979	--	HO Ce 89
64	6	X	65	09-11-1979	4	200	.02	4	09-11-1979	--	HO Ce 90
57	6	X	55	01-17-1979	6	110	.05	2	01-17-1979	--	HO Ce 91
47	6	X	45	12-18-1978	3	155	.02	4	12-18-1978	--	HO Ce 92
48	6	X	40	11 -- 1969	15	75	.20	3	11 -- 1969	--	HO Ce 93
38	6	X	45	10-10-1975	10	135	.07	2	10-10-1975	--	HO Ce 94
19	6	X	35	06-09-1977	5	265	.02	4	06-09-1977	--	HO Ce 95
20	6	X	50	05-15-1969	5	30	.17	1	05-15-1969	--	HO Ce 96
18	6	X	30	08-20-1965	5	30	.17	2	08-20-1965	--	HO Ce 97
43	6	X	29	06-21-1975	7	86	.08	2	07-21-1975	--	HO Ce 98
50	6	X	40	04-12-1984	12	6	2.0	3	04-12-1984	--	HO Ce 99
52	6	X	35	06-21-1979	60	65	.92	2	06-21-1979	--	HO Ce 100
40	6	X	30	12-28-1976	10	130	.08	2	12-28-1976	--	HO Ce 101
30	6	X	30	06-18-1974	10	10	1.0	2	06-18-1974	Q	HO Ce 102
31	6	X	40	02-15-1977	3	90	.03	2	02-15-1977	--	HO Ce 103
50	6	X	55	07-30-1978	3	180	.02	2	07-30-1974	--	HO Ce 104
52	6	X	40	05-14-1976	7	235	.03	2	05-14-1976	--	HO Ce 105
36	6	X	40	12-11-1973	2	160	.01	2	12-11-1973	--	HO Ce 106
26	6	X	26	12-19-1973	10	56	.18	2	12-19-1973	--	HO Ce 107
94	6	X	45	10-14-1980	9	175	.05	3	10-14-1980	--	HO Ce 108
83	6	X	35	06-10-1977	3	155	.02	3	06-10-1977	--	HO Ce 109
29	6	X	10	03-04-1985	12	63	.19	3	03-04-1985	--	HO Ce 110
51	6	X	50	09-11-1975	3	150	.02	1	09-11-1975	--	HO Ce 111
42	6	X	30	06-15-1987	10	19	.53	3	06-15-1988	--	HO Ce 112
57	6	X	45	09-11-1984	10	155	.06	3	09-11-1984	--	HO Ce 113
19	6	X	26	09-11-1984	10	13	.77	3	09-11-1984	--	HO Ce 114
54	6	X	25	03-01-1984	80	150	.53	8	03-01-1984	--	HO Ce 115
43	6	X	30	06-28-1984	60	250	.24	8	06-28-1984	--	HO Ce 116
28	6	X	30	07-19-1971	35	470	.07	1	07-19-1971	Q	HO Ce 117
33	6	X	30	02-02-1983	8	2	4.0	3	02-02-1983	--	HO Ce 118
36	6	X	35	05-11-1982	10	2	5.0	3	05-11-1982	--	HO Ce 119
60	6	X	40	03-16-1983	2	260	.01	3	03-16-1983	--	HO Ce 120
30	6	X	40	02-09-1984	3	167	.02	6	02-09-1984	--	HO Ce 121
23	6	X	25	10-11-1984	6.5	98	.07	3	10-11-1984	--	HO Ce 122
73	6	X	15	11-05-1985	6	75	.08	3	11-05-1985	--	HO Ce 123
68	6	X	40	04-13-1973	1	280	<.01	2	04-13-1973	--	HO Ce 124
24	6	X	31	01-16-1985	4	72	.06	3	01-16-1985	--	HO Ce 125
62	6	X	15	08-17-1978	20	105	.19	3	08-17-1978	Q	HO Ce 126
25	6	X	30	03-08-1974	10	34	.29	2	03-08-1974	--	HO Ce 127
22	6	X	26	06-10-1986	12	19	.63	3	06-10-1986	--	HO Ce 128
69	6	X	26	06-25-1986	12	3	4.0	3	06-25-1986	--	HO Ce 129
20	6	X	34	04-29-1986	12	6	2.0	3	04-29-1986	--	HO Ce 130
66	6	X	50	01-08-1986	30	50	.60	3	01-08-1986	--	HO Ce 131
56	6	X	20	04-03-1980	8	47	.17	3	04-03-1980	Q	HO Ce 132
62	6	X	31	03-02-1978	4	169	.02	6	03-02-1978	--	HO Ce 133
36	6	X	40	10-21-1981	1	260	<.01	2	10-21-1981	--	HO Ce 134
21	6	X	25	06-08-1979	40	347	.12	6	06-08-1979	--	HO Ce 135
20	6	X	46	09-13-1973	9	79	.11	3	09-13-1973	--	HO Ce 136
53	6	X	31	06-14-1985	10	27	.37	3	06-14-1985	--	HO Ce 137
16	6	X	30	11-06-1972	4.5	110	.04	3	11-06-1972	--	HO Ce 138
47	6	X	45	08-07-1974	3	250	.01	2	08-07-1974	--	HO Ce 139
21	6	X	55	10-18-1977	10	125	.08	2	10-18-1977	--	HO Ce 140
40	6	X	40	05-07-1979	10	105	.10	3	05-07-1979	--	HO Ce 141
37	6	X	60	07-02-1979	10	125	.08	2	07-02-1979	--	HO Ce 142
22	6	X	45	05-14-1975	4	155	.03	2	05-14-1975	--	HO Ce 143
22	6	X	45	05-14-1975	10	175	.06	2	05-14-1975	--	HO Ce 144
102	6	X	40	07-05-1973	12	200	.06	12	07-05-1973	--	HO Ce 145
19	6	X	25	11-20-1982	1	275	<.01	3	11-20-1982	--	HO Ce 146
40	6	X	40	02-27-1981	4	120	.03	3	02-27-1981	--	HO Ce 147
36	6	X	45	05-20-1973	20	0	--	2	05-20-1973	--	HO Ce 148
38	6	X	20	06-11-1973	6	140	.04	2	06-11-1973	--	HO Ce 149
57	6	X	25	03-27-1986	9	150	.06	4.5	03-27-1986	--	HO Ce 150
31	6	X	20	01-25-1974	15	0	--	2	01-25-1974	--	HO Ce 151
21	6	X	30	11-28-1977	4	135	.03	4	11-28-1977	--	HO Ce 152
20	6	X	32.16 S	11-07-1988	6	0	--	1	04-30-1970	O	HO Ce 153
40	6	X	50	10-02-1981	6	150	.04	2	10-02-1981	--	HO Ce 154
62	6	X	40	07-02-1982	4	140	.03	3	07-02-1982	--	HO Ce 155
26	6	X	25	08-30-1978	2	175	.01	3	08-30-1978	--	HO Ce 156
43	6	X	100	04-27-1981	4	218	.02	5	04-27-1981	--	HO Ce 157
--	--	X	Dry	04-27-1981	0	--	--	--	04-27-1981	--	HO Ce 158
51.5	6	X	40	09-01-1972	3	60	.05	2	09-01-1972	--	HO Ce 159
49	6	X	45	09-04-1984	2	255	.01	3	09-04-1984	--	HO Ce 160
21	6	X	75	02-20-1974	6	143	.04	2	02-20-1974	--	HO Ce 161
53	6	X	80	09-21-1972	2	150	.01	2	09-21-1972	--	HO Ce 162

Table 1.—Records of selected wells in Howard County—Continued

Well no.	Well permit no.	Owner or name	Driller	Date of construction	Altitude of land surface (ft)	Topo-graphic setting	Depth Drilled (ft)	Use of water	Geologic unit
HO Ce 163	HO-72-0099	Boone, Robert M	L F Easterday	12-18-1971	365	H	160	H	300OELL
HO Ce 164	HO-73-1442	Centennial Park	G E Harr Sons	07-01-1976	400	H	300	H	300OELL
HO Ce 165	HO-73-1442	Centennial Park	G E Harr Sons	07-01-1976	400	H	300	U	300OELL
HO Ce 166	HO-81-1255	James, Donald	L F Easterday	12-28-1985	350	S	200	H	300GLFD
HO Ce 167	HO-73-0190	--	G E Harr Sons	04-16-1973	425	H	100	U	300GLFD
HO Ce 168	HO-73-0140	Sachs, Steven	L F Easterday	03-04-1973	375	U	100	U	300GLFD
HO Ce 169	HO-73-0829	Winston, Elliott	L F Easterday	10-18-1974	365	S	80	H	300OELL
HO Ce 170	HO-73-0680	Mandy, Richard F	John Greene	05-13-1974	365	S	145	H	300OELL
HO Ce 171	HO-73-0067	Winkler, George	L F Easterday	09-20-1972	325	S	80	H	300OELL
HO Ce 172	HO-67-0240	Nature's Way Child Ctr	Dillon Bros	05-03-1967	360	S	85	T	300GLFD
HO Ce 173	HO-73-0541	Fernandis, Walter	Dillon Bros	11-12-1973	370	S	200	H,S	300GLFD
HO Ce 174	HO-73-0939	Biddison, N	Ralph Mayne	04-14-1975	395	F	80	H	300GLFD
HO Ce 175	HO-02-4489	Biddison, N	R Leister	09-05-1956	395	F	41	U	300GLFD
HO Ce 176	HO-73-0417	McDonald, Dan	L F Easterday	08-09-1973	390	H	260	U	300GLFD
HO Ce 177	HO-66-0369	Chesapeake Conf Bldg	Edward Brown	08-15-1966	365	S	70	C	300GLFD
HO Ce 178	HO-81-0696	Brink, H S Jr	L F Easterday	09-16-1984	385	H	250	A	300GLFD
HO Ce 179	HO-81-0698	Brink, H S Jr	L F Easterday	09-16-1984	385	H	250	A	300GLFD
HO Ce 180	HO-81-1857	Gaither, Wayne	L F Easterday	02-09-1987	385	H	360	H	300SKVLS
HO Ce 181	HO-73-0992	--	Joseph Mayne	05-07-1975	310	S	125	H	300SKVLS
HO Ce 182	HO-71-0080	Casale, William	L F Easterday	12-28-1971	390	H	90	U	300GLFD
HO Ce 183	HO-73-3302	Earp, Wesley	Joseph Mayne	12-10-1979	425	H	340	H	300GLFD
HO Cf 1	--	Maryland State Police	Washington	08-23-1937	230	H	201	U	300MWSG
HO Cf 2	--	Federal Commun Comm	--	1941	370	F	70	H	--
HO Cf 3	--	Federal Commun Comm	--	1941	385	F	70	T	--
HO Cf 4	HO-00-8827	Barras, Donald K	T N Smith	10-16-1951	215	S	67	U	300MWSG
HO Cf 5	HO-00-6106	Thompson, Frank R	T N Smith	07-05-1950	310	H	57	U	300MWSG
HO Cf 6	HO-00-9745	Smith, M G	Edward Brown	03-26-1952	450	S	100	U	300MWSG
HO Cf 7	HO-00-7124	Cugle, Francis	Edward Brown	12-19-1950	360	S	142	H	300MWSG
HO Cf 8	HO-00-6694	Hanson, Frank	Edward Brown	10-11-1950	355	S	118	H	300MWSG
HO Cf 9	HO-00-9706	Warczynski, Mrs M	T N Smith	03-17-1952	190	F	75	U	300MWSG
HO Cf 10	HO-00-9189	Laage, G A	T N Smith	12-24-1951	130	S	95	U	300RELY
HO Cf 11	HO-00-5130	Howard County	F B Rogers	02-06-1950	290	S	75	U	300MWSG
HO Cf 12	HO-00-0789	Peterson, Frank	F B Rogers	09-09-1946	370	S	70	H	300MWSG
HO Cf 13	HO-00-7914	Giampaoli, Joseph	John Greene	05-12-1951	215	H	110	U	300MWSG
HO Cf 14	HO-00-2228	Kerger, John	F B Rogers	01-14-1948	325	S	47	U	300MWSG
HO Cf 15	HO-00-1208	AT&T Co	Edward Brown	03-25-1947	400	U	97	U	300OELL
HO Cf 16	--	Columbia 100 Office Pk	Edward Brown	08-05-1952	480	S	89.1	U	300OELL
HO Cf 17	HO-00-0615	Rieger, James A	Edward Brown	07-18-1946	495	F	85	H	300MWSG
HO Cf 18	HO-00-4992	Bawger, Russell	Edward Brown	01-04-1950	520	H	78	H	300MWSG
HO Cf 19	HO-00-3565	McFarland, W C	W E Haines	06 -- 1949	430	S	70	H	300MWSG
HO Cf 20	HO-00-3567	Vaughn, E W	W E Haines	07 -- 1949	420	S	90	H,I	300MWSG
HO Cf 21	--	Bangs, Albert	--	1950	485	H	13	U	300MWSG
HO Cf 22	--	Wahland, George H	Edward Brown	1940	430	H	89	H	300MWSG
HO Cf 23	HO-00-0919	Resch, John	F B Rogers	10-24-1946	465	H	70	H	217PTXN
HO Cf 24	HO-00-7972	Howard High School	Edward Brown	07-10-1951	510	H	145	U	300GLFD
HO Cf 25	HO-00-9190	General Electric Ap Pk	T N Smith	11-26-1951	360	S	63	U	300MWSG
HO Cf 26	--	Ecker, Samuel	--	--	420	H	--	H,S	300OELL
HO Cf 27	--	Smith, Elizabeth	--	1824	460	H	38.4	U	300OELL
HO Cf 28	--	Ellicott Mills Mid Sch	--	1939	425	H	120	U	300MWSG
HO Cf 29	--	Lohrig, George	Edward Brown	1932	485	H	102	U	300MWSG
HO Cf 30	--	--	--	--	485	S	--	U	300MWSG
HO Cf 31	HO-02-3255	Balto Gas & Electric	M Kibler	06-07-1956	453	H	151	U	300MWSG
HO Cf 33	HO-73-0852	Howard Co Dept Pub Wks	L F Easterday	10 -- 1974	258	S	440	U	300MWSG
HO Cf 34	HO-73-0852	Howard Co Dept Pub Wks	L F Easterday	10 -- 1974	260	S	220	U	300MWSG
HO Cf 35	HO-73-0852	Howard Co Dept Pub Wks	L F Easterday	11 -- 1974	258	S	200	U	300MWSG
HO Cf 36	HO-73-0852	Howard Co Dept Pub Wks	L F Easterday	10-07-1974	250	S	200	U	300MWSG
HO Cf 37	HO-72-0227	Meadowridge Pub & Spt	Harry Green	06-09-1972	335	S	145	U	300MWSG
HO Cf 39	HO-73-3187	--	Md Drilling	04-30-1979	385	H	210	H	300MWSG
HO Cf 40	HO-81-1554	Green, William	L F Easterday	07-10-1986	380	H	140	H	300MWSG
HO Cf 41	HO-73-1202	Elkridge Ind Method Ch	L F Easterday	06-03-1976	285	S	180	U	300MWSG
HO Cf 42	HO-72-0045	St Stephen's AME Ch	L F Easterday	10-13-1971	270	S	200	U	300MWSG
HO Cf 43	HO-73-0002	Rockburn Branch Co Pk	L F Easterday	07-07-1972	380	H	240	U	300MWSG
HO Cf 44	HO-71-0009	U-Haul	Walter Frank	08-20-1970	180	H	400	U	300MWSG
HO Cf 45	HO-02-5898	Aladdin Trlr Village	G E Harr Sons	02-19-1957	250	S	165	U	300MWSG
HO Cf 46	HO-02-6323	Aladdin Trlr Village	G E Harr Sons	01-30-1957	250	S	210	U	300MWSG
HO Cf 47	HO-02-6324	Aladdin Trlr Village	G E Harr Sons	02-11-1957	250	S	140	U	300MWSG
HO Cf 48	HO-01-5008	Waterloo Middle School	Edward Brown	06-09-1954	285	H	78	U	300MWSG
HO Cf 49	HO-81-0257	Manekin Corporation	L F Easterday	09-09-1983	180	S	200	U	300MWSG
HO Cf 50	HO-73-3050	Rorabough, Robert E	Dillon Bros	11-29-1978	160	S	125	H	300MWSG
HO Cf 51	HO-73-2204	Nickel, Herbert	Dillon Bros	07-19-1977	195	S	200	H	300MWSG
HO Cf 52	HO-73-1315	Montague, Donald	L F Easterday	02-04-1976	250	H	200	U	300MWSG
HO Cf 53	HO-73-0473	Resch, Henry	L F Easterday	11-23-1973	270	H	220	U	300MWSG
HO Cf 54	HO-73-1282	O'Conner, John C	L F Easterday	12-22-1975	305	H	300	H	300MWSG
HO Cf 55	HO-73-0893	Stup, Ralph	L F Easterday	12-26-1974	250	S	220	H	300MWSG
HO Cf 56	HO-73-0895	Amerault, James	L F Easterday	12-23-1974	290	H	400	H	300MWSG

Casing			Water level		Aquifer test					Other	
Depth (ft)	Diameter (in.)	Finish	Depth, ft below land surface	Date measured	Yield (gal/min)	Drawdown (ft)	Specific capacity [(gal/min)/ft]	Hours pumped	Date	data available	Well no.
65	6	X	40	12-18-1971	10	120	0.08	1	12-18-1971	Q	HO Ce 163
45	6	X	7	07-01-1976	5	153	.03	12	07-01-1976	--	HO Ce 164
--	--	X	Dry	07-01-1976	0	--	--	--	07-01-1976	--	HO Ce 165
48	6	X	20	12-28-1985	6	40	.15	3	12-28-1985	--	HO Ce 166
20	6	X	20	04-16-1973	15	70	.21	6	04-16-1973	--	HO Ce 167
48	6	X	18.34 S	10-31-1988	20	50	.40	2	03-04-1973	O	HO Ce 168
18	6	X	40	10-18-1974	5	40	.13	2	10-18-1974	--	HO Ce 169
27	6	X	35	05-13-1974	6	35	.17	4	05-13-1974	--	HO Ce 170
35	6	X	20	09-20-1972	30	--	--	2	09-20-1973	--	HO Ce 171
26	6	X	15	05-03-1967	12	55	.22	2	05-03-1967	--	HO Ce 172
30	6	X	30	11-12-1973	12	150	.08	6	11-12-1973	--	HO Ce 173
31	6	X	20	04-14-1975	10	60	.17	2	04-14-1975	--	HO Ce 174
36	6	X	18.05 S	10-10-1988	25	12	2.08	4	09-05-1956	O	HO Ce 175
36	6	X	40	08-09-1973	1	220	<.01	1	08-09-1973	--	HO Ce 176
43	6	X	30	08-15-1966	20	--	--	2	08-15-1966	--	HO Ce 177
27	6	X	40	09-16-1984	2	210	.01	4	09-16-1984	--	HO Ce 178
26	6	X	40	09-16-1984	2	210	.01	4	09-16-1984	--	HO Ce 179
21	6	X	19	02-12-1987	2.5	58	.04	6	02-12-1987	--	HO Ce 180
48	6	X	35	05-07-1975	15	85	.18	2	05-07-1975	--	HO Ce 181
19	6	X	30	12-28-1971	8	60	.13	1	12-28-1971	--	HO Ce 182
71	6	X	70	12-10-1979	2	265	.01	6	12-10-1979	Q	HO Ce 183
54	8	X	--	--	12	--	--	12	08-23-1937	--	HO Cf 1
--	6	-	--	--	--	--	--	--	--	--	HO Cf 2
--	6	-	12	04 -- 1951	--	--	--	--	--	--	HO Cf 3
44	6	X	20	10-16-1951	--	--	--	--	--	--	HO Cf 4
43	6	X	14.5	07-05-1950	--	--	--	--	--	--	HO Cf 5
63	6	X	19.65 S	07-21-1952	10	26	.38	1	03-26-1952	--	HO Cf 6
96	6	X	38	12-19-1950	2	--	--	.5	12-19-1950	--	HO Cf 7
--	--	X	45	10-11-1950	3	--	--	1	10-11-1950	--	HO Cf 8
32	6	X	8	03-17-1952	--	--	--	--	--	--	HO Cf 9
11	6	X	17	12-24-1951	--	--	--	--	--	--	HO Cf 10
53	6	X	19.14 S	08-05-1952	2.5	--	--	--	02-06-1950	Q	HO Cf 11
--	6	X	22.45 S	08-05-1952	3	--	--	--	09-09-1946	--	HO Cf 12
40	6	X	25	05-12-1951	10	35	.29	5	05-12-1951	--	HO Cf 13
--	6	X	20	01-14-1948	20	--	--	--	01-14-1948	--	HO Cf 14
76	6	X	15	03-25-1947	10	43	.23	1	03-25-1947	--	HO Cf 15
--	6	-	15.71 S	08-07-1952	15	6	--	--	08-05-1952	--	HO Cf 16
--	6	X	31.15 S	08-07-1952	--	--	--	--	--	--	HO Cf 17
60	6	X	35	01-04-1950	5	--	--	1	01-04-1950	--	HO Cf 18
40	6	X	30	06 -- 1949	10	10	1.0	.5	06 -- 1949	--	HO Cf 19
55	6	X	55	07 -- 1949	7	10	.70	.5	07 -- 1949	--	HO Cf 20
13	48	W	7	08-11-1952	--	--	--	--	--	--	HO Cf 21
44	6	X	8	08-11-1952	3	--	--	--	08-11-1952	--	HO Cf 22
58.5	6	X	45	10-24-1946	3	--	--	--	10-24-1946	--	HO Cf 23
64	6	X	33	07-10-1951	25	15	1.67	8	07-10-1951	--	HO Cf 24
57	6	X	7	11-26-1951	--	--	--	--	--	--	HO Cf 25
--	48	W	8	08-25-1952	--	--	--	--	--	--	HO Cf 26
38.4	48	W	30.74 S	08-25-1952	--	--	--	--	--	--	HO Cf 27
--	6	X	--	--	--	--	--	--	--	--	HO Cf 28
--	6	X	48	1950	10	--	--	--	1952	--	HO Cf 29
--	6	-	--	--	--	--	--	--	--	--	HO Cf 30
50.8	6	X	29.81 S	09-14-1956	4.3	66	.07	8	06-26-1956	--	HO Cf 31
43	6	X	25 E	11-12-1974	.16	--	--	1	10 -- 1974	--	HO Cf 33
27	6	X	Dry	10 -- 1974	0	--	--	--	10 -- 1974	--	HO Cf 34
39	6	X	Dry	11 -- 1974	0	--	--	--	11 -- 1974	--	HO Cf 35
28	6	X	17	10-07-1974	1	183	<.01	2	10-07-1974	--	HO Cf 36
57	6	X	21.18 S	05-09-1988	10	100	.10	2.5	06-09-1972	O	HO Cf 37
75	6	X	40	04-30-1979	40	130	.31	2	04-30-1979	--	HO Cf 39
91	6	X	69	07-10-1986	10	11	.91	3	07-10-1986	--	HO Cf 40
25	6	X	5	06-03-1976	6	175	.03	2	06-03-1976	--	HO Cf 41
65	6	X	20.31 S	05-09-1988	1	150	.01	1	10-13-1971	--	HO Cf 42
103	6	X	62.37 S	01-31-1989	4	160	.02	1	07-07-1972	O	HO Cf 43
36	6	X	15	08-20-1970	2	--	--	2	08-20-1970	--	HO Cf 44
42	6	X	45	02-19-1957	16	105	.15	--	02-19-1957	--	HO Cf 45
38.8	6	X	40	01-30-1957	3.5	160	.02	--	01-30-1957	--	HO Cf 46
38.1	6	X	40	02-11-1957	4	85	.05	--	02-11-1957	--	HO Cf 47
46	--	X	18	06-09-1954	17	38	.45	1.5	06-09-1954	--	HO Cf 48
40	6	X	19.28 S	05-25-1988	25	170	.15	2	09-09-1983	O	HO Cf 49
21	6	X	40	11-29-1978	6	70	.09	4	11-29-1978	--	HO Cf 50
32	6	X	30	07-19-1977	2	165	.01	6	07-19-1977	--	HO Cf 51
68	6	X	40	02-04-1976	2	160	.01	2	02-04-1976	--	HO Cf 52
90	6	X	40	11-23-1973	3	180	.02	2	11-23-1973	--	HO Cf 53
94	6	X	50	12-22-1975	1	250	<.01	2	12-22-1975	--	HO Cf 54
43	6	X	40	12-26-1974	12	180	.07	2	12-26-1974	--	HO Cf 55
50	6	X	50	12-23-1974	1	350	<.01	2	12-23-1974	--	HO Cf 56

Table 1.—Records of selected wells in Howard County—Continued

Well no.	Well permit no.	Owner or name	Driller	Date of construction	Altitude of land surface (ft)	Topo-graphic setting	Depth Drilled (ft)	Use of water	Geologic unit
HO Cf 57	HO-73-3445	Sehman, Charles	L F Easterday	09-28-1979	360	S	200	U	300MWSG
HO Cf 58	HO-73-1952	Rice, Archie	L F Easterday	04-22-1977	360	H	160	U	300MWSG
HO Cf 59	HO-73-3532	Halcomb, Charles	L F Easterday	01-10-1980	335	S	180	H	300MWSG
HO Cf 60	HO-03-1749	Cedar Cabins Inc	Ed Bishop	07-28-1958	210	F	62	U	300MWSG
HO Cf 61	HO-81-0817	Kessler, Larry	G E Harr Sons	04-18-1985	280	S	300	H	300MWSG
HO Cf 62	HO-73-1531	Rockburn Branch Co Pk	Branham Cont	11-06-1976	315	H	300	H	300MWSG
HO Cf 63	HO-81-1821	Sisters of Notre Dame	Westminster	12-30-1986	315	H	228	H	300MWSG
HO Cf 64	HO-73-2346	Legal, Casimer C Jr	Westminster	10-19-1977	325	H	252	H	300MWSG
HO Cf 65	HO-04-8485	Geelhaar, Harry	R B Luster	09-05-1962	335	H	58	U	300MWSG
HO Cf 66	HO-73-2455	Geelhaar, Harry	G E Harr Sons	11-25-1977	340	H	250	H	300MWSG
HO Cf 67	HO-73-0712	Geelhaar, Harry	G E Harr Sons	06-04-1974	340	H	125	U	300MWSG
HO Cf 68	HO-73-0712	Geelhaar, Harry	G E Harr Sons	06-04-1974	340	H	200	U	300MWSG
HO Cf 69	HO-81-1174	Wessel, Kenneth	L F Easterday	09-26-1985	330	H	400	H	300MWSG
HO Cf 70	HO-81-1112	Klappenberger, M L	Westminster	08-01-1985	390	H	278	H	300MWSG
HO Cf 71	HO-81-0693	Lowe, George	Ralph Mayne	09-14-1984	380	S	200	H,S	300MWSG
HO Cf 72	HO-73-3372	Albright, Donald W	Joseph Mayne	07-19-1979	410	H	145	H	300MWSG
HO Cf 73	HO-73-1520	Bolton, Robert G	Westminster	07-20-1976	415	H	203	H	300MWSG
HO Cf 74	HO-73-1982	Pfau, Wyne	Dillon Bros	05-02-1977	425	F	200	H	300MWSG
HO Cf 75	HO-81-0551	Wood, Lee	Joseph Mayne	06-12-1984	395	H	183	H	300MWSG
HO Cf 76	HO-73-4004	Bobo, Cliff	Wayne Harley	10-09-1981	380	H	125	H	300MWSG
HO Cf 77	HO-73-3376	Anders, Roland	L F Easterday	08-07-1979	425	S	160	H	300MWSG
HO Cf 78	HO-73-4277	Rawlings, Michael	G E Harr Sons	09-29-1982	385	S	100	H	300MWSG
HO Cf 79	HO-73-2968	Lucas, Margarite	Westminster	09-20-1978	400	S	178	H	300MWSG
HO Cf 80	HO-73-2055	Alexander	Joseph Mayne	06-08-1977	400	H	180	H	300MWSG
HO Cf 81	HO-73-0759	Kachalo, Charles R	Westminster	07-29-1974	330	S	158	H	300MWSG
HO Cf 82	HO-73-1865	Judge, Daniel E	Dillon Bros	04-25-1977	380	S	175	H	300MWSG
HO Cf 83	HO-02-1861	Patapsco Valley St Pk	R Leister	01-09-1956	80	S	64	U	300MWSG
HO Cf 84	HO-73-1797	Slater, Mark B	Westminster	02-09-1977	360	H	190	H	300MWSG
HO Cf 85	HO-73-4293	Nelson, James	G E Harr Sons	10-16-1982	290	H	250	H	300ELCC
HO Cf 86	HO-81-1657	Deutsch, Leslie	L F Easterday	01-06-1987	190	S	400	U	300MWSG
HO Cf 87	HO-81-1057	Thomas, D	Joseph Mayne	07-02-1985	265	S	420	H	300MWSG
HO Cf 88	HO-73-1399	Wagener, Richard	Joseph Mayne	04-26-1976	445	H	185	H	300MWSG
HO Cf 89	HO-73-4218	Gombeski, Kevin	Westminster	07-26-1982	390	S	175	H	300MWSG
HO Cf 90	HO-73-3790	Merkel, Gerhardt	Dillon Bros	02-02-1981	390	S	145	H	300MWSG
HO Cf 91	HO-73-3189	Diehl, Arlie	Md Drilling	05-04-1979	390	H	272	Z	300MWSG
HO Cf 92	HO-73-3625	Wessel, Kenneth	L F Easterday	07-11-1980	355	S	120	H	300MWSG
HO Cf 93	HO-73-3675	Obrien, Daniel J	S Bollinger	01-16-1981	365	H	125	H	300MWSG
HO Cf 94	HO-73-4111	Stedding, Bobbie G	Ralph Mayne	02-09-1982	350	H	205	H	300MWSG
HO Cf 95	HO-81-1260	--	L F Easterday	12-31-1985	395	S	200	H	300MWSG
HO Cf 96	HO-73-3875	Ritterman, Richard	Joseph Mayne	06-15-1981	400	H	300	H	--
HO Cf 97	HO-73-3874	Tamalavicz, Vernon	Joseph Mayne	06-15-1981	405	H	260	A,H	300MWSG
HO Cf 98	HO-73-4136	Nichols, Malcolm	Ralph Mayne	04-15-1982	460	H	205	H	300MWSG
HO Cf 99	HO-81-1557	Herrmann, Jo	L F Easterday	07-16-1986	420	S	260	H	300MWSG
HO Cf 100	HO-02-3954	Ellicott Mills Mid Sch	Edward Brown	07-26-1956	425	F	69	U	300MWSG
HO Cf 101	HO-73-2924	Worthington Park	Westminster	08-30-1978	440	H	177	U	300MWSG
HO Cf 102	HO-73-4213	Snovell, Kelly	Joseph Mayne	07-30-1982	465	H	162	H	300MWSG
HO Cf 103	HO-73-3880	Wallace, Garey	Westminster	05-05-1981	475	H	228	H	300MWSG
HO Cf 104	HO-73-2612	Davis, Garth	L F Easterday	03-31-1978	470	S	180	H	300MWSG
HO Cf 105	HO-73-2030	Resneck, Howard	L F Easterday	04-29-1977	465	S	100	H	300MWSG
HO Cf 106	HO-73-0501	Kupchock, Walter	L F Easterday	11-19-1973	525	H	120	H	300MWSG
HO Cf 107	HO-81-0229	IGI Biotechnology	L F Easterday	09-22-1983	460	F	160	C	300OELL
HO Cf 108	HO-03-4890	Howard High School	G E Harr Sons	06-01-1959	525	H	185	U	300OELL
HO Cf 109	HO-73-3782	Goins, Addy	L F Easterday	03-02-1981	400	S	140	H	300OELL
HO Cf 110	HO-73-4370	Snyder, Elwood	L F Easterday	01-13-1982	335	V	160	C,H	300MWSG
HO Cf 111	HO-73-4242	--	G E Harr Sons	08-09-1988	365	H	100	H	300MWSG
HO Cf 112	HO-73-2576	Miller, John	Dillon Bros	04-13-1978	375	H	150	H	300MWSG
HO Cf 113	HO-73-1209	Newberger, Fred	Westminster	11-18-1975	360	H	188	H	300MWSG
HO Cf 114	HO-73-2919	Hawkins, Carolyn	L F Easterday	08-22-1978	340	H	220	U	300MWSG
HO Cf 115	--	Obrien, Daniel J	S Bollinger	01 -- 1981	365	H	--	U	300MWSG
HO Cf 116	--	Obrien, Daniel J	S Bollinger	01 -- 1981	365	H	--	U	300MWSG
HO Cf 117	--	Obrien, Daniel J	S Bollinger	01 -- 1981	365	H	--	U	300MWSG
HO Cf 118	HO-81-1965	Greisman, Sheldon	L F Easterday	03-06-1987	320	H	240	H	300MWSG
HO Cf 119	HO-81-2312	Kratz, Dennis	L F Easterday	10-16-1987	285	H	200	H	300MWSG
HO Cf 120	HO-81-2063	Gault, George W	Westminster	05-15-1987	390	H	278	H	300MWSG
HO Cf 121	HO-81-1761	Geuder, Ralph	L F Easterday	12-17-1986	405	U	360	A	300MWSG
HO Cf 122	HO-73-3508	Merritt, Donna	Walter Frank	01-28-1980	125	S	175	H	300RELY
HO Cg 1	--	Heath, Spencer	Hoshall	1921	210	S	165	U	300DDHL
HO Cg 2	--	Murray	Hoshall	1929	245	S	170	U	300MWSG
HO Cg 3	--	McSherry	Schultz	1908	325	S	304	U	300MWSG
HO Cg 4	--	Grace Church	--	--	35	V	104	U	300RELY
HO Cg 5	--	St Augustine's Church	--	1933	175	S	90	U	300RELY
HO Cg 6	--	Cassady, B	Dewey Brown	06 -- 1943	120	S	82	U	300RELY
HO Cg 7	HO-00-5131	Howard County	F B Rogers	02-13-1950	25	V	55	U	217PTXN
HO Cg 8	--	Cooper	--	07-02-1946	175	S	80	U	217PTXN
HO Cg 9	HO-00-0980	Force	G E Harr Sons	10-01-1947	230	S	125	H	300MWSG

Casing			Water level		Aquifer test					Other data available	Well no.
Depth (ft)	Diameter (in.)	Finish	Depth, ft below land surface	Date measured	Yield (gal/min)	Drawdown (ft)	Specific capacity [(gal/min)/ft]	Hours pumped	Date		
59	6	X	45	09-28-1979	3	155	0.02	3	09-28-1979	--	HO Cf 57
93	6	X	56.87 S	07-12-1988	15	60	.25	2	04-22-1977	O	HO Cf 58
90	6	X	--	--	15	--	--	4	01-10-1980	--	HO Cf 59
47	6	X	20	07-28-1958	12	0	--	2	07-28-1958	--	HO Cf 60
23	6	X	15	04-18-1985	1.43	123.50	.01	6	04-18-1985	--	HO Cf 61
50	6	X	18	11-06-1976	60	77	.78	2	11-06-1976	--	HO Cf 62
52	6	X	50	12-30-1986	15	161	.09	3	12-30-1986	--	HO Cf 63
64	6	X	66	10-19-1977	25	184	.14	6	10-19-1977	--	HO Cf 64
34	6	X	20	09-05-1962	4	18	.22	2	09-05-1962	--	HO Cf 65
42	6	X	50	11-25-1977	25	175	.14	6	11-25-1977	Q	HO Cf 66
21	6	X	28	06-04-1974	4	6	.67	6	06-04-1974	--	HO Cf 67
--	--	X	Dry	06-04-1974	0	--	--	--	06-04-1974	--	HO Cf 68
26	6	X	68	09-26-1985	1	25	.04	6	09-26-1985	--	HO Cf 69
81.1	6	X	60	08-01-1985	15	201	.07	3	08-01-1985	--	HO Cf 70
28	6	X	25	09-14-1984	9	3	3.0	3	09-14-1984	--	HO Cf 71
31	6	X	35	07-19-1979	10	110	.09	2	07-19-1979	--	HO Cf 72
42	6	X	83	07-20-1976	12	67	.18	6	07-20-1976	--	HO Cf 73
29	6	X	35	05-02-1977	4	115	.03	6	05-02-1977	--	HO Cf 74
41	6	X	31	06-12-1984	9	70	.13	3	06-12-1984	--	HO Cf 75
25	6	X	20	10-09-1981	15	10	1.50	2	10-09-1981	--	HO Cf 76
65	6	X	10	08-07-1979	10	150	.07	2	08-07-1979	--	HO Cf 77
53	6	X	35	09-29-1982	15	40	.38	3	09-29-1982	--	HO Cf 78
63	6	X	73	09-20-1978	7	58	.12	3	09-20-1978	Q	HO Cf 79
36	6	X	35	06-08-1977	15	140	.11	2	06-08-1977	--	HO Cf 80
31	6	X	85	07-29-1974	20	63	.32	8	07-29-1974	--	HO Cf 81
21	6	X	30	04-25-1977	2	135	.01	6	04-25-1977	--	HO Cf 82
30	6	X	24	01-09-1956	7	11	.64	5.5	01-09-1956	--	HO Cf 83
42	6	X	51	02-09-1977	15	96	.16	6	02-09-1977	--	HO Cf 84
40	6	X	35	10-16-1982	2.5	85	.03	3	10-16-1982	--	HO Cf 85
18	6	X	F S	10-11-1988	2	191	.01	6	01-06-1987	--	HO Cf 86
23	6	X	42	07-02-1985	2	238	.01	6	07-02-1985	--	HO Cf 87
64	6	X	45	04-26-1976	10	135	.07	2	04-26-1976	--	HO Cf 88
56.5	6	X	29	07-26-1982	14.6	113	.13	3	07-26-1982	--	HO Cf 89
40	6	X	20	02-02-1981	5	80	.06	6	02-02-1981	--	HO Cf 90
47	6	X	24.79 S	09-22-1988	12	195	.06	2	05-04-1979	O	HO Cf 91
19	6	X	30	07-11-1980	15	90	.17	3	07-11-1980	--	HO Cf 92
28	6	X	40	01-16-1981	12	85	.14	4	01-16-1981	--	HO Cf 93
18	6	X	50	02-09-1982	30	155	.19	4	02-09-1982	--	HO Cf 94
40	6	X	27	12-31-1985	10	15	.67	3	12-31-1985	--	HO Cf 95
48	6	X	65	06-15-1981	4	195	.02	4	06-15-1981	--	HO Cf 96
50	6	X	45	06-15-1981	12	135	.09	2	06-15-1981	--	HO Cf 97
53	6	X	32	04-15-1982	6	173	.03	4	04-15-1982	--	HO Cf 98
32	6	X	12	07-16-1986	10	53	.19	3	07-16-1986	--	HO Cf 99
51	--	X	43	07-26-1956	18	11	1.64	1.5	07-26-1956	--	HO Cf 100
64	6	X	26	08-30-1978	9	38	.24	6	08-30-1978	--	HO Cf 101
45	6	X	31	07-30-1982	10	1	10.0	3	07-30-1982	--	HO Cf 102
69	6	X	75	05-05-1981	20	130	.15	6	05-05-1981	--	HO Cf 103
60	6	X	40	03-31-1978	3	140	.02	3	03-31-1978	--	HO Cf 104
86	6	X	30	04-29-1977	60	70	.86	3	04-29-1977	Q	HO Cf 105
60	6	X	45	11-19-1973	10	75	.13	1	11-19-1973	--	HO Cf 106
77	6	X	40	09-22-1983	20	120	.17	2	09-22-1983	Q	HO Cf 107
66.5	6	X	35	06-01-1959	30	91	.33	5	06-01-1959	--	HO Cf 108
42	6	X	40	03-02-1981	6	100	.06	5	03-02-1981	--	HO Cf 109
50	6	X	75	01-13-1982	20	85	.24	3	01-13-1982	--	HO Cf 110
28	6	X	25	08-09-1982	15	4.12	3.64	3	08-09-1982	--	HO Cf 111
27	6	X	35	04-13-1978	10	65	.15	6	04-13-1978	Q	HO Cf 112
35	6	X	50	11-18-1975	5	57	.09	6	11-18-1975	--	HO Cf 113
65	6	X	40	08-22-1978	15	180	.08	3	08-22-1978	--	HO Cf 114
--	6	X	Dry	01 -- 1981	0	--	--	--	01 -- 1981	--	HO Cf 115
--	--	X	Dry	01 -- 1981	0	--	--	--	01 -- 1981	--	HO Cf 116
--	--	X	Dry	01 -- 1981	0	--	--	--	01 -- 1981	--	HO Cf 117
58	6	X	50	03-06-1987	50	190	.26	3	03-06-1987	--	HO Cf 118
18	6	X	100	10-16-1987	10	52	.19	3	10-16-1987	--	HO Cf 119
56.5	6	X	31	05-15-1987	2.5	247	.01	6	05-15-1987	--	HO Cf 120
50	6	X	34	12-17-1986	4	73	.05	3	12-17-1986	Q	HO Cf 121
22	6	X	45	01-28-1980	20	20	1.0	2	01-28-1990	Q	HO Cf 122
--	6	X	--	--	30	--	--	--	1921	Q	HO Cg 1
--	6	X	--	--	25	--	--	--	1929	--	HO Cg 2
--	--	X	--	--	17	--	--	--	1908	--	HO Cg 3
--	--	-	--	--	--	--	--	--	--	--	HO Cg 4
--	6	-	--	--	--	--	--	--	--	--	HO Cg 5
--	6	X	3.77 S	04-23-1952	--	--	--	--	--	O	HO Cg 6
51	6	X	5.49 S	04-22-1952	2	--	--	--	02-13-1950	--	HO Cg 7
--	6	-	53.30 S	04-23-1952	--	--	--	--	--	--	HO Cg 8
--	6	X	40	10-01-1947	10	40	.25	8	10-01-1947	--	HO Cg 9

Table 1.—Records of selected wells in Howard County—Continued

Well no.	Well permit no.	Owner or name	Driller	Date of construction	Altitude of land surface (ft)	Topo-graphic setting	Depth Drilled (ft)	Use of water	Geologic unit
HO Cg 10	HO-00-1115	Amberman, F L	F B Rogers	02-14-1947	200	S	39	U	300DDHL
HO Cg 11	HO-00-3527	Moreland, H T	Dillon Bros	01-17-1949	225	S	100	U	300DDHL
HO Cg 12	HO-00-3526	Hellmann, Walter	Dillon Bros	01-10-1949	220	H	62	U	217PTXN
HO Cg 13	HO-00-0434	Phillips, J M	F B Rogers	05-26-1946	160	S	36	U	300DDHL
HO Cg 14	HO-00-2584	LaCompte, L B	F B Rogers	05-18-1948	215	H	76	U	217PTXN
HO Cg 15	--	Smith	Bishop	11 -- 1956	50	S	90	U	217PTXN
HO Cg 16	--	Sutton	Bishop	11 -- 1956	50	S	70	U	300RELY
HO Cg 17	--	Meyer Bros	Meyer Bros	1956	60	S	43.5	U	217PTXN
HO Cg 18	HO-03-1026	Drummond & Co	G E Harr Sons	05-20-1958	60	S	208	U	300RELY
HO Cg 19	HO-01-6490	Street, J J	T N Smith	09-28-1954	130	S	149	U	217PTXN
HO Cg 21	--	Mullins, Elmer E	--	--	100	S	45.5	U	217PTXN
HO Cg 22	HO-04-6288	Custom Trk & Auto Ctr	W H Eiler	09-16-1962	100	V	127	U	300RELY
HO Cg 23	HO-73-3780	Danny Nolan's Saloon	L F Easterday	01-09-1981	160	S	200	U	300RELY
HO Cg 24	HO-73-2996	Redd, Samuel	L F Easterday	11-09-1978	150	S	280	U	300RELY
HO Cg 25	HO-73-1956	Covey, Robert L	A P Edmondson	07-21-1977	110	S	150	U	300RELY
HO Cg 26	HO-73-0850	Ritter, G H	L F Easterday	10-11-1974	135	S	300	U	300RELY
HO Cg 27	HO-73-3132	Malkmus, John	L F Easterday	02-28-1979	250	S	260	H	300MWSG
HO Cg 28	HO-73-1033	Koltko, Nicholas	L F Easterday	06-20-1975	190	S	200	H	300DDHL
HO Cg 29	HO-72-0005	Holy Trinity Church	Westminster	08-19-1971	220	S	207	H	300DDHL
HO Cg 30	HO-73-0010	Morris, Edward	L F Easterday	07-18-1972	205	H	300	H	300DDHL
HO Cg 31	HO-81-1253	Medairy, Wilburn	L F Easterday	12-30-1986	200	S	258	H	300DDHL
HO Cg 32	HO-73-1393	Brown, Thomas	L F Easterday	05-05-1976	210	H	560	H	300DDHL
HO Cg 33	HO-73-0619	Schulze, Robert	L F Easterday	03-15-1974	125	H	400	H	300DDHL
HO Cg 34	HO-81-2685	Dennis, Eugene	Walter Frank	06-02-1988	170	H	300	H	300RELY
HO Dd 1	--	Brown, Maurice	Beecraft	1952	490	S	17.6	H	400BLMR
HO Dd 2	--	Judy, Ethel	Hud Robinson	1946	470	H	25	H	300LCRV
HO Dd 3	HO-00-1570	Chitwood, B G	F B Rogers	06-28-1947	460	S	66	H	300LCRV
HO Dd 4	HO-81-0290	Cooney, Christopher	L F Easterday	11-14-1983	430	S	400	H	300LCRV
HO Dd 5	HO-81-0290	Cooney, Christopher	L F Easterday	11-14-1983	430	S	200	U	300LCRV
HO Dd 6	HO-81-0290	Cooney, Christopher	L F Easterday	11-14-1983	430	S	200	U	300LCRV
HO Dd 7	HO-81-0290	Cooney, Christopher	L F Easterday	11-14-1983	430	S	240	U	300LCRV
HO Dd 8	HO-81-0290	Cooney, Christopher	L F Easterday	11-14-1983	430	S	140	U	300LCRV
HO Dd 9	HO-81-0290	Cooney, Christopher	L F Easterday	11-14-1983	430	S	100	U	300LCRV
HO Dd 10	HO-73-0534	Comberiate, Mike	L F Easterday	11-27-1973	445	W	300	H	300LCRV
HO Dd 11	HO-73-2861	--	Westminster	07-12-1978	440	H	351	H	300LCRV
HO Dd 12	HO-73-1261	--	L F Easterday	11-28-1975	365	S	180	H	300LCRV
HO Dd 14	HO-73-3970	Thomas	L F Easterday	10-16-1981	415	W	160	H	300LCRV
HO Dd 15	HO-81-0349	Bray, Harry C	L F Easterday	12-21-1983	435	W	400	H	300LCRV
HO Dd 16	HO-81-0349	Bray, Harry C	L F Easterday	12-21-1983	435	W	300	U	300LCRV
HO Dd 17	HO-81-0185	Peters, Karl	Robert Cline	09-08-1983	405	S	425	H	300LCRV
HO Dd 18	HO-81-0185	Peters, Karl	Robert Cline	09-08-1983	400	S	--	U	300LCRV
HO Dd 19	HO-81-0185	Peters, Karl	Robert Cline	09-08-1983	400	S	--	U	300LCRV
HO Dd 20	HO-81-0185	Peters, Karl	Robert Cline	09-08-1983	400	S	--	U	300LCRV
HO Dd 21	HO-81-0993	Nathan, David	L F Easterday	07-30-1985	415	S	300	H	300LCRV
HO Dd 22	HO-73-4051	McCollam, George	L F Easterday	11-20-1981	390	S	460	H	300LCRV
HO Dd 23	HO-81-0951	Schooley Mill Park	Westminster	04-22-1985	485	H	400	H,I	400BLMR
HO Dd 24	HO-73-3868	Lane, Lee	L F Easterday	04-28-1981	480	U	200	H	300LCRV
HO Dd 25	HO-70-0090	Lane, Lee	Dewey Brown	12-11-1969	485	U	121	U	300LCRV
HO Dd 26	HO-73-0685	Kerwin	L F Easterday	05-13-1977	460	S	100	H	300LCRV
HO Dd 27	HO-73-1682	Koop, John W	L F Easterday	10-18-1976	440	F	400	H	300LCRV
HO Dd 28	HO-73-1585	Dudich, Dave	Dillon Bros	09-02-1976	420	H	150	H	300LCRV
HO Dd 29	HO-81-0596	Ketterman, Olen L	Ralph Mayne	07-02-1984	455	S	160	H	300LCRV
HO Dd 30	HO-73-0592	Devers, Jerry H	Ralph Mayne	03-13-1974	470	H	90	H	300LCRV
HO Dd 31	HO-73-3150	Smith, Charles	W B Quynn	02-14-1979	505	H	120	H	400BLMR
HO Dd 32	HO-73-2202	Drew, Marvin E	Joseph Mayne	07-27-1977	490	U	245	H	400BLMR
HO Dd 33	HO-81-1539	Cantor, Robert	Ralph Mayne	07-13-1986	455	H	300	U	400BLMR
HO Dd 34	HO-81-0784	Dull, Rex E	Ralph Mayne	12-18-1984	445	H	300	H	300LCRV
HO Dd 35	HO-73-0333	Eichel	L F Easterday	08-15-1973	380	U	300	H	300LCRV
HO Dd 36	HO-81-0427	Geoghan, Jo Ann	L F Easterday	03-26-1984	380	S	160	H	300LCRV
HO Dd 37	HO-73-0587	Bean, Garnet S	Ralph Mayne	03-28-1974	360	S	36	H	300CCKV
HO Dd 38	HO-73-3439	Poole, Michael	L F Easterday	10-29-1979	450	S	140	H	300STRS
HO Dd 39	HO-73-0483	Davis, Charles	Joseph Mayne	10-09-1973	430	S	240	H	300LCRV
HO Dd 40	HO-73-0484	Lindquist, David W	Joseph Mayne	10-09-1973	430	S	240	H	300LCRV
HO Dd 41	HO-73-2267	Fells, Lenny	Joseph Mayne	02-09-1978	405	U	285	H	300LCRV
HO Dd 42	HO-73-0844	MacKenzie, Kenneth	C A Cromwell	10-24-1974	440	S	250	H	300LCRV
HO Dd 43	HO-73-1123	--	A P Edmondson	09-16-1975	435	S	120	H	300LCRV
HO Dd 44	HO-81-0717	Potter	Joseph Mayne	09-20-1984	445	H	405	H	300LCRV
HO Dd 45	HO-81-0647	Potter	Joseph Mayne	09-19-1984	445	H	305	H	300LCRV
HO Dd 46	HO-81-0647	Potter	Joseph Mayne	09-19-1984	445	H	325	U	300LCRV
HO Dd 47	HO-81-0647	Potter	Joseph Mayne	09-19-1984	445	H	315	U	300LCRV
HO Dd 48	HO-81-0647	Potter	Joseph Mayne	09-19-1984	445	H	200	U	300LCRV
HO Dd 49	HO-81-0647	Potter	Joseph Mayne	09-19-1984	445	H	200	U	300LCRV
HO Dd 50	HO-73-3595	Schrider, Alfred	L F Easterday	04-24-1980	410	H	300	H	300LCRV
HO Dd 51	HO-73-2920	Potts, James	Ralph Mayne	08-24-1978	370	H	265	H	300LCRV
HO Dd 52	HO-81-0305	Hartel, Arthur	L F Easterday	11-08-1983	360	S	400	H	300LCRV

Casing			Water level		Aquifer test					Other	
Depth (ft)	Diameter (in.)	Finish	Depth, ft below land surface	Date measured	Yield (gal/min)	Drawdown (ft)	Specific capacity [(gal/min)/ft]	Hours pumped	Date	data available	Well no.
--	6	X	20	02-14-1947	8	--	--	--	02-14-1947	--	HO Cg 10
--	6	X	40	01-17-1949	2	--	--	--	01-17-1949	--	HO Cg 11
--	6	X	30	01-10-1949	2	--	--	--	01-10-1949	--	HO Cg 12
--	6	X	--	--	15	--	--	--	05-26-1946	--	HO Cg 13
--	6	-	51	05-18-1948	25	0	--	3	05-18-1948	--	HO Cg 14
--	6	-	--	--	--	--	--	--	--	--	HO Cg 15
--	--	-	--	--	--	--	--	--	--	--	HO Cg 16
43.5	36	W	7.71[2]S	05-12-1958	17	--	--	--	05-12-1958	--	HO Cg 17
90	6	X	+1.61 S	05-26-1958	45	110	0.41	12	05-20-1958	C	HO Cg 18
145	--	-	76.5	09-28-1954	--	--	--	--	--	--	HO Cg 19
45.5	36	W	42.47 S	05-04-1988	--	--	--	--	--	--	HO Cg 21
60	4	X	8	09-16-1962	1	117	.01	--	09-16-1962	Q	HO Cg 22
19	6	X	26.42 S	05-09-1988	3	--	--	--	01-09-1981	O	HO Cg 23
188	6	X	127.92 S	01-23-1989	30	230	.13	2	11-09-1978	O	HO Cg 24
23	6	X	35	07-21-1977	6	90	.07	6	07-21-1977	--	HO Cg 25
35	6	X	60	10-11-1974	1	240	<.01	2	10-11-1974	--	HO Cg 26
21	6	X	35	02-28-1979	20	225	.09	4	02-28-1979	Q	HO Cg 27
23	6	X	10	06-20-1975	4	190	.02	2	06-20-1975	--	HO Cg 28
55	6	X	55	08-19-1971	3.5	148	.02	12	08-19-1971	--	HO Cg 29
53	6	X	30	07-18-1972	2	270	.01	1	07-18-1972	--	HO Cg 30
56	6	X	65	12-30-1986	20	193	.10	3	12-30-1986	--	HO Cg 31
19	6	X	50	05-05-1976	1	510	<.01	1	05-05-1976	--	HO Cg 32
28	6	X	60	03-15-1974	1	340	<.01	2	03-15-1974	--	HO Cg 33
96	6	X	140	06-02-1988	12	160	.07	3	06-02-1988	Q	HO Cg 34
17.6	36	W	8.02 S	07-30-1952	--	--	--	--	--	--	HO Dd 1
25	--	W	14.23 S	07-30-1952	--	--	--	--	--	--	HO Dd 2
60.7	6	X	15	06-28-1947	8	--	--	--	06-28-1947	--	HO Dd 3
37	6	X	34	11-14-1983	1	253	<.01	6	11-14-1983	--	HO Dd 4
--	--	X	Dry	11-14-1983	0	--	--	--	11-14-1983	--	HO Dd 5
--	--	X	Dry	11-14-1983	0	--	--	--	11-14-1983	--	HO Dd 6
--	--	X	Dry	11-14-1983	0	--	--	--	11-14-1983	--	HO Dd 7
--	--	X	Dry	11-14-1983	0	--	--	--	11-14-1983	--	HO Dd 8
--	--	X	Dry	11-14-1983	0	--	--	--	11-14-1983	--	HO Dd 9
22	6	X	50	11-27-1973	1	250	<.01	1	11-27-1973	--	HO Dd 10
60	6	X	67	07-12-1978	3	193	.02	6	07-12-1978	--	HO Dd 11
32	6	X	50	11-28-1975	7	130	.05	1	11-28-1975	--	HO Dd 12
25	6	X	8	10-16-1981	4	152	.03	2	10-16-1981	--	HO Dd 14
23	6	X	30	12-21-1983	4	133	.03	3	12-21-1983	--	HO Dd 15
--	--	X	Dry	12-21-1983	0	--	--	3	12-21-1983	--	HO Dd 16
47	6	X	45	09-08-1983	1	120	.01	6	09-08-1983	--	HO Dd 17
--	--	X	Dry	09-08-1983	0	--	--	--	09-08-1983	--	HO Dd 18
--	--	X	Dry	09-08-1983	0	--	--	--	09-08-1983	--	HO Dd 19
--	--	X	Dry	09-08-1983	0	--	--	--	09-08-1983	--	HO Dd 20
66	6	X	46	07-30-1985	5	109	.05	3	07-30-1985	--	HO Dd 21
53	6	X	60	11-20-1981	8	400	.02	4	11-20-1981	--	HO Dd 22
60.9	6	X	30	04-22-1985	6.6	260	.03	6	04-22-1985	--	HO Dd 23
103	6	X	60	04-28-1981	8	140	.06	4	04-28-1981	--	HO Dd 24
90	6	X	23.47 S	03-16-1988	8	25	.32	1	12-11-1969	O	HO Dd 25
31	6	X	--	--	8	--	--	2	05-13-1977	--	HO Dd 26
48	6	X	60	10-18-1976	2	340	.01	2	10-18-1976	--	HO Dd 27
23	6	X	35	09-02-1976	5	110	.05	6	09-02-1976	--	HO Dd 28
46	6	X	5	07-02-1984	9	15	.60	3	07-02-1984	--	HO Dd 29
20	6	X	30	03-13-1974	6	60	.10	2	03-13-1974	--	HO Dd 30
46	6	X	30	02-14-1979	10	80	.12	2	02-14-1979	--	HO Dd 31
30	6	X	45	07-27-1977	10	200	.05	2	07-27-1977	--	HO Dd 32
48	6	X	27	07-13-1986	2	223	.01	6	07-13-1986	--	HO Dd 33
77	6	X	65	12-18-1984	9	115	.08	3	12-18-1984	--	HO Dd 34
45	6	X	40	08-15-1973	1	260	<.01	1	08-15-1973	--	HO Dd 35
19	6	X	13	03-26-1984	10	34	.29	3	03-26-1984	--	HO Dd 36
20	6	X	20	03-28-1974	10	16	.62	2	03-28-1974	--	HO Dd 37
19	6	X	30	10-29-1979	8	110	.07	3	10-29-1979	--	HO Dd 38
40	6	X	80	10-09-1973	5	160	.03	2	10-09-1973	--	HO Dd 39
29	6	X	80	10-09-1973	5	160	.03	2	10-09-1973	Q	HO Dd 40
48	6	X	45	02-09-1978	3	240	.01	2	02-09-1978	--	HO Dd 41
55	6	X	35	10-24-1974	3	215	.01	3	10-24-1974	--	HO Dd 42
30	6	X	40	09-16-1975	1.5	40	.04	2	09-16-1975	--	HO Dd 43
80	6	X	36	09-20-1984	.6	205	<.01	6	09-20-1984	--	HO Dd 44
76	6	X	35	09-19-1984	.75	110	.01	6	09-19-1984	--	HO Dd 45
--	--	X	Dry	09-19-1984	0	--	--	--	09-19-1984	--	HO Dd 46
--	--	X	Dry	09-19-1984	0	--	--	--	09-19-1984	--	HO Dd 47
--	--	X	Dry	09-19-1984	0	--	--	--	09-19-1984	--	HO Dd 48
--	--	X	Dry	09-19-1984	0	--	--	--	09-19-1984	--	HO Dd 49
23	6	X	30	04-24-1980	1	270	<.01	3	04-24-1980	--	HO Dd 50
90	6	X	30	08-24-1978	2	235	.01	8	08-24-1978	--	HO Dd 51
25	6	X	33	11-08-1983	2	72	.03	6	11-08-1983	--	HO Dd 52

[2] Well being pumped.

Table 1.—Records of selected wells in Howard County—Continued

Well no.	Well permit no.	Owner or name	Driller	Date of construction	Altitude of land surface (ft)	Topo-graphic setting	Depth Drilled (ft)	Use of water	Geologic unit
HO Dd 53	HO-81-0305	Hartel, Arthur	L F Easterday	11-08-1983	360	S	200	U	300LCRV
HO Dd 54	HO-81-0305	Hartel, Arthur	L F Easterday	11-08-1983	360	S	180	U	300LCRV
HO Dd 55	HO-73-0610	Schrider, Alfred	Ralph Mayne	04-25-1974	420	H	305	U	300LCRV
HO Dd 56	HO-81-1122	McKee, Arnold R	Joseph Mayne	10-08-1986	420	S	325	H	300LCRV
HO Dd 57	HO-81-1122	McKee, Arnold R	Joseph Mayne	01-17-1986	420	S	300	U	300LCRV
HO Dd 58	HO-81-1122	McKee, Arnold R	Joseph Mayne	01-17-1986	420	S	325	U	300LCRV
HO Dd 59	HO-81-1122	McKee, Arnold R	Joseph Mayne	01-17-1986	420	S	227	U	300LCRV
HO Dd 60	HO-81-1122	McKee, Arnold R	Joseph Mayne	01-17-1988	420	S	100	U	300LCRV
HO Dd 61	HO-81-1122	McKee, Arnold R	Joseph Mayne	01-17-1986	420	S	100	U	300LCRV
HO Dd 62	HO-81-1122	McKee, Arnold R	Joseph Mayne	01-17-1986	420	S	125	U	300LCRV
HO Dd 63	HO-81-1122	McKee, Arnold R	Joseph Mayne	01-17-1986	420	S	325	U	300LCRV
HO Dd 64	HO-81-1122	McKee, Arnold R	Joseph Mayne	01-17-1986	420	S	100	U	300LCRV
HO Dd 65	HO-81-1122	McKee, Arnold R	Joseph Mayne	01-17-1986	420	S	100	U	300LCRV
HO Dd 66	HO-81-1122	McKee, Arnold R	Joseph Mayne	01-17-1986	420	S	100	U	300LCRV
HO Dd 67	HO-81-1122	McKee, Arnold R	Joseph Mayne	01-17-1986	420	S	100	U	300LCRV
HO Dd 68	HO-81-1122	McKee, Arnold R	Joseph Mayne	01-17-1986	420	S	100	U	300LCRV
HO Dd 69	HO-81-1122	McKee, Arnold R	Joseph Mayne	01-17-1986	420	S	100	U	300LCRV
HO Dd 70	HO-81-1122	McKee, Arnold R	Joseph Mayne	01-17-1986	420	S	100	U	300LCRV
HO Dd 71	HO-81-1122	McKee, Arnold R	Joseph Mayne	01-17-1986	420	S	100	U	300LCRV
HO Dd 72	HO-81-1122	McKee, Arnold R	Joseph Mayne	01-17-1986	420	S	325	U	300LCRV
HO Dd 73	HO-73-0256	Kibler, Kenneth	Dillon Bros	05-18-1973	420	S	150	U	300LCRV
HO Dd 74	HO-73-0607	Kibler, Kenneth	Joseph Mayne	01-29-1974	420	S	300	H	300LCRV
HO Dd 75	HO-73-0877	Engel, Joel	C A Cromwell	01-14-1975	400	H	250	H	300LCRV
HO Dd 76	HO-81-1887	Lillienfield, Lawrence	Westminster	03-12-1987	390	H	478	H	300LCRV
HO Dd 77	HO-81-1697	McKee, Arnold R	Joseph Mayne	10-09-1986	420	S	585	H	300LCRV
HO Dd 78	HO-81-1835	McCoy, Larry	Ralph Mayne	01-16-1987	445	S	165	H	400BLMR
HO Dd 79	HO-81-2102	RCM Corporation	Ralph Mayne	06-19-1987	470	S	265	H	300STRS
HO Dd 80	HO-81-0241	Mayernick, Theodore J	L F Easterday	08-29-1983	400	S	160	U	300LCRV
HO Dd 81	HO-81-1702	Pavlovsky, Arthur	Joseph Mayne	10-09-1986	465	S	165	H	300LCRV
HO Dd 82	HO-81-1682	Iager, Ellsworth	Ralph Mayne	10-02-1986	455	U	140	C	300LCRV
HO Dd 83	HO-73-2372	Iager, Ellsworth	Ralph Mayne	10-18-1977	455	F	125	C	300LCRV
HO Dd 84	HO-66-0079	Mauk's Meat Market	Edward Brown	09-16-1965	450	H	80	C	300LCRV
HO Dd 85	HO-81-1475	Ritter, Keith	Ralph Mayne	07-23-1986	455	F	200	H	300LCRV
HO Dd 86	HO-73-3369	St Paul's Lutheran Ch	Dillon Bros	07-18-1979	455	U	400	H	300LCRV
HO Dd 87	HO-73-2828	--	Westminster	07-18-1978	460	H	402	H	300LCRV
HO Dd 88	HO-73-1493	Eigenbrode, David	Dillon Bros	06-02-1976	460	H	95	H	300LCRV
HO Dd 89	HO-73-1662	Munford, James A	Joseph Mayne	10-13-1976	445	H	300	H	300LCRV
HO Dd 90	HO-73-2707	Zimmerman, Roy A	Westminster	05-06-1978	410	S	250	H	300LCRV
HO Dd 91	HO-73-3921	Zimmerman, Roy A	Westminster	05-28-1981	420	H	128	I	300LCRV
HO Dd 92	HO-73-1299	Zimmerman, Roy A	Westminster	01-14-1976	405	H	220	H	300LCRV
HO Dd 93	HO-81-2584	McWhortor Inc	Keyser-Garver	03-22-1988	440	S	400	H	400BLMR
HO Dd 94	HO-73-0864	Iager, Ellsworth	L F Easterday	06-03-1982	355	H	300	H	300LCRV
HO Dd 95	HO-81-1884	Lillienfield, Lawrence	Westminster	05-14-1987	400	H	438	U	300LCRV
HO Dd 96	HO-81-2074	Lillienfield, Lawrence	Westminster	05-13-1987	400	H	453	U	300LCRV
HO Dd 97	--	Hilton, Louise	L F Easterday	--	400	S	300	H	300LCRV
HO Dd 98	HO-73-1437	Hilton, Louise	L F Easterday	05-11-1976	405	S	300	U	300LCRV
HO De 1	--	--	--	--	180	S	117	U	300MWSG
HO De 2	HO-00-4689	Milner, R R	F B Rogers	09-19-1949	140	V	35	U	300MWSG
HO De 3	--	Soaper	J E Robinson	1892	400	S	27.1	H	300OELL
HO De 4	--	Howard Co Board of Ed	Washington	1939	440	H	294	T	300OELL
HO De 5	--	Miles, Lloyd	Beecraft	1950	410	S	--	H	300OELL
HO De 6	--	St Paul's Lutheran Ch	--	1920	390	S	35	H,S	300OELL
HO De 7	--	Iager	--	1932	380	S	96	U	300SKVLS
HO De 8	--	Brown, Scott F	--	1896	380	S	35	H	300SKVLS
HO De 9	--	Wessel, Herbert Jr	Beecraft	01 -- 1952	420	H	47	U	300SKVLS
HO De 10	--	Greaul, George	--	09 -- 1952	440	H	122	H	300OELL
HO De 11	HO-00-7025	Md & Va Milk Producers	Sydnor Hydro	10-20-1949	400	H	130	U	300SKVLG
HO De 12	HO-00-7026	Md & Va Milk Producers	Sydnor Hydro	10-28-1950	360	S	412	U	300SKVLG
HO De 13	HO-01-0293	Milner, R R	T N Smith	06-11-1952	130	V	80	U	300MWSG
HO De 14	HO-01-0872	Diehl, Charles P	T N Smith	09-25-1952	160	S	102	U	300MWSG
HO De 15	HO-01-1348	Johns Hopkins Univ APL	Washington	01-26-1953	450	H	375	U	300OELL
HO De 16	HO-01-1681	Johns Hopkins Univ APL	Washington	02-06-1953	425	H	62	U	300SKVLS
HO De 17	HO-01-1765	Johns Hopkins Univ APL	Washington	02-23-1953	400	S	100	T	300SKVLS
HO De 18	HO-01-2140	Johns Hopkins Univ APL	Washington	05-05-1953	380	S	104	U	300SKVLS
HO De 19	HO-02-2231	Johns Hopkins Univ APL	Washington	03-23-1956	390	S	137	T	300SKVLS
HO De 20	--	Md & Va Milk Producers	--	1942	355	S	400	U	300SKVLG
HO De 21	--	Md & Va Milk Producers	--	--	380	H	278	U	300SKVLG
HO De 22	HO-05-0876	Johns Hopkins Univ APL	Edward Brown	04-05-1963	430	S	110	U	300SKVLS
HO De 23	HO-81-2067	Iager, Clara F	Joseph Mayne	05-06-1987	390	H	360	H	300OELL
HO De 24	HO-73-1685	Dolezal, Cornell	Dillon Bros	10-11-1976	365	H	250	H	300OELL
HO De 25	HO-73-3800	Dolezal, Cornell	Dillon Bros	02-25-1981	365	H	350	U	300OELL
HO De 26	HO-65-0150	Rocky Gorge Golf Fwy	Edward Brown	08-10-1964	395	S	140	C	300OELL
HO De 27	HO-73-3301	Gresham, Jack	Keyser-Garver	06-25-1979	345	S	405	H	300OELL
HO De 28	HO-73-0507	Miles, Robert L	Ralph Mayne	11-23-1973	410	H	145	H	300OELL

Casing			Water level		Aquifer test					Other	
Depth (ft)	Diameter (in.)	Finish	Depth, ft below land surface	Date measured	Yield (gal/min)	Drawdown (ft)	Specific capacity [(gal/min)/ft]	Hours pumped	Date	data available	Well no.
--	--	X	Dry	11-08-1983	0	--	--	--	11-08-1983	--	HO Dd 53
--	--	X	Dry	11-08-1983	0	--	--	--	11-08-1983	--	HO Dd 54
43	6	X	120	04-25-1974	1	180	0.01	2	04-25-1974	--	HO Dd 55
24	6	X	35	10-08-1986	.75	258	<.01	6	10-08-1986	--	HO Dd 56
--	--	X	Dry	01-17-1986	0	--	--	--	01-17-1986	--	HO Dd 57
--	--	X	Dry	01-17-1986	0	--	--	--	01-17-1988	--	HO Dd 58
--	--	X	Dry	01-17-1986	0	--	--	--	01-17-1986	--	HO Dd 59
--	--	X	Dry	01-17-1986	0	--	--	--	01-17-1988	--	HO Dd 60
--	--	X	Dry	01-17-1986	0	--	--	--	01-17-1986	--	HO Dd 61
--	--	X	Dry	01-17-1986	0	--	--	--	01-17-1986	--	HO Dd 62
--	--	X	Dry	01-17-1986	0	--	--	--	01-17-1986	--	HO Dd 63
--	--	X	Dry	01-17-1986	0	--	--	--	01-17-1986	--	HO Dd 64
--	--	X	Dry	01-17-1986	0	--	--	--	01-17-1986	--	HO Dd 65
--	--	X	Dry	01-17-1986	0	--	--	--	01-17-1986	--	HO Dd 66
--	--	X	Dry	01-17-1986	0	--	--	--	01-17-1986	--	HO Dd 67
--	--	X	Dry	01-17-1986	0	--	--	--	01-17-1986	--	HO Dd 68
--	--	X	Dry	01-17-1986	0	--	--	--	01-17-1986	--	HO Dd 69
--	--	X	Dry	01-17-1986	0	--	--	--	01-17-1986	--	HO Dd 70
--	--	X	Dry	01-17-1986	0	--	--	--	01-17-1986	--	HO Dd 71
--	--	X	Dry	01-17-1986	0	--	--	--	01-17-1986	--	HO Dd 72
24	6	X	40	05-18-1973	2	110	.02	6	05-08-1973	--	HO Dd 73
27	6	X	145	01-29-1974	3	150	.02	2	01-29-1974	--	HO Dd 74
35	6	X	45	01-14-1975	3	200	.01	2	01-14-1975	--	HO Dd 75
43	6	X	39	03-12-1987	3	336	.01	6	03-12-1987	--	HO Dd 76
23	6	X	214	10-09-1986	.5	123	<.01	6	10-09-1986	--	HO Dd 77
48	6	X	30	01-16-1987	10	15	.67	3	01-16-1987	--	HO Dd 78
20	6	X	14	06-19-1987	3	161	.02	6	06-19-1987	--	HO Dd 79
30	6	X	31.49 S	04-20-1988	10	5	2.0	3	08-29-1983	O	HO Dd 80
59	6	X	43	10-09-1986	6	67	.09	3	10-09-1986	--	HO Dd 81
48	6	X	15	10-02-1986	8	60	.13	3	10-02-1986	--	HO Dd 82
56	6	X	30	10-18-1977	30	95	.32	2	10-18-1977	--	HO Dd 83
39	6	X	40	09-16-1965	10	24	.42	2	09-16-1965	--	HO Dd 84
45	6	X	35	07-23-1986	4	35	.11	3	07-23-1986	--	HO Dd 85
38	6	X	15	07-18-1979	1.5	335	<.01	6	07-18-1979	--	HO Dd 86
62	6	X	135	07-18-1978	2	84	.02	6	07-18-1978	--	HO Dd 87
35	6	X	30	06-02-1976	7	20	.35	5	06-02-1976	--	HO Dd 88
68	6	X	45	10-13-1976	1	250	<.01	2	10-13-1976	--	HO Dd 89
61	6	X	66	05-06-1978	18	136	.13	6	05-06-1978	--	HO Dd 90
61	6	X	73	05-28-1981	25	15	1.67	3	05-28-1981	--	HO Dd 91
83	6	X	50	01-14-1976	8.5	137	.06	7	01-14-1976	--	HO Dd 92
61	6	X	1	03-21-1988	2	169	.01	6	03-22-1988	--	HO Dd 93
53	6	X	40	10-14-1974	2	160	.01	1	10-14-1974	Q	HO Dd 94
					1	250	<.01	3	06-03-1982		
43.6	6	X	35	05-14-1987	9	353	.03	6	05-14-1987	--	HO Dd 95
73	6	X	32	05-13-1987	1.9	339	.01	6	05-13-1987	--	HO Dd 96
--	6	X	--	--	--	--	--	--	--	Q	HO Dd 97
19	6	X	40	05-11-1976	1	260	<.01	2	05-11-1976	--	HO Dd 98
--	6	-	18.58 S	04-21-1952	--	--	--	--	--	--	HO De 1
27	6	X	3	05-22-1952	5	--	--	--	09-19-1949	Q	HO De 2
27.1	48	W	15.34 S	08-21-1952	--	--	--	--	--	--	HO De 3
--	6	X	32.24 S	08-21-1952	10	--	--	--	1939	--	HO De 4
--	30	W	6.04 S	04-29-1952	--	--	--	--	--	--	HO De 5
35	36	W	8	04-29-1952	--	--	--	--	--	--	HO De 6
--	6	X	84 E	04 -- 1952	--	--	--	--	--	--	HO De 7
35	48	W	--	--	--	--	--	--	--	--	HO De 8
47	36	W	35.54 S	01 -- 1952	--	--	--	--	--	--	HO De 9
105	6	X	24.06 S	11-07-1952	5	--	--	--	09 -- 1952	--	HO De 10
42.1	6	X	29	10-20-1949	30	46	.65	24	10-20-1949	--	HO De 11
14.5	6	X	8	10-28-1950	33	--	--	9	10-28-1950	--	HO De 12
19	6	X	5	06-11-1952	14	--	--	6	06-11-1952	--	HO De 13
30	6	X	13.5	09-25-1952	10	38	.26	1	09-25-1952	--	HO De 14
76	8	X	42	01-26-1953	4	248	.02	10	01-26-1953	--	HO De 15
51	8	X	4	02-06-1953	18	46	.39	24	02-06-1953	Q	HO De 16
22	6	X	9	02-23-1953	75	20	3.75	12	02-23-1953	Q	HO De 17
22	6	X	23	05-05-1953	1.5	77	.02	2	05-05-1953	--	HO De 18
26	6	X	14	03-23-1956	30	121	.25	24	03-23-1956	--	HO De 19
--	6	X	8.91 S	08-21-1957	1	--	--	--	1942	--	HO De 20
--	6	X	--	--	--	--	--	--	--	--	HO De 21
53	6	X	52	04-05-1963	5	--	--	2	04-05-1963	--	HO De 22
44	6	X	41	05-06-1987	1.6	195	.01	6	05-06-1987	--	HO De 23
42	6	X	40	10-11-1976	2	195	.01	6	10-11-1976	--	HO De 24
60	6	X	39.60 S	04-20-1988	1	270	<.01	6	02-25-1981	--	HO De 25
32	6	X	42	08-10-1964	20	--	--	4	08-10-1964	--	HO De 26
64	6	X	61	06-25-1979	2	34	.06	4	06-25-1979	--	HO De 27
75	6	X	50	11-23-1973	7	95	.07	2	11-23-1973	--	HO De 28

Table 1.—Records of selected wells in Howard County—Continued

Well no.	Well permit no.	Owner or name	Driller	Date of construction	Altitude of land surface (ft)	Topo-graphic setting	Depth Drilled (ft)	Use of water	Geologic unit
HO De 29	HO-73-3222	Ferris, Steve	Ralph Mayne	06-01-1979	400	H	325	H	300OELL
HO De 30	HO-73-1601	Jackson, William J	Dillon Bros	09-20-1976	450	U	200	H	300LCRV
HO De 31	HO-81-2097	Jackson, William J	Joseph Mayne	06-03-1987	450	U	365	H	300LCRV
HO De 32	HO-73-2586	Mikoloski, John	Joseph Mayne	04-20-1978	445	H	345	H	300OELL
HO De 33	HO-73-3135	Redner, Randy	Joseph Mayne	02-13-1979	435	S	205	H	300OELL
HO De 34	HO-73-3799	Boehly, Al	Joseph Mayne	02-27-1981	465	H	230	H	300LCRV
HO De 35	HO-73-3797	Carter, John H	Joseph Mayne	02-23-1981	440	U	300	H	300LCRV
HO De 36	HO-73-3008	Willis Thompson Inc	L F Easterday	12-12-1978	420	H	200	C	300SKVLS
HO De 37	HO-73-3978	Viener, Robert S	L F Easterday	10-29-1982	375	H	400	H	300SKVLS
HO De 38	HO-69-0040	Hammond Park Swim Club	G E Harr Sons	10-15-1968	335	H	247	U	300SKVLS
HO De 39	--	Weber, Kenneth	--	--	180	H	19.9	U	217PTXN
HO De 40	HO-73-3014	Giddings, Billy	L F Easterday	11-09-1978	220	H	700	U	300SKVLG
HO De 41	HO-00-7046	Md & Va Milk Producers	Guy Webb	12-09-1950	355	H	248	U	300SKVLG
HO De 42	HO-73-2256	Md & Va Milk Producers	L F Easterday	12-08-1977	365	H	700	U	300SKVLG
HO De 43	HO-73-3451	Md & Va Milk Producers	L F Easterday	12-08-1977	315	V	320	N	300SKVLG
HO De 44	HO-73-3448	Md & Va Milk Producers	L F Easterday	12-08-1977	320	V	300	N	300SKVLG
HO De 45	HO-73-3452	Md & Va Milk Producers	L F Easterday	12-08-1977	315	V	300	N	300SKVLG
HO De 46	HO-81-0276	Riggilo	L F Easterday	10-03-1983	350	H	300	H	300SKVLG
HO De 47	HO-81-0098	Voneiff, George	L F Easterday	05-19-1985	350	H	300	H	300SKVLG
HO De 48	HO-73-1879	Clements, Joseph	L F Easterday	03-23-1977	385	H	140	H	300SKVLG
HO De 49	--	Speigle, Gary	--	--	295	S	24.45	U	300MWSG
HO De 50	HO-72-0130	Wheatley, James	Tri County	12-14-1972	325	S	80	H	300MWSG
HO De 51	HO-73-3792	Lash, Ralph	Joseph Mayne	02-05-1981	305	H	125	H	300MWSG
HO De 52	HO-73-4082	Douse, Richard	Joseph Mayne	12-17-1981	360	F	165	H	300MWSG
HO De 53	HO-81-0624	Gould, Caleb	Ralph Mayne	07-13-1984	345	H	260	H	300SKVLG
HO De 54	HO-73-1746	Wincopia Farms	L F Easterday	12-02-1976	355	F	160	C,I	300SKVLG
HO De 55	HO-73-1665	Myers, Victor S	Dillon Bros	09-24-1976	365	H	275	H	300SKVLG
HO De 56	HO-72-0048	Md State Highway Admin	L F Easterday	09-22-1971	300	W	200	U	300SKVLG
HO De 57	HO-73-1321	Hall, Alfred	H J Greer	02-13-1976	280	F	83	H	217PTXN
HO De 58	HO-73-2019	Hess, P J	Joseph Mayne	05-03-1977	355	S	200	H	300SKVLS
HO De 59	HO-05-6109	Westvaco	Edward Brown	01-28-1964	410	H	180	U	300OELL
HO De 60	HO-05-6133	Westvaco	Edward Brown	01-30-1964	420	H	150	U	300OELL
HO De 61	HO-05-6160	Westvaco	Edward Brown	01-31-1964	400	W	90	U	300OELL
HO De 62	HO-05-6173	Westvaco	Edward Brown	02-04-1964	380	S	150	J	300OELL
HO De 63	HO-05-6230	Westvaco	Edward Brown	02-07-1964	380	S	150	J	300OELL
HO De 64	HO-65-0291	Westvaco	Edward Brown	01-04-1965	415	H	141	U	300OELL
HO De 65	HO-81-0695	Brown, James	L F Easterday	09-05-1984	280	S	300	H	300SKVLG
HO De 66	HO-73-2206	Ashby, David	L F Easterday	09-08-1977	285	H	220	H	300SKVLG
HO De 67	HO-73-0597	Bolton, Bob	Joseph Mayne	03-08-1974	290	H	140	H	300SKVLG
HO De 68	HO-73-2252	Cook, Robert E	Joseph Mayne	08-23-1977	360	S	200	U	300SKVLG
HO De 69	HO-73-4167	Welker, Jean	L F Easterday	05-07-1982	345	H	300	H	300SKVLS
HO De 70	HO-73-0968	Fisher, Lewis K	Joseph Mayne	06-24-1975	345	S	120	H	300SKVLS
HO De 71	HO-81-0702	Brown, Warren	G E Harr Sons	02-06-1985	365	H	175	U	300SKVLS
HO De 72	HO-73-2985	Price, James A	Joseph Mayne	10-17-1978	385	H	245	H	300SKVLS
HO De 73	HO-73-3647	Souder, Edgar	Ralph Mayne	07-27-1980	365	H	265	H	300SKVLG
HO De 74	HO-73-3770	Hofmann, John Jr	Dillon Bros	01-14-1981	335	H	245	H	300SKVLG
HO De 75	HO-73-0568	Laird, Gerald H	G E Harr Sons	01-02-1974	385	S	175	U	300SKVLG
HO De 76	HO-73-0567	Guion, William S	G E Harr Sons	12-28-1973	390	U	200	U	300SKVLG
HO De 77	HO-73-0307	Sambataro, Eugene	A R Keyser	10-31-1973	385	U	130	U	300SKVLG
HO De 78	HO-73-0298	Harvey, M Howell Jr	G E Harr Sons	05-31-1973	385	H	330	U	300SKVLG
HO De 79	HO-73-0297	--	G E Harr Sons	05-22-1973	365	U	155	U	300SKVLG
HO De 80	HO-72-0183	Wessell, Herbert	L F Easterday	05-05-1972	425	H	300	H	300SKVLS
HO De 81	--	Md State Highway Admin	L F Easterday	09 -- 1971	286	S	200	U	300SKVLG
HO De 82	--	Md State Highway Admin	L F Easterday	09 -- 1971	270	S	200	U	300MWSG
HO De 83	--	Md State Highway Admin	L F Easterday	09 -- 1971	281	H	300	U	300MWSG
HO De 84	HO-04-4108	Meyer, Henry E	Edward Brown	08-23-1961	230	S	140	U	300MWSG
HO De 85	HO-88-0470	Murphy, John	Joseph Mayne	05-08-1989	345	S	225	H	300OELL
HO Df 1	HO-00-0248	Henkel, M J	Washington	03-01-1946	170	F	129	H	217PTXN
HO Df 2	--	Grubb, J D	--	--	220	F	26	U	217PTXN
HO Df 3	--	Hanauer, D M	--	--	240	F	80	U	217PTXN
HO Df 4	HO-00-3333	Corum, Ashby	Washington	11-05-1948	270	H	108	U	217PTXN
HO Df 5	--	Leaseway Motor Car	--	1947	255	H	150	U	--
HO Df 6	--	Wade, W T	--	1900	200	H	60	H,S	217PTXN
HO Df 7	HO-00-4126	Morrell, G P	F B Rogers	07-10-1952	220	W	148	U	300MWSG
HO Df 8	HO-00-2878	Cannell, H S	F B Rogers	08-04-1948	185	H	88	U	217PTXN
HO Df 9	HO-00-1951	Mencken, C R	F B Rogers	10-10-1947	225	S	110	U	217PTXN
HO Df 10	HO-00-3658	H J Poist & Co	Washington	04-12-1949	160	F	182	U	300MWSG
HO Df 11	HO-00-7059	Mathews, Robert	T N Smith	11-14-1950	220	S	80	U	300MWSG
HO Df 12	--	Engleman, A B	G E Harr Sons	06 -- 1952	265	H	117	U	217PTXN
HO Df 13	--	Parisius, H W	--	1945	180	S	22	U	300MWSG
HO Df 14	HO-00-8246	Threadgill, W A	T N Smith	07-11-1951	215	F	60	U	300MWSG
HO Df 15	HO-00-1740	Hardee's	F B Rogers	09-25-1947	220	S	104	U	300MWSG
HO Df 16	HO-00-2768	--	F B Rogers	06-17-1948	270	S	123	U	300MWSG

Bottom of Casing (ft)	Bottom of Screen (ft)	Diameter (in.)	Finish	Water level: Depth, ft below land surface	Water level: Date measured	Aquifer test: Yield (gal/min)	Aquifer test: Drawdown (ft)	Aquifer test: Specific capacity [(gal/min)/ft]	Aquifer test: Hours pumped	Aquifer test: Date	Other data available	Well no.
55		6	X	30	06-01-1979	1	295	<0.01	6	06-01-1979	--	HO De 29
42		6	X	30	09-20-1976	4	150	.03	6	09-20-1976	--	HO De 30
57		6	X	42	06-03-1987	1	258	<.01	6	06-03-1987	--	HO De 31
78		6	X	55	04-20-1978	1	--	--	2	04-20-1978	--	HO De 32
38		6	X	60	02-13-1979	8	145	.06	2	02-13-1979	--	HO De 33
90		6	X	35	02-27-1981	4	125	.03	4	02-27-1981	--	HO De 34
64		6	X	40	02-23-1981	2	200	.01	6	02-23-1981	--	HO De 35
58		6	X	50	12-12-1978	3	150	.02	2	12-12-1978	--	HO De 36
21		6	X	30	10-29-1982	2	230	.01	6	08-21-1981	--	HO De 37
						1	370	<.01	3	10-29-1982		
55		6	X	52	10-15-1968	20	190	.11	4	10-15-1968	--	HO De 38
19.9		36	W	14.54 S	05-10-1988	--	--	--	--	--	O	HO De 39
24		6	X	100	11-09-1978	1	600	<.01	6	11-09-1978	--	HO De 40
51		6	X	23	12-09-1950	11	174.7	.06	5	12-09-1950	--	HO De 41
54		6	X	22.40 S	05-10-1988	30	685	.04	5	12-08-1977	L,O	HO De 42
20		8	X	+1	12-08-1977	20	321	.06	3	12-08-1977	--	HO De 43
25		8	X	5	12-08-1977	100	295	.34	3	12-08-1977	--	HO De 44
37		8	X	5	12-08-1977	30	295	.10	3	12-08-1977	--	HO De 45
29		6	X	27	10-03-1983	3	28	.11	6	10-03-1983	--	HO De 46
28		6	X	27	05-19-1985	2	109	.02	6	05-19-1988	--	HO De 47
29		6	X	25	03-23-1977	8	115	.07	3	03-23-1977	--	HO De 48
24.4		36	W	21.20 S	05-10-1988	--	--	--	--	--	--	HO De 49
32		6	X	30	12-14-1972	10	--	--	3	12-14-1972	--	HO De 50
33		6	X	38	02-05-1981	10	82	.12	2	02-05-1981	Q	HO De 51
46		6	X	23	12-17-1981	4	72	.06	6	12-17-1981	--	HO De 52
25		6	X	21	07-13-1984	5	54	.09	3	07-13-1984	--	HO De 53
19		6	X	35	12-02-1976	3	125	.02	2	12-02-1976	--	HO De 54
32		6	X	40	09-24-1976	2	230	.01	6	09-24-1976	--	HO De 55
19		6	X	10	09-22-1971	4	180	.02	8	09-22-1971	--	HO De 56
60		4	S	38	02-13-1976	10	7	1.43	1	02-13-1976	--	HO De 57
	83	2										
20		6	X	40	05-03-1977	3	155	.02	2	05-03-1977	--	HO De 58
74		6	X	72	01-28-1964	8	--	--	1	01-28-1964	--	HO De 59
92		6	X	85	01-30-1964	5	--	--	1	01-30-1964	--	HO De 60
43		6	X	38	01-31-1964	3	--	--	1	01-31-1964	--	HO De 61
14		6	X	6	02-04-1964	55	--	--	--	02-04-1964	--	HO De 62
16		6	X	12	02-07-1964	35	--	--	--	02-07-1964	--	HO De 63
72		6	X	29.12 S	09-27-1988	2	--	--	3	01-04-1965	O	HO De 64
25		6	X	45	09-05-1984	2	255	.01	3	09-05-1984	--	HO De 65
32		6	X	50	09-08-1977	4	170	.02	3	09-08-1977	--	HO De 66
56		6	X	40	03-08-1974	10	90	.11	2	03-08-1974	--	HO De 67
22		6	X	55	08-23-1977	8	140	.06	2	08-23-1977	--	HO De 68
19		6	X	51	05-07-1982	1	164	.01	6	05-07-1982	--	HO De 69
21		6	X	30	06-24-1975	7	85	.08	2	06-24-1975	--	HO De 70
42		6	X	37.92	02-06-1985	12	99.24	.12	6	02-06-1985	--	HO De 71
43		6	X	60	10-17-1978	2	180	.01	4	10-17-1978	--	HO De 72
38		6	X	35	07-27-1980	3	230	.01	6	07-27-1980	--	HO De 73
22		6	X	50	01-14-1981	15	175	.09	6	01-14-1981	--	HO De 74
26		6	X	16	01-02-1974	5	149	.03	6	01-02-1974	--	HO De 75
28		6	X	12	12-28-1973	4	178	.02	6	12-28-1973	--	HO De 76
29		6	X	11.40 S	11-07-1988	5	--	--	1	10-31-1973	O	HO De 77
50		6	X	65	05-31-1973	5	25	.20	6	05-31-1973	--	HO De 78
35		6	X	30	05-22-1973	3	115	.03	4	05-22-1973	--	HO De 79
68		6	X	40	05-05-1972	1	260	<.01	1	05-05-1972	--	HO De 80
--		--	X	--	--	2	--	--	--	09 -- 1971	--	HO De 81
--		--	X	--	--	.75	--	--	--	09 -- 1971	--	HO De 82
--		--	X	--	--	1.5	--	--	--	09 -- 1971	--	HO De 83
46		6	X	32	08-23-1961	8	--	--	1	08-23-1961	--	HO De 84
61		6	X	35	05-08-1989	10	28	.36	3	05-08-1989	Q	HO De 85
124		6	S	44.52 S	03-07-1946	35	17	2.06	4	03-01-1946	--	HO Df 1
	129	6										
26		48	W	--	--	--	--	--	--	--	--	HO Df 2
--		4	-	--	--	--	--	--	--	--	--	HO Df 3
104		6	X	92	11-05-1948	8	5	1.60	6	11-05-1948	--	HO Df 4
--		6	-	--	--	--	--	--	--	--	--	HO Df 5
60		--	W	--	--	--	--	--	--	--	--	HO Df 6
--		6	-	55	07-10-1949	1.5	--	--	--	07-10-1949	--	HO Df 7
40	45	6	P	26.30 S	04-23-1952	25	18	1.39	5	08-04-1948	--	HO Df 8
65	70	6										
--		6	-	49.45 S	04-23-1952	20	-10	--	--	10-10-1947	--	HO Df 9
36		6	X	4.86 S	06-04-1952	40	46	.87	10	04-12-1949	--	HO Df 10
49		6	X	26	11-14-1950	--	--	--	--	--	--	HO Df 11
--		6	-	45	06 -- 1952	9	--	--	--	06 -- 1952	--	HO Df 12
22		60	W	--	--	--	--	--	--	--	--	HO Df 13
32		6	X	20	07-11-1951	--	--	--	--	--	--	HO Df 14
--		6	-	44	09-25-1947	3	--	--	--	09-25-1947	--	HO Df 15
--		--	-	22	06-17-1948	30	40	.75	--	06-17-1948	--	HO Df 16

Table 1.—Records of selected wells in Howard County—Continued

Well no.	Well permit no.	Owner or name	Driller	Date of construction	Altitude of land surface (ft)	Topo-graphic setting	Depth Drilled (ft)	Use of water	Geologic unit
HO Df 17	HO-00-7823	Wayside Motel	T N Smith	06-12-1951	300	H	304	U	300MWSG
HO Df 18	HO-00-2516	Freestate Raceway	Columbia	06-08-1948	160	S	300	U	300MWSG
HO Df 19	HO-00-4784	Pfister Mobile Home Pk	F B Rogers	10-07-1949	220	S	75	U	217PTXN
HO Df 20	HO-02-0927	Baltimore Aircoil Co	Layne-Atlantic	09-29-1955	170	S	59	U	217PTXN
HO Df 21	HO-02-2453	Baltimore Aircoil Co	Layne-Atlantic	02-21-1956	170	S	37	U	217PTXN
HO Df 22	HO-02-9393	Keefer, Morton	T N Smith	01-13-1958	190	H	145	U	300RELY
HO Df 23	HO-02-8275	Concrete Pipe Products	Ralph Ault	10 -- 1957	180	V	59	U	217PTXN
HO Df 24	HO-02-8323	Concrete Pipe Products	Ralph Ault	10 -- 1957	180	V	58	U	217PTXN
HO Df 25	HO-03-4725	Concrete Pipe Products	Layne-Atlantic	05-26-1959	190	H	105	U	217PTXN
HO Df 26	HO-03-5004	Concrete Pipe Products	Layne-Atlantic	06-09-1959	185	V	126	U	--
HO Df 27	HO-03-5055	Concrete Pipe Products	Layne-Atlantic	06-12-1959	175	V	95	U	217PTXN
HO Df 28	HO-03-5056	Concrete Pipe Products	Layne-Atlantic	06-15-1959	170	V	111	U	217PTXN
HO Df 29	HO-03-5112	Concrete Pipe Products	Layne-Atlantic	06-16-1959	170	V	86	U	217PTXN
HO Df 30	HO-03-5111	Concrete Pipe Products	Layne-Atlantic	06-19-1959	170	V	110	U	217PTXN
HO Df 31	HO-03-6803	Concrete Pipe Products	Layne-Atlantic	07-18-1959	170	V	110	N	217PTXN
HO Df 32	HO-03-6804	Concrete Pipe Products	Layne-Atlantic	07-22-1959	170	V	111	N	217PTXN
HO Df 33	HO-01-6193	Tall Pines Motel	T N Smith	08-20-1954	210	S	55	U	300MWSG
HO Df 34	--	--	--	--	305	H	15	U	217PTXN
HO Df 35	HO-73-1872	Heil, Joseph	L F Easterday	04-01-1977	320	S	100	H	300MWSG
HO Df 36	HO-73-3516	M G Industries	D Wolford	02-04-1980	185	S	370	U	300RELY
HO Df 37	HO-71-0066	Leaseway Motor Car	Walter Frank	03-10-1971	260	H	125	C	217PTXN
HO Df 38	HO-73-0853	Cummins-Wagner Co Inc	H H Bunker	10-27-1974	225	S	80	U	217PTXN
HO Df 39	HO-67-0186	Annapolis Jct Post Off	Walter Frank	02-03-1967	215	U	85	U	217PTXN
HO Df 40	HO-65-0141	Pagoda Siding Inc	J R Tubman	08-06-1964	195	U	109.5	C	217PTXN
HO Df 41	HO-73-0354	Alban Tractor Co	Tri County	11 -- 1973	190	S	121	C	217PTXN
	HO-73-0655		Ray Williams	04-13-1974					
HO Df 42	HO-69-0107	Laurel Block Corp	Harry Green	01 -- 1969	190	F	112	N	217PTXN
HO Df 43	HO-73-1043	Vermeer Sales & Serv	Branham Cont	06-17-1975	225	F	90	C	217PTXN
HO Df 44	HO-73-4251	James Gibbons Co	Walter Frank	08-23-1982	235	H	90	C	217PTXN
HO Df 45	HO-73-0717	Asbury Un Methodist Ch	L F Easterday	06-17-1974	165	S	300	H	300MWSG
HO Df 46	HO-69-0191	Sylvan Pools Inc	Harry Green	07 -- 1969	230	F	114	U	217PTXN
HO Df 47	HO-73-0696	Shenk, D J	Joseph Mayne	06-15-1974	290	S	200	U	300MWSG
	HO-73-0729								
HO Df 48	HO-73-4108	Shenk, D J	Joseph Mayne	02-08-1982	290	S	340	H	300MWSG
HO Df 49	HO-73-0609	Johnson, Roosevelt	Westminster	02-19-1974	215	S	310	H	300MWSG
HO Df 50	HO-73-3217	Harmon, Forster	L F Easterday	04-26-1979	295	S	300	H	300MWSG
HO Df 51	HO-73-0146	Burly, Catherine	Walter Frank	01-29-1973	175	V	55	H	300MWSG
HO Df 52	HO-73-0823	Smith, David	John Houston	08-06-1974	250	S	97	H	217PTXN
HO Df 53	HO-73-1818	Rola Enterprises	H J Greer	02-17-1977	215	H	100	C	217PTXN
HO Df 54	HO-73-4243	Hertz Penske	Branham Cont	08-15-1982	205	F	150	C	217PTXN
HO Df 55	HO-81-2714	Ayer Corporation	L F Easterday	06-07-1988	235	F	600	C	300RELY
HO Df 56	HO-73-3051	Becker, George F	Roy Harley	12-01-1978	210	F	145	H	300MWSG
HO Df 57	HO-73-2416	Becker, George F	Roy Harley	--	210	F	175	U	300MWSG

Bottom of Casing (ft)	Bottom of Screen (ft)	Diameter (in.)	Finish	Water level: Depth, ft below land surface	Water level: Date measured	Aquifer test: Yield (gal/min)	Aquifer test: Drawdown (ft)	Aquifer test: Specific capacity [(gal/min)/ft]	Aquifer test: Hours pumped	Aquifer test: Date	Other data available	Well no.
126		6	X	138	06-12-1951	--	--	--	--	--	--	HO Df 17
21		8	X	4	06-08-1948	100	296	0.34	0.2	06-08-1948	--	HO Df 18
--		6	-	--	--	8	--	--	--	10-07-1949	--	HO Df 19
--		--	X	--	--	--	--	--	--	--	--	HO Df 20
24.4		6	S	4	02-21-1956	50	18	2.78	4	02-21-1956	--	HO Df 21
	34.4	4										
80.6		6	X	36	01-13-1958	3	--	--	2	01-13-1958	--	HO Df 22
44		6	G	22	10 -- 1957	35	11	3.18	8	10 -- 1957	--	HO Df 23
	59	4										
43		6	G	22	10 -- 1957	35	13	2.69	8	10 -- 1957	--	HO Df 24
	58	4										
--		--	X	--	--	--	--	--	--	--	--	HO Df 25
--		--	X	--	--	--	--	--	--	--	--	HO Df 26
70		6	S	6	06-12-1959	30	73	.41	8	06-12-1959	--	HO Df 27
	80	6										
45		6	S	6	06-15-1959	75	48	1.56	8	06-15-1959	--	HO Df 28
	55	6										
--		--	X	--	--	--	--	--	--	--	--	HO Df 29
53		6	S	7	06-19-1959	100	49	2.04	8	06-19-1959	--	HO Df 30
	63	6										
53		6	S	9	07-18-1959	100	46	2.17	8	07-18-1959	--	HO Df 31
	63	6										
45		6	S	5	07-22-1959	60	--	--	8	07-22-1959	--	HO Df 32
	55	6										
44		6	X	21.5	08-20-1954	27	11.50	2.35	1	08-20-1954	--	HO Df 33
15		36	W	7.63 S	05-04-1988	--	--	--	--	--	O	HO Df 34
49		6	X	30	04-01-1977	20	70	.29	3	04-01-1977	--	HO Df 35
116		6	X	30.14 S	05-09-1988	25	264	.09	3	02-04-1980	O	HO Df 36
115		6	S	80	03-10-1971	30	10	3	1	03-10-1971	--	HO Df 37
	125	--										
75		4	S	55.73 S	06-03-1988	12	5	2.40	3	10-27-1974	O	HO Df 38
	80	2										
78		4	S	41	02-03-1967	--	24	--	3	02-03-1967	--	HO Df 39
	85	2										
64		12	S	51	08-06-1964	101	11	9.18	8	08-06-1964	--	HO Df 40
102		6										
	107	6										
101		6	S	55	04-13-1974	5	75	.07	6	11 -- 1973	--	HO Df 41
	121	2				6	30	.20	3	04-13-1974		
100		4	S	40	01 -- 1969	15	35	.43	3.5	01 -- 1969	--	HO Df 42
107		2										
	112	2										
83		6	G	50	06-17-1975	12	15	.80	2	06-17-1975	--	HO Df 43
	90	2										
80		4	G	62	08-23-1982	10	10	1	3	08-23-1982	--	HO Df 44
	90	2										
50		6	X	10.54 S	05-10-1988	3	260	.01	2	06-17-1974	O	HO Df 45
85		6	S	60	07 -- 1969	15	20	.75	4	07 -- 1969	--	HO Df 46
	114	2										
24		6	X	89.47 S	06-30-1988	6	50	.12	2	05-28-1974	O	HO Df 47
						8	150	.05	2	06-15-1974		
24		6	X	60	02-08-1982	2	140	.01	6	02-08-1982	--	HO Df 48
34		6	X	30	02-19-1974	3	280	.01	8	02-19-1974	--	HO Df 49
141		6	X	60	04-26-1979	6	240	.02	3	04-26-1979	--	HO Df 50
42		4	X	10	01-29-1973	8	10	.80	2	01-29-1973	--	HO Df 51
87		4	G	68	08-06-1974	5	--	--	2	08-06-1974	--	HO Df 52
	97	3										
95		4	S	70	02-17-1977	15	5	3	1	02-17-1977	--	HO Df 53
	100	2										
138		4	G	100	08-15-1982	13	30	.43	4	08-15-1982	Q	HO Df 54
	150	2										
161		6	X	450	06-07-1988	20	150	.13	3	06-07-1988	Q	HO Df 55
79		6	X	38	12-01-1978	4	43	.09	3	12-01-1978	--	HO Df 56
48		6	X	12	05-17-1978	3	75	.04	4	--	--	HO Df 57

Table 2.—Records of wells owned by Howard County Department of Public Works and located in Anne Arundel and Baltimore Counties

[ft = feet; in. = inch; gal/min = gallons per minute; (gal/min)/ft = gallons per minute per foot of drawdown; -- = data not available]

Well no.	Well permit no.	Driller	Date of construction	Altitude of land surface (ft)	Topo-graphic setting	Depth drilled (ft)	Use of water	Geologic unit	Screened interval (ft)
AA Ac 71	AA-74-3991	S Winstead	01-07-1982	9	F	25	U	112PLSC	22 - 24
AA Ac 72	AA-74-3990	S Winstead	12-11-1981	9.3	F	28	U	112PLSC	19.5 - 25.5
AA Ac 73	AA-74-3992	S Winstead	12-11-1981	8.4	F	16	U	112PLSC	11 - 14
BA Gc 34	BA-73-8099	Branham Cont	06-11-1981	12	F	37.5	U	217PTXN	27.5 - 37.5
BA Gc 35	BA-73-8100	Branham Cont	06-11-1981	12	F	90	U	217PTXN	80 - 90
BA Gc 38	BA-81-0296	S Winstead	08-07-1981	13	F	22	U	112PLSC	13 - 17
BA Gc 39	BA-81-0297	S Winstead	09-01-1981	12	F	19	U	112PLSC	11 - 16
BA Gc 40	BA-81-0298	S Winstead	08-28-1981	13	F	23	U	112PLSC	15 - 20
BA Gc 41	BA-81-0289	S Winstead	12-04-1981	12.8	F	32.5	U	112PLSC	27.5 - 30.5
BA Gc 42	BA-81-0290	S Winstead	12-09-1981	12	F	21	U	112PLSC	14.8 - 19.8
BA Gc 43	BA-81-0292	S Winstead	12-07-1981	12	F	20	U	112PLSC	14.6 - 19.3
BA Gc 44	BA-81-0291	S Winstead	12-10-1981	12	F	20	U	112PLSC	14.3 - 19.3
BA Gc 45	BA-81-0294	S Winstead	12-08-1981	11	F	18	U	112PLSC	13 - 16
BA Gc 46	BA-81-0299	S Winstead	08-28-1981	12	F	22	U	112PLSC	12 - 19
BA Gc 47	BA-81-0295	S Winstead	12-09-1981	10.9	F	12	U	112PLSC	8.5 - 10
BA Gc 48	BA-81-0293	S Winstead	12-08-1981	12.5	F	18	U	112PLSC	14.5 - 17.5
BA Gc 49	BA-81-0300	S Winstead	08-27-1981	13	F	18	U	112PLSC	14 - 16
BA Gc 50	BA-81-0301	S Winstead	08-26-1981	14	F	21	U	112PLSC	13 - 17
BA Gc 51	BA-81-0302	S Winstead	08-25-1981	13	F	26	U	112PLSC	18 - 23
BA Gc 52	BA-81-0303	S Winstead	08-24-1981	12	F	36	U	112PLSC	30 - 33
BA Gc 53	BA-81-0313	S Winstead	08-21-1981	11	F	36	U	112PLSC	31 - 34
BA Gc 54	BA-81-0304	S Winstead	08-19-1981	9	F	21	U	112PLSC	16 - 19
BA Gc 55	BA-81-0305	S Winstead	08-13-1981	11	F	22	U	112PLSC	17 - 20
BA Gc 56	BA-81-0306	S Winstead	08-11-1981	9	F	20	U	112PLSC	15 - 18
BA Gc 57	BA-81-0307	S Winstead	08-10-1981	8	F	20	U	112PLSC	13 - 16
BA Gc 58	BA-81-0308	S Winstead	08-17-1981	7	F	31	U	112PLSC	12 - 15
BA Gc 59	BA-81-0309	S Winstead	08-13-1981	14	F	24	U	112PLSC	19 - 22
BA Gc 60	BA-81-0310	S Winstead	08-17-1981	14	F	25	U	112PLSC	17 - 19
BA Gc 61	BA-81-0311	S Winstead	08-18-1981	8.5	F	18	U	112PLSC	13 - 16
BA Gc 62	BA-81-0312	S Winstead	08-18-1981	8	F	19	U	112PLSC	13 - 17

Well diameter (in.)	Finish	Water level: Depth (ft below land surface)	Water level: Date measured	Aquifer test: Yield (gal/min)	Aquifer test: Drawdown (ft)	Aquifer test: Specific Capacity (gal/min/ft)	Aquifer test: Hours pumped	Aquifer test: Date of test	Well no.
2	G	3	01-07-1982	23	10	2.30	4	01-07-1982	AA Ac 71
2	G	3	12-11-1981	13	9	1.44	4	12-11-1981	AA Ac 72
2	G	4	12-11-1981	28	6	4.67	5	12-11-1981	AA Ac 73
6	G	4	06-11-1981	100	31	3.23	4	06-11-1981	BA Gc 34
4	G	0	06-11-1981	80	--	--	4	06-11-1981	BA Gc 35
2	S	6	08-07-1981	--	--	--	--	--	BA Gc 38
2	S	6.35	09-01-1981	78	2.90	26.9	3	09-01-1981	BA Gc 39
2	S	9.4	08-28-1981	82	4.32	19.0	1	08-28-1981	BA Gc 40
2	S	6.3	12-04-1981	--	--	--	--	--	BA Gc 41
2	G	--	--	--	--	--	--	--	BA Gc 42
2	G	--	--	--	--	--	--	--	BA Gc 43
2	G	--	--	--	--	--	--	--	BA Gc 44
2	S	4.5	12-08-1981	--	--	--	--	--	BA Gc 45
2	S	7.76	08-28-1981	47	3.08	15.3	1	08-28-1981	BA Gc 46
2	S	4.9	12-09-1981	--	--	--	--	--	BA Gc 47
2	G	8	12-08-1981	--	--	--	--	--	BA Gc 48
2	S	8	08-27-1981	--	--	--	--	--	BA Gc 49
2	S	10.03	08-26-1981	--	--	--	--	--	BA Gc 50
2	S	9.05	08-25-1981	74	3.48	21.3	2	08-25-1981	BA Gc 51
2	S	5.88	08-24-1981	44	11.51	3.82	3	08-24-1981	BA Gc 52
2	S	7.26	08-21-1981	28	14.62	1.92	3	08-21-1981	BA Gc 53
2	S	5.86	08-19-1981	14	6.83	2.05	2	08-19-1981	BA Gc 54
2	S	7.84	08-13-1981	75	5.14	14.6	2	08-13-1981	BA Gc 55
2	S	7.28	08-11-1981	41	5.41	7.58	3	08-11-1981	BA Gc 56
2	S	6.18	08-10-1981	46	5.42	8.49	2	08-10-1981	BA Gc 57
2	S	4.5	08-17-1981	68	4.74	14.3	4.5	08-17-1981	BA Gc 58
2	S	11.34	08-13-1981	23	5.63	4.09	2	08-13-1981	BA Gc 59
2	S	13	08-17-1981	--	--	--	--	--	BA Gc 60
2	S	5.45	08-18-1981	18	4.92	3.66	2	08-18-1981	BA Gc 61
2	S	6.15	08-18-1981	30	6.18	4.85	2	08-18-1981	BA Gc 62

Explanation of codes

Topographic setting

F Flat

Use of water

U Unused

Geologic unit

112PLSC Pleistocene deposits
217PTXN Patuxent Formation

Finish

G Gravel, screen
S Screen

Table 3.—Periodic water levels measured in observation wells in Howard County

[All water-level values are in feet below land surface]

Well number: HO Ab 4
Owner: Merhle Pickett.
Geologic unit: Prettyboy Schist.
Altitude: 720 feet.
Well characteristics: Dug unused water-table well; depth 33.2 feet, diameter 36 inches.
Period of record: May 1977 to March 1981; September 1987 to March 1989.
Extremes for period of record: Highest water level measured, 6.50 feet, April 1, 1980;
Lowest water level measured, 21.30 feet, December 30, 1988.

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
May 13, 1977	12.63	Dec 28, 1977	10.73	May 02, 1979	10.89	Sep 29, 1987	19.84
20	12.96	Jan 11, 1978	11.10	18	11.38	Nov 05	20.27
26	13.16	Feb 23	10.72	Jun 06	10.98	30	18.65
Jun 14	13.64	Mar 31	9.40	Jul 26	12.40	Jan 06, 1988	18.89
Jul 01	14.02	Apr 21	10.50	Oct 23	7.50	Feb 05	17.51
07	14.19	May 11	11.18	Nov 15	9.72	Mar 02	17.49
14	14.35	26	10.29	Jan 04, 1980	11.80	31	17.73
22	14.55	Jun 09	10.69	Mar 04	12.82	May 02	18.05
27	14.87	14	11.03	Apr 01	6.50	Jun 02	15.80
Aug 02	14.92	Jul 17	11.40	May 01	11.64	Jul 01	17.17
23	15.12	Aug 09	12.02	Jun 02	10.99	Aug 01	18.32
29	15.33	Sep 08	12.62	30	11.57	31	19.26
Sep 08	15.43	Oct 03	13.31	Jul 28	12.50	Sep 29	19.97
21	15.68	27	13.86	Aug 27	14.20	Oct 31	20.53
Oct 13	16.03	Dec 05	14.34	Oct 20	14.75	Nov 30	20.81
24	16.14	Jan 19, 1979	11.54	Nov 21	15.25	Dec 30	21.30
Nov 23	15.66	Mar 06	8.35	Dec 19	15.60	Jan 30, 1989	20.10
Dec 12	14.35	23	10.09	Mar 03, 1981	13.91	Mar 02	19.37

Well number: HO Ab 41
Owner: Manmohan Pant.
Geologic unit: Gillis Formation.
Altitude: 825 feet.
Well characteristics: Drilled unused water-table well, depth 610 feet, diameter 6 inches.
Remarks: Well may be shallower due to caving.
Period of record: August 1987 to March 1989.
Extremes for period of record: Highest water level measured, 44.60 feet, July 1, 1988;
Lowest water level measured, 50.06 feet, November 5, 1987.

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
Aug 11, 1987	49.81	Feb 05, 1988	48.32	Jul 01, 1988	44.60	Nov 30, 1988	47.77
Sep 29	50.05	Mar 02	47.37	Aug 01	45.05	Dec 30	48.35
Nov 05	50.06	31	46.72	31	45.78	Jan 30, 1989	48.65
30	49.96	May 02	46.53	Sep 29	46.44	Mar 02	48.69
Jan 06, 1988	49.09	Jun 02	45.53	Oct 31	47.20		

Well number: HO Ab 75
Owner: Wayne Hough.
Geologic unit: Gillis Formation.
Altitude: 790 feet.
Well characteristics: Drilled unused water-table well, depth 365 feet, diameter 6 inches.
Period of record: August 1987 to March 1990.
Extremes for period of record: Highest water level measured, 52.04 feet, May 30, 1989;
Lowest water level measured, 69.26 feet, March 2, 1989.

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
Aug 24, 1987	63.93	May 02, 1988	61.59	Jan 30, 1989	67.84	Sep 29, 1989	61.28
Sep 29	64.71	Jul 01	55.20	Mar 02	69.26	Oct 30	63.05
Nov 05	65.81	Aug 01	58.84	Apr 03	64.96	Nov 30	63.85
30	67.04	31	61.17	May 03	63.05	Dec 28	64.22
Jan 06, 1988	66.13	Sep 29	63.16	30	52.04	Jan 30, 1990	65.04
Feb 05	65.89	Oct 31	65.00	Jun 30	53.74	Mar 01	62.34
Mar 02	63.83	Nov 30	66.47	Aug 01	56.42	28	61.75
31	62.57	Dec 30	68.59	30	59.12		

Table 3.—Periodic water levels measured in observation wells in Howard County—Continued

Well number: HO Ab 81.
Owner: Thomas Harris.
Geologic unit: Prettyboy Schist.
Altitude: 730 feet.
Well characteristics: Drilled unused water-table well, depth 340 feet, diameter 6 inches.
Remarks: Equipped with water-level recorder June 1989 to April 1990; see table 4.
Period of record: August 1987 to April 1990.
Extremes for period of record: Highest water level measured, 37.05 feet, May 30, 1989;
Lowest water level measured, 41.61 feet, October 31, 1988.

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
Aug 24, 1987	40.45	Jun 02, 1988	37.20	Mar 02, 1989	40.34	Nov 30	39.20
Sep 29	40.37	Jul 01	37.84	Apr 03	38.98	Dec 28	39.73
Nov 05	40.60	Aug 01	39.09	May 03	38.80	Jan 30, 1990	39.18
Nov 30, 1987	40.20	Aug 31	40.23	30	37.05	Mar 01	38.42
Jan 06, 1988	39.38	Sep 29	40.84	Jun 12	37.12	28	38.61
Feb 05	38.97	Oct 31	41.61	Aug 01	37.67	Apr 27	37.89
Mar 02	38.43	Nov 30	41.42	30	38.61	30	37.08
31	38.43	Dec 30, 1988	41.60	Sep 29	39.61		
May 02	38.52	Jan 30, 1989	40.77	Oct 30	39.36		

Well number: HO Ad 79
Owner: Vernon Landgraf.
Geologic unit: Morgan Run Formation.
Altitude: 620 feet.
Well characteristics: Drilled unused water-table well, depth 160 feet, diameter 6 inches.
Period of record: June 1988 to November 1988.
Extremes for period of record: Highest water level measured, 35.35 feet, August 3, 1988;
Lowest water level measured, 37.97 feet, November 3, 1988.

Date	Water Level	Date	Water Level	Date	Water Level
Jun 06, 1988	36.49	Aug 03, 1988	35.35	Sep 28, 1988	36.84
Jul 01	35.73	31	35.99	Nov 03	37.97

Well number: HO Bb 26
Owner: Melvin Thomas.
Geologic unit: Morgan Run Formation.
Altitude: 750 feet.
Well characteristics: Drilled unused water-table well, depth 300 feet, diameter 6 inches.
Remarks: Equipped with water-level recorder October 1978 to June 1981, December 1987 to June 1989; see table 4.
Period of record: June 1977 to June 1981; October 1987 to June 1989.
Extremes for period of record: Highest water level measured, 23.81 feet, March 31, 1978;
Lowest water level measured, 42.47 feet, March 3, 1981.

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
Jun 14, 1977	35.62	May 26, 1978	25.09	Mar 04, 1980	35.18	Feb 05, 1988	30.71
Jul 01	36.44	Jun 09	26.47	Apr 01	32.25	Mar 11	30.35
14	37.20	14	27.20	May 01	28.14	31	31.93
22	37.53	Jul 17	30.13	Jun 24	30.81	May 02	33.25
27	37.00	Aug 09	32.00	Jul 28	34.68	Jun 02	25.05
Aug 02	37.90	Sep 08	33.80	Aug 27	36.67	Jul 01	29.36
22	38.49	Oct 03	35.30	Oct 20	37.40	Aug 01	33.13
29	40.38	23	36.04	23	38.40	31	35.44
Sep 08	38.78	27	36.30	Nov 21	39.00	Sep 29	36.88
21	38.95	Dec 05	37.66	Jan 07, 1981	39.75	Oct 31	37.85
Oct 13	40.42	Jan 19, 1979	29.43	Mar 03	42.47	Nov 30	38.51
24	39.40	Mar 23	24.52	20	38.19	Dec 30	39.00
Nov 23	39.72	May 02	27.47	May 20	37.08	Jan 30, 1989	37.85
Dec 12	37.15	18	29.39	Jun 19	36.55	Mar 02	35.45
28	37.68	Jun 06	29.30	Oct 05, 1987	36.28	Apr 03	29.89
Jan 11, 1978	29.16	Jul 26	32.94	Nov 05	37.14	May 03	32.23
Feb 23	27.28	Oct 23	27.77	30	37.03	30	24.10
Mar 31	23.81	Nov 15	28.30	Dec 07	35.37	Jun 12	26.15
Apr 21	29.85	Jan 04, 1980	33.94	Jan 06, 1988	33.90		

Table 3.—Periodic water levels measured in observation wells in Howard County—Continued

Well number: HO Bb 58
Owner: Howard Chapel United Methodist Church.
Geologic unit: Gillis Formation.
Altitude: 785 feet.
Well characteristics: Drilled domestic water-table well, depth 220 feet, diameter 6 inches.
Period of record: September 1987 to March 1989.
Extremes for period of record: Highest water level measured, 37.20 feet, June 2, 1988;
Lowest water level measured, 58.30 feet, January 30, 1989.

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
Sep 29, 1987	51.93	Mar 02, 1988	48.09	Aug 01, 1988	46.24	Dec 30, 1988	56.24
Nov 05	52.84	31	46.86	31	49.86	Jan 30, 1989	58.30
30	53.36	May 02	47.23	Sep 29	52.30	Mar 02	55.15
Jan 06, 1988	50.82	Jun 02	37.20	Oct 31	54.88		
Feb 05	49.05	Jul 01	40.79	Nov 30	56.16		

Well number: HO Bb 154
Owner: Patuxent River State Park.
Geologic unit: Morgan Run Formation.
Altitude: 565 feet.
Well characteristics: Dug unused water-table well, depth 66.2 feet, diameter 36 inches.
Period of record: May 1988 to March 1990.
Extremes for period of record: Highest water level measured, 54.48 feet, October 30, 1989;
Lowest water level measured, 59.30 feet, March 2, 1989.

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
May 23, 1988	56.65	Oct 31, 1988	56.92	May 03, 1989	58.62	Oct 30, 1989	54.48
Jun 02	56.65	Nov 30	57.62	30	57.73	Nov 30	55.97
Jul 01	55.88	Dec 30	58.32	Jun 30	56.45	Dec 28	56.45
Aug 01	55.48	Jan 30, 1989	58.94	Aug 01	55.40	Jan 30, 1990	56.70
31	55.59	Mar 02	59.30	30	54.83	Mar 01	56.76
Sep 29	56.02	Apr 03	59.23	Sep 29	54.88	28	56.55

Well number: HO Bc 8
Owner: Mt. Gregory United Methodist Church.
Geologic unit: Sykesville Formation.
Altitude: 585 feet.
Well characteristics: Drilled domestic water-table well, depth 78 feet, diameter 6 inches.
Period of record: September 1987 to March 1989.
Extremes for period of record: Highest water level measured, 11.96 feet, June 2, 1988;
Lowest water level measured, 16.90 feet, October 31, 1988.

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
Sep 29, 1987	14.13	Mar 02, 1988	12.23	Aug 31, 1988	15.76	Jan 30, 1989	13.17
Nov 05	14.04	May 02	12.66	Sep 28	15.96	Mar 01	12.68
30	13.08	Jun 02	11.96	Oct 31	16.90		
Jan 06, 1988	12.71	Jul 01	13.90	Nov 30	14.52		
Feb 05	12.16	Aug 01	14.73	Dec 30	14.25		

Well number: HO Bc 38
Owner: James Patrick.
Geologic unit: Morgan Run Formation.
Altitude: 520 feet.
Well characteristics: Dug unused water-table well, depth 57.8 feet, diameter 6 inches.
Period of record: March 1977 to March 1981; September 1987 to April 1990.
Extremes for period of record: Highest water level measured, 18.14 feet, January 4, 1980;
Lowest water level measured, 28.24 feet, January 7, 1981.

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
Mar 03, 1977	26.38	Nov 23, 1977	26.50	Oct 23, 1979	22.40	Jul 01, 1988	25.45
10	26.38	Dec 12	26.20	Nov 15	22.81	Aug 01	26.35
25	25.62	28	24.54	Jan 04, 1980	18.14	31	27.15
Apr 11	24.90	Feb 23, 1978	24.45	Mar 04	25.08	Sep 29	27.51
26	25.28	Mar 31	23.12	Apr 01	23.70	Oct 31	27.90
May 03	25.36	Apr 21	23.17	May 01	25.67	Nov 30	27.63
09	25.45	May 11	23.91	Jun 02	26.88	Dec 30	26.96
13	25.39	26	23.34	30	24.41	Jan 30, 1989	27.45
20	24.82	Jun 09	23.70	Jul 28	26.27	Mar 02	27.07
26	26.01	14	23.80	Aug 27	27.40	Apr 03	26.22
Jun 14	26.23	Jul 17	23.60	Oct 20	27.60	May 03	26.00
Jul 01	26.50	Aug 09	23.21	Nov 21	27.53	30	25.44
07	26.62	Sep 08	24.15	Jan 07, 1981	28.24	Jun 30	24.10
14	26.84	Oct 03	24.76	Mar 03	27.07	Aug 01	24.48
22	26.82	27	25.65	Sep 29, 1987	26.58	30	26.14
27	26.75	Dec 05	25.37	Nov 05	26.88	Sep 29	26.13
Aug 02	27.07	Jan 19, 1979	24.16	30	26.53	Oct 30	26.19
23	27.01	Mar 06	23.24	Jan 06, 1988	26.42	Nov 30	26.36
29	27.08	23	23.20	Feb 05	25.43	Jan 02, 1990	26.39
Sep 08	27.74	May 02	23.33	Mar 02	25.46	31	25.82
21	27.70	18	23.53	31	25.61	Mar 02	25.47
Oct 13	27.59	Jun 06	22.89	May 02	25.67	Apr 02	25.76
24	27.54	Jul 26	24.26	Jun 02	24.88		

Table 3.—Periodic water levels measured in observation wells in Howard County—Continued

Well number: HO Bc 185
Owner: Glenwood Baptist Church.
Geologic unit: Sykesville Formation.
Altitude: 510 feet.
Well characteristics: Drilled domestic water-table well, depth 86 feet, diameter 6 inches.
Period of record: October 1987 to March 1989.
Extremes for period of record: Highest water level measured, 53.47 feet, July 1, 1988;
Lowest water level measured, 61.60 feet, February 1, 1989.

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
Oct 05, 1987	58.82	Jun 02, 1988	54.48	Nov 03, 1988	61.54	Mar 01, 1989	59.88
Mar 02, 1988	57.40	Jul 01	53.47	Dec 02	59.88		
31	57.59	Aug 01	54.93[1]	Jan 02, 1989	60.40		
May 02	55.84	31	55.92	Feb 01	61.60		

Well number: HO Bc 247
Owner: Phillip Airulla.
Geologic unit: Sykesville Formation.
Altitude: 595 feet.
Well characteristics: Drilled unused water-table well, depth 170 feet, diameter 6 inches.
Period of record: October 1987 to April 1990.
Extremes for period of record: Highest water level measured, 33.53 feet, August 2, 1989;
Lowest water level measured, 40.53 feet, February 1, 1989.

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
Oct 16, 1987	39.35	Jun 02, 1988	36.77	Feb 01, 1989	40.53	Sep 28, 1989	34.52
Nov 05	39.50	Jul 01	36.09	Mar 01	40.33	Nov 02	35.36
30	39.71	Aug 01	36.44	Apr 06	39.44	Dec 01	35.57
Jan 06, 1988	39.57	31	37.24	May 04	38.27	Jan 02, 1990	35.75
Feb 05	38.75	Sep 28	38.03	31	36.73	31	35.71
Mar 02	38.41	Nov 03	38.98	Jul 03	34.71	Mar 02	35.32
31	37.65	Dec 02	39.71	Aug 02	33.53	Apr 02	34.88
May 02	37.20	Jan 02, 1989	40.28	Sep 01	34.42		

Well number: HO Bd 1
Owner: Maryland State Highway Administration.
Geologic unit: Morgan Run Formation.
Altitude: 630 feet.
Well characteristics: Dug unused water-table well, depth 48 feet, diameter 60 inches.
Period of record: October 1946 to current year.
Extremes for period of record: Highest water level measured, 27.76 feet, July 3, 1972;
Lowest water level measured, 46.88 feet, September 10, 1966.

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
Oct 24, 1946	39.53	Jan 06, 1950	40.93	Sep 17, 1952	32.53	Jul 06, 1954	38.73
Dec 11	39.46	Feb 03	42.33	Oct 09	33.07	30	39.08
26	40.74	Mar 03	44.15	20	33.92	Aug 03	38.93
Jan 10, 1947	42.53	31	39.37	Nov 13	34.27	Sep 15	39.60
Mar 15	45.10	May 04	38.10	14	34.19	29	40.53
Apr 09	43.02	Jun 07	37.32	25	34.81	Oct 04	40.81
12	45.47	12	37.54	Dec 03	34.64	30	40.40
May 06	43.22	Aug 08	37.78	16	34.95	Nov 23	42.42
31	43.86	Sep 08	37.83	29	34.88	Dec 06	41.33
Jul 14	42.60	27	38.33	Jan 20, 1953	34.39	30	42.87
Aug 11	43.19	Oct 06	38.57	Feb 09	33.55	Jan 04, 1955	41.89
Sep 12	43.30	27	39.18	11	33.27	Feb 03	42.71
Oct 06	44.64	Nov 03	39.88	23	32.84	09	42.90
Nov 18	44.99	Dec 05	37.50	Mar 09	32.83	Mar 02	44.09
Feb 16, 1948	45.94	Feb 12, 1951	37.26	Apr 13	31.31	24	45.03
Mar 24	45.22	Mar 06	36.84	20	31.16	Apr 04	44.66
May 03	43.50	21	35.18	May 06	30.85	May 04	43.58
Jun 11	41.10	Apr 06	36.39	Jun 08	31.43	Jun 01	42.94
Jul 06	41.29	May 09	35.50	12	31.24	27	43.30
Sep 07	39.60	29	35.29	Jul 06	32.01	Jul 14	43.09
Oct 04	41.25	Jun 08	35.36	20	32.59	Aug 08	43.00
25	40.64	Jul 11	35.10	Aug 13	33.34	29	42.90
Feb 11, 1949	39.90	Aug 02	34.55	Sep 04	34.32	Sep 17	42.12
Mar 01	37.93	Sep 07	35.35	14	35.00	Oct 07	41.71
Apr 08	36.55	Oct 04	36.14	Oct 08	35.65	12	41.61
May 23	34.00	Nov 08	37.17	Nov 05	36.64	Nov 04	40.78
Jun 03	33.97	Dec 07	36.36	09	36.96	25	40.68
10	34.32	Jan 04, 1952	38.80	13	36.81	Dec 01	40.52
Jul 11	35.28	10	38.73	Dec 08	37.59	30	40.43
13	34.36	Feb 01	38.98	29	38.81	Feb 01, 1956	41.05
Aug 04	36.12	Mar 14	37.44	Jan 07, 1954	38.35	Mar 01	40.72
19	35.33	Apr 03	37.33	29	38.43	30	40.73
Sep 07	35.83	17	36.19	Feb 03	38.27	May 01	39.78
23	36.30	May 09	34.93	Mar 09	38.70	03	39.90
Oct 11	36.69	Jun 13	30.63	Apr 01	38.70	Jun 07	39.19
24	38.62	Jul 05	30.28	20	38.79	Aug 05	39.37
Nov 04	38.46	22	30.46	May 03	38.45	Sep 10	40.37
Dec 01	41.13	Aug 07	30.88	Jun 04	38.37	21	40.41
09	38.96	15	31.12	21	38.15	Oct 01	40.68

[1] Recently pumped.

Table 3.—Periodic water levels measured in observation wells in Howard County—Continued

Well number: HO Bd 1 (continued)

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
Oct 26, 1956	40.00	Aug 01, 1962	37.09	Nov 13, 1968	40.80	Sep 11, 1978	33.36
Nov 28	41.65	10	37.11	Dec 18	41.05	Oct 31	35.25
Jan 04, 1957	42.32	Sep 06	37.84	30	41.25	Dec 05	36.28
Feb 06	42.55	24	38.26	Jan 31, 1969	41.31	Jan 08, 1979	37.02
Mar 22	42.20	Oct 07	38.51	Mar 14	41.61	Mar 14	34.26
Apr 01	41.61	Nov 08	39.47	Apr 25	41.66	Apr 24	32.43
Jun 05	40.10	09	39.42	Jun 06	41.50	Jun 19	32.15
Jul 12	39.22	Dec 05	39.83	Jul 17	42.27	20	32.06
25	39.57	14	40.04	Aug 21	41.60	Jul 20	31.50
Aug 16	39.82	Jan 07, 1963	40.34	Sep 25	42.25	Aug 28	32.51
Oct 16	41.59	Feb 01	39.85	Nov 06	42.14	Oct 01	30.84
Nov 07	41.74	07	40.46	Dec 18	42.86	Nov 19	28.22
Jan 02, 1958	44.25	Mar 08	40.72	Jan 05, 1970	42.95	Dec 17	29.07
20	43.63	Apr 01	40.71	27	42.54	Jan 02, 1980	29.70
Feb 05	41.84	23	41.25	Mar 11	42.06	30	31.14
13	41.33	May 08	41.03	Apr 22	41.97	Mar 04	32.19
Mar 31	40.05	Jun 02	40.64	Jun 10	39.23	Apr 24	31.95
Apr 14	39.30	06	40.43	Jul 16	38.45	Jun 10	30.81
24	38.28	Jul 01	42.71	Aug 26	40.02	Jul 21	32.00
May 27	34.67	22	41.38	Oct 07	41.49	Aug 25	33.73
28	34.80	31	41.09	Nov 19	40.57	Oct 09	35.41
Jun 20	33.74	Aug 26	41.69	Dec 17	40.85	Nov 21	36.89
Aug 06	34.76	Oct 01	42.10	Jan 28, 1971	41.24	Dec 16	37.73
12	34.69	11	42.06	Mar 09	40.83	Jan 05, 1981	38.41
Oct 07	36.21	Nov 06	42.13	Apr 15	39.98	21	38.80
Nov 03	36.64	14	42.54	May 18	39.25	Mar 09	39.96
05	36.97	Dec 13	42.90	Jun 23	38.63	Apr 20	40.50
Dec 23	38.50	17	42.99	Aug 12	38.12	Jun 05	40.80
Jan 07, 1959	38.91	Jan 21, 1964	43.05	Sep 23	37.72	Jul 22	40.18
Feb 02	39.70	24	43.02	Oct 18	37.02	Aug 24	40.20
Mar 26	40.72	Feb 17	42.49	Dec 03	34.99	Oct 16	40.91
31	40.23	28	42.19	Jan 03, 1972	33.80	Nov 19	41.33
May 13	40.49	Mar 06	42.08	Feb 29	32.80	Dec 16	41.66
Jun 12	41.82	Apr 08	40.38	Apr 11	30.98	Jan 29, 1982	42.14
15	40.99	16	40.87	May 22	29.08	Mar 04	42.07
Aug 04	41.07	30	39.80	Jul 03	27.76	Apr 16	40.84
Sep 16	41.84	May 15	39.25	Oct 06	30.08	May 14	39.93
25	42.06	Jun 02	38.75	Nov 02	31.50	Jul 12	38.49
Oct 22	42.02	26	37.85	Dec 12	33.41	Oct 01	39.05
Jan 04, 1960	43.63	30	37.56	Jan 02, 1973	33.27	Nov 03	39.96
12	44.26	Aug 05	38.63	29	31.10	Dec 06	40.77
Feb 25	42.95	19	37.90	Feb 27	30.05	Jan 04, 1983	41.38
Mar 25	43.25	31	39.05	Apr 09	29.40	Feb 02	41.63
Apr 13	43.73	Sep 29	39.29	May 25	27.91	Mar 04	41.93
May 18	40.97	Oct 02	39.10	Jul 03	28.60	Apr 06	40.69
Jun 15	39.81	Nov 04	40.48	Aug 21	30.44	May 06	38.02
29	39.45	10	40.20	Oct 05	32.56	Jun 01	34.05
Jul 17	39.20	Dec 07	40.90	Nov 20	34.57	Jul 07	32.36
Aug 01	39.21	14	41.02	Dec 20	35.40	Aug 01	31.95
16	40.55	Jan 05, 1965	41.62	Jan 24, 1974	36.14	Sep 01	32.83
Sep 07	39.35	12	41.80	Mar 01	35.68	Oct 06	34.43
22	38.50	Feb 01	41.87	May 03	35.15	Nov 10	35.28
Oct 06	39.49	Mar 10	41.69	28	34.86	Dec 09	36.57
Nov 01	39.29	Apr 15	40.94	Jul 11	35.07	27	36.60
07	39.98	May 03	40.05	Aug 20	36.18	Feb 01, 1984	35.36
Dec 04	40.40	Jun 22	39.29	Sep 23	37.32	Mar 02	34.23
19	39.49	29	38.95	Nov 14	38.17	Apr 02	33.13
Jan 04, 1961	40.88	Aug 02	38.93	Dec 06	38.69	May 02	30.50
28	41.40	Sep 03	39.73	Jan 02, 1975	39.11	Jun 06	29.47
Feb 02	41.61	30	40.35	Feb 28	38.42	Jul 02	30.47
Mar 01	40.90	Nov 03	44.49	Apr 07	37.13	31	32.63
09	40.39	Dec 06	41.86	Jun 17	34.18	Aug 31	31.71
Apr 04	38.81	Jan 03, 1966	42.58	Aug 08	33.97	Oct 08	33.24
18	40.80	Feb 02	42.72	Sep 12	33.65	Nov 05	34.05
May 03	37.04	Mar 03	44.48	29	34.03	Dec 05	35.32
25	35.74	Apr 01	44.58	Oct 29	30.77	Jan 08, 1985	36.14
Jun 05	35.39	May 02	44.60	Dec 04	30.44	Feb 06	36.60
26	34.69	Jun 08	46.51	29	31.32	Mar 05	37.14
Jul 02	34.91	Jul 21	45.60	Feb 20, 1976	31.31	Apr 02	37.24
Aug 02	35.30	Sep 10	46.88	Mar 30	31.62	May 07	37.73
14	35.61	Oct 13	45.25	May 11	33.12	Jun 03	37.93
Sep 05	36.01	19	45.16	Jun 27	33.37	Jul 03	37.96
26	36.24	Dec 28	44.48	Aug 11	34.81	Aug 07	38.31
Oct 08	36.95	Feb 03, 1967	43.62	Oct 14	36.28	Sep 05	38.74
23	37.42	Mar 14	42.43	Nov 30	36.81	Oct 09	39.39
29	37.58	Apr 25	40.78	Dec 28	37.11	Nov 07	39.89
Dec 02	38.46	Jun 02	39.30	Feb 10, 1977	38.03	Dec 02	40.21
07	38.53	20	38.80	Mar 31	38.74	Jan 06, 1986	40.22
Jan 04, 1962	39.37	Aug 08	38.80	May 11	38.19	Feb 04	40.40
15	38.36	31	39.08	Jun 17	37.09	Mar 04	40.02
Feb 07	40.06	Sep 14	39.19	Jul 19	37.52	Apr 02	38.77
14	39.91	Oct 26	39.63	Sep 02	38.79	May 01	37.69
Mar 05	40.22	Dec 11	40.34	Oct 18	39.54	Jun 03	37.12
08	40.38	30	40.70	Nov 15	39.91	Jul 03	37.17
Apr 02	39.42	Jan 10, 1968	40.70	Jan 03, 1978	39.33	29	37.85
25	37.96	Feb 20	40.12	Feb 01	38.02	Sep 18	39.55
May 01	37.65	Apr 02	40.20	27	35.63	Oct 10	40.26
18	36.96	May 22	39.88	Mar 27	34.23	Dec 17	41.58
Jun 06	36.39	Jun 28	39.05	May 08	33.07	Jan 08, 1987	41.66
29	36.33	Aug 14	38.96	Jun 19	31.82	Feb 03	41.24
Jul 05	36.25	Sep 25	39.70	Aug 01	32.52	Mar 03	41.54

Table 3.—Periodic water levels measured in observation wells in Howard County—Continued

Well number: HO Bd 1 (continued)

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
Apr 01, 1987	39.59	Jan 07, 1988	39.98	Nov 08, 1988	37.03	Jul 12, 1989	32.55
May 08	37.73	Feb 04	39.71	Dec 06	38.78	Aug 08	31.64
Jun 03	36.95	Mar 03	39.20	27	39.26	Sep 06	32.07
Jul 09	36.64	Apr 14	38.02	Jan 05, 1989	39.45	Oct 04	33.14
Aug 06	37.02	Jun 02	37.06	Feb 09	40.06	Nov 02	34.13
Sep 10	37.88	Jul 08	35.49	Mar 14	40.11	Dec 11	35.06
Oct 05	39.04	Aug 03	35.30	Apr 11	39.40	Jan 04, 1990	35.54
Nov 03	39.05	Sep 06	36.09	May 11	37.91	Feb 06	36.32
Dec 02	39.69	Oct 06	37.10	Jun 14	34.96	Mar 08	35.87
						Apr 06	35.34

Well number: HO Bd 141
Owner: Herman Taylor.
Geologic unit: Loch Raven Schist.
Altitude: 615 feet.
Well characteristics: Drilled unused water-table well, depth 90 feet, diameter 6 inches.
Period of record: June 1988 to March 1989.
Extremes for period of record: Highest water level measured, 41.08 feet, August 3, 1988; Lowest water level measured, 44.85 feet, January 2, 1989.

Date	Water Level	Date	Water Level	Date	Water Level
Jun 29, 1988	41.33	Sep 28, 1988	41.97	Jan 02, 1989	44.85
Aug 03	41.08	Nov 03	42.70	Feb 01	44.10
31	41.46	Dec 02	43.21	Mar 01	44.23

Well number: HO Bd 151
Owner: Austin Horman.
Geologic unit: Loch Raven Schist.
Altitude: 620 feet.
Well characteristics: Drilled unused water-table well, depth 500 feet, diameter 6 inches.
Period of record: August 1988 to March 1990.
Extremes for period of record: Highest water level measured, 47.42 feet, August 30, 1989; Lowest water level measured, 49.79 feet, May 4, 1989.

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
Aug 19, 1988	48.60	Feb 01, 1989	49.53	Jul 26, 1989	47.86	Dec 28, 1989	48.95
31	48.66	Mar 01	49.61	Aug 01	47.79	Jan 30, 1990	49.21
Sep 28	48.93	Apr 06	49.76	30	47.42	Mar 01	49.28
Nov 03	49.18	May 04	49.79	Sep 29	47.74	28	49.30
Dec 02	49.30	31	49.50	Oct 30	48.28		
Jan 02, 1989	49.38	Jun 30	48.84	Nov 30	48.64		

Well number: HO Bd 171
Owner: Raymond Sanetrik.
Geologic unit: Loch Raven Schist.
Altitude: 510 feet.
Well characteristics: Drilled unused water-table well, depth 150 feet, diameter 6 inches.
Remarks: Well may be shallower due to caving.
Period of record: November 1988 to April 1990.
Extremes for period of record: Highest water level measured, 21.45 feet, August 2, 1989; Lowest water level measured, 29.47 feet, January 2, 1989.

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
Nov 03, 1988	27.92	Apr 06, 1989	25.72	Sep 01, 1989	22.97	Jan 31, 1990	23.17
Dec 02	28.12	May 04	24.91	28	23.46	Mar 02	22.50
Jan 02, 1989	29.47	31	22.73	Nov 02	23.17	Apr 02	22.53
Feb 01	27.84	Jul 03	21.62	Dec 01	23.54		
Mar 01	27.31	Aug 02	21.45	Jan 02, 1990	23.72		

Table 3.—Periodic water levels measured in observation wells in Howard County—Continued

Well number: HO Bd 200
Owner: Chutiporn Malayaman.
Geologic unit: Baltimore Gneiss.
Altitude: 455 feet.
Well characteristics: Drilled unused water-table well, depth 400 feet, diameter 6 inches.
Period of record: September 1988 to April 1990.
Extremes for period of record: Highest water level measured, 19.94 feet, September 1, 1989;
Lowest water level measured, 25.76 feet, March 1, 1989.

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
Sep 22, 1988	22.25	Feb 01, 1989	24.89	Jul 03, 1989	20.93	Dec 01, 1989	22.38
28	22.40	Mar 01	25.76	Aug 02	20.05	Jan 02, 1990	22.40
Nov 03	24.05	Apr 06	25.40	Sep 01	19.94	31	21.70
Dec 02	25.02	May 04	23.45	28	21.05	Mar 02	20.85
Jan 02, 1989	24.69	31	22.41	Nov 02	21.67	Apr 02	20.63

Well number: HO Be 74
Owner: Charles Richards (formerly).
Geologic unit: Baltimore Gneiss.
Altitude: 405 feet.
Well characteristics: Drilled unused water-table well, depth 583 feet, diameter 6 inches.
Period of record: October 1988 to March 1990.
Extremes for period of record: Highest water level measured, 37.67 feet, August 1, 1989;
Lowest water level measured, 67.33 feet, March 2, 1989.

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
Oct 19, 1988	40.48	Mar 02, 1989	67.33	Aug 01, 1989	37.67	Dec 28, 1989	40.29
Nov 03	40.74	Apr 06	58.74	28	38.16	Jan 30, 1990	40.30
30	41.14	May 04	41.03	Sep 29	38.87	Mar 01	40.25
Dec 30	55.76	30	39.84	Oct 30	39.61	28	39.99
Jan 30, 1989	62.51	Jun 30	38.01	Nov 30	40.15		

Well number: HO Be 103
Owner: Fred Allnutt Inc.
Geologic unit: Baltimore Gneiss.
Altitude: 477 feet.
Well characteristics: Drilled unused water-table well, depth 125 feet, diameter 6 inches.
Period of record: November 1988 to April 1990.
Extremes for period of record: Highest water level measured, 20.56 feet, November 2, 1989;
Lowest water level measured, 25.45 feet, January 2, 1989.

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
Nov 03, 1988	24.05	Apr 06, 1989	24.92	Sep 01, 1989	20.74	Jan 31, 1990	21.18
Dec 02	24.44	May 03	25.42	28	20.57	Mar 02	20.94
Jan 02, 1989	25.45	31	23.37	Nov 02	20.56	Apr 02	20.80
Feb 01	25.18	Jul 03	22.10	Dec 01	20.69		
Mar 01	25.17	Aug 02	21.20	Jan 02, 1990	20.95		

Well number: HO Bf 38
Owner: Patapsco Valley State Park.
Geologic unit: Cockeysville Marble.
Altitude: 275 feet.
Well characteristics: Drilled unused water-table well, depth 202 feet, diameter 6 inches.
Remarks: Equipped with water-level recorder June 1989 to April 1990; see table 4.
Period of record: June 1988 to April 1990.
Extremes for period of record: Highest water level measured, 11.22 feet, August 1, 1989;
Lowest water level measured, 14.80 feet, January 30, 1989.

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
Jun 29, 1988	12.63	Jan 30, 1989	14.80	Jul 24, 1989	11.40	Dec 28, 1989	13.23
Aug 01	13.60	Mar 02	14.67	24	11.96	Jan 30, 1990	13.28
31	14.00	Apr 03	14.38	Aug 01	11.22	Mar 01	13.07
Sep 29	14.26	May 03	14.12	30	11.55	28	12.84
Oct 31	14.47	30	11.47	Sep 29	12.19	Apr 27	12.53
Nov 30	14.46	Jun 12	11.24	Oct 30	12.67		
Dec 30	14.75	30	11.40	Nov 30	13.04		

Table 3.—Periodic water levels measured in observation wells in Howard County—Continued

Well number: HO Bf 51
Owner: Bolanowski.
Geologic unit: Baltimore Gneiss.
Altitude: 465 feet.
Well characteristics: Drilled unused water-table well, depth 150 feet, diameter 6 inches.
Remarks: Equipped with water-level recorder August 1988 to August 1989; see table 4.
Period of record: June 1988 to March 1990.
Extremes for period of record: Highest water level measured, 22.13 feet, August 1, 1989;
Lowest water level measured, 31.33 feet, December 30, 1988.

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
Jun 29, 1988	26.47	Dec 30, 1988	31.33	Jun 30, 1989	22.23	Dec 28, 1989	27.67
Aug 01	27.83	Jan 30, 1989	30.48	Aug 01	22.13	Jan 30, 1990	27.35
31	29.01	Mar 02	29.31	28	23.97	Mar 01	26.64
Sep 29	29.85	Apr 03	27.19	Sep 29	25.87	28	27.17
Oct 31	30.85	May 03	26.35	Oct 30	26.22		
Nov 30	31.05	30	22.51	Nov 30	26.92		

Well number: HO Bf 67
Owner: Patapsco Valley State Park.
Geologic unit: Mount Washington Amphibolite.
Altitude: 425 feet.
Well characteristics: Drilled unused water-table well, depth 161 feet, diameter 6 inches.
Remarks: Equipped with water-level recorder April 1989 to April 1990; see table 4.
Period of record: October 1988 to April 1990.
Extremes for period of record: Highest water level measured, 12.60 feet, January 30, 1990;
Lowest water level measured, 25.19 feet, November 3, 1988.

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
Oct 05, 1988	24.27	Apr 06, 1989	16.55	Aug 30, 1989	16.90	Jan 30, 1990	12.60
Nov 03	25.19	May 03	16.02	Sep 29	17.86	Mar 01	13.33
Dec 02	24.75	30	13.02	Oct 30	17.17	28	13.12
Feb 01, 1989	23.41	Jun 30	14.03	Nov 30	17.02	Apr 27	21.62
Mar 01	20.88	Aug 01	13.18	Dec 28	18.51		

Well number: HO Bf 69
Owner: G W Eklof Jr.
Geologic unit: Mount Washington Amphibolite.
Altitude: 365 feet.
Well characteristics: Dug unused water-table well, depth 40.5 feet, diameter 36 inches.
Period of record: November 1988 to March 1989.
Extremes for period of record: Highest water level measured, 30.80 feet, March 1, 1989;
Lowest water level measured, 32.14 feet, January 3, 1989.

Date	Water Level	Date	Water Level	Date	Water Level
Nov 03, 1988	31.48	Jan 03, 1989	32.14	Mar 01, 1989	30.80
Dec 02	31.66	Feb 01	31.55		

Well number: HO Bf 78
Owner: Mary Wurtzer
Geologic unit: Mount Washington Amphibolite.
Altitude: 400 feet.
Well characteristics: Drilled unused water-table well, depth 122 feet, diameter 6 inches.
Period of record: October 1988 to April 1990.
Extremes for period of record: Highest water level measured, 30.70 feet, August 2, 1989;
Lowest water level measured, 40.24 feet, October 5, 1988.

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
Oct 05, 1988	40.24	Mar 01, 1989	37.51	Aug 02, 1989	30.70	Dec 28, 1989	33.86
Nov 03	37.68	Apr 07	36.23	Sep 01	31.43	Jan 31, 1990	33.77
Dec 02	38.03	May 04	35.42	28	32.47	Mar 02	33.00
Jan 02, 1989	38.40	30	33.26	Nov 02	33.00	Apr 02	32.93
Feb 01	38.06	Jul 03	31.22	Dec 01	33.40		

Table 3.—Periodic water levels measured in observation wells in Howard County—Continued

Well number: HO Cc 17
Owner: Richard Ryan.
Geologic unit: Hollofield Layered Ultramafite.
Altitude: 520 feet.
Well characteristics: Drilled unused water-table well, depth 175 feet, diameter 6 inches.
Period of record: November 1987 to April 1990.
Extremes for period of record: Highest water level measured, 21.19 feet, July 3, 1989;
Lowest water level measured, 28.19 feet, January 2, 1989.

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
Nov 30, 1987	26.80	Aug 03, 1988	24.37	Apr 07, 1989	25.55	Dec 01, 1989	24.65
Jan 06, 1988	26.02	31	25.27	May 04	24.12	Jan 02, 1990	25.30
Feb 05	25.34	Sep 28	26.48	31	22.60	31	25.03
Mar 02	24.55	Nov 03	27.25	Jul 03	21.19	Mar 02	23.81
31	24.12	Dec 02	27.84	Aug 02	21.21	Apr 02	23.47
May 02	23.93	Jan 02, 1989	28.19	Sep 01	22.25		
Jun 02	23.38	Feb 01	27.70	28	23.52		
Jul 01	23.27	Mar 01	26.87	Nov 02	24.40		

Well number: HO Cc 37
Owner: Robert Oler.
Geologic unit: Loch Raven Schist.
Altitude: 470 feet.
Well characteristics: Drilled unused water-table well, depth 285 feet, diameter 6 inches.
Remarks: Equipped with water-level recorder December 1987 to January 1989; see table 4.
Water levels affected by pumpage from nearby domestic well.
Period of record: December 1987 to January 1989.
Extremes for period of record: Highest water level measured, 45.91 feet, June 2, 1988;
Lowest water level measured, 48.07 feet, December 7, 1987.

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
Dec 01, 1987	47.97	Mar 07, 1988	47.18	Jul 01, 1988	46.38	Oct 31, 1988	47.52
07	48.07	31	46.92	Aug 01	46.93	Nov 30	47.30
Jan 06, 1988	47.89	May 02	46.71	31	46.54	Dec 30	47.75
Feb 05	47.74	Jun 02	45.91	Sep 29	46.98		

Well number: HO Cd 19
Owner: U.S. Geological Survey.
Geologic unit: Loch Raven Schist.
Altitude: 473.53 feet.
Well characteristics: Drilled unused water-table well, depth 150 feet, diameter 6 inches.
Period of record: August 1986 to August 1987.
Extremes for period of record: Highest water level measured, 55.08 feet, June 11, 1987;
Lowest water level measured, 59.05 feet, July 8, 1987.

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
Aug 26, 1986	57.43	Jul 08, 1987	59.05	Aug 31, 1987	58.94	Jun 11, 1987	55.08
Aug 06, 1987	55.54						

Well number: HO Cd 20
Owner: U.S. Geological Survey.
Geologic unit: Loch Raven Schist.
Altitude: 425.70 feet.
Well characteristics: Drilled unused water-table well, depth 96 feet, diameter 6 inches.
Remarks: Equipped with water-level recorder August 1986 to August 1988; see table 4.
Period of record: August 1986 to current year.
Extremes for period of record: Highest water level measured, 4.61 feet, June 29, 1989;
Lowest water levels measured, 9.68 feet, August 26, 1986, March 9, 1987.

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
Aug 26, 1986	9.68	Oct 08, 1987	8.63	Aug 23, 1988	7.76	Jun 01, 1989	5.43
Dec 30	9.06	Nov 19	8.41	Sep 14	8.05	29	4.61
Mar 09, 1987	9.68	20	8.32	Oct 19	8.52	Sep 14	5.35
Apr 09	6.14	Jan 21, 1988	7.28	Nov 23	8.61	Nov 06	5.27
May 13	7.02	Mar 17	6.89	Dec 22	8.89	Dec 14	5.68
Jun 11	7.06	Apr 14	6.68	Jan 19, 1989	8.31	Jan 10, 1990	5.56
Jul 08	7.32	Jun 09	6.13	Feb 16	8.61		
Aug 05	7.85	Jul 06	6.80	Apr 05	7.34		
06	8.41	Aug 18	7.68	May 04	7.22		

Table 3.—Periodic water levels measured in observation wells in Howard County—Continued

Well number: HO Cd 21
Owner: U.S. Geological Survey.
Geologic unit: Loch Raven Schist.
Altitude: 434.18 feet.
Well characteristics: Drilled unused water-table well, depth 96 feet, diameter 6 inches.
Remarks: Equipped with water-level recorder October 1986 to February 1988; see table 4.
Period of record: August 1986 to current year.
Extremes for period of record: Highest water level measured, 12.05 feet, June 29, 1989;
Lowest water level measured, 17.92 feet, October 8, 1986.

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
Aug 26, 1986	17.24	Jul 08, 1987	14.85	Apr 14, 1988	14.18	Feb 16, 1989	16.22
Oct 01	17.91	Aug 05	15.41	27	14.13	Apr 05	14.93
08	17.92	31	15.96	Jun 09	13.62	May 04	14.84
Dec 30	16.78	Oct 08	16.17	Jul 06	14.20	Jun 01	12.97
Mar 05, 1987	15.42	09	16.26	Aug 23	15.09	29	12.05
09	17.24	Nov 19	16.01	Sep 14	15.53	Sep 14	12.74
Apr 09	14.79	20	15.95	Oct 19	16.08	Nov 06	12.66
May 12	14.43	Jan 21, 1988	12.40	Nov 23	16.17	Dec 14	13.08
13	14.64	Feb 11	14.71	Dec 22	15.98		
Jun 11	14.65	Mar 17	14.41	Jan 19, 1989	15.95		

Well number: HO Cd 25
Owner: U.S. Geological Survey.
Geologic unit: Loch Raven Schist.
Altitude: 470.90 feet.
Well characteristics: Drilled unused water-table well, depth 97 feet, diameter 6 inches.
Period of record: August 1986 to current year.
Extremes for period of record: Highest water level measured, 36.96 feet, September 14, 1989;
Lowest water level measured, 47.21 feet, October 29, 1986.

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
Aug 26, 1986	44.90	Jul 08, 1987	40.10	Aug 23, 1988	39.07	May 04, 1989	43.95
Oct 09	46.61	Aug 06	39.94	Sep 14	39.48	Jun 01	43.03
28	45.73	31	40.13	Oct 19	40.39	01	43.03
29	47.21	Oct 08	40.45	Nov 23	41.47	29	41.28
Nov 04	45.72	Nov 19	41.53	Dec 22	42.33	30	41.28
10	45.94	Jan 21, 1988	41.56	Jan 19, 1989	42.78	Sep 14	36.96
Dec 30	46.37	Mar 17	40.69	Feb 16	43.52	Nov 06	37.99
Mar 09, 1987	44.90	Apr 14	39.72	Apr 05	43.92	Dec 14	39.18
May 13	41.98	Jun 10	38.97	05	43.92	Jan 11, 1990	41.22
Jun 11	40.88	Jul 06	38.78	May 04	43.95		

Well number: HO Cd 26
Owner: U.S. Geological Survey.
Geologic unit: Loch Raven Schist.
Altitude: 469.94 feet.
Well characteristics: Drilled unused water-table well, depth 143 feet, diameter 6 inches.
Remarks: Equipped with water-level recorder October 1986 to August 1988; see table 4.
Period of record: August 1986 to current year.
Extremes for period of record: Highest water level measured, 42.41 feet, September 14, 1989;
Lowest water level measured, 51.77 feet, December 3, 1986.

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
Aug 26, 1986	50.27	Aug 05, 1987	45.63	Jul 06, 1988	44.54	May 04, 1989	48.69
Oct 09	51.00	31	46.00	Aug 18	44.70	Jun 01	47.43
Nov 10	51.38	Oct 08	46.54	Sep 14	45.30	29	45.24
Dec 03	51.77	Nov 19	47.24	Oct 19	46.26	Sep 14	42.41
Mar 05, 1987	50.59	Jan 21, 1988	48.70	Nov 23	47.09	Nov 06	43.67
09	50.27	22	47.70	Dec 22	47.85	Dec 14	44.48
May 13	47.06	Mar 17	46.61	Jan 19, 1989	48.35	Jan 11, 1990	44.98
Jun 11	46.02	Apr 14	45.79	Feb 16	48.73		
Jul 08	45.64	Jun 09	44.66	Apr 05	48.94		

Table 3.—Periodic water levels measured in observation wells in Howard County—Continued

Well number: HO Cd 28
Owner: U.S. Geological Survey.
Geologic unit: Loch Raven Schist.
Altitude: 453.11 feet.
Well characteristics: Drilled unused water-table well, depth 46 feet, diameter 3.5 inches.
Remarks: Equipped with water-level recorder October 1986 to current year; see table 4.
Period of record: October 1986 to current year.
Extremes for period of record: Highest water level measured, 23.99 feet, September 14, 1989;
Lowest water level measured, 35.11 feet, December 4, 1986.

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
Oct 08, 1986	34.38	Jun 11, 1987	26.56	Apr 13, 1988	26.15	Jan 19, 1989	29.73
Nov 12	31.78	Jul 08	26.49	14	26.16	Apr 05	29.64
Dec 03	31.85	Aug 05	26.60	Jun 09	25.55	May 03	28.95
04	35.11	31	27.04	Jul 06	25.53	Sep 14	23.99
30	31.76	Oct 08	27.81	Aug 23	26.42	Nov 02	25.16
Mar 05, 1987	32.23	09	27.89	Sep 09	26.65	Dec 14	25.99
09	30.44	Nov 19	28.49	14	26.83	Jan 11, 1990	26.42
Apr 09	28.19	20	28.30	Oct 19	27.74	19	26.69
May 12	26.99	Jan 21, 1988	27.78	Nov 23	28.62		
13	27.10	Mar 17	24.53	Dec 22	29.32		

Well number: HO Cd 29
Owner: U.S. Geological Survey.
Geologic unit: Loch Raven Schist.
Altitude: 470.34 feet.
Well characteristics: Drilled unused water-table well, depth 68 feet, diameter 3.5 inches.
Remarks: Equipped with water-level recorder October 1986 to current year; see table 4.
Period of record: October 1986 to current year.
Extremes for period of record: Highest water level measured, 40.52 feet, September 14, 1989;
Lowest water level measured, 49.60 feet, December 30, 1986.

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
Oct 09, 1986	48.61	Jul 08, 1987	43.53	Jun 09, 1988	42.80	May 03, 1989	47.16
Nov 04	48.91	Aug 05	43.55	Jul 06	42.69	Jun 29	44.08
10	49.06	31	44.00	Aug 18	42.79	Sep 14	40.52
Dec 02	49.29	Oct 08	44.65	Sep 09	43.32	Nov 02	41.96
30	49.60	09	44.82	14	43.49	Dec 14	43.03
Mar 05, 1987	48.74	Nov 19	45.39	Oct 19	44.35	Jan 11, 1990	43.52
Apr 09	46.95	Jan 21, 1988	45.57	Nov 23	45.18	18	43.64
May 12	44.95	Feb 11	45.45	Dec 22	45.97	19	43.85
13	45.05	Mar 17	44.58	Jan 19, 1989	46.43		
Jun 11	43.82	Apr 14	43.80	Apr 05	47.43		

Well number: HO Cd 78
Owner: U.S. Geological Survey.
Geologic unit: Loch Raven Schist.
Altitude: 425.58 feet.
Well characteristics: Drilled unused water-table well, depth 19 feet, diameter 3.5 inches.
Remarks: Equipped with water-level recorder February 1988 to current year; see table 4.
Period of record: December 1987 to current year.
Extremes for period of record: Highest water level measured, 7.59 feet, January 22, 1988;
Lowest water level measured, 9.84 feet, December 22, 1988.

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
Dec 02, 1987	8.26	Feb 11, 1988	8.17	Aug 23, 1988	9.26	Apr 05, 1989	8.38
03	8.34	Mar 17	8.24	Sep 09	9.39	May 03	8.61
03	8.31	Apr 13	8.10	14	9.49	Sep 14	8.25
Jan 22, 1988	7.59	Apr 14	8.15	Oct 19	9.79	Nov 02	8.04
22	7.62	27	8.26	Nov 23	9.60	Dec 14	8.41
22	7.63	Jun 09	7.99	Dec 22	9.84	Jan 10, 1990	8.05
27	7.62	Jul 06	8.55	Jan 19, 1989	8.44	19	8.34

Well number: HO Cd 79
Owner: U.S. Geological Survey
Geologic unit: Loch Raven Schist.
Altitude: 452.37 feet.
Well characteristics: Drilled unused water-table well, depth 53 feet, diameter 3.5 inches.
Period of record: January 1988 to current year.
Extremes for period of record: Highest water level measured, 23.32 feet, September 14, 1989;
Lowest water level measured, 29.68 feet, February 15, 1989.

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
Jan 22, 1988	27.63	Apr 14, 1988	25.89	Aug 23, 1988	26.09	Nov 23, 1988	28.44
27	27.63	Jun 09	25.28	Sep 14	26.69	Dec 22	29.11
Mar 17	25.56	Jul 06	25.21	Oct 19	27.59	Jan 19, 1989	29.49

Table 3.—Periodic water levels measured in observation wells in Howard County—Continued

Well number: HO Cd 79 (continued)

Date	Water Level	Date	Water Level	Date	Water Level
Feb 15, 1989	29.68	May 31, 1989	26.98	Nov 02, 1989	24.10
Apr 05	29.04	Jun 29	24.82	Dec 14	24.96
May 03	28.27	Sep 14	23.32	Jan 10, 1990	25.26

Well number: HO Cd 161
Owner: Richard Martin.
Geologic unit: Loch Raven Schist.
Altitude: 560 feet.
Well characteristics: Drilled unused water-table well, depth 300 feet, diameter 6 inches.
Period of record: December 1987 to April 1990.
Extremes for period of record: Highest water level measured, 19.80 feet, July 3, 1989;
Lowest water level measured, 24.57 feet, January 2, 1989.

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
Dec 22, 1987	23.88	Aug 03, 1988	22.65	Apr 07, 1989	23.15	Dec 01, 1989	22.24
Jan 06, 1988	23.89	31	23.10	May 04	22.90	Jan 02, 1990	22.35
Feb 05	24.14	Sep 28	23.60	31	21.29	31	22.02
Mar 02	22.83	Nov 03	24.09	Jul 03	19.80	Mar 02	22.28
31	22.61	Dec 02	24.14	Aug 02	19.96	Apr 02	22.09
May 02	22.56	Jan 02, 1989	24.57	Sep 01	20.79		
Jun 02	22.01	Feb 01	24.52	28	21.34		
Jul 01	22.31	Mar 01	24.11	Nov 02	21.85		

Well number: HO Cd 191
Owner: John McCarthy.
Geologic unit: Loch Raven Schist.
Altitude: 340 feet.
Well characteristics: Drilled unused water-table well, depth 505 feet, diameter 6 inches.
Remarks: Equipped with water-level recorder January 1989 to April 1990; see table 4.
Period of record: January 1988 to April 1990.
Extremes for period of record: Highest water level measured, 10.83 feet, June 2, 1988;
Lowest water level measured, 15.46 feet, January 2, 1989.

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
Jan 21, 1988	13.87	Aug 03, 1988	12.94	May 30, 1989	11.27	Nov 30, 1989	13.33
Feb 05	13.19	31	13.57	Jun 30	11.03	Dec 28	13.73
Mar 31	12.68	Sep 28	14.08	Aug 01	11.54	Jan 30, 1990	12.86
May 02	12.67	Nov 03	14.54	30	12.15	Mar 01	12.69
Jun 02	10.83	Dec 02	14.97	Sep 29	12.76	28	12.88
Jul 01	11.98	Jan 02, 1989	15.46	Oct 30	13.06	Apr 27	11.93

Well number: HO Cd 217
Owner: McCunn Association of Maryland.
Geologic unit: Baltimore Gneiss.
Altitude: 540 feet.
Well characteristics: Drilled unused water-table well, depth 205 feet, diameter 6 inches.
Period of record: January 1988 to April 1990.
Extremes for period of record: Highest water level measured, 31.32 feet, September 28, 1989;
Lowest water level measured, 35.99 feet, January 22, 1988.

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
Jan 22, 1988	35.99	Aug 03, 1988	33.34	Mar 01, 1989	35.44	Sep 28, 1989	31.32
Feb 05	34.70	31	33.03	Apr 07	35.67	Nov 02	31.61
Mar 02	34.37	Sep 28	33.58	May 04	35.39	Dec 01	31.95
31	34.06	Nov 03	33.95	31	34.93	Jan 02, 1990	32.35
May 02	33.73	Dec 02	34.34	Jul 03	33.46	31	32.60
Jun 02	33.38	Jan 02, 1989	34.98	Aug 02	32.01	Mar 02	32.57
Jul 01	33.10	Feb 01	35.24	Sep 01	31.45	Apr 02	32.43

Table 3.—Periodic water levels measured in observation wells in Howard County—Continued

Well number: HO Cd 270
Owner: Lee Hall.
Geologic unit: Baltimore Gneiss.
Altitude: 485 feet.
Well characteristics: Drilled unused water-table well, depth 213 feet, diameter 6 inches.
Period of record: February 1988 to March 1990.
Extremes for period of record: Highest water level measured, 12.91 feet, May 30, 1989;
Lowest water level measured, 19.15 feet, November 3, 1988.

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
Feb 18, 1988	14.35	Aug 31, 1988	18.40	Apr 03, 1989	14.33	Oct 30, 1989	14.25
Mar 02	14.67	Sep 28	18.62	May 03	14.20	Nov 30	14.46
31	14.74	Nov 03	19.15	30	12.91	Dec 28	15.37
May 02	15.20	Dec 02	17.17	Jun 30	13.07	Jan 30, 1990	13.58
Jun 02	14.31	Jan 02, 1989	17.51	Aug 01	13.40	Mar 01	13.87
Jul 01	16.16	Feb 01	16.33	Sep 01	15.16	28	14.15
Aug 03	17.40	Mar 02	15.39	29	14.84		

Well number: HO Cd 341
Owner: U.S. Geological Survey.
Geologic unit: Loch Raven Schist.
Altitude: 453 feet.
Well characteristics: Drilled unused water-table well, depth 30 feet, diameter 3.5 inches.
Remarks: Equipped with water-level recorder August 1988 to current year; see table 4.
Period of record: August 1988 to current year.
Extremes for period of record: Highest water level measured, 23.93 feet, November 2, 1989;
Lowest water levels measured, dry, January 19, 1989, April 5, 1989.

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
Aug 18, 1988	28.12	Oct 19, 1988	27.65	May 03, 1989	28.85	Dec 14, 1989	25.91
23	26.21	Nov 23	28.56	31	27.49	Jan 11, 1990	26.41
Sep 09	26.58	Jan 19, 1989	DRY	Sep 14	23.93		
14	26.74	Apr 05	DRY	Nov 02	25.07		

Well number: HO Cd 342
Owner: U.S. Geological Survey.
Geologic unit: Loch Raven Schist.
Altitude: 434.27 feet.
Well characteristics: Drilled unused water-table well, depth 25 feet, diameter 3.5 inches.
Remarks: Equipped with water-level recorder August 1988 to current year; see table 4.
Period of record: August 1988 to current year.
Extremes for period of record: Highest water level measured, 19.86 feet, September 14, 1989;
Lowest water level measured, 23.66 feet. August 18, 1988.

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
Aug 18, 1988	23.66	Oct 19, 1988	23.18	Apr 05, 1989	22.31	Dec 14, 1989	20.73
23	21.88	Nov 23	23.32	May 03	21.30	Jan 11, 1990	20.94
Sep 09	22.26	Dec 22	23.57	Sep 14	19.86	18	21.00
14	22.32	Jan 19, 1989	23.17	Nov 02	20.22	19	21.07

Well number: HO Ce 38
Owner: Johns Hopkins University Applied Physics Lab.
Geologic unit: Sykesville Formation, schist member.
Altitude: 430 feet.
Well characteristics: Drilled unused water-table well, depth 125 feet, diameter 6 inches.
Remarks: Equipped with water-level recorder December 1987 to April 1990; see table 4.
Period of record: May 1956 to current year.
Extremes for period of record: Highest water level measured, 25.84 feet, May 5, 1972;
Lowest water level measured, 36.87 feet, December 5, 1986.

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
May 01, 1956	31.38	Oct 02, 1957	33.98	May 07, 1959	33.88	Dec 05, 1960	32.74
Jun 04	30.71	Nov 07	34.76	Jun 01	33.81	Jan 04, 1961	33.13
Jul 09	30.93	Dec 02	35.15	Jul 02	33.91	Feb 01	33.55
Aug 06	31.75	Jan 02, 1958	35.54	Aug 03	34.20	Mar 01	33.30
Sep 10	32.50	Feb 05	34.89	31	34.42	Apr 04	30.92
Oct 01	32.96	Mar 03	34.24	Oct 02	34.73	May 03	29.37
16	33.27	31	33.38	Nov 02	34.97	Jun 05	28.23
Nov 05	33.67	May 06	29.51	Dec 03	35.27	Jul 05	28.49
Dec 03	34.08	Jun 02	27.77	Jan 04, 1960	35.49	Aug 02	28.79
Jan 02, 1957	34.53	Jul 01	27.81	Feb 01	35.50	Sep 05	29.36
Feb 11	34.66	Aug 04	28.60	Mar 14	34.87	Oct 05	30.06
Mar 13	34.09	Sep 02	29.53	Apr 04	34.09	30	30.50
Apr 01	33.36	Oct 02	30.49	May 02	32.79	Dec 07	31.35
May 02	31.94	Nov 05	31.30	Jun 02	31.40	Jan 04, 1962	31.98
Jun 03	31.20	Dec 05	31.91	Jul 01	31.06	Feb 07	32.29
Jul 08	31.49	Jan 06, 1959	32.70	Aug 01	31.49	Mar 05	32.10
24	31.98	Feb 02	33.24	Sep 07	32.10	Apr 02	29.96
Aug 15	32.55	Mar 02	33.54	Oct 03	32.25	May 01	28.01
Sep 13	33.47	30	33.83	Nov 01	32.18	Jun 06	27.72

Table 3.—Periodic water levels measured in observation wells in Howard County—Continued

Well number: HO Ce 38 (continued)

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
Jul 05, 1962	28.60	Dec 30, 1968	34.50	Aug 01, 1977	33.64	Nov 02, 1984	32.46
Aug 01	29.61	Jan 16, 1969	34.44	29	34.09	Dec 13	33.22
Sep 04	30.75	Feb 24	34.37	Oct 19	34.68	Jan 11, 1985	33.55
Oct 09	31.81	Apr 01	34.28	Nov 23	34.97	Feb 14	33.98
Nov 08	32.58	May 21	33.93	Jan 06, 1978	33.76	Mar 07	34.03
Dec 03	32.99	Jun 16	34.26	Mar 06	30.74	Apr 05	34.09
Jan 07, 1963	33.17	Jul 29	34.85	28	30.65	May 03	34.30
Feb 06	33.10	Sep 03	35.20	May 01	29.87	Jun 14	34.35
Mar 08	32.96	Oct 30	35.38	Jun 19	29.08	Jul 18	34.45
Apr 01	32.55	Dec 23	35.68	Jul 19	29.65	Aug 01	34.52
May 08	31.67	Jan 05, 1970	36.11	Aug 30	30.66	Sep 12	34.98
29	31.53	Feb 24	34.49	Oct 11	31.75	Oct 10	35.26
Jul 01	31.78	May 01	32.49	Nov 27	32.81	Nov 07	35.50
31	32.19	Jul 09	30.46	Jan 08, 1979	33.40	Dec 04	35.76
Sep 04	32.92	Sep 10	31.56	May 01	30.70	Jan 08, 1986	35.81
Oct 01	33.54	Oct 29	32.82	Jul 10	29.67	Feb 04	35.79
Nov 06	34.05	Dec 30	32.94	Aug 28	30.88	Mar 05	35.55
Dec 17	34.62	Mar 04, 1971	32.27	Oct 16	30.77	Apr 04	34.79
Jan 21, 1964	34.58	Apr 27	33.41	Nov 27	30.82	May 02	34.76
Feb 18	33.22	May 25	29.38	Dec 28	30.30	Jun 03	34.18
Mar 06	32.70	Aug 06	29.62	Jan 02, 1980	30.39	Jul 07	34.56
Apr 16	30.89	Oct 05	30.44	30	30.87	Aug 08	35.20
Jun 02	29.68	Dec 02	29.72	Mar 10	33.64	Sep 17	35.95
Jul 01	29.82	Jan 04, 1972	29.10	Apr 15	30.81	Oct 17	36.34
Aug 04	30.81	Mar 17	27.31	Jun 05	29.59	Nov 14	36.71
31	31.62	May 05	25.84	Jul 18	30.59	Dec 05	36.87
Oct 02	32.57	Jul 11	26.60	Aug 27	31.64	Jan 07, 1987	36.76
Nov 10	33.54	Aug 25	27.64	Oct 01	32.52	Feb 12	36.20
Dec 07	34.10	Oct 27	29.89	Nov 10	33.51	Mar 06	35.76
Jan 05, 1965	34.50	Dec 28	30.16	Dec 30	34.38	Apr 07	34.90
Feb 01	34.67	Feb 12, 1973	29.11	Jan 05, 1981	34.50	May 07	34.42
Mar 09	33.69	Mar 20	28.68	21	34.69	Jun 04	34.14
Apr 15	31.74	Apr 23	27.88	Mar 10	35.35	Jul 10	34.24
May 03	31.21	Jun 19	28.28	Apr 20	35.47	Aug 07	34.65
Jun 04	30.91	Jul 30	29.29	Jun 08	35.27	Sep 10	35.18
30	30.99	Sep 04	30.20	Jul 13	34.92	Oct 05	35.55
Aug 02	31.69	Oct 24	31.33	Aug 24	35.12	08	35.59
Sep 03	32.62	Nov 27	32.01	Oct 16	35.70	Nov 03	35.77
30	33.21	Jan 02, 1974	32.58	Nov 13	36.00	Dec 02	36.04
Nov 03	33.80	Feb 04	31.93	Dec 16	36.31	09	35.99
Dec 06	34.30	Mar 20	31.58	Jan 29, 1982	36.67	Jan 06, 1988	35.90
Jan 03, 1966	34.72	Apr 15	31.60	Mar 05	36.54	Feb 05	35.65
Feb 09	34.79	May 20	31.09	Apr 16	35.84	Mar 07	35.05
Mar 03	35.15	Jul 09	31.63	May 14	35.31	31	34.68
Apr 01	34.62	Aug 26	32.64	Jul 12	34.36	May 02	34.42
May 02	34.23	Oct 17	33.30	Aug 27	34.31	Jun 02	34.18
Jun 07	33.56	Nov 12	33.43	Oct 01	34.95	Jul 01	33.90
Jul 26	33.31	Dec 31	33.91	Nov 09	35.67	Aug 01	34.22
Sep 10	34.35	Jan 25, 1975	33.69	Dec 05	36.07	Sep 01	34.77
Oct 18	34.75	Mar 03	32.94	Jan 05, 1983	36.45	29	35.21
Dec 01	33.65	Apr 08	31.80	Feb 04	36.69	Oct 31	35.64
Jan 18, 1967	33.79	May 12	30.87	Mar 03	36.75	Nov 30	35.99
Mar 01	33.32	Jun 27	30.51	Apr 06	35.78	Dec 30	36.19
Apr 07	31.95	Aug 22	30.98	May 09	33.10	Jan 30, 1989	36.27
May 19	30.79	Oct 06	31.12	Jun 02	32.43	Mar 02	36.10
Jul 05	30.73	Nov 10	30.13	Jul 11	31.40	Apr 03	35.61
Aug 09	31.43	Dec 15	30.28	Aug 11	28.71	May 03	34.92
31	32.01	30	30.64	Sep 09	32.50	30	33.86
Sep 08	32.00	Jan 21, 1976	30.32	Oct 04	32.93	Jun 30	32.65
Oct 06	32.62	Mar 08	30.20	Nov 18	33.81	Aug 01	32.26
Nov 15	33.34	Apr 12	30.41	Jan 13, 1984	33.55	30	32.32
Jan 05, 1968	34.14	May 20	30.47	Feb 03	31.99	Sep 29	32.85
08	34.12	Jul 22	31.54	Mar 09	32.11	Oct 30	33.24
Mar 06	33.17	Aug 18	32.50	Apr 12	30.81	Nov 30	33.34
Apr 29	32.20	Nov 30	33.80	May 10	29.75	Dec 28	33.63
Jun 05	31.89	Jan 06, 1977	33.46	Jun 13	29.34	Jan 30, 1990	33.86
Jul 15	31.84	Feb 11	33.48	Jul 13	29.96	Mar 01	33.60
Sep 06	32.06	Apr 04	33.88	Aug 10	30.57	28	33.41
Oct 24	33.71	May 10	33.18	31	30.98	Apr 27	33.18
Nov 26	34.30	Jun 20	32.92	Oct 11	32.05		

Well number: HO Ce 75
Owner: Hobbits Glen Golf Club.
Geologic unit: Oella Formation.
Altitude: 435 feet.
Well characteristics: Drilled unused water-table well, depth 227 feet, diameter 6 inches.
Remarks: Equipped with water-level recorder March 1988 to June 1989; see table 4.
Period of record: March 1988 to June 1989.
Extremes for period of record: Highest water level measured, 16.11 feet, June 12, 1989;
Lowest water level measured, 23.39 feet, December 30, 1989.

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
Mar 02, 1988	19.54	Jun 02, 1988	18.85	Sep 29, 1988	22.15	Jan 30, 1989	22.63
11	19.53	Jul 01	19.25	Oct 31	22.94	Mar 02	21.88
Apr 01	19.51	Aug 01	20.35	Nov 30	23.14	Apr 03	20.42
May 02	19.75	Sep 01	21.39	Dec 30	23.39	May 03	19.74

Table 3.—Periodic water levels measured in observation wells in Howard County—Continued

Well number: HO Ce 75 (continued)

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
May 30, 1989	16.94	Jun 12, 1989	16.11				

Well number: HO Ce 153
Owner: DeWitt Boyer.
Geologic unit: Guilford Granite.
Altitude: 420 feet.
Well characteristics: Drilled unused water-table well, depth 40 feet, diameter 6 inches.
Period of record: November 1988 to March 1990.
Extremes for period of record: Highest water levels measured, 26.72 feet, May 30, 1989, June 30, 1989; Lowest water level measured, 33.04 feet, January 30, 1989.

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
Nov 07, 1988	32.16	Apr 03, 1989	30.87	Sep 01, 1989	28.42	Jan 30, 1990	30.62
30	32.58	May 03	29.67	29	29.12	Mar 01	29.85
Dec 30	33.01	30	26.72	Oct 30	29.80	28	29.66
Jan 30, 1989	33.04	Jun 30	26.72	Nov 30	30.20		
Mar 02	32.41	Aug 01	27.53	Dec 28	30.55		

Well number: HO Ce 168
Owner: Steven Sachs.
Geologic unit: Guilford Granite.
Altitude: 375 feet.
Well characteristics: Drilled unused water-table well, depth 100 feet, diameter 6 inches.
Period of record: October 1988 to March 1990.
Extremes for period of record: Highest water level measured, 13.96 feet, June 30, 1989; Lowest water level measured, 18.63 feet, December 30, 1988.

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
Oct 31, 1988	18.34	Apr 03, 1989	16.72	Sep 01, 1989	14.61	Jan 30, 1990	15.16
Nov 30	18.41	May 03	16.20	29	15.01	Mar 01	14.92
Dec 30	18.63	30	14.54	Oct 30	14.94	28	15.07
Jan 30, 1989	18.08	Jun 30	13.96	Nov 30	15.22		
Mar 02	17.57	Aug 01	13.98	Dec 28	15.64		

Well number: HO Ce 175
Owner: N. Biddison.
Geologic unit: Guilford Granite.
Altitude: 395 feet.
Well characteristics: Drilled unused water-table well, depth 41 feet, diameter 6 inches.
Period of record: October 1988 to March 1990.
Extremes for period of record: Highest water level measured, 11.60 feet, May 30, 1989; Lowest water level measured, 18.68 feet, January 2, 1989.

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
Oct 10, 1988	18.05	Mar 01, 1989	16.55	Aug 01, 1989	12.92	Dec 28, 1989	15.84
Nov 03	18.46	Apr 07	14.68	Sep 01	14.23	Jan 30, 1990	14.83
30	18.66	May 03	13.44	29	15.18	Mar 01	13.87
Jan 02, 1989	18.68	30	11.60	Oct 30	15.25	28	13.72
30	18.55	Jun 30	11.66	Nov 30	15.43		

Well number: HO Cf 37
Owner: Meadowridge Pub and Spirit.
Geologic unit: Mount Washington Amphibolite.
Altitude: 335 feet.
Well characteristics: Drilled unused well[2], depth 145 feet, diameter 6 inches.
Remarks: Equipped with water-level recorder June 1988 to June 1989; see table 4.
Water levels may be affected by nearby pumpage.
Period of record: May 1988 to June 1989.
Extremes for period of record: Highest water levels measured, 20.59 feet, May 31, 1989, June 12, 1989; Lowest water level measured, 21.98 feet, September 29, 1988.

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
May 09, 1988	21.18	Aug 01, 1988	21.68	Nov 30, 1988	21.67	Apr 03, 1989	21.00
12	21.15	Sep 01	21.91	Dec 30	21.71	May 03	21.02
Jun 03	20.99	29	21.98	Jan 30, 1989	21.38	31	20.59
Jul 01	21.59	Oct 31	21.66	Mar 02	21.27	Jun 12	20.59

[2] Well drilled through Coastal Plain sediments and ends in crystaline rock.

Table 3.—Periodic water levels measured in observation wells in Howard County—Continued

Well number: HO Cf 43
Owner: Rockburn Branch County Park.
Geologic unit: Mount Washington Amphibolite.
Altitude: 380 feet.
Well characteristics: Drilled unused well[2], depth 240 feet, diameter 6 inches.
Period of record: January 1989 to April 1989.
Extremes for period of record: Highest water level measured, 61.43 feet, April 10, 1989; Lowest water level measured, 62.37 feet, January 31, 1989.

Date	Water Level	Date	Water Level	Date	Water Level
Jan 31, 1989	62.37	Mar 02, 1989	61.98	Apr 10, 1989	61.43

Well number: HO Cf 49
Owner: Manekin Corporation.
Geologic unit: Mount Washington Amphibolite.
Altitude: 180 feet.
Well characteristics: Drilled unused well[2], depth 200 feet, diameter 6 inches.
Remarks: Equipped with water-level recorder November 1989 to February 1990; see table 4.
Period of record: May 1988 to March 1990.
Extremes for period of record: Highest water level measured, 18.64 feet, May 31, 1989; Lowest water level measured, 31.24 feet, November 4, 1988.

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
May 25, 1988	19.28	Dec 05, 1988	30.75	May 31, 1989	18.64	Nov 30, 1989	23.28
Jun 30	24.69	Jan 03, 1989	30.75	Jul 03	21.00	Dec 28	24.78
Aug 02	27.22	31	27.45	Aug 02	23.15	Jan 30, 1990	19.77
Sep 01	28.94	Mar 03	22.95	30	25.34	Mar 01	19.93
29	30.14	Apr 10	19.48	Sep 29	26.24	28	21.34
Nov 04	31.24	May 03	19.67	Oct 30	23.47		

Well number: HO Cf 58
Owner: Archie Rice.
Geologic unit: Mount Washington Amphibolite.
Altitude: 360 feet.
Well characteristics: Drilled unused well[2], depth 160 feet, diameter 6 inches.
Period of record: July 1988 to March 1989.
Extremes for period of record: Highest water level measured, 56.63 feet, January 30, 1989; Lowest water level measured, 57.52 feet, October 31, 1988.

Date	Water Level	Date	Water Level	Date	Water Level
Jul 12, 1988	56.87	Sep 29, 1988	57.50	Dec 30, 1988	57.00
Aug 03	57.16	Oct 31	57.52	Jan 30, 1989	56.63
Sep 01	57.49	Nov 30	57.00	Mar 02	56.66

Well number: HO Cf 91
Owner: Arlie Diehl.
Geologic unit: Mount Washington Amphibolite.
Altitude: 390 feet.
Well characteristics: Drilled occasionally used well[2], depth 272 feet, diameter 6 inches.
Period of record: September 1988 to March 1990.
Extremes for period of record: Highest water level measured, 16.72 feet, May 30, 1989; Lowest water level measured, 25.48 feet, October 31, 1988.

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
Sep 22, 1988	24.79	Jan 30, 1989	22.73	Jul 03, 1989	19.35	Nov 30, 1989	21.32
29	24.90	Mar 02	20.66	Aug 02	19.73	Dec 28	22.83
Oct 31	25.48	Apr 03	19.05	Sep 01	21.98	Jan 30, 1990	19.28
Nov 30	24.48	May 03	19.65	29	22.38	Mar 01	19.88
Dec 30	25.05	30	16.72	Oct 30	21.87	28	21.37

Well number: HO Cg 6
Owner: B. Cassady.
Geologic unit: James Run Formation, Relay Gneiss Member.
Altitude: 120 feet.
Well characteristics: Drilled unused water-table well, depth 82 feet, diameter 6 inches.
Period of record: May 1988 to April 1990.
Extremes for period of record: Highest water level measured, 2.03 feet, January 31, 1990; Lowest water level measured, 5.54 feet, September 1, 1988.

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
May 04, 1988	3.26	Jun 30, 1988	4.49	Sep 01, 1988	5.54	Nov 04, 1988	4.95
Jun 03	3.22	Aug 02	5.14	30	5.46	Dec 05	3.42

[2] Well drilled through Coastal Plain sediments and ends in crystalline rock.

Table 3.—Periodic water levels measured in observation wells in Howard County—Continued

Well number: HO Cg 6 (continued)

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
Jan 03, 1989	2.51	May 03, 1989	2.10	Aug 30, 1989	3.96	Jan 02, 1990	2.24
Feb 02	2.89	31	3.01	Sep 28	3.67	31	2.03
Mar 03	2.68	Jul 03	3.33	Nov 02	3.05	Mar 02	2.70
Apr 10	2.35	Aug 02	2.88	Dec 01	2.90	Apr 02	2.27

Well number: HO Cg 23
Owner: Danny Nolan's Irish Saloon.
Geologic unit: James Run Formation, Relay Gneiss Member.
Altitude: 160 feet.
Well characteristics: Drilled unused water-table well, depth 200 feet, diameter 6 inches.
Period of record: May 1988 to April 1990.
Extremes for period of record: Highest water level measured, 25.51 feet, January 31, 1990;
Lowest water level measured, 31.61 feet, November 4, 1988.

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
May 09, 1988	26.42	Nov 04, 1988	31.61	May 03, 1989	26.06	Nov 02, 1989	28.77
Jun 03	28.45	Dec 05	29.05	30	26.82	Dec 01	29.06
30	29.93	Jan 03, 1989	29.85	Jul 03	27.79	Jan 02, 1990	28.33
Aug 02	29.65	Feb 02	29.06	Aug 02	27.13	31	25.51
Sep 01	29.77	Mar 03	28.00	30	29.54	Mar 01	27.36
30	31.00	Apr 10	26.76	Sep 28	28.70	Apr 02	26.58

Well number: HO Cg 24
Owner: Samuel Redd.
Geologic unit: James Run Formation, Relay Gneiss Member.
Altitude: 150 feet.
Well characteristics: Drilled unused well[2], depth 280 feet, diameter 6 inches.
Period of record: January 1989 to April 1990.
Extremes for period of record: Highest water level measured, 123.94 feet, April 2, 1990;
Lowest water level measured, 127.92 feet, January 23, 1989.

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
Jan 23, 1989	127.92	May 03, 1989	125.72	Aug 30, 1989	124.73	Jan 02, 1990	124.37
Feb 02	127.57	31	125.54	Sep 28	124.82	31	124.33
Mar 03	126.90	Jul 03	125.49	Nov 02	124.49	Mar 01	124.43
Apr 10	126.03	Aug 02	125.02	Dec 01	124.40	Apr 02	123.94

Well number: HO Dd 25
Owner: Lee Lane.
Geologic unit: Loch Raven Schist.
Altitude: 485 feet.
Well characteristics: Drilled unused water-table well, depth 121 feet, diameter 6 inches.
Period of record: March 1988 to March 1989.
Extremes for period of record: Highest water level measured, 21.85 feet, June 2, 1988;
Lowest water level measured, 26.74 feet, September 1, 1988.

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
Mar 16, 1988	23.47	Jul 01, 1988	22.47	Sep 28, 1988	25.30	Jan 02, 1989	26.62
May 02	22.79	Aug 03	23.72	Nov 03	26.25	Feb 01	26.25
Jun 02	21.85	Sep 01	26.74	Dec 02	26.54	Mar 01	25.56

Well number: HO Dd 80
Owner: Theodore Mayernick.
Geologic unit: Loch Raven Schist.
Altitude: 400 feet.
Well characteristics: Drilled unused water-table well, depth 160 feet, diameter 6 inches.
Period of record: April 1988 to April 1990.
Extremes for period of record: Highest water level measured, 27.07 feet, August 2, 1989;
Lowest water levels measured, 37.15 feet, Jan. 2, 1989, Feb. 1, 1989.

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
Apr 20, 1988	31.49	Sep 28, 1988	34.45	Apr 07, 1989	35.44	Sep 28, 1989	29.72
May 02	31.62	Nov 03	35.79	May 04	34.22	Nov 02	30.61
Jun 02	30.82	Dec 02	36.47	31	29.40	Dec 01	31.36
30	30.86	Jan 02, 1989	37.15	Jul 03	27.17	Jan 02, 1990	32.21
Aug 03	32.12	Feb 01	37.15	Aug 02	27.07	31	32.36
Sep 01	33.40	Mar 01	36.87	Sep 01	28.13	Mar 02	31.90
						Apr 02	31.82

[2] Well drilled through Coastal Plain sediments and ends in crystalline rock.

Table 3.—Periodic water levels measured in observation wells in Howard County—Continued

Well number: HO De 39
Owner: Kenneth Weber.
Geologic unit: Patuxent Formation.
Altitude: 180 feet.
Well characteristics: Dug unused water-table well, depth 19.9 feet, diameter 36 inches.
Period of record: May 1988 to April 1990.
Extremes for period of record: Highest water level measured, 12.90 feet, May 31, 1989;
Lowest water level measured, 17.21 feet, January 3, 1989.

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
May 10, 1988	14.54	Nov 04, 1988	16.84	May 03, 1989	14.47	Nov 02, 1989	15.66
Jun 03	13.91	Dec 05	17.00	31	12.90	Dec 01	15.85
30	14.90	Jan 03, 1989	17.21	Jul 03	13.79	Jan 02, 1990	15.85
Aug 02	15.75	31	16.93	Aug 02	14.23	31	14.89
Sep 01	16.08	Mar 03	16.44	30	15.04	Mar 02	14.83
30	16.56	Apr 10	14.74	Sep 28	15.66	Apr 02	14.86

Well number: HO De 42
Owner: Maryland and Virginia Milk Producers Association.
Geologic unit: Sykesville Formation, gneiss Member.
Altitude: 365 feet.
Well characteristics: Drilled unused water-table well, depth 700 feet, diameter 6 inches.
Remarks: Equipped with water-level recorder June 1989 to August 1989; see table 4.
Water levels may be affected by nearby pumpage.
Period of record: May 1988 to August 1989.
Extremes for period of record: Highest water level measured, 19.11 feet, June 12, 1989;
Lowest water level measured, 27.09 feet, December 2, 1988.

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
May 10, 1988	22.40	Sep 28, 1988	26.12	Mar 01, 1989	25.14	Jun 30, 1989	19.40
Jun 03	22.43	Nov 03	26.88	Apr 07	23.38	Aug 01	20.52
30	23.09	Dec 02	27.09	May 04	22.83		
Aug 03	24.32	Jan 02, 1989	26.83	31	19.34		
Sep 01	25.42	Feb 01	25.89	Jun 12	19.11		

Well number: HO De 64
Owner: Westvaco Corporation.
Geologic unit: Oella Formation.
Altitude: 415 feet.
Well characteristics: Drilled unused water-table well, depth 141 feet, diameter 6 inches.
Period of record: September 1988 to December 1989.
Extremes for period of record: Highest water level measured, 25.02 feet, June 30, 1989;
Lowest water level measured, 30.52 feet, January 2, 1989.

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
Sep 27, 1988	29.12	Feb 01, 1989	29.90	May 31, 1989	25.60	Sep 28, 1989	26.54
Nov 03	30.02	Mar 01	29.48	Jun 30	25.02	Nov 02	26.85
Dec 02	30.40	Apr 07	28.75	Aug 01	25.07	Dec 01	27.18
Jan 02, 1989	30.52	May 04	28.00	Sep 01	25.74		

Well number: HO De 77
Owner: Eugene Sambataro.
Geologic unit: Sykesville Formation, Gneiss Member.
Altitude: 385 feet.
Well characteristics: Drilled unused water-table well, depth 130 feet, diameter 6 inches.
Period of record: November 1988 to April 1990.
Extremes for period of record: Highest water level measured, 3.03 feet, May 31, 1989;
Lowest water level measured, 11.40 feet, November 7, 1988.

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
Nov 07, 1988	11.40	Apr 07, 1989	6.55	Sep 01, 1989	6.44	Jan 31, 1990	4.42
Dec 02	10.74	May 04	6.13	28	6.34	Mar 02	4.87
Jan 02, 1989	10.98	31	3.03	Nov 02	5.58	Apr 02	5.08
Feb 01	9.57	Jun 30	3.19	Dec 01	5.79		
Mar 01	8.41	Aug 01	4.30	Jan 02, 1990	6.13		

Table 3.—Periodic water levels measured in observation wells in Howard County—Continued

Well number: HO Df 34
Owner: Unknown.
Geologic unit: Patuxent Formation.
Altitude: 305 feet.
Well characteristics: Dug unused water-table well, depth 15 feet, diameter 36 inches.
Period of record: May 1988 to April 1990.
Extremes for period of record: Highest water level measured, 0.80 feet, January 31, 1990;
Lowest water level measured, 10.73 feet, November 4, 1988.

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
May 04, 1988	7.63	Nov 04, 1988	10.73	May 03, 1989	1.60	Nov 02, 1989	6.73
Jun 03	4.33	Dec 05	9.06	31	2.63	Dec 01	6.55
30	8.38	Jan 03, 1989	9.90	Jul 03	4.47	Jan 02, 1990	5.66
Aug 02	9.34	31	7.60	Aug 02	6.18	31	.80
Sep 01	9.81	Mar 03	2.75	30	8.57	Mar 02	4.07
30	10.23	Apr 10	1.42	Sep 28	8.09	Apr 02	4.28

Well number: HO Df 36
Owner: M G Industries.
Geologic unit: James Run Formation, Relay Gneiss Member.
Altitude: 185 feet.
Well characteristics: Drilled unused well[2], depth 370 feet, diameter 6 inches.
Period of record: May 1988 to April 1990.
Extremes for period of record: Highest water level measured, 28.68 feet, April 2, 1990;
Lowest water level measured, 30.63 feet, September 1, 1988.

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
May 09, 1988	30.14	Nov 04, 1988	30.19	May 03, 1989	29.56	Nov 02, 1989	29.12
Jun 03	30.01	Dec 05	30.04	31	29.46	Dec 01	29.04
30	30.20	Jan 03, 1989	29.89	Jul 03	29.43	Jan 02, 1990	28.96
Aug 02	30.55	Feb 02	29.84	Aug 02	29.30	31	28.94
Sep 01	30.63	Mar 03	29.70	30	29.25	Mar 02	28.83
30	30.44	Apr 10	29.57	Sep 28	29.30	Apr 02	28.68

Well number: HO Df 38
Owner: Cummins-Wagner Co. Inc.
Geologic unit: Patuxent Formation.
Altitude: 225 feet.
Well characteristics: Drilled unused well, depth 80 feet, casing diameter 4 inches,
screen diameter 2 inches.
Period of record: June 1988 to April 1990.
Extremes for period of record: Highest water level measured, 53.27 feet, August 2, 1989;
Lowset water level measured, 58.16 feet, February 2, 1989.

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
Jun 03, 1988	55.73	Dec 05, 1988	57.68	May 31, 1989	55.83	Dec 01, 1989	55.33
30	55.52	Jan 03, 1989	57.72	Jul 03	53.82	Jan 02, 1990	55.94
Aug 02	56.16	Feb 02	58.16	Aug 02	53.27	31	56.21
Sep 01	56.60	Mar 03	58.14	30	53.70	Mar 02	55.93
30	56.95	Apr 10	57.82	Sep 28	54.60	Apr 02	56.04
Nov 04	57.29	May 03	57.43	Nov 02	54.84		

Well number: HO Df 45
Owner: Asbury United Methodist Church.
Geologic unit: Mount Washington Amphibolite.
Altitude: 165 feet.
Well characteristics: Drilled unused(?) well[2], depth 300 feet, diameter 6 inches.
Period of record: May 1988 to April 1990.
Extremes for period of record: Highest water level measured, 10.24 feet, January 31, 1990;
Lowest water level measured, 13.12 feet, July 3, 1989.

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
May 10, 1988	10.54	Nov 04, 1988	11.46	May 03, 1989	10.47	Nov 02, 1989	10.46
Jun 03	10.79	Dec 05	10.91	31	11.50	Dec 02	10.31
30	12.48	Jan 03, 1989	10.86	Jul 03	13.12	Jan 02, 1990	10.38
Aug 02	12.67	Feb 02	10.84	Aug 02	10.69	31	10.24
Sep 01	12.10	Mar 03	11.63	30	11.50	Mar 02	10.36
30	11.97	Apr 10	10.84	Sep 28	12.95	Apr 02	10.29

[2] Well drilled through Coastal Plain sediments and ends in crystalline rock.

Table 3.—Periodic water levels measured in observation wells in Howard County—Continued

Well number: HO Df 47
Owner: D.J. Shenk.
Geologic unit: Mount Washington Amphibolite.
Altitude: 290 feet.
Well characteristics: Drilled unused water-table well, depth 200 feet, diameter 6 inches.
Remarks: Water levels affected by pumpage from domestic well less than 10 feet away.
Period of record: June 1988 to April 1990.
Extremes for period of record: Highest water level measured, 65.87 feet, May 31, 1989;
Lowest water level measured, 89.53 feet, January 2, 1990.

Date	Water Level	Date	Water Level	Date	Water Level	Date	Water Level
Jun 10, 1988	89.47[3]	Dec 05, 1988	84.61	May 31, 1989	65.87	Jan 02, 1990	89.53
30	89.50	Jan 03, 1989	88.73	Aug 02	89.46	31	89.51
Aug 02	71.77	31	83.61	30	89.36	Mar 02	89.49
Sep 01	79.51[3]	Mar 03	77.89	Sep 28	89.50	Apr 02	86.37[3]
30	83.70	Apr 10	75.66	Nov 02	75.94		
Nov 04	76.11	May 03	77.54	Dec 01	87.46		

[3] Nearby well recently pumping.

Table 4.—Continuous water levels recorded in observation wells in Howard County

[All water-level values are in feet below land surface; -- = data not available]

Well number: HO Ab 81
Owner: Thomas Harris.
Geologic unit: Prettyboy Schist.
Altitude: 730 feet.
Well characteristics: Drilled unused water-table well, depth 340 feet, diameter 6 inches.
Period of record: June 1989 to April 1990.
Extremes for period of record: Highest water level recorded, 36.96 feet, July 7-8, 1989;
Lowest water level recorded, 39.89 feet, January 2, 1990.

Water Year October 1988 to September 1989.

	April		May		June		July		August		September	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	--	--	--	--	--	--	37.03	37.00	--	--	38.69	38.68
2	--	--	--	--	--	--	37.00	36.99	37.65	37.62	38.81	38.68
3	--	--	--	--	--	--	37.00	36.98	37.62	37.61	38.87	38.81
4	--	--	--	--	--	--	37.00	36.99	37.61	37.59	38.94	38.87
5	--	--	--	--	--	--	37.02	36.99	37.62	37.60	38.97	38.94
6	--	--	--	--	--	--	37.02	37.00	37.69	37.62	38.97	38.96
7	--	--	--	--	--	--	36.99	36.96	37.76	37.68	38.98	38.97
8	--	--	--	--	--	--	36.99	36.96	37.82	37.76	39.00	38.98
9	--	--	--	--	--	--	37.00	36.99	37.86	37.82	39.02	39.00
10	--	--	--	--	--	--	37.03	37.00	37.87	37.86	39.09	39.02
11	--	--	--	--	--	--	37.07	37.03	37.87	37.86	39.18	39.09
12	--	--	--	--	--	--	37.09	37.07	37.89	37.87	39.25	39.18
13	--	--	--	--	37.08	37.01	37.07	37.04	37.90	37.88	39.30	39.25
14	--	--	--	--	37.13	37.08	37.14	37.04	37.98	37.90	39.30	39.29
15	--	--	--	--	37.16	37.12	37.20	37.14	38.01	37.98	39.38	39.30
16	--	--	--	--	37.19	37.15	37.20	37.17	38.03	37.99	39.41	39.38
17	--	--	--	--	37.23	37.18	37.23	37.17	38.12	38.03	39.49	39.42
18	--	--	--	--	37.24	37.22	37.24	37.23	38.18	38.13	39.58	39.50
19	--	--	--	--	37.25	37.23	37.23	37.19	38.18	38.16	39.58	39.57
20	--	--	--	--	37.24	37.23	37.24	37.18	38.19	38.17	39.63	39.58
21	--	--	--	--	37.27	37.25	37.32	37.24	38.20	38.19	39.66	39.63
22	--	--	--	--	37.27	37.24	37.37	37.32	38.20	38.20	39.65	39.54
23	--	--	--	--	37.24	37.20	37.39	37.37	38.32	38.20	39.68	39.54
24	--	--	--	--	37.21	37.19	37.40	37.38	38.41	38.33	39.73	39.68
25	--	--	--	--	37.19	37.10	37.40	37.39	38.45	38.41	39.73	39.66
26	--	--	--	--	37.10	37.05	37.40	37.38	38.50	38.45	39.67	39.61
27	--	--	--	--	37.05	37.01	37.38	37.36	38.55	38.50	39.73	39.68
28	--	--	--	--	37.05	37.01	37.44	37.36	38.61	38.55	39.73	39.65
29	--	--	--	--	--	--	37.49	37.45	38.61	38.59	--	--
30	--	--	--	--	--	--	37.52	37.49	38.63	38.59	--	--
31	--	--	--	--	--	--	37.59	37.51	38.68	38.64	--	--
Month	--	--	--	--	--	--	37.59	36.96	--	--	--	--

Water Year October 1989 to September 1990

	October		November		December		January		February		March	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	--	--	39.37	39.28	39.28	39.21	39.84	39.69	39.11	38.94	38.42	38.33
2	--	--	39.37	39.30	39.28	39.17	39.89	39.82	38.94	38.82	38.32	38.26
3	--	--	39.35	39.29	39.23	39.16	39.82	39.76	38.86	38.75	38.34	38.26
4	--	--	39.38	39.35	39.24	39.21	39.75	39.66	38.74	38.70	38.41	38.34
5	--	--	39.37	39.34	39.23	39.20	39.71	39.66	38.78	38.73	38.45	38.41
6	--	--	39.34	39.30	39.24	39.21	39.66	39.63	38.75	38.70	38.51	38.43
7	--	--	39.33	39.30	39.39	39.25	39.66	39.61	38.70	38.63	38.54	38.51
8	--	--	39.31	39.28	39.39	39.34	39.61	39.58	38.68	38.62	38.52	38.40
9	--	--	39.32	39.26	39.34	39.32	39.59	39.49	38.61	38.46	38.40	38.38
10	--	--	39.39	39.32	39.33	39.31	39.55	39.49	38.50	38.38	38.44	38.39
11	--	--	39.40	39.38	39.33	39.32	39.55	39.41	38.50	38.46	38.45	38.42
12	--	--	39.48	39.38	39.35	39.33	39.47	39.42	38.51	38.46	38.44	38.42
13	--	--	39.49	39.44	39.38	39.33	39.56	39.48	38.51	38.38	38.46	38.44
14	--	--	39.43	39.41	39.42	39.38	39.58	39.52	38.43	38.38	38.46	38.45
15	--	--	39.41	39.34	39.42	39.33	39.52	39.47	38.43	38.31	38.49	38.46
16	--	--	39.38	39.24	39.46	39.36	39.49	39.46	38.30	38.26	38.49	38.45
17	--	--	39.44	39.38	39.48	39.46	39.46	39.37	38.48	38.28	38.45	38.40
18	--	--	39.45	39.41	39.55	39.48	39.40	39.34	38.48	38.32	38.58	38.44
19	--	--	39.45	39.31	39.55	39.49	39.45	39.40	38.33	38.27	38.58	38.53
20	--	--	39.30	39.15	39.55	39.49	39.42	39.30	38.42	38.33	38.54	38.53
21	--	--	39.31	39.19	39.60	39.54	39.33	39.26	38.42	38.37	38.61	38.54
22	--	--	39.32	39.25	39.66	39.60	39.34	39.31	38.37	38.21	38.61	38.51
23	--	--	39.29	39.24	39.70	39.66	39.40	39.34	38.21	38.16	38.59	38.50
24	--	--	39.32	39.29	39.70	39.61	39.38	39.34	38.28	38.17	38.61	38.59
25	--	--	39.32	39.22	39.61	39.53	39.37	39.28	38.50	38.29	38.58	38.55
26	--	--	39.26	39.20	39.67	39.51	39.41	39.31	38.51	38.47	38.55	38.52
27	--	--	39.29	39.21	39.70	39.66	39.43	39.37	38.46	38.35	38.58	38.55
28	--	--	39.24	39.17	39.76	39.66	39.36	39.34	38.37	38.35	38.61	38.55
29	--	--	39.30	39.24	39.78	39.76	--	--	--	--	38.59	38.56
30	--	--	39.28	39.11	39.79	39.76	--	--	--	--	38.56	38.49
31	39.33	39.26	--	--	39.77	39.68	39.17	39.11	--	--	38.49	38.47
Month	--	--	39.49	39.11	39.79	39.16	--	--	39.11	38.16	38.61	38.26

Table 4.—Continuous water levels recorded in observation wells in Howard County—Continued

Well number: HO Ab 81 (continued)

Water Year October 1989 to September 1990

	April		May		June		July		August		September	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	38.46	38.45	--	--	--	--	--	--	--	--	--	--
2	38.45	38.37	--	--	--	--	--	--	--	--	--	--
3	38.37	38.32	--	--	--	--	--	--	--	--	--	--
4	38.32	38.26	--	--	--	--	--	--	--	--	--	--
5	38.31	38.28	--	--	--	--	--	--	--	--	--	--
6	38.32	38.28	--	--	--	--	--	--	--	--	--	--
7	38.28	38.26	--	--	--	--	--	--	--	--	--	--
8	38.27	38.26	--	--	--	--	--	--	--	--	--	--
9	38.26	38.16	--	--	--	--	--	--	--	--	--	--
10	38.16	37.90	--	--	--	--	--	--	--	--	--	--
11	37.98	37.89	--	--	--	--	--	--	--	--	--	--
12	38.05	37.98	--	--	--	--	--	--	--	--	--	--
13	38.08	38.03	--	--	--	--	--	--	--	--	--	--
14	38.03	37.89	--	--	--	--	--	--	--	--	--	--
15	37.88	37.84	--	--	--	--	--	--	--	--	--	--
16	37.87	37.85	--	--	--	--	--	--	--	--	--	--
17	37.92	37.82	--	--	--	--	--	--	--	--	--	--
18	37.99	37.93	--	--	--	--	--	--	--	--	--	--
19	38.01	37.99	--	--	--	--	--	--	--	--	--	--
20	37.99	37.85	--	--	--	--	--	--	--	--	--	--
21	37.87	37.81	--	--	--	--	--	--	--	--	--	--
22	37.87	37.85	--	--	--	--	--	--	--	--	--	--
23	37.86	37.84	--	--	--	--	--	--	--	--	--	--
24	37.88	37.86	--	--	--	--	--	--	--	--	--	--
25	37.88	37.84	--	--	--	--	--	--	--	--	--	--
26	37.86	37.84	--	--	--	--	--	--	--	--	--	--
27	--	--	--	--	--	--	--	--	--	--	--	--
28	--	--	--	--	--	--	--	--	--	--	--	--
29	--	--	--	--	--	--	--	--	--	--	--	--
30	--	--	--	--	--	--	--	--	--	--	--	--
31	--	--	--	--	--	--	--	--	--	--	--	--

Well number: HO Bb 26
Owner: Melvin Thomas.
Geologic unit: Morgan Run Formation.
Altitude: 750 feet.
Well characteristics: Drilled unused water-table well, depth 300 feet, diameter 6 inches.
Period of record: October 1978 to June 1981, December 1987 to June 1989.
Extremes for period of record: Highest mean water level recorded, 22.78 feet, May 20, 1989;
Lowest mean water level recorded, 42.46 feet, March 3, 1981.

Water Year October 1978 to September 1979

	Mean Values											
Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	--	36.40	37.59	34.91	--	--	24.83	27.29	30.14	30.27	33.50	35.42
2	--	36.46	37.61	34.03	--	--	24.90	27.45	30.10	30.43	33.56	35.44
3	--	36.51	37.63	31.53	--	--	25.11	27.43	29.97	30.62	33.69	35.46
4	--	36.53	37.59	30.55	--	--	25.10	27.49	29.79	--	33.81	35.55
5	--	36.58	37.62	30.13	--	--	25.15	27.72	29.49	--	33.87	35.60
6	--	36.64	37.70	29.84	--	--	25.27	27.86	29.22	--	33.91	33.73
7	--	36.68	37.70	29.65	--	--	25.50	28.02	28.97	--	34.00	28.53
8	--	36.76	37.66	29.48	--	--	25.41	28.15	28.77	--	34.06	28.07
9	--	36.81	37.62	28.86	--	--	25.15	28.25	28.59	--	34.18	28.34
10	--	36.87	37.67	28.47	--	--	25.65	28.32	28.47	--	34.20	28.48
11	--	36.92	37.66	28.49	--	--	25.77	28.45	28.42	--	34.24	28.54
12	--	36.96	37.59	28.39	--	--	25.57	28.60	28.60	--	34.34	28.78
13	--	37.01	37.48	28.11	--	--	25.53	28.69	28.80	--	34.45	28.99
14	--	37.02	37.41	28.17	--	--	25.37	28.89	28.93	--	34.50	29.00
15	--	37.07	37.32	28.97	--	--	25.34	29.05	28.95	--	34.54	29.15
16	--	37.13	37.24	29.05	--	--	25.49	29.22	28.93	--	34.62	29.60
17	--	37.15	37.17	28.95	--	--	25.63	29.37	28.90	--	34.68	29.83
18	--	37.17	37.12	29.13	--	--	25.71	29.35	29.01	--	34.67	29.89
19	--	37.24	37.08	29.45	--	--	25.80	29.38	29.27	--	34.70	29.87
20	--	37.29	37.01	--	--	--	25.94	29.47	29.44	--	34.79	30.12
21	--	37.31	36.93	--	--	--	26.03	29.55	29.44	--	34.85	30.30
22	--	37.34	37.03	--	--	--	26.14	29.73	29.39	--	34.91	30.25
23	36.04	37.34	37.04	--	--	24.52	26.29	29.78	29.49	--	34.96	30.10
24	36.12	37.33	36.93	--	--	24.42	26.39	29.73	29.67	--	34.98	29.39
25	36.13	37.41	36.82	--	--	24.58	26.43	29.73	29.88	--	35.03	28.39
26	36.13	37.46	36.76	--	--	24.71	26.39	29.82	30.07	32.95	35.13	27.92
27	36.22	37.47	36.58	--	--	24.84	26.45	29.91	30.12	33.06	35.15	27.82
28	36.27	37.50	36.33	--	--	24.85	26.78	29.90	30.10	33.17	35.19	27.85
29	36.33	37.54	35.98	--	--	24.66	27.01	29.92	30.14	33.24	35.23	27.81
30	36.41	37.55	35.61	--	--	24.70	27.11	30.03	30.18	33.34	35.28	27.92
31	36.39	--	35.27	--	--	24.70	--	30.14	--	33.43	35.35	--
Lowest	--	37.55	37.70	--	--	--	27.11	30.14	30.18	--	35.35	35.60
Highest	--	36.40	35.27	--	--	--	24.83	27.29	28.42	--	33.50	27.81

Table 4.—Continuous water levels recorded in observation wells in Howard County—Continued

Well number: HO Bb 26 (continued)

Water Year October 1979 to September 1980

						Mean Values						
Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	28.04	--	30.86	--	33.76	35.11	29.09	28.22	28.15	31.70	34.88	36.92
2	25.77	--	31.04	--	33.83	35.06	27.93	28.07	28.19	31.78	34.96	36.97
3	23.93	--	31.23	--	33.86	35.12	27.48	27.84	28.27	31.86	35.04	37.03
4	23.95	--	31.11	33.90	33.88	35.17	26.93	27.62	28.45	32.00	35.15	37.08
5	23.82	--	31.16	33.86	33.91	35.18	27.14	27.38	28.62	32.04	35.26	37.13
6	23.59	--	31.20	34.05	33.89	35.33	27.36	27.21	28.66	32.20	35.36	37.16
7	23.49	--	31.39	34.03	33.93	35.35	27.46	27.19	28.65	32.40	35.43	37.21
8	23.30	--	31.68	34.20	34.04	35.27	27.47	27.17	28.70	32.43	35.46	37.27
9	23.46	--	31.89	34.29	33.97	35.38	27.32	27.21	28.88	32.59	35.51	37.31
10	23.44	--	31.89	34.40	33.93	35.39	27.42	27.27	29.01	32.65	35.60	37.35
11	23.24	--	31.98	34.28	34.00	35.45	27.50	27.24	29.31	32.76	35.66	37.41
12	21.65	--	32.06	34.40	34.11	35.59	27.34	27.32	29.47	32.88	35.73	37.46
13	19.94	--	32.14	34.50	34.23	35.55	27.32	27.32	29.52	33.04	35.82	37.49
14	19.55	--	32.34	34.38	34.22	35.49	27.14	27.48	29.49	33.18	35.87	37.51
15	19.49	--	32.50	34.44	34.20	35.50	27.12	27.74	29.52	33.25	36.03	37.54
16	19.46	28.62	32.42	34.48	34.07	35.26	27.40	27.91	29.73	33.31	36.18	37.59
17	19.55	28.78	32.58	34.47	34.30	34.80	27.58	28.00	29.93	33.40	36.28	37.62
18	19.81	28.97	32.73	34.42	34.43	34.51	27.48	27.92	29.98	33.55	36.31	37.66
19	20.15	29.23	32.77	34.41	34.45	34.27	27.52	27.97	30.05	33.68	36.34	37.68
20	20.49	29.41	32.99	34.28	34.41	33.83	27.48	28.10	30.15	33.77	36.37	37.70
21	20.82	29.59	33.08	34.08	34.49	33.26	27.53	28.21	30.36	33.88	36.41	37.72
22	21.20	29.66	33.07	33.83	34.52	32.77	27.56	28.25	30.48	33.96	36.46	37.74
23	21.91	29.79	33.10	33.65	34.58	31.96	27.53	28.11	30.61	34.03	36.53	37.77
24	22.19	29.96	--	33.63	34.67	31.06	27.72	27.95	30.76	34.15	36.58	37.80
25	--	30.08	--	33.59	34.68	30.74	27.89	27.83	30.93	34.27	36.61	37.81
26	--	30.01	--	33.74	34.77	30.75	28.07	27.92	30.99	34.35	36.65	37.84
27	--	30.39	--	33.72	34.80	30.74	28.05	27.96	31.09	34.45	36.70	37.86
28	--	30.36	--	33.71	34.85	30.68	28.08	27.97	31.22	34.53	36.73	37.88
29	--	30.53	--	33.75	35.01	30.46	28.19	28.00	31.27	34.60	36.78	37.90
30	--	30.73	--	33.79	--	30.25	28.24	28.09	31.44	34.71	36.82	37.91
31	--	--	--	33.72	--	29.90	--	28.11	--	34.82	36.86	--
Lowest	--	--	--	--	35.01	35.59	29.09	28.25	31.44	34.82	36.86	37.91
Highest	--	--	--	--	33.76	29.90	26.93	27.17	28.15	31.70	34.88	36.92

Water Year October 1980 to September 1981

						Mean Values						
Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	37.93	38.56	39.10	--	--	--	--	--	37.15	--	--	--
2	37.94	38.58	39.11	--	--	--	--	--	37.13	--	--	--
3	37.96	38.60	39.14	--	--	42.46	--	--	37.09	--	--	--
4	37.98	38.62	39.14	--	--	42.44	--	--	37.06	--	--	--
5	38.02	38.63	39.15	--	--	42.34	--	--	37.06	--	--	--
6	38.04	38.65	39.15	--	--	41.86	--	--	36.95	--	--	--
7	38.06	38.67	39.16	39.75	--	40.42	--	--	36.95	--	--	--
8	38.07	38.70	39.16	--	--	39.31	--	--	36.93	--	--	--
9	38.09	38.72	39.18	--	--	39.16	--	--	36.80	--	--	--
10	38.12	38.75	39.21	--	--	39.02	--	--	36.81	--	--	--
11	38.13	38.77	39.22	--	--	38.82	--	--	36.87	--	--	--
12	38.15	--	39.23	--	--	38.64	--	--	36.87	--	--	--
13	38.18	--	39.24	--	--	38.58	--	--	36.81	--	--	--
14	38.20	--	39.26	--	--	38.50	--	--	36.77	--	--	--
15	38.23	--	39.27	--	--	38.40	--	--	36.74	--	--	--
16	38.25	--	39.27	39.93	--	38.35	--	--	36.66	--	--	--
17	38.27	--	39.29	--	--	--	--	--	36.58	--	--	--
18	38.29	--	39.30	--	--	--	--	--	36.56	--	--	--
19	38.31	--	39.33	--	--	--	--	--	--	--	--	--
20	38.33	--	39.34	--	--	--	--	37.08	--	--	--	--
21	38.35	39.01	--	40.42	--	--	--	37.06	--	--	--	--
22	38.38	39.01	--	40.48	--	--	--	37.04	--	--	--	--
23	38.40	39.01	--	40.56	--	--	--	37.08	--	--	--	--
24	38.41	39.02	--	40.66	--	--	--	37.07	--	--	--	--
25	38.40	39.03	--	40.74	--	--	--	37.06	--	--	--	--
26	38.43	39.05	--	40.82	--	--	--	37.05	--	--	--	--
27	38.45	39.05	--	40.90	--	--	--	37.05	--	--	--	--
28	38.47	39.05	--	40.98	--	--	--	36.98	--	--	--	--
29	38.50	39.06	--	--	--	--	--	37.00	--	--	--	--
30	38.52	39.09	--	--	--	--	--	37.02	--	--	--	--
31	38.54	--	--	--	--	--	--	37.05	--	--	--	--
Lowest	38.54	--	--	--	--	--	--	--	--	--	--	--
Highest	37.93	--	--	--	--	--	--	--	--	--	--	--

Table 4.—Continuous water levels recorded in observation wells in Howard County—Continued

Well number HO Bb 26 (continued)

Water Year October 1987 to September 1988

	October		November		December		January		February		March	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	--	--	--	--	--	--	34.00	33.93	--	--	--	--
2	--	--	--	--	--	--	34.07	34.00	--	--	--	--
3	--	--	--	--	--	--	34.04	33.76	--	--	--	--
4	--	--	--	--	--	--	33.74	33.63	--	--	--	--
5	--	--	--	--	--	--	33.82	33.73	--	--	--	--
6	--	--	--	--	--	--	33.92	33.81	30.62	30.44	--	--
7	--	--	--	--	--	--	33.94	33.73	30.47	30.19	--	--
8	--	--	--	--	35.19	34.92	33.72	33.58	30.18	30.09	--	--
9	--	--	--	--	34.91	34.66	33.71	33.59	30.09	30.04	--	--
10	--	--	--	--	34.66	34.49	33.80	33.72	30.07	30.04	--	--
11	--	--	--	--	34.48	34.36	33.80	33.74	30.09	30.07	--	--
12	--	--	--	--	34.52	34.36	33.74	33.59	30.76	30.06	30.33	30.24
13	--	--	--	--	34.75	34.53	33.80	33.57	30.70	30.64	30.28	30.08
14	--	--	--	--	34.78	34.70	33.96	33.84	30.71	30.70	30.37	30.27
15	--	--	--	--	34.70	34.29	33.95	33.85	30.71	30.71	30.62	30.38
16	--	--	--	--	34.42	34.35	33.90	33.85	30.72	30.64	30.89	30.63
17	--	--	--	--	34.60	34.43	33.89	33.79	30.70	30.63	31.02	30.90
18	--	--	--	--	34.64	34.59	33.92	33.75	30.70	30.70	31.02	30.81
19	--	--	--	--	34.58	34.45	33.95	33.82	30.70	30.70	30.87	30.81
20	--	--	--	--	34.44	34.25	--	--	30.70	30.70	31.24	30.84
21	--	--	--	--	34.37	34.27	--	--	30.70	30.64	31.47	31.25
22	--	--	--	--	34.35	34.20	--	--	30.70	30.64	31.59	31.49
23	--	--	--	--	34.36	34.21	--	--	30.70	30.70	31.60	31.48
24	--	--	--	--	34.36	34.21	--	--	30.71	30.63	31.53	31.48
25	--	--	--	--	34.20	34.10	--	--	30.60	30.55	31.56	31.51
26	--	--	--	--	34.26	34.10	--	--	30.57	30.57	31.55	31.45
27	--	--	--	--	34.26	34.18	--	--	30.57	30.56	31.78	31.47
28	--	--	--	--	34.18	33.95	--	--	30.57	30.57	31.91	31.79
29	--	--	--	--	34.14	33.85	--	--	--	--	31.89	31.78
30	--	--	--	--	34.20	34.15	--	--	--	--	31.81	31.78
31	--	--	--	--	34.14	33.94	--	--	--	--	32.06	31.81

	April		May		June		July		August		September	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	32.04	32.02	33.18	33.13	--	--	--	--	33.17	33.03	35.52	35.47
2	32.06	32.04	33.30	33.18	--	--	29.70	29.55	33.32	33.18	35.54	35.51
3	32.05	32.01	33.31	33.30	--	--	30.00	29.70	33.45	33.33	35.52	35.51
4	32.04	32.01	33.34	33.30	--	--	30.09	30.01	33.51	33.44	35.51	35.48
5	32.05	32.04	33.31	33.26	--	--	30.16	30.09	33.55	33.49	35.63	35.49
6	32.04	32.00	33.29	33.24	--	--	30.23	30.12	33.65	33.54	35.70	35.63
7	32.12	32.00	33.28	33.22	--	--	30.34	30.22	33.74	33.65	35.77	35.71
8	32.22	32.12	33.24	32.91	--	--	30.39	30.32	33.84	33.74	35.80	35.77
9	32.25	32.22	32.88	32.67	--	--	30.50	30.40	33.96	33.84	35.81	35.78
10	32.25	32.21	32.66	32.55	--	--	30.62	30.50	34.04	33.96	35.87	35.81
11	32.22	32.21	32.54	32.48	--	--	30.74	30.62	34.12	34.04	35.92	35.87
12	32.21	32.21	32.49	32.46	--	--	30.85	30.75	34.20	34.12	35.95	35.92
13	32.25	32.21	32.45	32.38	--	--	31.04	30.85	34.25	34.21	35.92	35.91
14	32.26	32.20	32.37	32.30	--	--	31.12	31.04	34.28	34.25	36.03	35.93
15	32.28	32.21	32.30	32.25	--	--	31.35	31.12	34.40	34.28	36.17	36.03
16	32.30	31.70	32.27	32.21	--	--	31.47	31.36	34.48	34.41	36.20	36.17
17	32.30	31.70	32.29	32.27	--	--	31.58	31.46	34.52	34.45	36.20	36.19
18	32.30	31.70	32.26	31.96	--	--	31.69	31.58	34.62	34.52	36.23	36.20
19	32.49	31.90	31.93	31.64	--	--	31.79	31.64	34.67	34.62	36.26	36.23
20	32.50	32.48	--	--	--	--	31.90	31.79	34.71	34.67	36.29	36.26
21	32.61	32.48	--	--	--	--	31.99	31.90	34.95	34.71	36.37	36.29
22	32.73	32.61	--	--	--	--	32.18	31.99	34.99	34.95	36.41	36.37
23	32.74	32.57	--	--	--	--	32.23	32.19	34.99	34.95	36.44	36.41
24	32.77	32.54	--	--	--	--	32.35	32.24	35.00	34.97	36.55	36.45
25	32.84	32.79	--	--	--	--	32.43	32.35	35.10	35.00	36.62	36.55
26	32.90	32.84	--	--	--	--	32.57	32.43	35.25	35.11	36.69	36.62
27	32.89	32.84	--	--	--	--	32.72	32.57	35.31	35.25	36.73	36.69
28	32.91	32.80	--	--	--	--	32.81	32.72	35.34	35.31	36.78	36.72
29	32.97	32.91	--	--	--	--	32.86	32.81	35.37	35.29	36.87	36.78
30	33.13	32.98	--	--	--	--	32.92	32.86	35.44	35.38	36.89	36.87
31	--	--	--	--	--	--	33.01	32.92	--	--	--	--
Month	33.13	31.70	--	--	--	--	--	--	--	--	36.89	35.47

Table 4.—Continuous water levels recorded in observation wells in Howard County—Continued

Well number: HO Bb 26 (continued)

Water Year October 1988 to September 1989

	October		November		December		January		February		March	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	36.91	36.89	37.84	37.82	38.54	38.52	39.04	39.04	37.88	37.84	35.65	35.38
2	36.93	36.90	37.89	37.83	38.55	38.54	39.05	39.04	37.88	37.85	35.38	35.22
3	36.97	36.93	37.92	37.89	38.56	38.54	39.05	39.03	37.90	37.85	35.21	35.12
4	37.00	36.97	37.93	37.92	38.59	38.57	39.08	39.06	37.92	37.89	35.10	34.92
5	37.08	37.00	37.94	37.89	38.59	38.58	39.08	39.08	37.89	37.85	34.97	34.94
6	37.14	37.08	37.99	37.94	38.60	38.59	39.10	39.08	37.86	37.85	35.06	34.96
7	37.15	37.14	38.05	38.00	38.62	38.60	39.11	39.10	37.87	37.85	35.05	34.86
8	37.17	37.15	38.09	38.06	38.65	38.63	39.13	39.10	37.87	37.83	34.85	34.59
9	37.18	37.17	38.11	38.09	38.66	38.65	39.15	39.13	37.88	37.84	34.57	34.33
10	37.19	37.18	38.12	38.08	38.68	38.66	39.15	39.15	37.84	37.81	34.31	33.91
11	37.23	37.18	38.18	38.13	38.71	38.68	39.16	39.15	37.81	37.79	33.89	33.81
12	37.29	37.23	38.19	38.18	38.72	38.71	39.15	39.12	37.86	37.79	33.80	33.41
13	37.32	37.29	38.20	38.18	38.73	38.70	39.16	39.13	37.87	37.82	33.39	33.04
14	37.34	37.32	38.22	38.21	38.74	38.73	39.16	39.10	37.84	37.81	33.02	32.91
15	37.35	37.34	38.24	38.22	38.78	38.74	39.09	39.05	37.84	37.80	33.19	33.04
16	37.38	37.35	38.25	38.24	38.78	38.78	--	--	37.87	37.82	33.11	32.86
17	37.39	37.38	38.28	38.25	38.80	38.78	--	--	37.87	37.81	32.87	32.67
18	37.40	37.39	38.29	38.28	38.81	38.80	--	--	37.81	37.73	33.03	32.89
19	37.44	37.40	38.30	38.29	38.83	38.81	--	--	37.73	37.68	33.04	32.72
20	37.48	37.44	38.30	38.27	38.84	38.83	--	--	37.67	37.59	32.89	32.62
21	37.49	37.44	38.41	38.30	38.86	38.84	--	--	37.58	37.41	33.01	32.90
22	37.49	37.43	38.41	38.41	38.88	38.87	--	--	37.45	37.42	33.00	32.89
23	37.52	37.49	38.42	38.41	38.88	38.87	--	--	37.41	37.30	32.89	32.44
24	37.55	37.52	38.43	38.42	38.90	38.88	--	--	37.29	37.09	32.41	31.26
25	37.60	37.56	38.44	38.43	38.93	38.90	--	--	37.07	36.74	31.21	30.53
26	37.63	37.60	38.44	38.44	38.95	38.93	--	--	36.73	36.13	30.51	29.96
27	37.65	37.63	38.44	38.44	38.96	38.94	--	--	36.13	35.87	29.94	29.57
28	37.67	37.65	38.48	38.44	38.98	38.92	--	--	35.86	35.66	29.61	29.55
29	37.69	37.67	38.50	38.48	38.99	38.98	--	--	--	--	29.55	29.37
30	37.82	37.69	38.52	38.49	39.01	38.99	--	--	--	--	29.57	29.26
31	37.84	37.82	--	--	39.04	39.01	37.90	37.88	--	--	29.96	29.59
Month	37.84	36.89	38.52	37.82	39.04	38.52	--	--	37.92	35.66	35.65	29.26

	April		May		June		July		August		September	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	30.09	29.98	32.11	31.98	24.67	24.58	--	--	--	--	--	--
2	30.01	29.97	32.09	31.91	24.83	24.67	--	--	--	--	--	--
3	29.97	29.87	32.29	32.10	24.89	24.82	--	--	--	--	--	--
4	30.13	29.90	32.34	32.29	25.09	24.83	--	--	--	--	--	--
5	30.20	30.13	32.30	32.02	25.13	25.08	--	--	--	--	--	--
6	30.30	30.12	31.99	28.00	25.32	25.10	--	--	--	--	--	--
7	30.34	30.20	27.87	26.48	25.45	25.32	--	--	--	--	--	--
8	30.54	30.30	26.46	26.22	25.55	25.46	--	--	--	--	--	--
9	30.81	30.55	26.22	25.82	25.65	25.50	--	--	--	--	--	--
10	30.97	30.82	25.81	25.66	26.00	25.69	--	--	--	--	--	--
11	31.03	30.92	25.66	25.53	26.13	26.01	--	--	--	--	--	--
12	31.04	30.98	25.54	25.51	--	--	--	--	--	--	--	--
13	31.14	30.99	25.55	25.53	--	--	--	--	--	--	--	--
14	31.15	31.05	25.55	25.46	--	--	--	--	--	--	--	--
15	31.05	30.96	25.47	25.41	--	--	--	--	--	--	--	--
16	31.29	31.07	25.40	23.92	--	--	--	--	--	--	--	--
17	31.33	31.18	23.85	23.09	--	--	--	--	--	--	--	--
18	31.26	31.19	23.11	22.96	--	--	--	--	--	--	--	--
19	31.46	31.29	22.97	22.82	--	--	--	--	--	--	--	--
20	31.53	31.46	22.82	22.78	--	--	--	--	--	--	--	--
21	31.46	31.42	23.00	22.83	--	--	--	--	--	--	--	--
22	31.54	31.45	23.03	22.99	--	--	--	--	--	--	--	--
23	31.59	31.53	23.07	22.95	--	--	--	--	--	--	--	--
24	31.66	31.57	--	--	--	--	--	--	--	--	--	--
25	31.66	31.58	--	--	--	--	--	--	--	--	--	--
26	31.73	31.60	--	--	--	--	--	--	--	--	--	--
27	31.77	31.67	--	--	--	--	--	--	--	--	--	--
28	31.87	31.70	--	--	--	--	--	--	--	--	--	--
29	31.98	31.88	--	--	--	--	--	--	--	--	--	--
30	32.10	31.99	--	--	--	--	--	--	--	--	--	--
31	--	--	24.59	24.45	--	--	--	--	--	--	--	--
Month	32.10	29.87	--	--	--	--	--	--	--	--	--	--

Table 4.—Continuous water levels recorded in observation wells in Howard County—Continued

Well number: HO Bf 38
Owner: Patapsco Valley State Park.
Geologic unit: Cockeysville Marble.
Altitude: 275 feet.
Well characteristics: Drilled unused water-table well, depth 202 feet, diameter 6 inches.
Period of record: June 1989 to April 1990.
Extremes for period of record: Highest water level recorded, 11.18 feet, July 20-24, 1989;
Lowest water level recorded, 13.29 feet, February 7-9, 1990.

Water Year October 1988 to September 1989

	April		May		June		July		August		September	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	--	--	--	--	--	--	11.41	11.41	11.21	11.20	11.59	11.58
2	--	--	--	--	--	--	11.41	11.41	11.23	11.21	11.62	11.59
3	--	--	--	--	--	--	11.41	11.41	11.23	11.23	11.64	11.62
4	--	--	--	--	--	--	11.41	11.41	11.23	11.23	11.67	11.64
5	--	--	--	--	--	--	11.40	11.40	11.23	11.23	11.70	11.67
6	--	--	--	--	--	--	11.40	11.31	11.23	11.23	11.71	11.70
7	--	--	--	--	--	--	11.31	11.31	11.24	11.23	11.73	11.71
8	--	--	--	--	--	--	11.31	11.31	11.26	11.24	11.75	11.73
9	--	--	--	--	--	--	11.32	11.31	11.27	11.26	11.76	11.75
10	--	--	--	--	--	--	11.32	11.32	11.27	11.27	11.78	11.76
11	--	--	--	--	--	--	11.34	11.32	11.27	11.27	11.80	11.78
12	--	--	--	--	--	--	11.35	11.34	11.28	11.27	11.82	11.80
13	--	--	--	--	--	--	11.35	11.34	11.29	11.28	11.83	11.82
14	--	--	--	--	11.25	11.24	11.36	11.35	11.30	11.29	11.84	11.83
15	--	--	--	--	11.25	11.25	11.38	11.36	11.31	11.30	11.86	11.85
16	--	--	--	--	11.27	11.25	11.38	11.27	11.32	11.31	11.87	11.86
17	--	--	--	--	11.29	11.27	11.27	11.27	11.34	11.32	11.88	11.87
18	--	--	--	--	11.30	11.29	11.27	11.27	11.35	11.34	11.91	11.88
19	--	--	--	--	11.32	11.30	11.27	11.27	11.35	11.35	11.94	11.92
20	--	--	--	--	11.32	11.29	11.27	11.18	11.36	11.35	11.94	11.94
21	--	--	--	--	11.29	11.28	11.18	11.18	11.37	11.36	11.95	11.95
22	--	--	--	--	11.27	11.26	11.18	11.18	11.37	11.37	11.96	11.95
23	--	--	--	--	11.26	11.26	11.18	11.18	11.38	11.37	12.01	11.96
24	--	--	--	--	11.27	11.26	11.19	11.18	11.41	11.38	12.03	12.01
25	--	--	--	--	11.28	11.27	11.19	11.19	11.43	11.41	12.05	12.03
26	--	--	--	--	11.29	11.28	11.19	11.19	11.44	11.43	12.05	12.04
27	--	--	--	--	11.30	11.29	11.20	11.19	11.46	11.44	12.07	12.05
28	--	--	--	--	11.31	11.30	11.20	11.20	11.47	11.46	12.09	12.07
29	--	--	--	--	11.32	11.31	11.20	11.20	11.49	11.47	--	--
30	--	--	--	--	11.41	11.32	11.20	11.20	11.56	11.49	--	--
31	--	--	--	--	--	--	11.20	11.20	11.58	11.56	--	--
Month	--	--	--	--	--	--	11.41	11.18	11.58	11.20	--	--

Water Year October 1989 to September 1990

	October		November		December		January		February		March	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	--	--	12.76	12.71	13.06	13.04	13.28	13.27	--	--	13.11	13.05
2	--	--	12.77	12.76	13.06	13.04	--	--	--	--	13.05	13.00
3	--	--	12.80	12.77	13.05	13.04	--	--	--	--	13.00	12.99
4	--	--	12.81	12.80	13.06	13.05	--	--	--	--	12.99	12.99
5	--	--	12.82	12.81	13.05	13.05	--	--	--	--	12.99	12.93
6	--	--	12.83	12.82	13.06	13.05	--	--	--	--	12.93	12.91
7	--	--	12.85	12.83	13.09	13.05	--	--	13.29	13.28	12.92	12.91
8	--	--	12.85	12.84	13.10	13.09	--	--	13.29	13.29	12.92	12.89
9	--	--	12.88	12.85	13.10	13.09	--	--	13.29	13.28	12.89	12.86
10	--	--	12.90	12.88	13.10	13.08	--	--	13.28	13.25	12.86	12.85
11	--	--	12.91	12.90	13.10	13.09	--	--	13.26	13.26	12.85	12.84
12	--	--	12.94	12.91	13.10	13.09	--	--	13.26	13.26	12.84	12.84
13	--	--	12.95	12.94	13.11	13.09	--	--	13.26	13.26	12.84	12.84
14	--	--	12.95	12.94	13.11	13.10	--	--	13.26	13.25	12.84	12.84
15	--	--	12.95	12.95	13.12	13.10	--	--	13.25	13.24	12.84	12.84
16	--	--	12.95	12.93	13.12	13.10	--	--	13.24	13.22	12.84	12.84
17	--	--	12.93	12.92	13.13	13.12	--	--	13.24	13.22	12.84	12.82
18	--	--	12.94	12.92	13.15	13.13	--	--	13.24	13.24	12.82	12.82
19	--	--	12.95	12.94	13.15	13.14	--	--	13.24	13.22	12.82	12.81
20	--	--	12.95	12.94	13.15	13.14	--	--	13.23	13.22	12.81	12.80
21	--	--	12.98	12.94	13.16	13.15	--	--	13.23	13.23	12.81	12.81
22	--	--	12.99	12.98	13.18	13.16	--	--	13.23	13.18	12.81	12.81
23	--	--	13.01	12.99	13.19	13.18	--	--	13.18	13.15	12.82	12.81
24	--	--	13.03	13.01	13.19	13.18	--	--	13.15	13.13	12.82	12.82
25	--	--	13.03	13.02	13.19	13.17	--	--	13.15	13.13	12.82	12.82
26	--	--	13.03	13.02	13.18	13.15	--	--	13.16	13.15	12.82	12.82
27	--	--	13.03	13.03	13.20	13.18	--	--	13.16	13.14	12.84	12.83
28	--	--	13.03	13.02	13.25	13.20	--	--	13.14	13.11	12.84	12.84
29	--	--	13.05	13.03	13.26	13.25	--	--	--	--	12.84	12.84
30	--	--	13.05	13.04	13.28	13.26	--	--	--	--	12.84	12.84
31	12.71	12.69	--	--	13.28	13.27	--	--	--	--	12.84	12.82
Month	--	--	13.05	12.71	13.28	13.04	--	--	--	--	13.11	12.80

Table 4.—Continuous water levels recorded in observation wells in Howard County—Continued

Well number: HO Bf 38 (continued)

Water Year October 1989 to September 1990

	April		May		June		July		August		September	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	12.82	12.82	--	--	--	--	--	--	--	--	--	--
2	12.82	12.78	--	--	--	--	--	--	--	--	--	--
3	12.78	12.76	--	--	--	--	--	--	--	--	--	--
4	12.75	12.75	--	--	--	--	--	--	--	--	--	--
5	12.75	12.75	--	--	--	--	--	--	--	--	--	--
6	12.76	12.75	--	--	--	--	--	--	--	--	--	--
7	12.76	12.76	--	--	--	--	--	--	--	--	--	--
8	12.76	12.75	--	--	--	--	--	--	--	--	--	--
9	12.76	12.75	--	--	--	--	--	--	--	--	--	--
10	12.75	12.75	--	--	--	--	--	--	--	--	--	--
11	12.75	12.75	--	--	--	--	--	--	--	--	--	--
12	12.76	12.75	--	--	--	--	--	--	--	--	--	--
13	12.76	12.75	--	--	--	--	--	--	--	--	--	--
14	12.76	12.74	--	--	--	--	--	--	--	--	--	--
15	12.74	12.66	--	--	--	--	--	--	--	--	--	--
16	12.66	12.65	--	--	--	--	--	--	--	--	--	--
17	12.65	12.64	--	--	--	--	--	--	--	--	--	--
18	12.65	12.65	--	--	--	--	--	--	--	--	--	--
19	12.65	12.64	--	--	--	--	--	--	--	--	--	--
20	12.64	12.62	--	--	--	--	--	--	--	--	--	--
21	12.62	12.60	--	--	--	--	--	--	--	--	--	--
22	12.60	12.59	--	--	--	--	--	--	--	--	--	--
23	12.59	12.57	--	--	--	--	--	--	--	--	--	--
24	12.57	12.56	--	--	--	--	--	--	--	--	--	--
25	12.56	12.53	--	--	--	--	--	--	--	--	--	--
26	12.53	12.52	--	--	--	--	--	--	--	--	--	--
27	--	--	--	--	--	--	--	--	--	--	--	--
28	--	--	--	--	--	--	--	--	--	--	--	--
29	--	--	--	--	--	--	--	--	--	--	--	--
30	--	--	--	--	--	--	--	--	--	--	--	--
31	--	--	--	--	--	--	--	--	--	--	--	--

Well number: HO Bf 51
Owner: Bolanowski.
Geologic unit: Baltimore Gneiss.
Altitude: 465 feet.
Well characteristics: Drilled unused water-table well, depth 150 feet, diameter 6 inches.
Period of record: August 1988 to August 1989.
Extremes for period of record: Highest water level recorded, 21.84 feet, July 21-23, 1989;
Lowest water level recorded, 31.39 feet, January 5,6,9-12, 1989.

Water Year October 1987 to September 1988

	April		May		June		July		August		September	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	--	--	--	--	--	--	--	--	--	--	29.03	29.01
2	--	--	--	--	--	--	--	--	27.92	27.84	29.03	29.03
3	--	--	--	--	--	--	--	--	27.92	27.92	29.08	29.03
4	--	--	--	--	--	--	--	--	27.99	27.92	29.08	29.08
5	--	--	--	--	--	--	--	--	27.99	27.99	29.08	29.08
6	--	--	--	--	--	--	--	--	27.99	27.99	29.11	29.08
7	--	--	--	--	--	--	--	--	28.00	27.99	29.11	29.11
8	--	--	--	--	--	--	--	--	28.05	28.00	29.17	29.11
9	--	--	--	--	--	--	--	--	28.10	28.05	29.18	29.18
10	--	--	--	--	--	--	--	--	28.11	28.10	29.20	29.18
11	--	--	--	--	--	--	--	--	28.15	28.13	29.22	29.20
12	--	--	--	--	--	--	--	--	28.19	28.15	29.22	29.21
13	--	--	--	--	--	--	--	--	28.23	28.20	29.24	29.21
14	--	--	--	--	--	--	--	--	28.40	28.24	29.27	29.24
15	--	--	--	--	--	--	--	--	28.38	28.38	29.34	29.27
16	--	--	--	--	--	--	--	--	28.39	28.38	29.38	29.34
17	--	--	--	--	--	--	--	--	28.40	28.39	29.38	29.38
18	--	--	--	--	--	--	--	--	28.43	28.40	29.38	29.38
19	--	--	--	--	--	--	--	--	28.49	28.44	29.41	29.38
20	--	--	--	--	--	--	--	--	28.52	28.50	29.45	29.41
21	--	--	--	--	--	--	--	--	28.60	28.52	29.45	29.44
22	--	--	--	--	--	--	--	--	28.61	28.60	29.48	29.45
23	--	--	--	--	--	--	--	--	28.61	28.61	29.49	29.48
24	--	--	--	--	--	--	--	--	28.66	28.61	29.50	29.49
25	--	--	--	--	--	--	--	--	28.70	28.66	29.51	29.50
26	--	--	--	--	--	--	--	--	28.83	28.70	29.60	29.51
27	--	--	--	--	--	--	--	--	28.83	28.83	29.64	29.59
28	--	--	--	--	--	--	--	--	28.85	28.83	29.66	29.64
29	--	--	--	--	--	--	--	--	28.87	28.85	29.84	29.66
30	--	--	--	--	--	--	--	--	28.90	28.87	29.84	29.84
31	--	--	--	--	--	--	--	--	29.01	28.90	--	--
Month	--	--	--	--	--	--	--	--	--	--	29.84	29.01

Table 4.—Continuous water levels recorded in observation wells in Howard County—Continued

Well number: HO Bf 51 (continued)

Water Year October 1988 to September 1989

	October		November		December		January		February		March	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	29.86	29.84	30.84	30.84	31.05	31.05	31.33	31.33	30.48	30.48	29.41	29.39
2	29.86	29.85	30.87	30.84	31.05	31.05	31.33	31.32	30.50	30.48	29.39	29.30
3	29.91	29.87	30.89	30.87	31.05	31.03	31.33	31.33	30.49	30.45	29.29	29.22
4	29.95	29.91	30.90	30.89	31.03	31.03	31.34	31.33	30.45	30.45	29.22	29.18
5	30.01	29.95	30.90	30.90	31.03	31.03	31.39	31.34	30.45	30.44	29.18	29.13
6	30.06	30.01	30.94	30.90	31.03	31.02	31.39	31.38	30.44	30.41	29.14	29.09
7	30.06	30.05	30.99	30.94	31.02	31.02	31.38	31.38	30.41	30.39	29.09	29.06
8	30.13	30.06	31.06	30.99	31.04	31.02	31.38	31.38	30.39	30.39	29.06	29.01
9	30.13	30.13	31.06	31.06	31.04	31.03	31.39	31.38	30.39	30.39	29.01	28.93
10	30.15	30.13	31.06	31.06	31.04	31.03	31.39	31.39	30.40	30.39	28.92	28.87
11	30.16	30.15	31.10	31.06	31.06	31.04	31.39	31.39	30.39	30.35	28.87	28.78
12	30.21	30.16	31.12	31.10	31.09	31.06	31.39	31.31	30.35	30.35	28.77	28.77
13	30.25	30.21	31.14	31.12	31.08	31.08	31.30	31.25	30.36	30.35	28.77	28.68
14	30.27	30.25	31.15	31.14	31.09	31.08	31.25	31.20	30.35	30.32	28.68	28.62
15	30.27	30.27	31.17	31.15	31.09	31.09	31.19	31.04	30.33	30.29	28.62	28.60
16	30.35	30.27	31.20	31.17	31.13	31.09	31.03	30.96	30.30	30.29	28.60	28.60
17	30.37	30.36	31.23	31.20	31.13	31.13	30.96	30.88	30.30	30.23	28.60	28.51
18	30.38	30.37	31.25	31.23	31.13	31.13	30.88	30.81	30.23	30.18	28.51	28.51
19	30.38	30.38	31.26	31.25	31.16	31.13	30.81	30.77	30.18	30.14	28.51	28.51
20	30.42	30.38	31.26	31.24	31.20	31.16	30.77	30.71	30.14	30.09	28.51	28.39
21	30.42	30.42	31.25	31.24	31.20	31.20	30.72	30.71	30.09	29.93	28.40	28.39
22	30.43	30.42	31.25	31.25	31.24	31.20	30.71	30.66	29.92	29.79	28.40	28.40
23	30.48	30.43	31.25	31.25	31.24	31.23	30.66	30.64	29.78	29.73	28.40	28.29
24	30.53	30.48	31.25	31.24	31.23	31.23	30.64	30.64	29.72	29.63	28.28	27.94
25	30.57	30.53	31.25	31.25	31.25	31.23	30.64	30.64	29.62	29.55	27.94	27.88
26	30.63	30.58	31.25	31.25	31.26	31.25	30.64	30.60	29.54	29.44	27.88	27.79
27	30.63	30.63	31.25	31.22	31.29	31.26	30.60	30.55	29.44	29.44	27.78	27.67
28	30.65	30.63	31.22	31.19	31.30	31.29	30.55	30.55	29.44	29.41	27.66	27.57
29	30.70	30.65	31.19	31.16	31.30	31.29	30.55	30.52	--	--	27.56	27.50
30	30.76	30.70	31.16	31.05	31.33	31.29	30.52	30.46	--	--	27.50	27.37
31	30.84	30.77	--	--	31.33	31.32	30.49	30.46	--	--	27.36	27.29
Month	30.84	29.84	31.26	30.84	31.33	31.02	31.39	30.46	30.50	29.41	29.41	27.29

	April		May		June		July		August		September	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	27.29	27.27	--	--	22.56	22.53	22.17	22.17	22.13	22.12	--	--
2	27.27	27.15	--	--	22.64	22.56	22.18	22.17	22.13	22.13	--	--
3	27.18	27.15	--	--	22.65	22.64	22.18	22.18	22.15	22.13	--	--
4	27.18	27.14	26.38	26.35	22.67	22.64	22.29	22.19	22.19	22.15	--	--
5	27.14	27.08	--	--	22.68	22.67	22.30	22.29	22.30	22.19	--	--
6	27.07	27.03	--	--	22.68	22.68	22.29	22.28	22.38	22.30	--	--
7	27.03	26.93	--	--	22.69	22.66	22.28	22.09	22.48	22.38	--	--
8	26.93	26.88	24.59	24.57	22.66	22.65	22.08	22.07	22.58	22.48	--	--
9	26.88	26.87	24.59	24.52	22.66	22.61	22.07	22.06	22.68	22.58	--	--
10	26.87	26.84	24.51	24.40	22.61	22.61	22.09	22.06	22.73	22.68	--	--
11	26.84	26.79	24.40	24.29	22.68	22.62	22.12	22.10	22.78	22.73	--	--
12	26.79	26.77	24.29	24.22	22.68	22.68	22.22	22.14	22.87	22.78	--	--
13	26.77	26.74	24.22	24.18	22.69	22.68	22.23	22.23	22.92	22.87	--	--
14	26.73	26.68	24.18	24.07	22.77	22.69	22.27	22.23	23.00	22.92	--	--
15	26.68	26.63	24.06	23.98	22.80	22.74	22.38	22.27	23.06	23.01	--	--
16	26.62	26.59	23.98	23.65	22.74	22.74	22.47	22.38	23.13	23.06	--	--
17	26.59	26.54	23.59	23.21	22.75	22.74	22.46	22.23	23.32	23.13	--	--
18	26.54	26.51	23.20	23.10	22.77	22.75	22.23	22.23	23.29	23.22	--	--
19	--	--	23.10	22.94	22.81	22.77	22.23	22.22	23.31	23.29	--	--
20	--	--	22.93	22.83	22.85	22.81	22.24	22.22	23.36	23.30	--	--
21	--	--	22.83	22.80	22.85	22.58	22.20	21.84	23.42	23.36	--	--
22	--	--	22.80	22.76	22.57	22.11	21.84	21.84	23.51	23.42	--	--
23	--	--	22.75	22.67	22.10	22.10	21.85	21.84	23.57	23.51	--	--
24	--	--	22.67	22.61	22.10	22.08	21.85	21.85	23.69	23.57	--	--
25	--	--	22.61	22.59	22.08	22.08	21.85	21.85	23.71	23.69	--	--
26	--	--	22.59	22.58	22.08	22.06	21.92	21.85	23.80	23.71	--	--
27	--	--	22.58	22.58	22.06	22.06	21.94	21.92	23.90	23.80	--	--
28	--	--	22.58	22.58	22.07	22.06	21.94	21.94	--	--	--	--
29	--	--	22.59	22.58	22.12	22.07	22.02	21.94	--	--	--	--
30	--	--	22.58	22.49	22.17	22.13	22.09	22.02	--	--	--	--
31	--	--	22.53	22.49	--	--	22.13	22.09	--	--	--	--
Month	--	--	--	--	22.85	22.06	22.47	21.84	--	--	--	--

Table 4.—Continuous water levels recorded in observation wells in Howard County—Continued

Well number: HO Bf 67
Owner: Patapsco Valley State Park.
Geologic unit: Mount Washington Amphibolite.
Altitude: 425 feet.
Well characteristics: Drilled unused water-table well, depth 161 feet, diameter 6 inches.
Period of record: April 1989 to April 1990.
Extremes for period of record: Highest water level recorded, 9.81 feet, April 4, 1990;
Lowest water level recorded, 18.67 feet, December 29, 1989.

Water Year October 1988 to September 1989

	April		May		June		July		August		September	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	--	--	--	--	13.89	13.55	14.39	14.26	13.34	12.90	17.21	17.04
2	--	--	--	--	14.29	13.90	--	--	12.91	12.88	17.53	17.23
3	--	--	--	--	14.55	14.31	--	--	13.13	12.92	17.67	17.55
4	--	--	15.58	15.27	14.98	14.56	--	--	13.33	13.14	17.71	17.68
5	--	--	15.25	14.50	15.21	15.02	14.32	13.34	13.67	13.40	17.71	17.66
6	--	--	14.47	13.70	15.06	14.17	13.31	12.44	13.97	13.68	17.67	17.63
7	16.37	15.93	13.66	13.07	--	--	12.43	12.08	--	--	17.64	17.60
8	15.93	15.69	13.02	12.86	--	--	--	--	--	--	17.66	17.62
9	16.10	15.73	12.99	12.81	--	--	--	--	--	--	17.69	17.65
10	16.34	16.10	12.78	12.33	--	--	--	--	--	--	17.81	17.70
11	16.45	16.34	12.32	12.03	--	--	13.47	12.93	15.37	15.29	18.00	17.83
12	16.55	16.45	12.08	11.99	--	--	13.79	13.49	15.47	15.37	18.11	18.04
13	16.72	16.51	12.40	12.09	--	--	14.00	13.79	15.62	15.48	18.12	18.09
14	16.84	16.72	12.58	12.40	--	--	14.56	14.04	15.68	15.62	18.09	17.97
15	16.82	16.59	12.71	12.58	--	--	14.91	14.59	15.72	15.68	18.23	18.02
16	16.69	16.59	12.73	12.42	--	--	14.84	13.61	15.82	15.72	18.22	18.13
17	16.63	16.17	12.40	12.05	--	--	13.56	13.10	16.58	15.96	18.35	18.16
18	16.21	16.05	12.03	11.85	--	--	13.11	13.07	16.62	16.58	18.47	18.35
19	16.11	15.92	11.96	11.90	--	--	13.17	13.06	16.59	16.56	18.46	18.37
20	15.90	15.46	12.06	11.92	--	--	13.05	11.76	16.57	16.55	18.44	18.39
21	--	--	12.53	12.06	--	--	11.73	11.58	16.63	16.57	18.40	18.11
22	--	--	12.93	12.54	--	--	11.80	11.58	16.66	16.63	18.10	17.80
23	--	--	13.02	12.82	--	--	12.22	11.81	16.72	16.64	18.36	17.88
24	--	--	12.79	12.48	--	--	12.61	12.24	16.80	16.73	18.46	18.36
25	--	--	12.47	12.15	--	--	12.98	12.63	16.85	16.82	18.40	17.98
26	--	--	12.35	12.19	--	--	13.27	12.99	16.88	16.84	18.03	17.88
27	--	--	12.61	12.38	--	--	13.41	13.28	16.94	16.89	18.12	18.05
28	--	--	12.81	12.63	--	--	13.82	13.42	16.96	16.94	18.07	17.87
29	--	--	12.93	12.81	--	--	14.13	13.85	16.95	16.90	--	--
30	--	--	13.15	12.94	--	--	14.13	14.13	17.17	16.90	18.15	17.92
31	--	--	13.54	13.16	--	--	14.12	13.35	17.21	17.17	--	--

Water Year October 1989 to September 1990

	October		November		December		January		February		March	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	18.16	18.04	17.46	17.08	17.35	17.09	17.95	17.14	12.21	11.89	13.33	13.09
2	18.01	17.65	--	--	17.35	16.81	17.13	16.27	12.00	11.77	13.08	12.90
3	17.66	17.58	--	--	17.15	16.84	16.27	15.89	12.34	12.02	13.26	12.90
4	17.70	17.62	17.72	17.63	17.25	17.07	15.88	15.56	12.19	11.85	13.76	13.28
5	17.74	17.66	17.71	17.61	17.25	17.06	15.84	15.66	12.42	12.20	13.99	13.76
6	17.75	17.64	17.61	17.52	17.29	17.16	15.85	15.64	12.31	12.18	14.55	13.99
7	18.04	17.76	17.64	17.54	17.92	17.34	15.85	15.70	12.36	12.09	14.72	14.56
8	18.15	18.02	17.62	17.49	17.92	17.64	15.74	15.57	12.50	12.36	14.68	14.40
9	18.40	18.16	17.69	17.42	17.67	17.50	15.77	15.16	12.42	12.12	14.39	14.26
10	18.45	18.34	17.97	17.69	17.59	17.49	15.15	14.98	12.27	12.01	14.57	14.35
11	18.52	18.34	17.97	17.88	17.70	17.58	14.97	14.31	12.27	12.00	14.63	14.53
12	18.52	18.44	18.23	17.88	17.74	17.65	14.75	14.32	12.27	11.98	14.66	14.59
13	--	--	18.29	18.03	17.82	17.62	15.25	14.75	12.28	12.01	14.76	14.65
14	--	--	18.03	17.97	17.90	17.81	15.34	15.26	12.37	12.01	14.84	14.74
15	--	--	17.97	17.71	17.96	17.52	15.42	15.24	12.40	12.24	14.97	14.84
16	--	--	17.71	16.51	18.06	17.70	15.56	15.43	12.39	12.19	15.02	14.92
17	--	--	16.49	15.62	18.17	18.07	15.61	15.42	13.32	12.42	14.91	14.58
18	--	--	--	--	18.23	18.13	15.89	15.42	13.43	13.16	14.57	14.09
19	--	--	--	--	18.22	17.96	16.08	15.90	13.32	12.99	14.08	13.24
20	--	--	--	--	18.15	17.96	16.02	15.61	13.89	13.35	13.22	12.88
21	--	--	--	--	18.34	18.10	15.92	15.58	14.01	13.90	12.95	12.88
22	--	--	--	--	18.47	18.36	16.22	15.93	13.96	13.36	12.93	12.61
23	--	--	--	--	18.52	18.43	16.35	16.19	13.37	13.25	12.94	12.60
24	--	--	--	--	18.43	18.18	16.40	16.21	13.36	13.23	13.12	12.94
25	--	--	--	--	18.17	17.92	16.33	15.33	13.85	13.37	13.14	13.01
26	--	--	--	--	18.39	17.86	15.31	14.59	13.89	13.62	13.01	12.93
27	--	--	--	--	18.50	18.26	14.58	13.63	13.60	13.12	13.12	12.99
28	--	--	--	--	18.63	18.25	13.62	13.28	13.19	13.11	13.12	12.96
29	--	--	--	--	18.67	18.49	--	--	--	--	13.13	12.97
30	--	--	--	--	18.61	18.48	--	--	--	--	12.96	12.71
31	17.09	16.89	--	--	18.50	17.95	12.34	12.22	--	--	12.68	11.86
Month	--	--	--	--	18.67	16.81	--	--	14.01	11.77	15.02	11.86

Table 4.—Continuous water levels recorded in observation wells in Howard County—Continued

Well number: HO Bf 67 (continued)

Water Year October 1989 to September 1990

	April		May		June		July		August		September	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	11.85	11.28	--	--	--	--	--	--	--	--	--	--
2	11.26	10.67	--	--	--	--	--	--	--	--	--	--
3	10.66	10.00	--	--	--	--	--	--	--	--	--	--
4	9.98	9.81	--	--	--	--	--	--	--	--	--	--
5	10.21	9.87	--	--	--	--	--	--	--	--	--	--
6	10.40	10.22	--	--	--	--	--	--	--	--	--	--
7	10.33	10.23	--	--	--	--	--	--	--	--	--	--
8	10.24	10.08	--	--	--	--	--	--	--	--	--	--
9	10.16	9.84	--	--	--	--	--	--	--	--	--	--
10	--	--	--	--	--	--	--	--	--	--	--	--
11	--	--	--	--	--	--	--	--	--	--	--	--
12	--	--	--	--	--	--	--	--	--	--	--	--
13	--	--	--	--	--	--	--	--	--	--	--	--
14	--	--	--	--	--	--	--	--	--	--	--	--
15	--	--	--	--	--	--	--	--	--	--	--	--
16	--	--	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--	--	--
18	--	--	--	--	--	--	--	--	--	--	--	--
19	--	--	--	--	--	--	--	--	--	--	--	--
20	--	--	--	--	--	--	--	--	--	--	--	--
21	--	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--	--
23	--	--	--	--	--	--	--	--	--	--	--	--
24	--	--	--	--	--	--	--	--	--	--	--	--
25	--	--	--	--	--	--	--	--	--	--	--	--
26	--	--	--	--	--	--	--	--	--	--	--	--
27	--	--	--	--	--	--	--	--	--	--	--	--
28	--	--	--	--	--	--	--	--	--	--	--	--
29	--	--	--	--	--	--	--	--	--	--	--	--
30	--	--	--	--	--	--	--	--	--	--	--	--
31	--	--	--	--	--	--	--	--	--	--	--	--

Well number: HO Cc 37
Owner: Robert Oler.
Geologic unit: Loch Raven Schist.
Altitude: 470 feet.
Well characteristics: Drilled unused water-table well, depth 285 feet, diameter 6 inches.
Remarks: Water levels affected by pumpage from nearby domestic well.
Period of record: December 1987 to January 1989.
Extremes for period of record: Highest water level recorded, 45.77 feet, June 5, 1988;
Lowest water level recorded, 48.29 feet, December 29, 1987.

Water Year October 1987 to September 1988

	October		November		December		January		February		March	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	--	--	--	--	--	--	48.07	47.98	48.10	47.97	47.42	47.17
2	--	--	--	--	--	--	48.04	47.98	48.01	47.92	47.42	47.27
3	--	--	--	--	--	--	47.98	47.83	47.92	47.79	47.31	47.23
4	--	--	--	--	--	--	47.89	47.80	47.85	47.68	47.23	47.13
5	--	--	--	--	--	--	48.00	47.89	47.85	47.73	47.30	47.15
6	--	--	--	--	--	--	48.05	47.98	47.98	47.81	47.34	47.31
7	--	--	--	--	--	--	48.07	47.98	47.97	47.94	47.34	47.19
8	--	--	--	--	48.00	47.98	48.03	47.92	47.94	47.94	47.20	47.10
9	--	--	--	--	48.08	47.98	47.97	47.91	47.94	47.71	47.26	47.06
10	--	--	--	--	48.01	47.92	48.02	47.91	47.79	47.64	47.42	47.12
11	--	--	--	--	47.95	47.79	48.04	47.98	47.79	47.66	47.42	47.27
12	--	--	--	--	47.95	47.84	48.01	47.92	47.63	47.50	47.30	47.05
13	--	--	--	--	47.87	47.80	48.05	47.92	47.62	47.52	47.04	46.96
14	--	--	--	--	47.91	47.85	48.05	48.02	47.61	47.54	47.09	46.97
15	--	--	--	--	47.91	47.85	48.15	48.00	47.55	47.44	47.10	47.06
16	--	--	--	--	47.89	47.85	48.25	48.14	47.60	47.44	47.12	47.06
17	--	--	--	--	48.18	47.81	48.20	47.98	47.84	47.60	47.14	47.03
18	--	--	--	--	48.16	48.02	47.97	47.92	47.84	47.66	47.23	47.07
19	--	--	--	--	48.15	48.02	47.97	47.92	47.68	47.50	47.20	47.07
20	--	--	--	--	48.13	48.05	47.92	47.61	47.53	47.44	47.24	47.07
21	--	--	--	--	48.17	48.05	47.66	47.58	47.68	47.44	47.20	47.09
22	--	--	--	--	48.10	47.99	47.98	47.64	47.69	47.56	47.19	47.09
23	--	--	--	--	47.98	47.98	47.98	47.91	47.56	47.47	47.17	47.01
24	--	--	--	--	48.00	47.86	47.93	47.91	47.56	47.44	47.02	46.90
25	--	--	--	--	48.09	48.00	47.93	47.74	47.56	47.45	46.95	46.88
26	--	--	--	--	48.06	47.98	47.89	47.83	47.45	47.44	46.87	46.74
27	--	--	--	--	48.12	48.00	47.90	47.88	47.44	47.44	46.89	46.74
28	--	--	--	--	48.11	47.99	47.88	47.83	47.44	47.44	46.85	46.78
29	--	--	--	--	48.29	48.15	47.94	47.89	47.45	47.18	46.92	46.78
30	--	--	--	--	48.24	48.14	47.93	47.92	--	--	46.94	46.86
31	--	--	--	--	48.22	48.08	47.98	47.93	--	--	46.92	46.82
Month	--	--	--	--	--	--	48.25	47.58	48.10	47.18	47.42	46.74

Table 4.—Continuous water levels recorded in observation wells in Howard County—Continued

Well number: HO Cc 37 (continued)

Water Year October 1987 to September 1988

	April		May		June		July		August		September	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	47.00	46.80	46.86	46.53	--	--	46.45	46.03	--	--	--	--
2	47.00	46.81	46.88	46.60	--	--	46.32	46.09	46.89	46.47	--	--
3	46.87	46.78	46.75	46.63	46.04	45.91	46.23	45.99	47.68	46.66	--	--
4	46.84	46.76	46.71	46.59	45.96	45.84	46.31	46.14	48.26	46.69	--	--
5	46.88	46.76	46.65	46.62	46.60	45.77	46.95	46.48	48.61	47.33	--	--
6	46.89	46.77	46.64	46.60	46.54	46.01	46.84	46.54	47.31	46.97	--	--
7	46.81	46.76	46.59	46.51	46.05	45.83	47.70	46.66	47.36	46.82	--	--
8	46.80	46.71	46.67	46.49	46.06	45.86	--	--	47.11	46.77	--	--
9	46.88	46.72	46.64	46.48	46.06	45.92	--	--	46.98	46.73	--	--
10	46.88	46.76	46.72	46.46	45.96	45.88	--	--	47.55	46.89	--	--
11	46.89	46.75	46.72	46.65	47.50	45.88	--	--	47.16	46.78	--	--
12	46.78	46.70	46.68	46.55	47.06	46.32	--	--	46.77	46.62	--	--
13	46.83	46.69	46.56	46.43	46.33	46.05	--	--	46.74	46.53	--	--
14	46.86	46.78	46.51	46.37	46.11	45.97	--	--	47.27	46.45	--	--
15	46.81	46.61	46.47	46.38	46.33	45.90	--	--	46.95	46.49	--	--
16	46.75	46.71	51.54	46.32	46.59	45.99	--	--	47.31	46.49	--	--
17	46.86	46.74	51.09	47.40	46.59	46.32	--	--	47.31	46.65	--	--
18	46.85	46.61	47.36	46.93	46.31	46.11	--	--	47.21	46.56	--	--
19	46.63	46.56	47.08	46.70	46.15	45.97	--	--	47.17	46.68	--	--
20	46.66	46.61	47.04	46.69	--	--	--	--	46.73	46.55	--	--
21	46.61	46.53	46.72	46.57	--	--	--	--	46.64	46.48	--	--
22	46.71	46.57	46.66	46.53	--	--	--	--	46.50	46.37	--	--
23	47.03	46.74	46.51	46.31	--	--	--	--	46.57	46.32	--	--
24	46.98	46.78	46.40	46.23	--	--	--	--	46.55	46.40	--	--
25	46.96	46.71	46.33	46.19	--	--	--	--	46.49	46.33	--	--
26	46.76	46.64	46.33	46.13	46.75	46.14	--	--	46.39	46.27	--	--
27	46.64	46.47	46.26	46.08	46.37	45.99	--	--	48.04	46.28	--	--
28	46.57	46.43	--	--	46.81	46.00	--	--	47.65	46.60	--	--
29	46.59	46.48	--	--	46.47	46.09	--	--	46.55	46.32	--	--
30	46.57	46.51	--	--	46.35	46.03	--	--	46.34	46.25	--	--
31	--	--	--	--	--	--	--	--	--	--	--	--
Month	47.03	46.43	--	--	--	--	--	--	--	--	--	--

Water Year October 1988 to September 1989

	October		November		December		January		February		March	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	--	--	47.69	47.48	47.59	47.20	47.98	47.81	--	--	--	--
2	47.03	46.82	47.47	47.30	47.59	47.33	47.88	47.72	--	--	--	--
3	47.03	46.86	47.44	47.25	47.57	47.37	47.91	47.63	--	--	--	--
4	46.90	46.75	47.43	47.16	47.53	47.38	47.99	47.81	--	--	--	--
5	47.14	46.89	47.28	47.10	47.72	47.39	47.97	47.88	--	--	--	--
6	47.16	46.89	47.48	47.18	47.73	47.45	47.93	47.79	--	--	--	--
7	46.99	46.83	47.47	47.28	47.49	47.30	48.13	47.87	--	--	--	--
8	46.91	46.68	47.52	47.29	47.55	47.44	48.07	47.81	--	--	--	--
9	46.75	46.58	47.38	47.20	47.53	47.33	48.02	47.92	--	--	--	--
10	46.77	46.67	47.43	47.17	47.63	47.39	47.99	47.89	--	--	--	--
11	46.86	46.68	47.44	47.35	47.77	47.57	47.98	47.91	--	--	--	--
12	46.89	46.78	47.56	47.42	47.74	47.59	48.00	47.83	--	--	--	--
13	47.07	46.91	47.57	47.41	47.66	47.59	48.06	47.89	--	--	--	--
14	47.02	46.88	47.83	47.48	47.78	47.58	48.06	47.99	--	--	--	--
15	46.99	46.87	47.85	47.54	47.65	47.57	48.06	47.81	--	--	--	--
16	47.07	46.90	47.68	47.52	47.79	47.54	48.03	47.70	--	--	--	--
17	46.89	46.83	47.55	47.31	47.85	47.61	48.07	47.93	--	--	--	--
18	47.13	46.83	47.46	47.33	47.81	47.64	--	--	--	--	--	--
19	47.31	46.99	47.93	47.45	48.00	47.62	--	--	--	--	--	--
20	47.09	47.01	47.87	47.39	47.96	47.77	--	--	--	--	--	--
21	47.25	47.00	47.40	47.31	47.74	47.59	--	--	--	--	--	--
22	47.42	46.98	47.50	47.41	47.78	47.61	--	--	--	--	--	--
23	47.22	46.98	47.52	47.32	47.75	47.64	--	--	--	--	--	--
24	47.47	47.14	47.72	47.37	47.88	47.66	--	--	--	--	--	--
25	47.36	47.16	47.72	47.46	47.93	47.79	--	--	--	--	--	--
26	47.64	47.36	47.45	47.34	48.04	47.86	--	--	--	--	--	--
27	47.73	47.50	47.48	47.26	48.03	47.92	--	--	--	--	--	--
28	47.68	47.45	47.57	47.37	47.96	47.84	--	--	--	--	--	--
29	47.64	47.32	47.65	47.53	48.02	47.90	--	--	--	--	--	--
30	47.91	47.66	47.58	47.31	47.94	47.83	--	--	--	--	--	--
31	47.88	47.70	--	--	48.00	47.75	--	--	--	--	--	--
Month	--	--	47.93	47.10	48.04	47.20	--	--	--	--	--	--

Table 4.—Continuous water levels recorded in observation wells in Howard County—Continued

Well number: HO Cd 20
Owner: U.S. Geological Survey.
Geologic unit: Loch Raven Schist.
Altitude: 475.70 feet.
Well characteristics: Drilled unused water-table well, depth 96 feet, diameter 6 inches.
Period of record: December 1986 to August 1988.
Extremes for period of record: Highest water level recorded, 5.93 feet,May 25, 1988;
Lowest water level recorded, 9.93 feet, December 5, 1986.

Water Year October 1986 to September 1987

	October		November		December		January		February		March	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	--	--	--	--	--	--	--	--	8.76	8.68	8.44	7.85
2	--	--	--	--	--	--	--	--	8.69	8.67	7.88	7.84
3	--	--	--	--	--	--	9.10	9.08	8.73	8.68	7.86	7.83
4	--	--	--	--	--	--	9.11	9.07	8.74	8.73	7.86	7.84
5	--	--	--	--	9.93	9.91	9.09	9.07	8.75	8.71	--	--
6	--	--	--	--	9.93	9.90	9.07	9.01	8.70	8.65	--	--
7	--	--	--	--	9.91	9.88	9.06	9.01	8.65	8.63	7.90	7.84
8	--	--	--	--	9.90	9.88	9.07	9.05	8.64	8.58	7.84	7.79
9	--	--	--	--	9.89	9.85	9.07	9.05	8.70	8.62	7.86	7.77
10	--	--	--	--	9.89	9.85	9.05	8.99	8.69	8.64	7.92	7.86
11	--	--	--	--	9.88	9.84	9.07	8.99	8.67	8.62	7.91	7.87
12	--	--	--	--	9.84	9.82	9.08	9.02	8.63	8.56	7.87	7.82
13	--	--	--	--	9.85	9.82	9.10	9.05	8.64	8.61	7.84	7.80
14	--	--	--	--	9.83	9.77	9.09	9.04	8.64	8.59	7.84	7.79
15	--	--	--	--	9.78	9.76	9.09	9.03	8.65	8.62	7.84	7.80
16	--	--	--	--	9.78	9.74	9.11	9.08	8.65	8.58	7.83	7.79
17	--	--	--	--	9.77	9.74	9.11	9.09	8.60	8.58	7.83	7.76
18	--	--	--	--	9.75	9.67	9.10	9.02	8.62	8.59	7.81	7.76
19	--	--	--	--	9.69	9.66	9.05	8.73	8.64	8.62	7.78	7.74
20	--	--	--	--	9.67	9.64	8.74	8.71	8.63	8.59	7.77	7.73
21	--	--	--	--	9.65	9.63	8.73	8.71	8.59	8.58	7.77	7.75
22	--	--	--	--	9.64	9.61	8.72	8.58	8.59	8.49	7.80	7.74
23	--	--	--	--	9.61	9.59	8.76	8.63	8.61	8.44	7.81	7.79
24	--	--	--	--	9.59	9.15	8.77	8.74	8.61	8.59	7.80	7.77
25	--	--	--	--	9.14	9.09	8.75	8.68	8.60	8.57	7.80	7.76
26	--	--	--	--	9.14	9.11	8.75	8.65	8.59	8.55	7.80	7.73
27	--	--	--	--	9.13	9.11	8.74	8.71	8.58	8.53	7.81	7.76
28	--	--	--	--	9.12	9.09	8.76	8.70	8.56	8.45	7.82	7.74
29	--	--	--	--	9.11	9.06	8.76	8.71	--	--	7.84	7.78
30	--	--	--	--	--	--	8.71	8.65	--	--	7.80	7.69
31	--	--	--	--	--	--	8.75	8.67	--	--	7.68	7.56
Month	--	--	--	--	--	--	--	--	8.76	8.44	--	--

	April		May		June		July		August		September	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	7.67	7.62	7.00	6.93	6.95	6.91	7.34	7.15	7.77	7.75	--	--
2	7.67	7.61	6.98	6.95	6.97	6.93	7.18	7.15	7.78	7.77	8.49	8.46
3	7.69	7.57	6.98	6.96	6.98	6.95	7.19	7.16	7.81	7.77	8.54	8.49
4	7.57	7.29	6.99	6.93	6.95	6.86	7.20	7.18	7.83	7.81	8.57	8.54
5	7.33	7.29	6.93	6.88	6.93	6.87	7.26	7.20	--	--	8.57	8.53
6	7.31	7.29	6.88	6.85	6.99	6.93	7.28	7.25	--	--	8.55	8.49
7	7.32	7.29	6.89	6.86	6.99	6.95	7.26	7.22	7.91	7.86	8.52	8.48
8	7.33	7.30	6.92	6.89	6.99	6.96	--	--	7.90	7.86	8.51	8.30
9	--	--	6.94	6.89	7.01	6.96	--	--	7.91	7.87	8.48	8.37
10	--	--	6.93	6.89	7.07	7.01	7.34	7.30	7.97	7.88	8.50	8.46
11	7.18	7.13	6.95	6.90	--	--	7.36	7.31	8.00	7.96	8.52	8.49
12	7.18	7.11	--	--	--	--	7.37	7.33	8.02	7.98	8.52	8.36
13	7.23	7.15	--	--	7.09	7.06	7.37	7.33	8.05	8.02	8.39	8.35
14	7.24	7.15	6.94	6.84	7.12	7.07	7.37	7.32	8.06	8.04	8.44	8.39
15	7.18	7.12	6.85	6.80	7.14	7.10	7.43	7.38	8.07	8.05	8.46	8.42
16	7.13	7.05	6.91	6.85	7.18	7.12	7.47	7.42	8.08	8.05	8.46	8.43
17	7.06	7.02	6.87	6.85	7.22	7.15	7.50	7.47	8.09	8.06	8.45	8.41
18	7.08	7.03	6.88	6.85	7.23	7.22	7.49	7.47	8.15	8.09	8.41	8.35
19	7.09	7.05	6.90	6.85	7.22	7.21	7.51	7.48	8.17	8.14	8.44	8.40
20	7.07	7.04	6.89	6.86	7.22	7.20	7.53	7.51	8.23	8.16	8.43	8.40
21	7.04	7.01	6.88	6.85	7.22	7.19	7.56	7.52	8.25	8.22	8.44	8.40
22	7.08	7.00	6.87	6.85	7.23	7.20	7.59	7.56	8.24	8.15	8.44	8.41
23	7.07	7.01	6.87	6.84	7.28	7.21	7.61	7.57	8.27	8.17	8.45	8.41
24	7.01	6.93	6.90	6.84	7.33	7.28	7.63	7.60	8.31	8.26	8.46	8.42
25	7.02	6.97	6.93	6.88	7.32	7.29	7.63	7.59	8.32	8.28	8.51	8.45
26	7.03	6.98	6.91	6.88	7.32	7.25	7.63	7.59	8.33	8.29	8.53	8.50
27	7.00	6.92	6.92	6.88	7.32	7.25	7.66	7.62	8.33	8.26	8.56	8.52
28	6.95	6.92	6.89	6.85	7.39	7.33	7.69	7.64	8.34	8.32	8.57	8.54
29	6.95	6.82	6.90	6.86	7.42	7.38	7.73	7.69	8.40	8.33	8.55	8.49
30	7.00	6.88	6.92	6.88	7.43	7.30	7.74	7.70	8.42	8.40	8.49	8.45
31	--	--	6.93	6.88	--	--	7.76	7.72	--	--	--	--

Table 4.—Continuous water levels recorded in observation wells in Howard County—Continued

Well number: HO Cd 20 (continued)

Water Year October 1987 to September 1988

	October		November		December		January		February		March	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	8.56	8.48	8.61	8.57	7.86	7.78	7.83	7.75	7.47	7.41	6.84	6.81
2	8.58	8.54	8.60	8.56	7.93	7.83	7.85	7.81	7.42	7.32	6.82	6.77
3	8.60	8.54	8.58	8.53	7.92	7.84	7.85	7.77	7.31	7.15	6.81	6.75
4	8.61	8.57	8.54	8.50	7.90	7.80	7.80	7.71	7.14	7.05	6.82	6.69
5	8.61	8.57	8.59	8.48	7.93	7.87	7.84	7.79	7.13	7.08	6.84	6.77
6	8.60	8.55	8.63	8.57	7.97	7.91	7.87	7.82	7.18	7.11	6.78	6.73
7	8.63	8.53	8.63	8.59	7.98	7.94	7.87	7.81	7.17	7.10	6.84	6.77
8	--	--	8.62	8.58	7.97	7.91	7.81	7.74	7.14	7.11	6.85	6.72
9	--	--	8.61	8.58	7.91	7.85	7.82	7.77	7.14	7.11	6.72	6.67
10	8.64	8.59	8.62	8.55	7.87	7.85	7.85	7.83	7.17	7.15	6.83	6.70
11	8.61	8.56	8.56	8.50	7.85	7.84	7.85	7.83	7.18	6.87	6.84	6.79
12	8.60	8.57	8.55	8.53	7.89	7.83	7.83	7.78	6.86	6.81	6.79	6.71
13	8.63	8.59	8.55	8.52	7.98	7.90	7.86	7.76	6.94	6.83	6.77	6.71
14	8.65	8.63	8.53	8.51	7.98	7.95	7.92	7.86	6.94	6.83	6.79	6.74
15	8.64	8.62	8.55	8.52	7.95	7.77	7.90	7.85	6.86	6.80	6.84	6.78
16	8.65	8.63	8.52	8.47	7.84	7.78	7.89	7.85	6.95	6.86	6.88	6.82
17	8.65	8.61	8.47	8.37	7.92	7.83	7.88	7.83	6.94	6.86	6.88	6.81
18	8.66	8.62	8.44	8.36	7.92	7.89	7.84	7.78	6.92	6.87	6.87	6.75
19	8.68	8.65	--	--	7.89	7.85	7.80	7.72	6.87	6.66	6.78	6.73
20	8.67	8.63	--	--	7.88	7.78	7.71	7.25	6.74	6.65	6.87	6.74
21	8.71	8.62	8.39	8.30	7.87	7.82	7.32	7.24	6.78	6.75	6.91	6.87
22	8.73	8.68	8.39	8.36	7.87	7.79	7.35	7.31	6.77	6.68	6.95	6.91
23	8.74	8.69	8.39	8.34	7.89	7.82	7.37	7.33	6.76	6.68	6.91	6.84
24	8.74	8.69	8.38	8.35	7.89	7.83	7.38	7.36	6.77	6.76	6.85	6.83
25	8.73	8.69	8.38	8.34	7.83	7.79	7.37	7.29	6.79	6.76	6.85	6.82
26	8.74	8.70	8.36	8.33	7.85	7.79	7.47	7.29	6.79	6.70	6.82	6.64
27	8.71	8.51	8.38	8.36	7.85	7.82	7.52	7.47	6.81	6.69	6.77	6.64
28	8.55	8.51	8.35	8.24	7.81	7.73	7.52	7.49	6.81	6.76	6.80	6.76
29	8.57	8.53	8.24	7.80	7.85	7.71	7.52	7.49	6.83	6.77	6.78	6.72
30	8.58	8.54	7.80	7.76	7.87	7.84	7.48	7.44	--	--	6.75	6.71
31	8.61	8.55	--	--	7.85	7.78	7.48	7.45	--	--	6.79	6.74
Month	--	--	--	--	7.98	7.71	7.92	7.24	7.47	6.65	6.95	6.64

	April		May		June		July		August		September	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	6.77	6.72	6.64	6.58	6.07	6.02	6.67	6.61	7.26	7.22	--	--
2	6.78	6.72	6.64	6.60	6.11	6.03	6.71	6.66	7.30	7.26	--	--
3	6.75	6.67	6.64	6.59	6.10	6.07	6.74	6.69	7.33	7.30	--	--
4	--	--	6.62	6.58	6.12	6.08	6.80	6.74	7.33	7.32	--	--
5	6.76	6.70	6.58	6.41	6.10	6.05	6.83	6.79	7.34	7.33	--	--
6	6.72	6.65	6.41	6.22	6.11	6.05	6.82	6.80	7.34	7.32	--	--
7	6.65	6.59	6.27	6.21	6.11	6.07	6.85	6.81	7.39	7.32	--	--
8	6.64	6.60	6.32	6.27	6.13	6.11	6.87	6.84	7.43	7.38	--	--
9	6.67	6.64	6.31	6.27	6.14	6.10	6.87	6.85	7.46	7.42	--	--
10	6.66	6.60	6.27	6.25	6.19	6.14	6.92	6.85	7.49	7.45	--	--
11	6.67	6.62	6.35	6.26	6.20	6.17	6.94	6.91	7.51	7.47	--	--
12	6.67	6.64	6.38	6.34	6.21	6.17	6.94	6.89	7.54	7.49	--	--
13	6.67	6.63	6.36	6.29	6.25	6.20	6.97	6.90	7.57	7.52	--	--
14	6.69	6.62	6.37	6.31	6.28	6.23	6.98	6.94	7.59	7.55	--	--
15	6.65	6.58	6.36	6.31	6.27	6.24	7.06	6.98	7.60	7.56	--	--
16	6.69	6.64	6.32	6.27	6.26	6.23	7.08	7.04	7.65	7.60	--	--
17	6.68	6.57	6.35	6.29	6.27	6.24	7.10	7.07	7.66	7.64	--	--
18	6.60	6.54	6.29	6.25	6.33	6.26	7.14	7.10	--	--	--	--
19	6.65	6.61	6.28	6.24	6.35	6.32	7.15	7.11	--	--	--	--
20	6.69	6.60	6.27	6.24	6.34	6.31	7.17	7.13	--	--	--	--
21	6.64	6.56	6.25	6.23	6.36	6.31	7.13	7.07	--	--	--	--
22	6.68	6.65	6.24	6.23	6.38	6.35	7.13	7.07	--	--	--	--
23	6.69	6.59	6.23	6.05	6.46	6.37	7.15	6.93	--	--	--	--
24	6.68	6.57	6.05	5.94	6.51	6.46	7.06	6.94	--	--	--	--
25	6.70	6.67	6.04	5.93	6.50	6.44	7.11	7.06	--	--	--	--
26	6.69	6.65	6.06	6.03	6.48	6.40	7.13	7.09	--	--	--	--
27	--	--	6.06	6.03	6.54	6.48	7.16	7.11	--	--	--	--
28	--	--	6.05	6.01	6.57	6.53	7.17	7.12	--	--	--	--
29	6.57	6.54	6.05	6.01	6.59	6.54	7.19	7.14	--	--	--	--
30	6.63	6.55	6.08	6.04	6.62	6.57	7.21	7.16	--	--	--	--
31	--	--	6.08	6.04	--	--	7.22	7.17	--	--	--	--
Month	--	--	6.64	5.93	6.62	6.02	7.22	6.61	--	--	--	--

Table 4.—Continuous water levels recorded in observation wells in Howard County—Continued

Well number: HO Cd 21
Owner: U.S. Geological Survey.
Geologic unit: Loch Raven Schist.
Altitude: 434.18 feet.
Well characteristics: Drilled unused water-table well, depth 96 feet, diameter 6 inches.
Period of record: December 1986 to February 1988.
Extremes for period of record: Highest water level recorded, 14.38 feet, April 29, 1987,May 7, 1987;
Lowest water level recorded, 17.62 feet, December 5-6, 1986.

Water Year October 1986 to September 1987

	October		November		December		January		February		March	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	--	--	--	--	--	--	--	--	--	--	--	--
2	--	--	--	--	--	--	--	--	--	--	--	--
3	--	--	--	--	--	--	--	--	16.91	16.79	--	--
4	--	--	--	--	--	--	--	--	16.80	16.79	--	--
5	--	--	--	--	17.62	17.61	--	--	16.79	16.76	--	--
6	--	--	--	--	17.62	17.60	--	--	16.77	16.43	--	--
7	--	--	--	--	17.60	17.58	--	--	16.47	16.44	--	--
8	--	--	--	--	17.58	17.58	--	--	16.43	16.35	--	--
9	--	--	--	--	17.58	17.55	--	--	16.39	16.34	--	--
10	--	--	--	--	17.55	17.55	--	--	16.38	16.32	15.51	15.45
11	--	--	--	--	17.57	17.54	--	--	16.36	16.30	15.51	15.46
12	--	--	--	--	17.54	17.52	--	--	16.31	16.24	15.45	15.39
13	--	--	--	--	17.53	17.52	--	--	16.32	16.28	15.41	15.37
14	--	--	--	--	17.53	17.47	--	--	16.31	16.27	15.40	15.35
15	--	--	--	--	17.47	17.45	--	--	16.32	16.29	15.39	15.35
16	--	--	--	--	17.46	17.43	--	--	16.32	16.25	15.39	15.34
17	--	--	--	--	17.44	17.42	--	--	16.26	16.24	15.38	15.30
18	--	--	--	--	17.42	17.36	--	--	16.27	16.26	15.35	15.29
19	--	--	--	--	17.36	17.34	--	--	16.30	16.27	15.31	15.27
20	--	--	--	--	17.34	17.33	--	--	16.29	16.26	15.29	15.26
21	--	--	--	--	17.33	17.32	--	--	16.26	16.25	15.28	15.27
22	--	--	--	--	17.32	17.30	--	--	16.25	16.19	15.32	15.26
23	--	--	--	--	17.30	17.27	--	--	16.27	16.09	15.32	15.30
24	--	--	--	--	17.27	17.21	--	--	16.27	16.25	15.31	15.28
25	--	--	--	--	17.19	16.84	--	--	16.26	16.23	15.30	15.26
26	--	--	--	--	16.85	16.84	--	--	16.25	16.21	15.29	15.23
27	--	--	--	--	16.85	16.84	--	--	16.24	16.19	15.31	15.25
28	--	--	--	--	16.84	16.81	--	--	--	--	15.30	15.23
29	--	--	--	--	16.82	16.78	--	--	--	--	15.32	15.27
30	--	--	--	--	--	--	--	--	--	--	15.29	15.16
31	--	--	--	--	--	--	--	--	--	--	15.15	15.05

	April		May		June		July		August		September	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	15.15	15.10	14.55	14.48	14.52	14.49	14.92	14.76	15.32	15.31	--	--
2	15.13	15.08	14.52	14.49	14.54	14.51	14.77	14.75	15.33	15.32	16.05	16.03
3	15.15	15.03	14.53	14.50	14.55	14.53	14.79	14.75	15.36	15.32	16.10	16.05
4	15.03	14.80	14.52	14.48	14.53	14.45	14.80	14.78	15.38	15.36	16.14	16.10
5	14.81	14.79	14.48	14.42	14.51	14.45	14.83	14.80	--	--	16.14	16.09
6	14.79	14.77	14.42	14.39	14.56	14.51	14.86	14.83	--	--	16.11	16.05
7	14.78	14.76	14.41	14.38	14.56	14.53	14.85	14.81	15.49	15.43	16.09	16.05
8	14.78	14.76	14.43	14.41	14.56	14.53	--	--	15.47	15.44	16.07	15.87
9	--	--	14.45	14.41	14.57	14.53	--	--	15.48	15.44	16.04	15.94
10	--	--	14.42	14.39	14.64	14.58	14.93	14.89	15.53	15.45	16.07	16.03
11	14.83	14.78	14.44	14.40	--	--	14.94	14.90	15.57	15.53	16.09	16.06
12	14.82	14.75	--	--	--	--	14.95	14.91	15.59	15.55	16.09	15.95
13	14.86	14.79	--	--	14.69	14.65	14.95	14.91	15.62	15.59	15.96	15.94
14	14.87	14.79	14.54	14.44	14.70	14.67	14.95	14.90	15.63	15.61	16.00	15.96
15	14.80	14.73	14.44	14.41	14.72	14.69	15.00	14.95	15.64	15.63	16.02	15.99
16	14.74	14.66	14.51	14.45	14.75	14.70	15.03	14.99	15.65	15.62	16.02	16.00
17	14.66	14.64	14.46	14.44	14.80	14.73	15.06	15.03	15.65	15.62	16.01	15.98
18	14.69	14.64	14.47	14.44	14.81	14.80	15.05	15.03	15.72	15.65	15.98	15.93
19	14.70	14.66	14.50	14.44	14.80	14.78	15.07	15.04	15.74	15.71	16.01	15.96
20	14.67	14.65	14.49	14.46	14.79	14.77	15.09	15.07	15.78	15.73	16.00	15.97
21	14.64	14.62	14.47	14.45	14.80	14.77	15.12	15.08	15.82	15.79	16.01	15.97
22	14.67	14.60	14.47	14.44	14.81	14.78	15.15	15.12	15.80	15.72	16.01	15.98
23	14.67	14.60	14.46	14.44	14.86	14.79	15.17	15.13	15.83	15.74	16.02	15.98
24	14.60	14.52	14.48	14.43	14.91	14.86	15.20	15.16	15.86	15.83	16.02	15.98
25	14.61	14.56	14.52	14.47	14.88	14.86	15.20	15.16	15.87	15.85	16.07	16.01
26	14.60	14.56	14.51	14.47	14.89	14.83	15.19	15.16	15.88	15.86	16.08	16.06
27	14.58	14.50	14.51	14.46	14.89	14.83	15.22	15.18	15.88	15.83	16.10	16.08
28	14.51	14.48	14.48	14.44	14.96	14.90	15.26	15.20	15.89	15.87	16.12	16.10
29	14.50	14.38	14.48	14.44	14.99	14.96	15.28	15.25	15.95	15.89	16.11	16.05
30	14.55	14.42	14.50	14.46	15.00	14.88	15.29	15.26	15.97	15.96	16.05	16.02
31	--	--	14.50	14.47	--	--	15.31	15.28	--	--	--	--

Table 4.—Continuous water levels recorded in observation wells in Howard County—Continued

Well number: HO Cd 21 (continued)

Water Year October 1987 to September 1988

	October		November		December		January		February		March	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	16.12	16.04	16.21	16.17	15.51	15.44	15.44	15.37	15.02	14.96	--	--
2	16.14	16.10	16.19	16.16	15.58	15.49	15.46	15.43	14.98	14.91	--	--
3	16.16	16.09	16.19	16.13	15.58	15.49	15.46	15.38	14.90	14.76	--	--
4	16.15	16.12	16.15	16.10	15.54	15.44	15.40	15.32	14.75	14.64	--	--
5	16.16	16.12	16.17	16.08	15.57	15.51	15.45	15.40	14.71	14.67	--	--
6	16.14	16.10	16.21	16.17	15.61	15.55	15.47	15.43	14.72	14.69	--	--
7	16.17	16.08	16.22	16.18	15.61	15.58	15.48	15.43	14.75	14.66	--	--
8	--	--	16.21	16.18	15.60	15.54	15.42	15.34	14.69	14.66	--	--
9	--	--	16.20	16.17	15.55	15.47	15.42	15.37	14.69	14.66	--	--
10	16.24	16.19	16.21	16.14	15.50	15.47	15.45	15.42	14.71	14.66	--	--
11	16.20	16.16	16.16	16.10	15.47	15.46	15.45	15.43	--	--	--	--
12	16.20	16.16	16.14	16.12	15.50	15.46	15.43	15.38	--	--	--	--
13	16.22	16.18	16.15	16.12	15.60	15.51	15.45	15.36	--	--	--	--
14	16.25	16.23	16.13	16.11	15.60	15.58	15.52	15.45	--	--	--	--
15	16.23	16.21	16.14	16.12	15.57	15.39	15.50	15.45	--	--	--	--
16	16.24	16.22	16.12	16.08	15.46	15.40	15.48	15.44	--	--	--	--
17	16.25	16.21	16.07	15.99	15.55	15.45	15.47	15.43	--	--	--	--
18	16.25	16.22	16.04	15.96	15.54	15.52	15.43	15.37	--	--	--	--
19	16.27	16.24	--	--	15.52	15.47	15.41	15.33	--	--	--	--
20	16.27	16.23	--	--	15.51	15.39	15.31	14.91	--	--	--	--
21	16.29	16.22	16.01	15.93	15.49	15.44	14.95	14.91	--	--	--	--
22	16.31	16.28	16.01	15.99	15.49	15.41	14.96	14.93	--	--	--	--
23	16.32	16.28	16.01	15.97	15.51	15.44	14.97	14.94	--	--	--	--
24	16.33	16.28	16.00	15.98	15.52	15.45	14.98	14.96	--	--	--	--
25	16.31	16.28	16.01	15.96	15.45	15.41	14.95	14.87	--	--	--	--
26	16.33	16.29	15.98	15.95	15.47	15.41	15.04	14.87	--	--	--	--
27	16.30	16.12	16.00	15.98	15.47	15.44	15.09	15.04	--	--	--	--
28	16.15	16.12	15.98	15.88	15.44	15.35	15.09	15.06	--	--	--	--
29	16.17	16.14	15.87	15.48	15.47	15.33	15.09	15.06	--	--	--	--
30	16.19	16.14	15.47	15.43	15.49	15.46	15.05	15.01	--	--	--	--
31	16.21	16.15	--	--	15.47	15.40	15.04	15.01	--	--	--	--
Month	--	--	--	--	15.61	15.33	15.52	14.87	--	--	--	--

Well number: HO Cd 26
Owner: U.S. Geological Survey.
Geologic unit: Loch Raven Schist.
Altitude: 469.94 feet.
Well characteristics: Drilled unused water-table well, depth 143 feet, diameter 6 inches.
Period of record: October 1986 to August 1988.
Extremes fo rperiod of record: Highest water level recorded, 44.42 feet, July 12-13,15, 1988;
Lowest water level recorded, 51.70 feet, December 5, 1986.

Water Year October 1986 to September 1987

	October		November		December		January		February		March	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	--	--	51.31	51.30	--	--	51.65	51.63	51.41	51.41	50.78	50.69
2	--	--	51.31	51.29	--	--	51.63	51.60	51.41	51.39	50.69	50.67
3	--	--	51.29	51.29	--	--	51.61	51.60	51.39	51.37	50.67	50.65
4	--	--	51.30	51.29	--	--	51.63	51.62	51.38	51.37	50.65	50.63
5	--	--	51.31	51.30	51.70	51.63	51.64	51.63	51.39	51.38	50.63	50.54
6	--	--	51.31	51.31	51.63	51.59	51.64	51.64	51.39	51.37	50.54	50.50
7	--	--	51.34	51.31	51.59	51.56	51.63	51.61	51.37	51.33	50.50	50.44
8	--	--	51.35	51.35	51.56	51.55	51.62	51.61	51.33	51.28	50.44	50.38
9	--	--	51.35	51.35	51.55	51.53	51.63	51.62	51.28	51.26	50.37	50.32
10	--	--	--	--	51.53	51.52	51.63	51.60	51.26	51.26	50.32	50.31
11	--	--	--	--	51.54	51.53	51.60	51.58	51.26	51.25	50.31	50.27
12	--	--	--	--	51.54	51.54	51.58	51.58	51.25	51.22	50.27	50.23
13	--	--	--	--	51.58	51.54	51.60	51.58	51.22	51.20	50.23	50.17
14	--	--	--	--	51.59	51.58	51.61	51.60	51.20	51.18	50.17	50.12
15	--	--	--	--	51.59	51.59	51.61	51.60	51.18	51.16	50.12	50.08
16	--	--	--	--	51.59	51.59	51.61	51.60	51.16	51.14	50.09	50.04
17	--	--	--	--	51.60	51.60	51.62	51.61	51.17	51.10	50.03	49.99
18	--	--	--	--	51.60	51.58	51.62	51.60	51.10	51.07	49.99	49.94
19	--	--	--	--	51.59	51.58	51.59	51.55	51.07	51.06	49.93	49.88
20	--	--	--	--	51.61	51.59	51.55	51.54	51.06	51.04	49.88	49.82
21	--	--	--	--	51.63	51.61	51.55	51.55	51.04	51.01	49.82	49.77
22	--	--	--	--	51.64	51.63	51.55	51.51	51.01	50.96	49.77	49.72
23	--	--	--	--	51.64	51.64	51.51	51.48	50.96	50.90	49.72	49.68
24	--	--	--	--	51.64	51.61	51.50	51.48	50.90	50.89	49.68	49.64
25	51.19	51.16	--	--	51.61	51.58	51.51	51.50	50.89	50.88	49.64	49.58
26	51.19	51.19	--	--	51.61	51.59	51.51	51.48	50.88	50.86	49.58	49.52
27	51.19	51.19	--	--	51.63	51.61	51.49	51.48	50.86	50.83	49.52	49.47
28	51.22	51.19	--	--	51.63	51.63	51.48	51.47	50.83	50.78	49.47	49.42
29	51.24	51.22	--	--	51.64	51.63	51.48	51.47	--	--	49.42	49.38
30	51.26	51.24	--	--	51.63	51.62	51.47	51.44	--	--	49.38	49.31
31	51.30	51.26	--	--	51.64	51.63	51.44	51.41	--	--	49.31	49.23
Month	--	--	--	--	--	--	51.65	51.41	51.41	50.78	50.78	49.23

Table 4.—Continuous water levels recorded in observation wells in Howard County—Continued

Well number: HO Cd 26 (continued)

Water Year October 1986 to September 1987

	April		May		June		July		August		September	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	49.23	49.20	47.64	47.61	--	--	45.70	45.67	--	--	45.99	45.99
2	49.20	49.16	47.60	47.56	--	--	45.67	45.64	--	--	46.01	45.99
3	49.15	49.11	47.56	47.52	--	--	45.64	45.63	--	--	46.05	46.01
4	49.10	49.00	47.52	47.49	--	--	45.63	45.62	--	--	46.10	46.05
5	49.00	48.96	47.49	47.45	--	--	45.63	45.62	--	--	46.13	46.10
6	48.97	48.89	47.44	47.39	46.15	46.13	45.65	45.63	--	--	46.13	46.12
7	48.89	48.83	47.38	47.32	46.13	46.10	45.66	45.65	45.71	45.67	46.13	46.10
8	48.83	48.79	47.32	47.29	46.10	46.06	--	--	45.72	45.71	46.10	46.05
9	48.79	48.77	47.28	47.25	46.06	46.02	--	--	45.71	45.69	46.05	46.04
10	48.77	48.73	47.25	47.20	46.03	46.01	--	--	45.69	45.68	46.10	46.05
11	48.72	48.67	47.20	47.15	46.04	46.02	--	--	45.72	45.68	46.14	46.10
12	48.67	48.62	--	--	46.03	45.98	--	--	45.75	45.72	46.16	46.15
13	48.61	48.58	--	--	45.97	45.93	--	--	45.79	45.76	46.16	46.15
14	48.58	48.55	--	--	45.93	45.90	--	--	45.81	45.79	46.18	46.15
15	48.55	48.49	--	--	45.90	45.88	--	--	45.82	45.81	46.20	46.17
16	48.49	48.41	--	--	45.88	45.87	--	--	45.82	45.81	46.22	46.19
17	48.40	48.33	--	--	45.87	45.86	--	--	45.81	45.78	46.22	46.21
18	48.32	48.29	--	--	45.88	45.87	--	--	45.78	45.78	46.21	46.19
19	48.29	48.26	--	--	45.88	45.86	--	--	45.80	45.78	46.23	46.19
20	48.26	48.22	--	--	45.86	45.81	--	--	45.83	45.80	46.26	46.23
21	48.21	48.16	--	--	45.81	45.77	--	--	45.88	45.83	46.29	46.26
22	48.16	48.11	--	--	45.77	45.74	--	--	45.88	45.87	46.31	46.29
23	48.12	48.06	--	--	45.74	45.72	--	--	45.86	45.85	46.33	46.32
24	48.06	47.99	--	--	45.74	45.72	--	--	45.91	45.87	46.34	46.33
25	47.99	47.94	--	--	45.73	45.72	--	--	45.95	45.91	46.37	46.34
26	47.94	47.90	--	--	45.72	45.69	--	--	45.96	45.95	46.41	46.37
27	47.90	47.85	--	--	45.69	45.67	--	--	45.96	45.94	46.46	46.41
28	47.84	47.77	--	--	45.69	45.67	--	--	45.94	45.93	46.50	46.46
29	47.77	47.68	--	--	45.71	45.69	--	--	45.95	45.93	46.51	46.49
30	47.68	47.64	--	--	45.71	45.70	--	--	45.99	45.95	46.49	46.43
31	--	--	--	--	--	--	--	--	--	--	--	--
Month	49.23	47.64	--	--	--	--	--	--	--	--	46.51	45.99

Water Year October 1987 to September 1988

	October		November		December		January		February		March	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	46.42	46.41	47.04	46.99	--	--	48.08	48.06	--	--	--	--
2	46.46	46.42	47.05	47.04	48.05	47.98	48.08	48.06	--	--	--	--
3	46.49	46.46	47.06	47.04	48.10	48.05	48.09	48.08	--	--	--	--
4	46.53	46.49	47.04	46.99	48.10	48.09	48.09	48.01	--	--	--	--
5	46.55	46.53	46.99	46.96	48.13	48.09	48.01	48.01	--	--	--	--
6	46.55	46.54	47.01	46.96	48.20	48.13	48.03	48.02	--	--	--	--
7	46.54	46.53	47.06	47.02	48.25	48.20	48.06	48.03	--	--	--	--
8	--	--	47.09	47.06	48.27	48.25	48.06	47.99	--	--	--	--
9	--	--	47.10	47.09	48.27	48.21	47.98	47.96	--	--	--	--
10	46.70	46.67	47.12	47.10	48.21	48.16	47.96	47.95	--	--	--	--
11	46.70	46.69	47.12	47.10	48.16	48.10	47.96	47.96	--	--	--	--
12	46.69	46.69	47.10	47.10	48.10	48.07	47.96	47.93	--	--	--	--
13	46.70	46.69	47.12	47.10	48.11	48.07	47.93	47.88	--	--	--	--
14	46.74	46.70	47.15	47.12	48.18	48.11	47.92	47.88	--	--	--	--
15	46.75	46.74	47.23	47.16	48.18	48.13	47.93	47.92	--	--	--	--
16	46.76	46.75	47.28	47.23	48.12	48.08	47.93	47.90	--	--	--	--
17	46.77	46.76	47.28	47.27	48.10	48.07	47.90	47.87	--	--	--	--
18	46.76	46.76	47.26	47.23	48.16	48.11	47.87	47.80	--	--	--	--
19	46.77	46.76	--	--	48.17	48.16	47.80	47.80	--	--	--	--
20	46.78	46.78	--	--	48.17	48.13	47.80	47.73	--	--	--	--
21	46.78	46.78	--	--	48.13	48.11	--	--	--	--	--	--
22	46.84	46.78	--	--	48.12	48.11	--	--	--	--	--	--
23	46.88	46.84	--	--	48.11	48.10	--	--	--	--	--	--
24	46.91	46.88	--	--	48.13	48.11	--	--	--	--	--	--
25	46.91	46.91	--	--	48.13	48.10	--	--	--	--	--	--
26	46.92	46.91	--	--	48.09	48.08	--	--	--	--	46.41	46.33
27	46.92	46.88	--	--	48.10	48.08	--	--	--	--	46.32	46.28
28	46.87	46.85	--	--	48.10	48.09	--	--	--	--	46.30	46.28
29	46.89	46.85	--	--	48.08	48.02	--	--	--	--	46.30	46.28
30	46.93	46.89	--	--	48.08	48.03	--	--	--	--	46.28	46.24
31	46.99	46.94	--	--	48.09	48.08	--	--	--	--	46.24	46.22

Table 4.—Continuous water levels recorded in observation wells in Howard County—Continued

Well number: HO Cd 26 (continued)

Water Year October 1987 to September 1988

	April		May		June		July		August		September	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	46.22	46.18	45.37	45.35	44.83	44.79	44.46	44.45	44.53	44.53	--	--
2	46.18	46.15	45.36	45.36	44.79	44.77	44.47	44.46	44.55	44.53	--	--
3	46.15	46.09	45.36	45.35	44.77	44.76	44.48	44.47	44.58	44.55	--	--
4	46.09	46.02	45.35	45.32	44.76	44.76	44.51	44.48	44.60	44.58	--	--
5	46.02	45.99	45.32	45.27	44.76	44.75	44.54	44.51	44.60	44.60	--	--
6	45.99	45.94	45.27	45.21	44.75	44.72	--	--	44.60	44.59	--	--
7	45.93	45.86	45.21	45.19	44.72	44.68	44.54	44.51	44.58	44.57	--	--
8	45.86	45.85	45.23	45.19	44.68	44.66	44.51	44.49	44.57	44.57	--	--
9	45.87	45.85	45.23	45.22	44.66	44.66	44.49	44.46	44.60	44.57	--	--
10	45.87	45.86	45.22	45.17	44.69	44.66	44.45	44.44	44.62	44.60	--	--
11	45.86	45.84	45.17	45.14	44.72	44.69	44.44	44.43	44.64	44.62	--	--
12	45.84	45.83	45.15	45.14	44.72	44.72	44.43	44.42	44.66	44.65	--	--
13	45.83	45.80	45.15	45.14	44.72	44.72	44.43	44.42	44.68	44.66	--	--
14	--	--	45.15	45.12	44.73	44.72	44.43	44.43	44.69	44.68	--	--
15	45.78	45.73	45.12	45.09	44.73	44.70	44.43	44.42	44.69	44.69	--	--
16	45.73	45.72	45.09	45.04	44.70	44.66	44.45	44.43	44.69	44.68	--	--
17	45.72	45.68	45.04	45.01	44.65	44.62	44.45	44.44	44.70	44.69	--	--
18	45.68	45.60	45.00	44.98	44.62	44.61	44.45	44.44	--	--	--	--
19	45.60	45.58	44.98	44.97	44.62	44.61	44.45	44.45	--	--	--	--
20	45.58	45.58	44.97	44.97	44.62	44.60	44.46	44.45	--	--	--	--
21	45.57	45.54	44.97	44.97	44.60	44.57	44.46	44.45	--	--	--	--
22	45.54	45.54	44.97	44.96	44.57	44.54	44.45	44.45	--	--	--	--
23	45.54	45.52	44.96	44.93	44.54	44.52	44.46	44.45	--	--	--	--
24	45.52	45.47	44.93	44.88	44.55	44.52	44.45	44.44	--	--	--	--
25	45.47	45.47	44.88	44.86	44.56	44.55	44.46	44.44	--	--	--	--
26	45.47	45.46	44.90	44.86	44.55	44.50	44.47	44.46	--	--	--	--
27	45.46	45.42	44.93	44.90	44.50	44.49	44.48	44.47	--	--	--	--
28	45.41	45.38	44.93	44.92	44.50	44.49	44.52	44.48	--	--	--	--
29	45.38	45.35	44.91	44.89	44.50	44.48	44.54	44.52	--	--	--	--
30	45.35	45.35	44.89	44.87	44.48	44.46	44.54	44.54	--	--	--	--
31	--	--	44.87	44.83	--	--	44.54	44.53	--	--	--	--
Month	--	--	45.37	44.83	44.83	44.46	--	--	--	--	--	--

Well number: HO Cd 28
Owner: U.S. Geological Survey.
Geologic unit: Loch Raven Schist.
Altitude: 453.11 feet.
Well characteristics: Drilled unused water-table well, depth 46 feet, diameter 3.5 inches.
Period of record: October 1986 to current year.
Extremes for period of record: Highest water level recorded, 23.63 feet, August 6, 1989, September 1, 1989; Lowest water level recorded, 32.03 feet, December 13, 1986.

Water Year October 1986 to September 1987

	October		November		December		January		February		March	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	--	--	31.51	31.49	31.89	31.88	31.89	31.78	--	--	29.91	29.82
2	--	--	31.51	31.47	31.88	31.79	31.78	31.76	30.87	30.84	29.92	29.87
3	--	--	31.52	31.51	--	--	31.78	31.77	30.84	30.82	29.92	29.88
4	--	--	31.52	31.51	--	--	31.78	31.74	30.83	30.82	29.90	29.87
5	--	--	31.54	31.52	--	--	31.74	31.72	30.82	30.78	--	--
6	--	--	31.58	31.53	--	--	31.71	31.63	30.78	30.72	30.05	29.97
7	--	--	31.59	31.58	--	--	31.63	31.61	30.72	30.66	29.97	29.88
8	--	--	31.59	31.58	--	--	31.62	31.60	30.66	30.60	29.88	29.81
9	--	--	31.61	31.58	--	--	31.60	31.57	30.64	30.62	29.82	29.76
10	--	--	31.64	31.62	32.02	31.98	31.57	31.50	30.64	30.60	29.84	29.82
11	--	--	31.64	31.60	32.02	32.00	31.50	31.48	30.60	30.55	29.82	29.72
12	--	--	--	--	32.00	31.99	31.48	31.46	30.54	30.48	29.72	29.65
13	--	--	--	--	32.03	32.00	31.47	31.46	30.51	30.48	29.64	29.60
14	--	--	--	--	--	--	31.46	31.41	30.48	30.45	29.59	29.52
15	--	--	--	--	--	--	31.41	31.39	30.46	30.44	29.52	29.49
16	--	--	--	--	--	--	31.40	31.38	30.44	30.38	29.48	29.43
17	--	--	--	--	--	--	31.38	31.35	30.38	30.33	29.43	29.34
18	--	--	31.70	31.66	31.98	31.93	31.35	31.28	30.33	30.31	29.36	29.28
19	--	--	31.74	31.68	--	--	31.28	31.20	30.32	30.30	29.28	29.21
20	--	--	31.74	31.66	--	--	31.30	31.25	30.30	30.25	29.21	29.14
21	--	--	31.76	31.68	--	--	31.25	31.22	30.25	30.20	29.16	29.10
22	--	--	31.78	31.76	--	--	31.22	31.13	30.20	30.09	29.10	29.07
23	--	--	31.78	31.77	31.93	31.91	31.19	31.14	30.16	30.07	29.08	29.01
24	--	--	31.80	31.78	31.91	31.79	31.19	31.17	30.16	30.13	29.01	28.97
25	--	--	31.81	31.80	31.87	31.79	31.17	31.09	30.13	30.10	28.97	28.88
26	--	--	31.81	31.76	31.88	31.87	31.09	31.07	30.10	30.05	28.87	28.84
27	--	--	31.84	31.79	31.88	31.86	31.08	31.06	30.05	30.01	28.84	28.78
28	--	--	31.84	31.84	31.86	31.84	31.06	31.04	30.01	29.92	--	--
29	--	--	31.86	31.83	31.84	31.80	31.04	30.97	--	--	--	--
30	--	--	31.88	31.86	--	--	--	--	--	--	28.70	28.55
31	31.51	31.49	--	--	31.91	31.89	--	--	--	--	28.66	28.48

Table 4.—Continuous water levels recorded in observation wells in Howard County—Continued

Well number: HO Cd 28 (continued)

Water Year October 1986 to September 1987

	April		May		June		July		August		September	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	28.66	28.56	27.43	27.30	26.61	26.56	26.48	26.43	26.62	26.59	28.57	28.57
2	28.56	28.47	27.33	27.29	26.59	26.56	26.45	26.41	26.61	26.57	--	--
3	28.55	28.37	27.31	27.28	26.60	26.57	26.48	26.43	26.58	26.55	27.20	27.13
4	28.37	28.26	27.32	27.30	26.58	26.53	26.47	26.45	26.60	26.57	27.25	27.21
5	28.38	28.34	27.31	27.19	26.58	26.55	26.52	26.47	--	--	27.22	27.19
6	28.33	28.27	27.20	27.13	26.58	26.55	26.56	26.52	--	--	27.20	27.15
7	28.26	28.22	27.14	27.11	26.57	26.49	26.52	26.48	--	--	27.18	27.16
8	28.23	28.18	27.15	27.12	26.51	26.45	--	--	--	--	27.17	27.07
9	--	--	27.14	27.06	26.50	26.45	--	--	--	--	27.24	27.12
10	--	--	27.06	27.03	26.58	26.51	--	--	--	--	27.29	27.24
11	--	--	27.05	26.99	--	--	--	--	--	--	27.31	27.29
12	28.13	28.03	--	--	26.48	26.40	--	--	26.78	26.74	27.31	27.26
13	28.12	28.07	--	--	26.42	26.40	--	--	26.81	26.78	27.29	27.25
14	28.13	28.02	27.07	26.94	26.43	26.41	--	--	26.82	26.79	27.37	27.30
15	28.02	27.94	26.93	26.88	26.43	26.39	--	--	26.81	26.77	27.38	27.35
16	27.94	27.85	26.98	26.90	26.46	26.40	--	--	26.78	26.75	27.38	27.35
17	27.85	27.83	26.90	26.84	26.51	26.43	--	--	26.76	26.73	27.35	27.31
18	27.86	27.85	26.85	26.82	26.53	26.47	--	--	26.82	26.74	27.37	27.29
19	27.86	27.82	26.88	26.83	26.47	26.40	--	--	26.85	26.82	27.47	27.38
20	27.82	27.78	26.88	26.86	26.41	26.38	--	--	26.92	26.84	27.47	27.45
21	27.78	27.70	26.86	26.83	26.39	26.37	--	--	26.96	26.91	27.50	27.47
22	27.74	27.69	26.84	26.77	26.40	26.37	--	--	26.91	26.80	27.50	27.49
23	27.74	27.63	26.77	26.73	26.44	26.37	--	--	26.95	26.82	27.51	27.49
24	27.62	27.57	26.76	26.72	26.50	26.45	26.59	26.56	27.00	26.95	27.52	27.50
25	27.65	27.60	26.77	26.74	26.46	26.41	26.58	26.54	26.99	26.97	27.62	27.52
26	27.62	27.56	26.76	26.73	26.43	26.39	26.54	26.51	26.99	26.96	27.65	27.62
27	27.56	27.44	26.73	26.70	26.44	26.39	26.55	26.50	26.96	26.90	27.69	27.64
28	27.45	27.41	26.70	26.64	26.52	26.45	26.57	26.52	26.97	26.93	27.70	27.67
29	27.42	27.24	26.64	26.61	26.54	26.49	26.63	26.57	27.05	26.96	27.67	27.54
30	27.42	27.28	26.62	26.59	26.50	26.48	26.61	26.58	27.09	27.05	27.54	27.49
31	--	--	26.60	26.58	--	--	26.61	26.58	--	--	--	--

Water Year October 1987 to September 1988

	October		November		December		January		February		March	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	27.69	27.53	28.29	28.24	28.33	28.30	28.15	28.07	27.67	27.62	26.99	26.96
2	27.71	27.67	28.27	28.24	28.51	28.34	28.21	28.15	27.67	27.58	26.96	26.86
3	27.74	27.69	28.25	28.16	28.51	28.32	28.18	28.02	27.71	27.62	26.88	26.81
4	27.77	27.74	28.16	28.11	28.40	28.29	28.04	27.96	27.62	27.49	26.87	26.75
5	27.78	27.72	28.25	28.10	28.47	28.41	28.12	28.04	27.63	27.60	26.97	26.89
6	27.72	27.69	28.34	28.26	28.54	28.47	28.13	28.10	27.66	27.61	26.89	26.75
7	27.79	27.68	28.34	28.30	28.55	28.51	28.15	28.04	27.68	27.53	26.82	26.74
8	--	--	28.34	28.30	28.50	28.39	28.03	27.90	27.55	27.51	26.84	26.73
9	--	--	28.34	28.29	28.39	28.27	28.01	27.92	27.54	27.47	26.72	26.55
10	27.86	27.83	28.35	28.30	28.30	28.24	28.05	28.01	27.53	27.47	26.69	26.55
11	27.82	27.79	28.32	28.27	28.25	28.20	28.04	27.98	27.52	27.36	26.76	26.69
12	27.83	27.78	28.36	28.29	28.27	28.18	27.98	27.88	27.34	27.24	26.69	26.52
13	27.92	27.81	28.37	28.35	28.43	28.29	27.98	27.84	27.42	27.30	26.55	26.48
14	27.97	27.93	28.46	28.37	28.44	28.38	28.07	27.99	27.48	27.36	26.56	26.50
15	27.93	27.89	28.54	28.47	28.37	28.09	28.05	27.94	27.34	27.19	26.58	26.52
16	27.94	27.91	28.53	28.47	28.22	28.13	27.94	27.92	27.38	27.19	26.60	26.57
17	27.93	27.89	28.47	28.29	28.36	28.22	27.92	27.84	27.39	27.31	--	--
18	27.94	27.89	28.47	28.29	28.39	28.33	27.87	27.79	27.31	27.28	--	--
19	27.98	27.95	--	--	28.32	28.28	27.91	27.85	27.30	27.05	26.45	26.41
20	27.98	27.94	--	--	28.28	28.13	27.84	27.71	27.12	27.04	26.56	26.40
21	28.04	27.94	28.50	28.32	28.26	28.17	--	--	27.26	27.13	26.61	26.57
22	28.11	28.05	28.56	28.50	28.25	28.15	27.84	27.82	27.26	27.10	26.64	26.58
23	28.10	28.08	28.53	28.49	28.30	28.16	27.83	27.76	27.11	27.05	26.58	26.44
24	28.13	28.05	28.55	28.50	28.30	28.18	27.81	27.76	27.14	27.11	26.44	26.39
25	28.12	28.04	28.54	28.47	28.17	28.11	27.76	27.62	27.11	27.07	26.42	26.35
26	28.12	28.09	28.51	28.46	28.23	28.10	27.85	27.62	27.10	26.98	26.35	26.26
27	28.08	27.96	28.56	28.52	28.23	28.17	27.89	27.85	27.00	26.91	26.44	26.26
28	28.14	27.98	28.52	28.43	28.17	28.03	27.89	27.84	27.05	26.98	26.49	26.44
29	28.20	28.15	28.42	28.23	28.21	27.99	27.87	27.78	26.97	26.94	26.44	26.34
30	28.22	28.16	28.30	28.26	28.25	28.21	27.77	27.69	--	--	26.35	26.32
31	28.29	28.17	--	--	28.23	28.08	27.72	27.67	--	--	26.39	26.33
Month	--	--	--	--	28.55	27.99	--	--	27.71	26.91	--	--

Table 4.—Continuous water levels recorded in observation wells in Howard County—Continued

Well number: HO Cd 28 (continued)

Water Year October 1987 to September 1988

	April		May		June		July		August		September	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	26.33	26.29	26.07	26.00	25.67	25.57	25.44	25.40	--	--	--	--
2	26.32	26.27	26.04	26.01	25.70	25.58	25.48	25.45	--	--	--	--
3	26.27	26.18	26.05	26.00	25.69	25.65	25.49	25.45	25.92	25.89	--	--
4	26.19	26.15	26.01	25.98	25.68	25.66	25.55	25.49	25.92	25.87	--	--
5	26.24	26.19	25.98	25.89	25.67	25.55	25.58	25.54	25.89	25.85	--	--
6	26.20	26.08	25.94	25.86	25.60	25.54	--	--	25.87	25.84	--	--
7	26.17	26.04	26.01	25.94	25.55	25.50	--	--	25.90	25.85	--	--
8	26.22	26.17	26.08	26.01	25.57	25.53	--	--	25.95	25.91	--	--
9	26.24	26.21	26.02	25.91	--	--	--	--	25.97	25.95	--	--
10	26.23	26.16	25.91	25.86	--	--	--	--	26.01	25.98	--	--
11	26.18	26.14	25.98	25.89	25.62	25.55	--	--	26.05	26.00	--	--
12	26.19	26.15	26.03	25.98	25.55	25.52	--	--	26.05	26.03	--	--
13	--	--	25.98	25.86	25.57	25.52	--	--	26.08	26.05	--	--
14	--	--	25.93	25.88	25.57	25.54	--	--	26.08	26.04	--	--
15	26.10	26.02	25.91	25.84	25.54	25.46	--	--	26.05	26.01	--	--
16	26.13	26.09	25.84	25.78	25.46	25.41	--	--	26.10	26.05	--	--
17	26.12	25.97	25.85	25.81	25.45	25.42	--	--	--	--	--	--
18	26.03	25.91	25.85	25.82	25.50	25.45	--	--	26.16	26.06	26.92	26.90
19	26.07	26.02	25.86	25.83	25.51	25.46	--	--	26.18	26.15	26.95	26.92
20	26.12	26.01	25.87	25.85	25.46	25.39	--	--	26.16	26.13	26.96	26.94
21	26.05	25.93	25.86	25.83	25.40	25.38	--	--	26.26	26.15	27.02	26.95
22	26.10	26.05	25.84	25.80	25.39	25.36	--	--	26.34	26.26	27.05	27.00
23	26.10	25.95	25.80	25.74	25.47	25.36	--	--	--	--	27.02	26.95
24	26.06	25.91	25.75	25.73	25.55	25.48	--	--	--	--	27.14	27.03
25	26.07	26.03	25.87	25.71	25.50	25.35	--	--	--	--	27.16	27.13
26	26.05	25.99	25.89	25.86	25.39	25.30	--	--	--	--	27.20	27.17
27	26.01	25.90	25.87	25.80	25.45	25.40	--	--	--	--	27.23	27.19
28	25.98	25.96	25.80	25.73	25.45	25.40	--	--	--	--	27.26	27.20
29	25.98	25.96	25.73	25.72	25.41	25.36	--	--	--	--	27.33	27.27
30	26.07	25.97	25.75	25.72	25.39	25.36	--	--	--	--	27.32	27.27
31	--	--	25.72	25.66	--	--	--	--	--	--	--	--
Month	--	--	26.08	25.66	--	--	--	--	--	--	--	--

Water Year October 1988 to September 1989

	October		November		December		January		February		March	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	27.28	27.24	28.06	27.94	28.85	28.75	29.46	29.45	29.89	29.85	30.14	30.12
2	27.24	27.21	28.07	27.93	28.88	28.85	29.45	29.43	29.92	29.89	--	--
3	27.32	27.24	28.16	28.08	28.85	28.79	29.45	29.36	29.96	29.90	--	--
4	27.36	27.32	28.15	28.11	28.94	28.80	29.56	29.37	29.98	29.96	--	--
5	27.47	27.37	28.11	27.95	28.93	28.88	29.57	29.55	29.96	29.94	30.12	30.04
6	27.51	27.47	28.19	28.03	28.92	28.88	29.58	29.50	29.95	29.91	30.08	30.05
7	27.51	27.46	28.31	28.19	28.94	28.88	29.62	29.58	29.99	29.95	30.15	30.08
8	27.48	27.44	28.31	28.26	29.02	28.94	29.59	29.52	30.00	29.96	30.15	30.14
9	27.50	27.46	28.37	28.31	29.02	28.96	29.68	29.60	30.03	29.98	30.14	30.08
10	27.47	27.37	28.34	28.20	29.00	28.97	29.69	29.67	30.01	29.97	30.09	30.07
11	27.54	27.36	28.44	28.27	29.08	28.97	29.71	29.67	29.97	29.93	30.07	30.00
12	27.66	27.54	28.46	28.41	29.11	29.06	29.71	29.55	30.05	29.95	30.05	29.98
13	27.70	27.67	28.41	28.30	29.05	28.94	29.76	29.55	30.07	30.01	30.06	30.02
14	27.71	27.64	28.43	28.37	29.08	28.99	29.76	29.66	30.04	29.98	30.02	29.98
15	27.67	27.64	28.48	28.43	29.17	29.03	29.66	29.60	--	--	29.99	29.95
16	27.71	27.67	28.47	28.39	29.18	29.12	29.75	29.66	--	--	30.07	30.00
17	27.73	27.71	28.54	28.37	29.13	29.08	29.75	29.72	30.17	30.13	30.06	29.99
18	27.71	27.62	28.59	28.54	29.18	29.13	29.75	29.68	30.13	30.07	29.99	29.92
19	--	--	28.58	28.53	29.22	29.18	--	--	30.07	30.05	30.05	29.98
20	--	--	28.53	28.31	29.22	29.20	--	--	30.08	30.06	30.04	29.92
21	27.86	27.63	28.64	28.36	29.27	29.21	29.86	29.79	30.07	29.96	29.96	29.87
22	27.76	27.60	28.68	28.64	--	--	29.86	29.81	30.09	30.00	30.01	29.97
23	27.85	27.77	--	--	--	--	29.81	29.79	30.13	30.09	30.01	29.97
24	27.86	27.80	--	--	--	--	29.81	29.79	30.14	30.13	29.96	29.84
25	27.91	27.87	--	--	--	--	29.87	29.82	30.13	30.09	29.87	29.85
26	28.00	27.92	28.68	28.67	--	--	29.87	29.71	30.09	30.00	29.90	29.87
27	28.05	28.01	28.67	28.63	--	--	29.86	29.71	30.11	30.02	29.89	29.86
28	28.03	27.96	28.77	28.62	--	--	29.89	29.85	30.12	30.11	29.85	29.79
29	28.09	28.04	28.85	28.78	--	--	29.85	29.83	--	--	29.79	29.78
30	28.11	28.07	28.82	28.73	29.43	29.38	29.82	29.76	--	--	29.79	29.72
31	28.13	28.06	--	--	29.45	29.37	29.88	29.83	--	--	29.72	29.66

Table 4.—Continuous water levels recorded in observation wells in Howard County—Continued

Well number: HO Cd 28 (continued)

Water Year October 1988 to September 1989

	April		May		June		July		August		September	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	29.80	29.72	28.99	28.91	--	--	25.31	25.20	23.85	23.83	23.74	23.63
2	29.81	29.75	28.94	28.88	27.57	27.43	25.20	25.11	23.83	23.77	23.85	23.66
3	29.74	29.65	--	--	27.43	27.30	25.11	25.06	23.77	23.71	23.91	23.86
4	29.66	29.62	--	--	27.29	27.26	25.06	24.99	23.71	23.64	23.96	23.91
5	--	--	28.98	28.74	27.27	27.12	24.99	24.95	23.65	23.64	23.93	23.89
6	--	--	28.77	28.72	27.11	27.09	24.95	24.86	23.65	23.63	23.89	23.85
7	--	--	28.78	28.77	27.09	27.01	24.86	24.77	--	--	23.86	23.83
8	--	--	28.78	28.78	27.01	26.93	24.77	24.75	--	--	23.85	23.82
9	--	--	28.80	28.75	26.93	26.80	24.75	24.69	--	--	23.85	23.82
10	--	--	28.74	28.69	26.84	26.80	24.69	24.58	--	--	23.86	23.83
11	--	--	28.69	28.69	26.83	26.75	24.58	24.55	--	--	23.96	23.86
12	29.51	29.47	28.69	28.68	26.75	26.58	24.55	24.51	--	--	24.02	23.96
13	29.47	29.42	28.68	28.67	26.57	26.50	24.50	24.40	--	--	24.03	24.00
14	29.43	29.38	28.67	28.61	26.52	26.46	24.41	24.38	--	--	--	--
15	29.38	29.29	28.61	28.54	26.46	26.36	24.46	24.41	--	--	--	--
16	29.32	29.29	28.54	28.47	26.36	26.31	24.43	24.28	--	--	--	--
17	29.33	29.26	28.52	28.47	26.33	26.26	24.28	24.27	--	--	--	--
18	29.26	29.24	28.51	28.47	26.26	26.18	24.27	24.25	--	--	--	--
19	29.25	29.23	28.47	28.40	26.18	26.10	24.25	24.14	--	--	24.17	24.09
20	29.24	29.21	28.39	28.31	26.10	26.00	24.13	24.08	--	--	24.15	24.10
21	29.21	29.16	28.31	28.26	26.02	25.95	24.18	24.10	--	--	24.19	24.16
22	29.16	29.13	28.26	28.19	25.95	25.87	24.18	24.17	--	--	24.16	23.96
23	29.15	29.11	28.19	28.07	25.87	25.77	24.17	24.11	--	--	24.28	23.96
24	29.12	29.08	28.07	28.06	25.77	25.70	24.11	24.07	--	--	24.40	24.29
25	29.08	29.05	28.07	28.01	25.70	25.60	24.07	24.02	--	--	24.37	24.23
26	29.05	29.04	28.00	27.95	25.60	25.52	24.02	23.95	--	--	24.31	24.13
27	29.04	29.00	27.95	27.91	25.52	25.44	23.95	23.85	--	--	24.49	24.33
28	29.03	29.00	27.93	27.86	25.44	25.40	23.86	23.84	--	--	24.47	24.35
29	29.01	28.99	27.85	27.76	--	--	23.93	23.87	--	--	24.34	24.26
30	29.00	28.99	27.75	27.65	--	--	23.92	23.86	--	--	24.43	24.31
31	--	--	--	--	--	--	23.86	23.85	23.79	23.71	--	--
Month	--	--	--	--	--	--	25.31	23.84	--	--	--	--

Water Year October 1989 to September 1990

	October		November		December		January		February		March	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	24.43	24.36	25.17	24.95	25.79	25.66	26.42	26.04	26.76	26.59	26.45	26.34
2	24.36	24.28	--	--	25.79	25.49	26.47	26.41	26.58	26.50	26.33	26.20
3	24.45	24.31	--	--	25.67	25.50	26.42	26.38	26.71	26.58	26.24	26.17
4	24.49	24.45	--	--	25.73	25.63	26.38	26.21	26.59	26.42	26.39	26.26
5	24.51	24.45	--	--	25.72	25.62	26.40	26.24	26.72	26.58	26.44	26.39
6	24.44	24.41	--	--	25.74	25.69	26.43	26.33	26.70	26.61	26.50	26.39
7	24.59	24.44	25.12	25.07	26.02	25.74	26.45	26.38	26.63	26.54	26.57	26.50
8	24.60	24.53	25.10	25.04	26.02	25.86	26.37	26.28	26.68	26.58	26.49	26.33
9	24.70	24.58	25.13	24.99	25.86	25.79	26.42	26.32	26.57	26.42	26.32	26.21
10	24.71	24.63	25.30	25.14	25.83	25.79	26.44	26.27	26.53	26.32	26.31	26.24
11	24.72	24.63	25.32	25.20	25.87	25.83	--	--	26.57	26.52	26.30	26.27
12	24.73	24.66	25.43	25.20	25.89	25.87	--	--	26.67	26.52	26.28	26.23
13	24.74	24.68	25.46	25.31	25.95	25.85	--	--	--	--	26.28	26.24
14	24.76	24.72	25.31	25.27	--	--	--	--	--	--	26.26	26.23
15	24.77	24.72	25.27	25.16	--	--	--	--	26.56	26.45	26.29	26.25
16	24.79	24.75	25.29	24.99	26.01	25.79	--	--	26.44	26.36	26.28	26.22
17	24.78	24.75	25.46	25.30	26.06	26.01	--	--	26.72	26.39	26.22	26.12
18	24.90	24.79	25.57	25.44	26.08	26.04	--	--	26.73	26.51	26.37	26.17
19	24.88	24.82	25.59	25.37	26.08	25.95	--	--	26.49	26.35	--	--
20	24.84	24.67	25.35	25.06	26.06	25.95	26.63	26.41	26.62	26.46	--	--
21	24.92	24.84	25.51	25.14	26.15	26.04	26.47	26.34	26.62	26.51	--	--
22	25.08	24.93	25.58	25.47	26.20	26.15	26.53	26.47	26.51	26.19	26.39	26.27
23	25.12	25.08	25.58	25.43	26.22	26.19	26.64	26.54	26.19	26.16	26.40	26.25
24	25.08	25.05	25.67	25.59	26.19	26.07	26.60	26.53	26.36	26.18	26.46	26.40
25	25.06	25.03	25.65	25.49	26.06	25.95	26.61	26.44	26.69	26.38	26.40	26.34
26	25.07	25.03	25.61	25.44	26.18	25.93	26.73	26.46	26.72	26.60	26.36	26.33
27	25.08	25.04	25.69	25.57	26.26	26.15	26.79	26.69	26.59	26.38	26.44	26.37
28	25.06	25.04	25.61	25.44	26.29	26.14	26.72	26.67	26.41	26.38	26.45	26.38
29	25.08	25.05	25.74	25.62	26.32	26.26	26.71	26.34	--	--	26.45	26.40
30	25.09	25.04	25.72	25.59	26.29	26.23	26.66	26.34	--	--	26.40	26.30
31	25.04	24.91	--	--	26.30	26.04	26.76	26.66	--	--	26.30	26.26
Month	25.12	24.28	--	--	--	--	--	--	--	--	--	--

Table 4.—Continuous water levels recorded in observation wells in Howard County—Continued

Well number: HO Cd 28 (continued)

Water Year October 1989 to September 1990

	April		May		June		July		August		September	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	26.29	26.26	--	--	--	--	--	--	--	--	--	--
2	26.27	26.20	--	--	--	--	--	--	--	--	--	--
3	26.20	26.18	--	--	--	--	--	--	--	--	--	--
4	26.21	26.15	--	--	--	--	--	--	--	--	--	--
5	26.33	26.21	--	--	--	--	--	--	--	--	--	--
6	26.42	26.34	--	--	--	--	--	--	--	--	--	--
7	26.46	26.35	--	--	--	--	--	--	--	--	--	--
8	26.51	26.46	--	--	--	--	--	--	--	--	--	--
9	26.53	26.41	--	--	--	--	--	--	--	--	--	--
10	26.41	26.14	--	--	--	--	--	--	--	--	--	--
11	26.33	26.13	--	--	--	--	--	--	--	--	--	--
12	26.48	26.34	--	--	--	--	--	--	--	--	--	--
13	26.52	26.46	--	--	--	--	--	--	--	--	--	--
14	26.45	26.28	--	--	--	--	--	--	--	--	--	--
15	26.27	26.22	--	--	--	--	--	--	--	--	--	--
16	26.31	26.25	--	--	--	--	--	--	--	--	--	--
17	26.37	26.21	--	--	--	--	--	--	--	--	--	--
18	26.50	26.39	--	--	--	--	--	--	--	--	--	--
19	26.53	26.46	--	--	--	--	--	--	--	--	--	--
20	26.46	26.28	--	--	--	--	--	--	--	--	--	--
21	26.27	26.20	--	--	--	--	--	--	--	--	--	--
22	26.30	26.25	--	--	--	--	--	--	--	--	--	--
23	26.27	26.24	--	--	--	--	--	--	--	--	--	--
24	--	--	--	--	--	--	--	--	--	--	--	--
25	--	--	--	--	--	--	--	--	--	--	--	--
26	--	--	--	--	--	--	--	--	--	--	--	--
27	--	--	--	--	--	--	--	--	--	--	--	--
28	--	--	--	--	--	--	--	--	--	--	--	--
29	--	--	--	--	--	--	--	--	--	--	--	--
30	--	--	--	--	--	--	--	--	--	--	--	--
31	--	--	--	--	--	--	--	--	--	--	--	--

Well number: HO Cd 29
Owner: U.S. Geological Survey.
Geologic unit: Loch Raven Schist.
Altitude: 470.34 feet.
Well characteristics: Drilled unused water-table well, depth 68 feet, diameter 3.5 inches.
Period of record: October 1986 to current year.
Extremes for period of record: Highest water level recorded, 40.39 feet, August 31, 1989;
Lowest water level recorded, 49.71 feet, January 16, 1987.

Water Year October 1986 to September 1987

	October		November		December		January		February		March	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	--	--	48.91	48.86	49.34	49.33	49.67	49.57	49.56	49.51	48.84	48.74
2	--	--	48.89	48.84	--	--	49.63	49.57	49.51	49.50	48.81	48.79
3	--	--	48.90	48.88	--	--	49.68	49.63	49.53	49.50	48.81	48.78
4	--	--	--	--	--	--	49.68	49.67	49.54	49.53	48.79	48.76
5	--	--	--	--	--	--	49.69	49.67	49.54	49.50	--	--
6	--	--	--	--	--	--	49.68	49.63	49.50	49.44	48.77	48.68
7	--	--	--	--	--	--	49.67	49.62	49.44	49.41	48.68	48.68
8	--	--	--	--	--	--	49.69	49.67	49.41	49.35	48.68	48.63
9	--	--	--	--	--	--	49.69	49.68	49.41	49.38	48.63	48.59
10	--	--	--	--	--	--	49.67	49.61	49.41	49.39	--	--
11	--	--	--	--	--	--	49.66	49.61	49.39	49.34	--	--
12	--	--	--	--	--	--	49.68	49.65	49.34	49.29	--	--
13	--	--	--	--	--	--	49.70	49.68	49.32	49.31	48.54	48.43
14	--	--	--	--	--	--	--	--	49.31	49.28	48.42	48.41
15	--	--	--	--	--	--	--	--	49.29	49.28	48.41	48.32
16	--	--	--	--	--	--	49.71	49.69	49.28	49.22	48.32	48.27
17	--	--	--	--	--	--	49.70	49.69	49.22	49.20	48.27	48.18
18	--	--	--	--	--	--	49.68	49.62	49.20	49.18	48.18	48.11
19	--	--	--	--	--	--	49.63	49.54	49.20	49.18	48.09	48.04
20	--	--	49.16	49.12	49.55	49.52	49.68	49.63	49.18	49.14	48.04	47.97
21	--	--	49.17	49.12	49.56	49.55	49.66	49.65	49.14	49.09	48.00	47.93
22	--	--	49.20	49.17	49.57	49.56	49.65	49.52	49.09	49.00	47.94	47.92
23	--	--	49.20	49.20	49.56	49.56	49.65	49.54	49.05	48.99	47.93	47.86
24	--	--	49.23	49.20	49.57	49.43	49.66	49.65	49.07	49.03	47.86	47.85
25	48.78	48.77	49.25	49.23	49.58	49.47	49.66	49.59	49.03	49.00	47.85	47.83
26	48.76	48.74	49.24	49.17	--	--	49.61	49.58	49.00	48.97	47.83	47.68
27	48.79	48.76	49.28	49.20	--	--	49.62	49.61	48.97	48.94	47.71	47.64
28	48.84	48.79	49.28	49.28	--	--	49.61	49.60	48.93	48.85	47.64	47.61
29	48.84	48.82	49.30	49.27	49.62	49.60	49.61	49.57	--	--	47.63	47.56
30	48.89	48.82	49.33	49.30	--	--	49.57	49.52	--	--	47.55	47.41
31	48.91	48.89	--	--	49.67	49.66	49.56	49.52	--	--	47.49	47.36
Month	--	--	--	--	--	--	--	--	49.56	48.85	--	--

Table 4.—Continuous water levels recorded in observation wells in Howard County—Continued

Well number: HO Cd 29 (continued)

Water Year October 1986 to September 1987

	April		May		June		July		August		September	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	47.49	47.38	45.63	45.49	44.07	44.01	43.57	43.50	43.59	43.55	--	--
2	47.38	47.31	45.51	45.46	44.02	44.00	43.53	43.47	43.57	43.52	--	--
3	47.36	47.21	45.47	45.42	44.02	43.97	43.54	43.50	43.54	43.49	44.16	44.02
4	47.20	47.10	45.46	45.44	43.99	43.91	43.52	43.48	43.55	43.51	44.22	44.17
5	47.18	47.13	45.43	45.30	43.95	43.91	43.57	43.51	--	--	44.19	44.15
6	47.12	47.06	45.31	45.20	43.93	43.91	43.60	43.55	--	--	44.15	44.08
7	47.05	47.01	45.20	45.15	43.92	43.81	43.55	43.51	43.71	43.70	44.11	44.08
8	47.01	46.96	45.18	45.13	43.82	43.75	--	--	43.70	43.65	44.09	43.96
9	--	--	45.15	45.06	43.80	43.73	43.55	43.55	43.65	43.59	44.15	44.03
10	--	--	45.07	45.00	43.86	43.81	43.55	43.49	43.72	43.59	44.21	44.16
11	--	--	45.02	44.94	--	--	43.50	43.46	43.75	43.71	44.23	44.20
12	--	--	--	--	43.87	43.78	43.48	43.45	43.77	43.72	44.23	44.17
13	46.70	46.70	--	--	43.78	43.77	43.47	43.40	43.79	43.77	44.20	44.15
14	46.70	46.58	45.05	44.86	43.77	43.75	43.50	43.39	43.80	43.77	44.27	44.20
15	46.58	46.47	44.85	44.77	43.75	43.74	43.55	43.50	43.79	43.74	44.29	44.24
16	46.47	46.36	44.81	44.75	43.74	43.74	43.60	43.53	43.75	43.70	44.27	44.23
17	46.36	46.34	44.75	44.66	43.78	43.74	43.65	43.60	43.72	43.68	44.23	44.18
18	46.35	46.33	44.66	44.61	43.80	43.73	43.60	43.50	43.79	43.71	44.24	44.16
19	46.33	46.28	44.64	44.61	43.73	43.64	43.53	43.51	43.82	43.79	44.34	44.25
20	46.27	46.21	44.64	44.59	43.65	43.59	43.55	43.48	43.91	43.81	44.33	44.31
21	46.20	46.12	44.58	44.54	43.61	43.57	43.53	43.49	43.95	43.88	44.36	44.32
22	46.13	46.08	44.54	44.45	43.60	43.55	43.55	43.49	43.88	43.74	44.36	44.33
23	46.13	46.00	44.45	44.39	43.63	43.55	43.53	43.50	43.93	43.78	44.36	44.33
24	46.00	45.93	44.40	44.35	43.69	43.62	43.55	43.51	43.98	43.93	44.36	44.33
25	45.99	45.93	44.40	44.35	43.62	43.55	43.55	43.49	43.97	43.94	44.47	44.35
26	45.93	45.87	44.36	44.32	43.57	43.50	43.49	43.45	43.96	43.92	44.50	44.46
27	45.86	45.72	44.32	44.27	43.57	43.50	43.51	43.45	43.91	43.84	44.55	44.50
28	45.73	45.67	44.26	44.17	43.64	43.58	43.53	43.48	43.92	43.88	44.55	44.51
29	45.68	45.47	44.17	44.12	43.66	43.59	43.59	43.53	44.02	43.90	44.51	44.35
30	45.63	45.53	44.13	44.08	43.60	43.57	43.57	43.52	44.06	44.00	44.34	44.30
31	--	--	44.09	44.04	--	--	43.57	43.54	--	--	--	--

Water Year October 1987 to September 1988

	October		November		December		January		February		March	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	44.53	44.33	45.18	45.11	45.36	45.30	45.82	45.71	--	--	45.00	44.97
2	44.54	44.49	45.13	45.10	45.58	45.36	45.90	45.83	--	--	44.97	44.85
3	44.58	44.51	45.11	45.00	45.58	45.38	45.87	45.68	--	--	44.87	44.80
4	44.60	44.57	44.99	44.94	45.51	45.34	45.73	45.62	--	--	44.89	44.73
5	44.61	44.53	45.11	44.92	45.61	45.52	45.83	45.73	--	--	44.98	44.90
6	44.54	44.49	45.21	45.12	45.70	45.61	45.89	45.83	--	--	44.90	44.75
7	44.61	44.48	45.21	45.17	45.72	45.69	45.92	45.80	--	--	44.83	44.74
8	--	--	45.21	45.16	45.69	45.59	45.78	45.61	--	--	44.85	44.73
9	--	--	45.20	45.15	45.58	45.46	45.77	45.65	--	--	44.72	44.53
10	--	--	45.21	45.15	45.51	45.45	45.83	45.77	--	--	44.67	44.53
11	--	--	45.18	45.12	45.48	45.44	45.83	45.77	--	--	44.75	44.68
12	--	--	45.22	45.15	45.56	45.42	45.77	45.64	45.25	45.14	44.67	44.49
13	--	--	45.24	45.21	45.76	45.57	45.78	45.60	45.35	45.22	44.53	44.46
14	--	--	45.35	45.23	45.78	45.71	45.91	45.79	45.42	45.29	44.54	44.47
15	--	--	45.44	45.36	45.70	45.39	45.87	45.75	45.27	45.12	44.55	44.49
16	--	--	45.43	45.36	45.59	45.45	45.77	45.74	45.33	45.11	44.57	44.54
17	--	--	45.35	45.16	45.78	45.60	45.74	45.65	45.36	45.27	--	--
18	--	--	45.37	45.15	45.82	45.77	45.69	45.58	45.27	45.23	44.56	44.39
19	--	--	--	--	45.75	45.72	45.74	45.66	45.26	44.98	44.38	44.34
20	--	--	--	--	45.73	45.56	45.64	45.50	45.07	44.98	44.50	44.33
21	--	--	45.41	45.19	45.74	45.62	45.62	45.51	45.24	45.08	44.54	44.50
22	45.00	44.91	45.48	45.41	45.74	45.64	45.64	45.62	45.24	45.07	44.57	44.50
23	44.99	44.97	45.48	45.44	45.83	45.65	45.63	45.57	45.09	45.01	44.51	44.35
24	45.01	44.94	45.50	45.45	45.83	45.71	45.63	45.57	45.12	45.09	44.35	44.30
25	44.99	44.92	45.49	45.43	45.70	45.63	45.58	45.41	45.10	45.06	44.31	44.25
26	44.99	44.94	45.50	45.42	45.82	45.63	45.69	45.41	45.10	44.96	44.25	44.15
27	44.93	44.80	45.55	45.51	45.83	45.77	45.76	45.70	44.99	44.88	44.32	44.16
28	45.00	44.82	45.51	45.41	45.77	45.60	--	--	45.04	44.97	44.37	44.31
29	45.07	45.00	45.41	45.23	45.84	45.55	--	--	44.98	44.93	44.31	44.19
30	45.09	45.02	45.30	45.24	45.89	45.84	--	--	--	--	44.20	44.17
31	45.18	45.04	--	--	45.88	45.72	--	--	--	--	44.24	44.17
Month	--	--	--	--	45.89	45.30	--	--	--	--	--	--

Table 4.—Continuous water levels recorded in observation wells in Howard County—Continued

Well number: HO Cd 29 (continued)

Water Year October 1987 to September 1988

	April		May		June		July		August		September	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	44.17	44.13	43.48	43.38	42.87	42.76	42.68	42.63	42.68	42.62	43.27	43.22
2	44.15	44.10	43.42	43.39	42.91	42.77	42.74	42.65	42.72	42.68	43.26	43.17
3	44.09	43.98	43.42	43.35	42.91	42.86	42.76	42.72	42.75	42.71	43.17	43.10
4	43.98	43.93	43.36	43.30	42.92	42.89	--	--	42.74	42.68	43.11	42.93
5	44.02	43.97	43.30	43.19	42.91	42.77	--	--	42.69	42.63	43.18	42.95
6	43.97	43.82	43.25	43.16	42.83	42.76	--	--	42.66	42.60	43.30	43.20
7	43.91	43.76	43.32	43.24	42.78	42.72	42.62	42.58	42.67	42.62	43.37	43.30
8	43.95	43.91	43.40	43.31	42.81	42.77	42.61	42.55	42.71	42.67	43.40	43.33
9	43.97	43.93	43.32	43.18	42.87	42.76	42.56	42.54	42.73	42.71	--	--
10	43.94	43.86	43.18	43.11	42.95	42.86	42.57	42.53	42.76	42.72	--	--
11	43.87	43.83	43.27	43.16	42.90	42.83	42.58	42.53	42.79	42.74	--	--
12	43.88	43.83	43.32	43.25	42.91	42.86	42.59	42.56	42.79	42.76	--	--
13	43.83	43.77	43.25	43.11	42.89	42.82	42.63	42.58	42.81	42.77	--	--
14	--	--	43.18	43.13	42.81	42.73	42.59	42.52	42.80	42.73	--	--
15	43.72	43.64	43.16	43.07	42.73	42.69	42.63	42.54	42.74	42.69	--	--
16	43.75	43.72	43.07	42.99	42.80	42.72	42.63	42.57	42.80	42.74	--	--
17	43.73	43.54	43.08	43.03	42.82	42.78	42.59	42.50	42.81	42.70	--	--
18	43.61	43.46	43.08	43.04	42.80	42.73	42.64	42.57	42.81	42.71	--	--
19	43.64	43.56	43.10	43.04	42.73	42.68	42.61	42.58	42.86	42.82	--	--
20	43.68	43.54	43.10	43.07	42.68	42.65	42.63	42.60	42.83	42.78	--	--
21	43.58	43.44	43.09	43.05	42.66	42.63	42.61	42.53	42.95	42.82	--	--
22	43.63	43.56	43.06	43.01	42.84	42.66	42.64	42.57	43.04	42.96	--	--
23	43.62	43.42	43.01	42.93	42.82	42.71	42.64	42.54	43.02	42.86	--	--
24	43.55	43.38	42.95	42.91	42.69	42.53	42.62	42.57	42.85	42.80	--	--
25	43.56	43.50	43.10	42.89	42.69	42.54	42.64	42.61	42.88	42.84	43.79	43.74
26	43.52	43.44	43.12	43.08	42.69	42.66	42.63	42.58	43.02	42.89	43.86	43.79
27	43.46	43.32	43.10	43.02	42.67	42.62	42.67	42.62	43.09	43.02	43.90	43.85
28	43.41	43.37	43.01	42.93	42.61	42.57	42.69	42.65	43.12	43.09	43.93	43.85
29	43.39	43.36	42.94	42.92	42.63	42.56	42.69	42.64	43.10	42.95	44.01	43.93
30	43.48	43.37	42.97	42.92	42.68	42.60	42.65	42.58	43.12	43.07	43.97	43.92
31	--	--	42.93	42.86	--	--	42.62	42.58	43.21	43.12	--	--
Month	--	--	43.48	42.86	42.95	42.53	--	--	43.21	42.60	--	--

Water Year October 1988 to September 1989

	October		November		December		January		February		March	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	43.92	43.86	44.65	44.49	45.42	45.30	46.10	46.08	46.64	46.57	47.23	47.19
2	43.86	43.81	44.64	44.48	45.46	45.41	46.08	46.04	46.72	46.65	47.24	47.20
3	43.96	43.85	44.75	44.65	45.41	45.32	46.08	45.94	46.78	46.68	47.23	47.20
4	44.01	43.96	44.74	44.68	45.54	45.36	46.22	45.98	46.82	46.78	47.25	47.22
5	44.14	44.01	44.67	44.48	45.51	45.44	46.23	46.19	46.79	46.75	47.24	47.16
6	44.18	44.14	44.77	44.60	45.50	45.42	46.23	46.12	46.78	46.71	47.26	47.19
7	44.18	44.11	44.93	44.77	45.52	45.41	46.29	46.23	46.84	46.77	47.35	47.26
8	44.12	44.08	44.94	44.85	45.62	45.52	46.25	46.13	46.85	46.79	47.36	47.34
9	44.13	44.08	44.99	44.94	45.62	45.53	46.37	46.26	46.90	46.84	47.34	47.29
10	44.10	43.96	44.94	44.77	45.58	45.53	46.38	46.33	46.86	46.82	47.32	47.29
11	44.15	43.96	45.05	44.86	45.69	45.53	46.40	46.34	46.85	46.79	47.31	47.22
12	44.30	44.15	45.08	45.00	45.72	45.63	46.38	46.18	46.99	46.82	47.34	47.19
13	44.34	44.30	45.00	44.88	45.62	45.48	46.45	46.19	47.02	46.92	47.36	47.30
14	44.35	44.26	45.02	44.96	45.66	45.55	46.45	46.30	46.99	46.89	47.31	47.26
15	44.29	44.26	45.07	45.02	45.79	45.58	46.32	46.24	47.01	46.93	47.34	47.24
16	44.33	44.29	45.05	44.94	45.80	45.69	46.43	46.32	47.10	47.02	47.42	47.35
17	44.36	44.31	45.14	44.92	45.71	45.63	46.43	46.38	47.11	47.04	47.42	47.34
18	44.31	44.21	45.19	45.13	45.78	45.71	46.44	46.35	47.04	46.96	47.38	47.26
19	44.40	44.30	45.17	45.08	45.84	45.77	--	--	46.98	46.94	47.46	47.39
20	44.48	44.40	45.08	44.83	45.84	45.79	--	--	47.01	46.98	47.46	47.30
21	44.48	44.19	45.22	44.92	45.92	45.82	46.50	46.39	46.98	46.85	47.42	47.25
22	44.35	44.17	45.27	45.21	--	--	46.49	46.43	47.06	46.92	47.48	47.42
23	44.45	44.36	--	--	--	--	46.43	46.39	47.11	47.06	47.49	47.44
24	44.45	44.35	--	--	--	--	46.47	46.40	47.13	47.10	47.44	47.33
25	44.51	44.46	--	--	--	--	46.56	46.47	47.13	47.07	47.40	47.36
26	44.63	44.52	45.24	45.20	--	--	46.56	46.35	47.07	46.95	47.47	47.41
27	44.69	44.63	45.20	45.14	--	--	46.57	46.36	47.15	47.02	47.48	47.42
28	44.65	44.54	45.36	45.14	--	--	46.61	46.54	47.19	47.15	47.42	47.36
29	44.71	44.66	45.45	45.36	--	--	46.56	46.52	--	--	47.41	47.35
30	44.73	44.69	45.39	45.27	46.07	45.99	46.53	46.44	--	--	47.41	47.33
31	44.75	44.65	--	--	46.10	45.99	46.61	46.54	--	--	47.39	47.27
Month	44.75	43.81	--	--	--	--	--	--	47.19	46.57	47.49	47.16

Table 4.—Continuous water levels recorded in observation wells in Howard County—Continued

Well number: HO Cd 29 (continued)

Water Year October 1988 to September 1989

	April		May		June		July		August		September	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	47.52	47.39	--	--	46.05	45.99	43.93	43.81	41.21	41.14	40.59	40.47
2	47.54	47.46	--	--	45.99	45.93	43.81	43.71	41.14	41.02	--	--
3	47.46	47.37	--	--	45.94	45.85	43.71	43.62	41.02	40.94	--	--
4	47.40	47.37	47.19	47.13	45.85	45.82	43.62	43.53	40.94	40.81	--	--
5	--	--	47.13	46.82	45.85	45.71	43.53	43.46	40.85	40.79	--	--
6	--	--	47.01	46.87	45.73	45.70	43.45	43.33	40.80	40.74	--	--
7	47.43	47.28	46.99	46.98	45.70	45.62	43.32	43.20	--	--	--	--
8	47.36	47.28	46.99	46.97	45.62	45.55	43.19	43.15	--	--	--	--
9	47.39	47.31	46.99	46.91	45.55	45.43	43.15	43.03	--	--	--	--
10	47.32	47.28	46.90	46.84	45.48	45.45	43.03	42.90	--	--	--	--
11	47.34	47.29	46.85	46.84	45.47	45.40	42.91	42.84	--	--	--	--
12	47.37	47.31	46.86	46.84	45.40	45.25	42.86	42.75	--	--	--	--
13	47.31	47.26	46.86	46.84	45.24	45.19	42.74	42.59	--	--	--	--
14	47.29	47.25	46.84	46.80	45.22	45.15	42.62	42.56	--	--	--	--
15	47.30	47.25	46.80	46.73	45.17	45.08	42.63	42.54	--	--	40.63	40.56
16	47.28	47.23	46.73	46.66	45.10	45.03	42.54	42.34	--	--	40.64	40.59
17	47.24	47.20	46.72	46.68	45.07	45.00	42.36	42.32	--	--	40.71	40.59
18	47.21	47.19	46.73	46.69	45.00	44.92	42.33	42.22	--	--	40.79	40.71
19	47.21	47.15	46.69	46.61	44.92	44.85	42.22	42.03	--	--	40.80	40.70
20	47.22	47.16	46.61	46.52	44.85	44.70	42.02	41.95	--	--	40.78	40.72
21	47.21	47.18	46.52	46.50	44.76	44.68	42.05	42.00	--	--	40.81	40.76
22	47.21	47.19	46.51	46.45	44.69	44.57	42.05	41.95	--	--	40.76	40.48
23	47.21	47.09	46.45	46.34	44.57	44.46	41.95	41.84	--	--	40.91	40.51
24	47.13	47.04	46.38	46.34	44.45	44.39	41.84	41.75	--	--	41.04	40.91
25	--	--	46.38	46.32	44.39	44.28	41.75	41.63	--	--	41.02	40.82
26	--	--	46.32	46.29	44.28	44.19	41.62	41.52	--	--	40.95	40.71
27	--	--	46.31	46.27	44.19	44.10	41.51	41.35	--	--	41.13	40.97
28	--	--	46.32	46.25	44.11	44.05	41.37	41.29	--	--	41.11	40.95
29	--	--	46.25	46.17	--	--	41.43	41.35	--	--	40.95	40.85
30	--	--	46.17	46.10	--	--	41.36	41.24	--	--	41.06	40.93
31	--	--	46.09	46.06	--	--	41.24	41.20	40.48	40.39	--	--
Month	--	--	--	--	--	--	43.93	41.20	--	--	--	--

Water Year October 1989 to September 1990

	October		November		December		January		February		March	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	41.05	40.95	41.97	41.72	42.82	42.67	43.58	43.13	43.94	43.78	44.04	43.90
2	40.94	40.85	--	--	42.82	42.48	43.62	43.55	43.81	43.70	43.90	43.78
3	41.05	40.90	--	--	42.68	42.50	43.55	43.51	43.95	43.81	43.86	43.75
4	41.10	41.04	--	--	42.74	42.63	43.50	43.30	43.84	43.64	44.02	43.88
5	41.12	41.04	--	--	42.72	42.62	43.53	43.36	43.99	43.85	44.08	44.02
6	41.04	40.99	--	--	42.74	42.67	43.57	43.44	43.94	43.87	44.16	44.02
7	41.21	41.03	42.01	41.93	43.09	42.77	43.58	43.49	43.93	43.82	44.23	44.14
8	41.21	41.13	41.98	41.89	43.09	42.91	43.48	43.38	43.98	43.87	44.13	43.96
9	41.34	41.21	42.03	41.84	42.92	42.81	43.55	43.40	43.86	43.71	43.94	43.84
10	41.35	41.26	42.23	42.04	42.87	42.81	43.57	43.36	43.85	43.61	43.96	43.88
11	41.36	41.25	42.25	42.10	42.94	42.87	--	--	43.90	43.84	43.93	43.90
12	41.36	41.28	42.40	42.10	42.96	42.90	--	--	44.03	43.85	43.92	43.87
13	41.37	41.32	42.43	42.26	43.01	42.88	--	--	--	--	43.93	43.89
14	41.38	41.33	42.26	42.21	--	--	--	--	--	--	43.91	43.87
15	41.40	41.33	42.21	42.05	--	--	--	--	44.00	43.84	43.94	43.90
16	41.42	41.37	42.23	41.85	43.17	42.93	--	--	43.83	43.77	43.93	43.86
17	41.41	41.36	42.42	42.25	43.22	43.17	--	--	44.18	43.84	43.85	43.75
18	41.55	41.41	42.56	42.39	43.24	43.19	--	--	44.18	43.93	44.04	43.82
19	41.51	41.43	42.58	42.30	43.24	43.08	--	--	43.93	43.79	--	--
20	41.48	41.35	42.28	41.94	43.20	43.08	43.77	43.54	44.11	43.94	--	--
21	41.60	41.48	42.50	42.08	43.32	43.17	43.62	43.46	44.12	44.00	--	--
22	41.82	41.61	42.57	42.43	43.39	43.32	43.70	43.61	44.00	43.67	44.04	43.91
23	41.87	41.82	42.58	42.40	43.40	43.34	43.80	43.71	43.70	43.64	44.05	43.89
24	41.84	41.79	42.67	42.58	43.33	43.19	43.77	43.68	43.90	43.68	44.11	44.04
25	41.80	41.76	42.63	42.46	43.18	43.03	43.77	43.60	44.25	43.92	44.03	43.98
26	41.83	41.77	42.62	42.41	43.33	43.00	43.91	43.64	44.27	44.14	44.01	43.97
27	41.84	41.79	42.70	42.53	43.40	43.25	43.97	43.85	44.13	43.93	44.08	44.02
28	41.83	41.80	42.62	42.41	43.44	43.24	43.91	43.83	43.98	43.94	44.08	44.01
29	41.86	41.83	42.75	42.63	43.47	43.39	43.87	43.49	--	--	44.08	44.02
30	41.87	41.80	42.71	42.59	43.44	43.36	43.86	43.55	--	--	44.01	43.91
31	41.80	41.64	--	--	43.42	43.11	43.96	43.85	--	--	43.90	43.86
Month	41.87	40.85	--	--	--	--	--	--	--	--	--	--

Table 4.—Continuous water levels recorded in observation wells in Howard County—Continued

Well number: HO Cd 29 (continued)

Water Year October 1989 to September 1990

	April		May		June		July		August		September	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	43.88	43.85	--	--	--	--	--	--	--	--	--	--
2	43.87	43.79	--	--	--	--	--	--	--	--	--	--
3	43.80	43.77	--	--	--	--	--	--	--	--	--	--
4	43.81	43.75	--	--	--	--	--	--	--	--	--	--
5	43.94	43.81	--	--	--	--	--	--	--	--	--	--
6	44.02	43.95	--	--	--	--	--	--	--	--	--	--
7	44.07	43.94	--	--	--	--	--	--	--	--	--	--
8	44.13	44.07	--	--	--	--	--	--	--	--	--	--
9	44.15	44.02	--	--	--	--	--	--	--	--	--	--
10	44.01	43.74	--	--	--	--	--	--	--	--	--	--
11	43.95	43.73	--	--	--	--	--	--	--	--	--	--
12	44.11	43.96	--	--	--	--	--	--	--	--	--	--
13	44.15	44.08	--	--	--	--	--	--	--	--	--	--
14	44.08	43.90	--	--	--	--	--	--	--	--	--	--
15	43.89	43.84	--	--	--	--	--	--	--	--	--	--
16	43.93	43.88	--	--	--	--	--	--	--	--	--	--
17	44.02	43.83	--	--	--	--	--	--	--	--	--	--
18	44.14	44.04	--	--	--	--	--	--	--	--	--	--
19	44.18	44.10	--	--	--	--	--	--	--	--	--	--
20	44.09	43.92	--	--	--	--	--	--	--	--	--	--
21	43.90	43.85	--	--	--	--	--	--	--	--	--	--
22	43.94	43.89	--	--	--	--	--	--	--	--	--	--
23	43.92	43.88	--	--	--	--	--	--	--	--	--	--
24	--	--	--	--	--	--	--	--	--	--	--	--
25	--	--	--	--	--	--	--	--	--	--	--	--
26	--	--	--	--	--	--	--	--	--	--	--	--
27	--	--	--	--	--	--	--	--	--	--	--	--
28	--	--	--	--	--	--	--	--	--	--	--	--
29	--	--	--	--	--	--	--	--	--	--	--	--
30	--	--	--	--	--	--	--	--	--	--	--	--
31	--	--	--	--	--	--	--	--	--	--	--	--

Well number: HO Cd 78
Owner: U.S. Geological Survey.
Geologic unit: Loch Raven Schist.
Altitude: 425.58 feet.
Well characteristics: Drilled unused water-table well, depth 19 feet, diameter 3.5 inches.
Period of record: February 1988 to current year.
Extremes for period of record: Highest water level recorded, 6.08 feet, June 7, 1989;
Lowest water level recorded, 9.88 feet, January 7, 1989.

Water Year October 1987 to September 1988

	October		November		December		January		February		March	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	--	--	--	--	--	--	--	--	--	--	8.07	8.04
2	--	--	--	--	--	--	--	--	--	--	8.07	8.05
3	--	--	--	--	--	--	--	--	--	--	8.09	8.06
4	--	--	--	--	--	--	--	--	--	--	8.12	8.05
5	--	--	--	--	--	--	--	--	--	--	8.13	8.08
6	--	--	--	--	--	--	--	--	--	--	8.08	8.04
7	--	--	--	--	--	--	--	--	--	--	8.11	8.04
8	--	--	--	--	--	--	--	--	--	--	8.13	8.06
9	--	--	--	--	--	--	--	--	--	--	8.05	8.01
10	--	--	--	--	--	--	--	--	--	--	8.12	8.01
11	--	--	--	--	--	--	--	--	--	--	8.16	8.12
12	--	--	--	--	--	--	--	--	8.04	7.32	8.13	8.06
13	--	--	--	--	--	--	--	--	7.63	7.33	8.14	8.07
14	--	--	--	--	--	--	--	--	7.71	7.64	8.14	8.11
15	--	--	--	--	--	--	--	--	7.75	7.69	8.19	8.14
16	--	--	--	--	--	--	--	--	7.89	7.75	8.22	8.19
17	--	--	--	--	--	--	--	--	7.89	7.89	--	--
18	--	--	--	--	--	--	--	--	7.99	7.89	--	--
19	--	--	--	--	--	--	--	--	7.92	7.57	8.19	8.14
20	--	--	--	--	--	--	--	--	7.55	7.42	8.27	8.17
21	--	--	--	--	--	--	--	--	7.67	7.51	8.30	8.27
22	--	--	--	--	--	--	--	--	7.70	7.62	8.32	8.28
23	--	--	--	--	--	--	--	--	7.80	7.67	8.30	8.24
24	--	--	--	--	--	--	--	--	7.84	7.80	8.27	8.24
25	--	--	--	--	--	--	--	--	7.89	7.84	8.27	8.23
26	--	--	--	--	--	--	--	--	7.92	7.89	8.25	8.13
27	--	--	--	--	--	--	--	--	7.96	7.88	8.17	8.12
28	--	--	--	--	--	--	--	--	8.00	7.97	8.19	8.15
29	--	--	--	--	--	--	--	--	8.04	8.00	8.16	8.11
30	--	--	--	--	--	--	--	--	--	--	8.15	8.13
31	--	--	--	--	--	--	--	--	--	--	8.18	8.15

Table 4.—Continuous water levels recorded in observation wells in Howard County—Continued

Well number: HO Cd 78 (continued)

Water Year October 1987 to September 1988

	April		May		June		July		August		September	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	8.17	8.15	8.31	8.29	7.78	7.75	8.47	8.43	8.96	8.94	9.35	9.33
2	8.19	8.16	8.33	8.30	7.86	7.79	8.49	8.46	8.98	8.96	9.35	9.35
3	8.18	8.13	8.33	8.32	7.88	7.84	8.51	8.49	9.00	8.98	9.36	9.34
4	8.18	8.13	8.32	8.31	7.90	7.87	8.55	8.51	9.00	8.99	9.36	9.28
5	8.20	8.18	8.31	8.13	7.90	7.87	8.57	8.54	9.02	9.00	9.35	9.28
6	8.19	8.13	8.10	7.03	7.93	7.88	--	--	9.03	9.01	9.37	9.35
7	8.12	8.10	7.50	7.03	7.96	7.91	8.71	8.67	9.04	9.02	9.39	9.37
8	8.11	8.06	7.71	7.52	7.98	7.96	8.72	8.69	9.05	9.03	9.39	9.39
9	8.07	8.04	7.77	7.71	--	--	8.74	8.70	9.07	9.05	--	--
10	8.07	8.04	7.86	7.77	8.04	8.01	8.75	8.70	9.09	9.07	--	--
11	8.10	8.06	7.93	7.84	8.04	8.03	8.78	8.74	9.11	9.09	--	--
12	8.11	8.09	7.97	7.93	8.07	8.04	8.76	8.74	9.13	9.11	--	--
13	--	--	7.99	7.94	8.11	8.07	8.78	8.74	9.15	9.13	--	--
14	--	--	8.02	7.99	8.13	8.11	8.79	8.77	9.16	9.14	--	--
15	8.15	8.09	8.03	8.01	8.13	8.12	8.83	8.79	9.18	9.15	--	--
16	8.18	8.15	8.04	8.00	8.14	8.10	8.84	8.82	9.20	9.18	--	--
17	8.18	8.11	8.09	8.04	8.15	8.12	8.87	8.83	9.21	9.19	9.53	9.51
18	8.18	8.08	8.06	7.97	8.19	8.15	8.88	8.86	9.23	9.21	9.51	9.50
19	8.20	8.15	7.96	7.91	8.20	8.18	8.89	8.87	9.24	9.23	9.52	9.51
20	8.23	8.16	7.91	7.90	8.21	8.19	8.90	8.88	9.23	9.19	9.53	9.52
21	8.23	8.13	7.90	7.89	8.23	8.20	8.88	8.85	9.24	9.19	9.55	9.53
22	8.25	8.21	7.90	7.88	8.25	8.22	8.87	8.84	9.26	9.24	9.56	9.55
23	8.26	8.17	7.90	7.10	8.31	8.24	8.87	8.75	--	--	9.58	9.55
24	8.26	8.15	7.03	6.79	8.33	8.32	8.80	8.74	9.24	9.20	9.60	9.58
25	8.27	8.25	7.36	6.99	8.33	8.29	8.86	8.81	9.27	9.24	9.60	9.58
26	8.27	8.24	7.49	7.35	8.36	8.27	8.88	8.86	9.29	9.27	9.60	9.58
27	--	--	7.56	7.49	8.38	8.35	8.88	8.87	9.32	9.29	9.61	9.60
28	8.26	8.18	7.61	7.55	8.40	8.38	8.89	8.87	9.32	9.31	9.63	9.61
29	8.27	8.25	7.69	7.61	8.41	8.39	8.90	8.89	9.32	9.25	9.64	9.63
30	8.31	8.27	7.75	7.69	8.44	8.40	8.93	8.90	9.31	9.28	9.64	9.63
31	--	--	7.77	7.74	--	--	8.94	8.91	9.33	9.31	--	--
Month	--	--	8.33	6.79	--	--	--	--	--	--	--	--

Water Year October 1988 to September 1989

	October		November		December		January		February		March	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	9.64	9.63	9.82	9.79	9.43	9.37	9.83	9.83	9.49	9.46	9.03	8.97
2	9.64	9.63	9.82	9.79	9.47	9.43	9.83	9.82	9.52	9.50	9.05	9.03
3	9.65	9.65	9.84	9.82	9.50	9.47	9.83	9.80	9.55	9.52	9.08	9.05
4	9.66	9.65	9.84	9.82	9.55	9.50	9.87	9.81	9.56	9.55	9.12	9.08
5	9.69	9.66	9.82	9.78	9.58	9.55	9.87	9.86	9.55	9.53	9.12	9.08
6	9.71	9.69	9.82	9.80	9.58	9.58	9.87	9.84	9.54	9.52	9.16	8.82
7	9.71	9.70	9.85	9.82	9.62	9.58	9.88	9.86	9.56	9.54	8.83	8.69
8	9.71	9.70	9.85	9.83	9.65	9.62	9.86	9.83	9.56	9.54	8.77	8.72
9	9.72	9.71	9.85	9.85	9.66	9.65	9.84	9.81	9.58	9.56	8.81	8.77
10	9.72	9.71	9.85	9.81	9.67	9.66	9.81	9.78	9.56	9.55	8.85	8.81
11	9.74	9.71	9.86	9.83	9.71	9.67	9.78	9.77	9.56	9.54	8.85	8.78
12	9.76	9.74	9.87	9.86	9.72	9.71	9.77	8.71	9.60	9.55	8.81	8.75
13	9.77	9.76	9.86	9.84	9.72	9.70	8.69	8.58	9.61	9.58	8.81	8.78
14	9.77	9.76	9.86	9.85	9.74	9.72	8.85	8.69	9.57	9.38	8.81	8.79
15	9.77	9.76	9.87	9.86	9.77	9.73	8.86	8.03	--	--	8.85	8.76
16	9.79	9.77	9.87	9.85	9.77	9.76	8.39	8.05	--	--	8.90	8.85
17	9.79	9.78	9.85	9.83	9.77	9.76	8.63	8.40	9.29	9.25	8.91	8.88
18	9.79	9.77	9.85	9.84	9.79	9.77	8.76	8.63	9.25	9.23	8.91	8.85
19	--	--	9.84	9.78	9.81	9.79	--	--	9.25	9.23	8.95	8.91
20	--	--	--	--	9.81	9.80	--	--	9.27	9.25	8.95	8.90
21	9.81	9.74	--	--	9.83	9.81	9.11	9.02	9.27	8.76	8.90	8.85
22	9.77	9.74	--	--	--	--	9.16	9.11	8.76	8.27	8.92	8.90
23	9.79	9.77	--	--	--	--	9.19	9.16	8.48	8.27	8.90	8.87
24	9.79	9.77	--	--	--	--	9.25	9.19	8.64	8.48	8.87	7.46
25	9.80	9.79	--	--	--	--	9.31	9.25	8.74	8.64	7.77	7.45
26	9.82	9.80	9.64	9.63	--	--	9.31	9.27	8.81	8.74	8.08	7.78
27	9.82	9.82	9.65	9.59	--	--	9.39	9.31	8.92	8.81	8.18	8.09
28	9.82	9.80	9.59	9.29	--	--	9.40	9.38	8.97	8.92	8.24	8.18
29	9.83	9.82	9.32	9.29	--	--	9.41	9.39	--	--	8.34	8.24
30	9.83	9.83	9.37	9.32	9.81	9.80	9.44	9.40	--	--	8.36	8.32
31	9.84	9.82	--	--	9.82	9.80	9.46	9.44	--	--	8.35	8.01
Month	--	--	--	--	--	--	--	--	--	--	9.16	7.45

Table 4.—Continuous water levels recorded in observation wells in Howard County—Continued

Well number: HO Cd 78 (continued)

Water Year October 1988 to September 1989

	April		May		June		July		August		September	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	8.21	8.13	--	--	--	--	7.28	7.24	7.58	7.56	8.10	8.07
2	8.25	8.21	--	--	7.47	7.43	7.31	7.27	7.59	7.58	8.16	8.09
3	8.26	8.20	--	--	7.48	7.46	7.32	7.30	7.62	7.58	8.18	8.16
4	8.31	8.26	--	--	7.57	7.45	7.31	7.14	7.62	7.62	8.20	8.17
5	--	--	8.67	7.82	7.57	6.87	7.22	7.13	7.67	7.62	8.20	8.18
6	--	--	7.71	6.72	6.82	6.49	7.22	7.09	7.69	7.64	8.19	8.18
7	8.28	8.24	7.38	6.81	6.64	6.08	7.19	7.10	7.73	7.68	8.19	8.18
8	8.33	8.24	7.74	7.40	6.79	6.22	7.26	7.14	7.78	7.73	8.19	8.18
9	8.36	8.33	7.84	7.74	6.89	6.79	7.30	7.26	7.80	7.78	8.21	8.19
10	8.37	8.33	7.81	7.72	7.08	6.89	7.33	7.30	7.80	7.79	8.23	8.20
11	8.37	8.34	7.75	7.70	7.18	7.08	7.40	7.33	7.80	7.78	8.26	8.23
12	--	--	7.83	7.75	7.20	7.17	7.41	7.38	7.80	7.78	8.28	8.26
13	--	--	7.90	7.83	7.28	7.16	7.40	7.37	7.83	7.80	8.28	8.27
14	--	--	7.87	7.84	7.33	7.10	7.47	7.38	7.84	7.82	--	--
15	--	--	7.86	7.83	7.21	7.07	7.49	7.47	7.84	7.82	8.30	8.25
16	--	--	7.83	5.99	7.31	7.20	7.49	7.15	7.86	7.82	8.30	8.25
17	--	--	6.47	5.95	7.37	7.28	7.27	7.15	7.91	7.86	8.30	8.25
18	--	--	6.92	6.47	7.42	7.37	7.33	7.27	7.92	7.91	8.32	8.30
19	--	--	7.14	6.93	7.46	7.42	7.34	7.33	7.91	7.88	8.32	8.28
20	--	--	7.25	7.14	7.46	6.19	7.35	6.96	7.90	7.88	8.29	8.17
21	--	--	7.35	7.24	6.56	6.12	7.22	7.02	7.93	7.90	8.17	8.15
22	--	--	7.38	7.35	6.57	6.11	7.31	7.22	7.94	7.93	8.15	8.10
23	--	--	7.38	6.96	6.82	6.57	7.38	7.31	7.97	7.93	8.26	8.12
24	--	--	6.97	6.77	6.98	6.82	7.44	7.38	8.00	7.97	8.29	8.26
25	--	--	7.08	6.87	7.06	6.98	7.46	7.44	8.02	8.00	8.29	8.23
26	--	--	7.21	7.06	7.14	7.06	7.49	7.45	8.02	8.01	8.23	8.11
27	--	--	7.26	7.07	7.20	7.14	7.49	7.45	8.04	8.02	8.18	8.15
28	--	--	7.23	7.18	7.27	7.19	7.55	7.47	8.05	8.03	8.16	8.14
29	--	--	7.27	7.23	--	--	7.57	7.55	8.05	8.02	8.17	8.14
30	--	--	7.32	7.26	--	--	7.58	7.55	8.09	8.02	8.23	8.17
31	--	--	--	--	--	--	7.57	7.55	8.10	8.09	--	--
Month	--	--	--	--	--	--	7.58	6.96	8.10	7.56	--	--

Water Year October 1989 to September 1990

	October		November		December		January		February		March	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	8.23	8.20	8.04	7.98	8.33	8.28	8.44	7.51	7.55	7.45	8.05	8.00
2	8.20	7.85	--	--	8.33	8.20	7.77	7.55	7.69	7.55	7.99	7.97
3	7.92	7.83	--	--	8.32	8.24	7.98	7.77	7.77	7.69	8.05	7.97
4	8.00	7.92	--	--	8.33	8.29	8.02	7.97	7.83	7.64	8.09	8.05
5	8.04	8.00	--	--	8.34	8.29	8.07	8.02	7.87	7.83	8.11	8.08
6	8.07	8.03	--	--	8.36	8.30	8.11	8.01	7.85	7.82	8.14	8.09
7	8.15	8.07	8.11	8.07	8.42	8.36	8.11	8.08	7.89	7.82	8.16	8.14
8	8.16	8.13	8.11	8.07	8.42	8.36	8.15	8.08	7.91	7.86	8.14	8.08
9	8.22	8.16	8.13	8.06	8.39	8.34	8.17	8.09	7.87	7.83	8.10	8.06
10	8.23	8.21	8.18	8.12	8.39	8.35	--	--	7.86	7.77	8.14	8.10
11	8.26	8.22	8.18	8.13	8.41	8.38	--	--	7.81	7.73	8.13	8.12
12	8.26	8.23	8.22	8.14	8.42	8.38	--	--	7.83	7.75	8.13	8.11
13	8.28	8.26	8.22	8.17	8.43	8.39	--	--	--	--	8.15	8.13
14	8.29	8.28	8.18	8.16	--	--	--	--	--	--	8.16	8.14
15	8.31	8.29	8.18	8.13	--	--	--	--	7.85	7.81	8.18	8.15
16	8.31	8.30	8.13	7.77	8.50	8.44	--	--	7.87	7.80	8.19	8.17
17	8.31	8.30	7.91	7.77	8.51	8.50	--	--	7.98	7.88	8.18	8.12
18	8.34	8.31	8.04	7.91	8.54	8.50	--	--	7.98	7.89	8.24	8.17
19	8.32	7.49	8.06	7.99	8.53	8.49	--	--	7.96	7.86	--	--
20	7.47	6.52	8.04	7.92	8.53	8.49	8.33	8.26	8.01	7.96	--	--
21	7.31	6.80	8.15	8.02	8.57	8.53	8.34	8.25	8.01	7.97	--	--
22	7.59	7.32	8.17	8.12	8.59	8.57	8.37	8.33	7.98	7.84	8.27	8.22
23	7.70	7.60	8.20	8.11	8.59	8.58	8.40	8.35	7.93	7.85	8.30	8.23
24	7.77	7.70	8.22	8.20	8.58	8.53	8.40	8.35	8.00	7.89	8.32	8.28
25	7.82	7.77	8.22	8.16	8.54	8.52	8.40	7.83	8.09	8.01	8.29	8.26
26	7.87	7.82	8.25	8.16	8.62	8.52	7.82	6.99	8.09	8.04	8.29	8.26
27	7.91	7.87	8.26	8.19	8.62	8.58	7.55	7.24	8.03	7.97	8.31	8.29
28	7.94	7.91	8.27	8.16	8.64	8.58	7.77	7.55	8.02	7.99	8.31	8.28
29	7.96	7.94	8.30	8.27	8.64	8.61	7.77	6.96	--	--	8.33	8.30
30	7.98	7.96	8.28	8.24	8.64	8.61	7.18	6.89	--	--	8.31	8.25
31	7.97	7.93	--	--	8.64	8.50	7.46	7.18	--	--	8.26	8.04
Month	8.34	6.52	--	--	--	--	--	--	--	--	--	--

Table 4.—Continuous water levels recorded in observation wells in Howard County—Continued

Well number: HO Cd 78 (continued)

Water Year October 1989 to September 1990

	April		May		June		July		August		September	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	8.09	8.04	--	--	--	--	--	--	--	--	--	--
2	8.09	7.38	--	--	--	--	--	--	--	--	--	--
3	7.34	7.19	--	--	--	--	--	--	--	--	--	--
4	7.66	7.35	--	--	--	--	--	--	--	--	--	--
5	7.83	7.67	--	--	--	--	--	--	--	--	--	--
6	7.89	7.84	--	--	--	--	--	--	--	--	--	--
7	7.90	7.78	--	--	--	--	--	--	--	--	--	--
8	7.86	7.81	--	--	--	--	--	--	--	--	--	--
9	7.87	7.80	--	--	--	--	--	--	--	--	--	--
10	7.82	7.74	--	--	--	--	--	--	--	--	--	--
11	7.92	7.77	--	--	--	--	--	--	--	--	--	--
12	7.99	7.92	--	--	--	--	--	--	--	--	--	--
13	8.01	7.98	--	--	--	--	--	--	--	--	--	--
14	8.00	7.95	--	--	--	--	--	--	--	--	--	--
15	7.97	7.91	--	--	--	--	--	--	--	--	--	--
16	8.00	7.97	--	--	--	--	--	--	--	--	--	--
17	8.05	7.94	--	--	--	--	--	--	--	--	--	--
18	8.07	8.04	--	--	--	--	--	--	--	--	--	--
19	8.07	8.04	--	--	--	--	--	--	--	--	--	--
20	8.05	7.98	--	--	--	--	--	--	--	--	--	--
21	8.02	7.97	--	--	--	--	--	--	--	--	--	--
22	8.04	8.02	--	--	--	--	--	--	--	--	--	--
23	8.05	8.03	--	--	--	--	--	--	--	--	--	--
24	--	--	--	--	--	--	--	--	--	--	--	--
25	--	--	--	--	--	--	--	--	--	--	--	--
26	--	--	--	--	--	--	--	--	--	--	--	--
27	--	--	--	--	--	--	--	--	--	--	--	--
28	--	--	--	--	--	--	--	--	--	--	--	--
29	--	--	--	--	--	--	--	--	--	--	--	--
30	--	--	--	--	--	--	--	--	--	--	--	--
31	--	--	--	--	--	--	--	--	--	--	--	--

Well number: HO Cd 191
Owner: John McCarthy.
Geologic unit: Loch Raven Schist.
Altitude: 340 feet.
Well characteristics: Drilled unused water-table well, depth 505 feet, diameter 6 inches.
Period of record: January 1989 to April 1990.
Extremes for period of record: Highest water level recorded, 8.81 feet,May 8, 1989;
Lowest water level recorded, 15.81 feet, February 13, 1989.

Water Year October 1988 to September 1989

	October		November		December		January		February		March	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	--	--	--	--	--	--	--	--	15.61	15.57	--	--
2	--	--	--	--	--	--	--	--	15.66	15.61	--	--
3	--	--	--	--	--	--	--	--	15.71	15.65	15.43	15.39
4	--	--	--	--	--	--	--	--	15.73	15.71	15.47	15.43
5	--	--	--	--	--	--	--	--	15.71	15.69	15.46	15.42
6	--	--	--	--	--	--	--	--	15.69	15.66	15.47	15.37
7	--	--	--	--	--	--	--	--	15.72	15.69	15.37	15.25
8	--	--	--	--	--	--	--	--	15.72	15.68	15.25	15.17
9	--	--	--	--	--	--	--	--	15.75	15.71	15.16	15.14
10	--	--	--	--	--	--	--	--	15.73	15.71	15.14	15.14
11	--	--	--	--	--	--	--	--	15.71	15.68	15.14	15.13
12	--	--	--	--	--	--	--	--	15.79	15.69	15.14	15.12
13	--	--	--	--	--	--	--	--	15.81	15.76	15.15	15.14
14	--	--	--	--	--	--	--	--	15.79	15.75	15.14	15.13
15	--	--	--	--	--	--	--	--	15.79	15.76	15.17	15.13
16	--	--	--	--	--	--	--	--	15.80	15.78	15.23	15.18
17	--	--	--	--	--	--	--	--	15.80	15.74	15.24	15.19
18	--	--	--	--	--	--	--	--	15.73	15.65	15.25	15.15
19	--	--	--	--	--	--	--	--	15.64	15.63	15.31	15.26
20	--	--	--	--	--	--	15.39	15.30	15.65	15.63	15.31	15.18
21	--	--	--	--	--	--	15.49	15.40	15.63	15.44	15.21	15.18
22	--	--	--	--	--	--	15.49	15.47	15.41	15.20	15.20	15.14
23	--	--	--	--	--	--	15.47	15.47	15.19	15.06	15.14	15.00
24	--	--	--	--	--	--	15.52	15.47	--	--	14.99	14.05
25	--	--	--	--	--	--	15.58	15.52	--	--	14.03	13.77
26	--	--	--	--	--	--	15.57	15.47	--	--	13.77	13.74
27	--	--	--	--	--	--	15.59	15.47	--	--	13.76	13.71
28	--	--	--	--	--	--	15.61	15.59	--	--	13.70	13.64
29	--	--	--	--	--	--	15.59	15.57	--	--	13.69	13.64
30	--	--	--	--	--	--	--	--	--	--	13.69	13.62
31	--	--	--	--	--	--	15.59	15.55	--	--	13.65	13.55

Table 4.—Continuous water levels recorded in observation wells in Howard County—Continued

Well number: HO Cd 191 (continued)

Water Year October 1988 to September 1989

	April		May		June		July		August		September	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	13.77	13.66	13.32	13.22	11.42	11.36	11.04	11.02	--	--	--	--
2	13.79	13.73	13.23	13.20	11.48	11.42	11.06	11.04	11.54	11.53	--	--
3	13.73	13.61	13.24	13.20	11.52	11.48	11.11	11.06	11.54	11.53	--	--
4	13.62	13.57	13.26	13.23	11.60	11.49	11.12	11.10	11.54	11.53	--	--
5	13.61	13.57	13.23	12.90	11.63	11.54	11.09	11.07	11.57	11.53	--	--
6	13.60	13.49	12.71	11.44	11.52	10.99	11.07	10.93	11.60	11.56	--	--
7	13.49	13.37	11.42	9.19	10.99	10.22	10.93	10.87	11.66	11.60	--	--
8	13.37	13.32	9.14	8.81	10.19	10.00	10.97	10.88	11.76	11.66	--	--
9	13.43	13.31	9.15	8.82	10.00	9.92	11.02	10.97	11.80	11.76	--	--
10	13.47	13.44	9.37	9.17	10.03	9.93	11.04	11.02	11.82	11.80	--	--
11	13.48	13.44	9.55	9.38	10.14	10.04	11.12	11.05	11.80	11.79	--	--
12	13.47	13.43	9.80	9.56	10.17	10.14	11.15	11.12	11.79	11.79	--	--
13	13.43	13.41	10.08	9.80	10.25	10.12	11.14	11.11	11.82	11.79	--	--
14	13.46	13.41	10.27	10.09	10.39	10.26	11.23	11.12	11.84	11.82	--	--
15	13.41	13.35	10.39	10.28	10.48	10.40	11.29	11.24	11.83	11.81	--	--
16	13.43	13.35	10.44	10.37	10.60	10.49	11.29	11.23	11.86	11.81	--	--
17	13.46	13.38	10.36	10.00	10.74	10.60	11.31	11.23	11.94	11.86	--	--
18	13.39	13.37	10.00	9.93	10.81	10.75	11.33	11.31	11.96	11.94	--	--
19	13.40	13.26	9.96	9.93	10.88	10.81	11.33	11.29	11.95	11.93	--	--
20	13.26	13.08	10.02	9.96	10.90	10.88	11.28	11.16	11.95	11.93	--	--
21	13.08	12.99	10.24	10.03	10.89	10.84	11.30	11.18	11.97	11.95	--	--
22	13.02	12.99	10.41	10.25	10.84	10.75	11.35	11.30	11.99	11.97	--	--
23	13.07	13.02	10.47	10.42	10.75	10.70	11.38	11.35	12.01	11.99	--	--
24	13.11	13.06	10.67	10.47	10.71	10.69	11.40	11.38	12.07	12.02	--	--
25	13.10	13.07	10.82	10.69	10.73	10.71	11.42	11.40	12.11	12.08	--	--
26	13.13	13.08	10.95	10.82	10.78	10.73	11.42	11.41	12.12	12.10	--	--
27	13.15	13.11	11.10	10.96	10.81	10.78	11.41	11.37	12.16	12.12	--	--
28	13.22	13.14	11.23	11.11	10.91	10.81	11.43	11.37	12.17	12.16	--	--
29	13.25	13.22	11.27	11.23	11.02	10.92	11.50	11.44	12.17	12.13	--	--
30	13.31	13.25	11.29	11.26	11.05	11.02	11.51	11.50	--	--	--	--
31	--	--	11.36	11.30	--	--	11.52	11.49	--	--	--	--
Month	13.79	12.99	13.32	8.81	11.63	9.92	11.52	10.87	--	--	--	--

Water Year October 1989 to September 1990

	October		November		December		January		February		March	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	12.84	12.79	13.13	13.02	13.44	13.37	13.70	13.62	12.70	12.68	12.70	12.67
2	12.78	12.75	13.13	13.07	13.44	13.29	13.70	13.63	12.70	12.68	12.67	12.57
3	12.83	12.75	13.15	13.06	13.37	13.29	13.63	13.60	12.82	12.71	12.60	12.57
4	12.85	12.83	13.19	13.15	13.40	13.35	13.60	13.51	12.80	12.69	12.70	12.61
5	12.86	12.83	13.17	13.15	13.39	13.34	13.63	13.54	12.91	12.81	12.75	12.70
6	12.83	12.82	13.15	13.09	13.40	13.38	13.66	13.58	12.90	12.84	12.82	12.73
7	12.91	12.82	13.12	13.09	13.56	13.40	13.66	13.62	12.85	12.80	12.88	12.83
8	12.91	12.88	13.11	13.07	13.56	13.50	13.63	13.57	12.87	12.82	12.84	12.76
9	12.96	12.91	13.14	13.06	13.49	13.45	13.66	13.57	12.82	12.70	12.76	12.68
10	12.96	12.92	13.24	13.14	13.47	13.44	13.64	13.57	12.77	12.68	12.76	12.71
11	12.97	12.92	13.25	13.19	13.50	13.47	13.64	13.47	12.78	12.70	12.77	12.75
12	12.97	12.94	13.33	13.19	13.51	13.50	13.59	13.48	12.76	12.69	12.77	12.75
13	12.97	12.95	13.33	13.26	13.53	13.48	13.73	13.59	12.76	12.68	12.80	12.77
14	12.98	12.96	13.26	13.23	13.55	13.53	13.75	13.72	12.70	12.68	12.80	12.78
15	12.99	12.97	13.23	13.14	13.57	13.45	13.72	13.72	12.70	12.67	12.83	12.80
16	13.00	12.98	13.18	13.04	13.60	13.47	13.74	13.72	12.67	12.58	12.84	12.81
17	13.00	12.98	13.23	13.18	13.63	13.60	13.74	13.72	12.81	12.60	12.81	12.75
18	13.04	13.00	13.31	13.23	13.65	13.63	13.76	13.72	12.82	12.69	12.82	12.78
19	13.02	12.98	13.33	13.18	13.65	13.57	13.82	13.76	12.69	12.66	12.83	12.76
20	12.96	12.91	13.18	13.01	13.63	13.57	13.79	13.66	12.79	12.68	12.78	12.77
21	12.94	12.88	13.29	13.06	13.68	13.62	13.72	13.63	12.79	12.75	12.85	12.78
22	13.04	12.95	13.33	13.25	13.72	13.69	13.77	13.72	12.75	12.55	12.85	12.79
23	13.06	13.04	13.34	13.24	13.73	13.72	13.82	13.78	12.55	12.53	12.88	12.78
24	13.05	13.04	13.38	13.34	13.72	13.66	13.81	13.76	12.61	12.53	12.91	12.88
25	13.04	13.02	13.37	13.28	13.66	13.56	13.81	13.72	12.82	12.61	12.88	12.85
26	13.04	13.03	13.36	13.25	13.68	13.54	13.72	13.34	12.84	12.78	12.86	12.84
27	13.05	13.04	13.40	13.31	13.73	13.68	13.33	13.18	12.78	12.68	12.91	12.86
28	13.05	13.04	13.36	13.26	13.78	13.67	13.21	13.17	12.68	12.68	--	--
29	13.06	13.05	13.43	13.36	13.79	13.75	--	--	--	--	12.87	12.84
30	--	--	13.42	13.33	13.77	13.73	--	--	--	--	12.83	12.77
31	13.06	12.98	--	--	13.77	13.61	12.72	12.69	--	--	12.77	12.53
Month	--	--	13.43	13.01	13.79	13.29	--	--	12.91	12.53	--	--

Table 4.—Continuous water levels recorded in observation wells in Howard County—Continued

Well number: HO Cd 191 (continued)

Water Year October 1989 to September 1990

	April		May		June		July		August		September	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	12.53	12.39	--	--	--	--	--	--	--	--	--	--
2	12.39	12.27	--	--	--	--	--	--	--	--	--	--
3	12.26	11.84	--	--	--	--	--	--	--	--	--	--
4	11.83	11.75	--	--	--	--	--	--	--	--	--	--
5	11.87	11.78	--	--	--	--	--	--	--	--	--	--
6	11.94	11.87	--	--	--	--	--	--	--	--	--	--
7	11.99	11.93	--	--	--	--	--	--	--	--	--	--
8	11.99	11.90	--	--	--	--	--	--	--	--	--	--
9	11.90	11.80	--	--	--	--	--	--	--	--	--	--
10	11.79	11.58	--	--	--	--	--	--	--	--	--	--
11	11.73	11.57	--	--	--	--	--	--	--	--	--	--
12	11.84	11.73	--	--	--	--	--	--	--	--	--	--
13	11.87	11.82	--	--	--	--	--	--	--	--	--	--
14	11.83	11.73	--	--	--	--	--	--	--	--	--	--
15	11.72	11.65	--	--	--	--	--	--	--	--	--	--
16	11.67	11.63	--	--	--	--	--	--	--	--	--	--
17	11.74	11.59	--	--	--	--	--	--	--	--	--	--
18	11.83	11.74	--	--	--	--	--	--	--	--	--	--
19	11.88	11.84	--	--	--	--	--	--	--	--	--	--
20	11.84	11.73	--	--	--	--	--	--	--	--	--	--
21	11.74	11.69	--	--	--	--	--	--	--	--	--	--
22	11.78	11.74	--	--	--	--	--	--	--	--	--	--
23	11.78	11.76	--	--	--	--	--	--	--	--	--	--
24	11.83	11.78	--	--	--	--	--	--	--	--	--	--
25	11.85	11.80	--	--	--	--	--	--	--	--	--	--
26	11.84	11.81	--	--	--	--	--	--	--	--	--	--
27	--	--	--	--	--	--	--	--	--	--	--	--
28	--	--	--	--	--	--	--	--	--	--	--	--
29	--	--	--	--	--	--	--	--	--	--	--	--
30	--	--	--	--	--	--	--	--	--	--	--	--
31	--	--	--	--	--	--	--	--	--	--	--	--

Well number: HO Cd 341
Owner: U.S. Geological Survey.
Geologic unit: Loch Raven Schist.
Altitude: 453 feet.
Well characteristics: Drilled unused water-table well, depth 30 feet, diameter 3.5 inches.
Period of record: August 1988 to current year.
Extremes for period of record: Highest water level recorded, 23.53 feet, August 6, 1989;
Lowest water level recorded, 29.18 feet, December 21, 1988.

Water Year October 1987 to September 1988

	April		May		June		July		August		September	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	--	--	--	--	--	--	--	--	--	--	26.48	26.44
2	--	--	--	--	--	--	--	--	--	--	26.48	26.43
3	--	--	--	--	--	--	--	--	--	--	26.43	26.38
4	--	--	--	--	--	--	--	--	--	--	26.38	26.25
5	--	--	--	--	--	--	--	--	--	--	26.48	26.27
6	--	--	--	--	--	--	--	--	--	--	26.56	26.49
7	--	--	--	--	--	--	--	--	--	--	26.62	26.56
8	--	--	--	--	--	--	--	--	--	--	26.64	26.59
9	--	--	--	--	--	--	--	--	--	--	--	--
10	--	--	--	--	--	--	--	--	--	--	--	--
11	--	--	--	--	--	--	--	--	--	--	--	--
12	--	--	--	--	--	--	--	--	--	--	--	--
13	--	--	--	--	--	--	--	--	--	--	--	--
14	--	--	--	--	--	--	--	--	--	--	--	--
15	--	--	--	--	--	--	--	--	--	--	--	--
16	--	--	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--	26.87	26.81
18	--	--	--	--	--	--	--	--	--	--	26.83	26.81
19	--	--	--	--	--	--	--	--	--	--	26.86	26.84
20	--	--	--	--	--	--	--	--	--	--	26.87	26.85
21	--	--	--	--	--	--	--	--	--	--	26.93	26.86
22	--	--	--	--	--	--	--	--	--	--	26.96	26.92
23	--	--	--	--	--	--	--	--	--	--	26.96	26.87
24	--	--	--	--	--	--	--	--	26.12	26.06	27.05	26.96
25	--	--	--	--	--	--	--	--	26.15	26.09	27.08	27.05
26	--	--	--	--	--	--	--	--	26.26	26.15	27.12	27.08
27	--	--	--	--	--	--	--	--	26.32	26.26	27.14	27.11
28	--	--	--	--	--	--	--	--	26.35	26.32	27.18	27.11
29	--	--	--	--	--	--	--	--	26.33	26.20	27.24	27.19
30	--	--	--	--	--	--	--	--	26.37	26.31	27.22	27.19
31	--	--	--	--	--	--	--	--	26.44	26.37	--	--

Table 4.—Continuous water levels recorded in observation wells in Howard County—Continued

Well number: HO Cd 341 (continued)

Water Year October 1988 to September 1989

	October		November		December		January		February		March	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	27.19	27.16	27.97	27.85	28.76	28.67	--	--	--	--	--	--
2	27.16	27.12	27.99	27.85	28.78	28.75	--	--	--	--	--	--
3	27.25	27.16	28.08	28.00	28.75	28.69	--	--	--	--	--	--
4	27.29	27.25	28.07	28.03	28.84	28.72	--	--	--	--	--	--
5	27.39	27.29	28.02	27.87	28.83	28.78	--	--	--	--	--	--
6	27.42	27.39	28.12	27.97	28.82	28.78	--	--	--	--	--	--
7	27.42	27.39	28.24	28.12	28.85	28.78	--	--	--	--	--	--
8	27.40	27.37	28.25	28.18	28.91	28.85	--	--	--	--	--	--
9	27.41	27.38	28.29	28.25	28.91	28.85	--	--	--	--	--	--
10	27.39	27.30	28.27	28.13	28.90	28.87	--	--	--	--	--	--
11	27.45	27.30	28.36	28.21	28.98	28.87	--	--	--	--	--	--
12	27.56	27.45	28.38	28.34	29.01	28.94	--	--	--	--	--	--
13	27.60	27.57	28.34	28.24	28.93	28.84	--	--	--	--	--	--
14	27.61	27.55	28.36	28.31	28.99	28.90	--	--	--	--	--	--
15	27.58	27.55	28.40	28.36	29.07	28.93	--	--	--	--	--	--
16	27.62	27.58	28.39	28.32	29.07	29.01	--	--	--	--	--	--
17	27.64	27.61	28.47	28.31	29.03	28.97	--	--	--	--	--	--
18	27.61	27.53	28.52	28.47	29.09	29.04	--	--	--	--	--	--
19	--	--	28.51	28.46	29.12	29.08	--	--	--	--	--	--
20	--	--	28.46	28.26	29.13	29.10	--	--	--	--	--	--
21	27.75	27.52	28.57	28.33	29.18	29.12	--	--	--	--	--	--
22	27.66	27.50	28.61	28.57	--	--	--	--	--	--	--	--
23	27.75	27.68	--	--	--	--	--	--	--	--	--	--
24	27.76	27.69	--	--	--	--	--	--	--	--	--	--
25	27.81	27.77	--	--	--	--	--	--	--	--	--	--
26	27.91	27.81	28.60	28.58	--	--	--	--	--	--	--	--
27	27.96	27.91	28.58	28.54	--	--	--	--	--	--	--	--
28	27.95	27.86	28.68	28.53	--	--	--	--	--	--	--	--
29	28.00	27.96	28.76	28.69	--	--	--	--	--	--	--	--
30	28.03	27.99	28.72	28.64	--	--	--	--	--	--	--	--
31	28.05	27.97	--	--	--	--	--	--	--	--	--	--

	April		May		June		July		August		September	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	--	--	--	--	--	--	25.10	25.01	23.75	23.71	--	--
2	--	--	--	--	27.36	27.26	25.01	24.92	23.71	23.65	--	--
3	--	--	--	--	27.26	27.15	24.92	24.86	23.65	23.61	--	--
4	--	--	--	--	27.14	27.11	24.86	24.80	23.61	23.54	--	--
5	--	--	28.74	28.50	27.13	26.96	24.80	24.74	23.59	23.55	--	--
6	--	--	28.60	28.50	26.96	26.93	24.73	24.64	23.57	23.53	--	--
7	--	--	28.62	28.60	26.94	26.84	24.64	24.54	--	--	--	--
8	--	--	28.63	28.60	26.84	26.76	24.55	24.52	--	--	--	--
9	--	--	28.63	28.56	26.75	26.62	24.53	24.46	--	--	--	--
10	--	--	28.55	28.51	26.66	26.63	24.46	24.37	--	--	--	--
11	--	--	28.51	28.51	26.63	26.56	24.39	24.35	--	--	--	--
12	--	--	28.51	28.50	26.55	26.38	24.38	24.31	--	--	--	--
13	--	--	28.51	28.49	26.37	26.32	24.30	24.22	--	--	--	--
14	--	--	28.49	28.44	26.34	26.28	24.29	24.20	--	--	--	--
15	--	--	28.44	28.38	26.29	26.18	24.32	24.26	--	--	--	--
16	--	--	28.38	28.31	26.18	26.11	24.26	24.13	--	--	--	--
17	--	--	28.36	28.31	26.15	26.07	24.16	24.12	--	--	--	--
18	--	--	28.36	28.32	26.07	25.99	24.16	24.11	--	--	--	--
19	--	--	28.32	28.25	25.98	25.91	24.11	24.00	--	--	24.10	24.02
20	--	--	28.24	28.17	25.91	25.77	24.00	23.94	--	--	24.10	24.05
21	--	--	28.16	28.13	25.80	25.73	24.07	24.01	--	--	24.13	24.09
22	--	--	28.13	28.06	25.74	25.65	24.08	24.04	--	--	24.09	23.88
23	--	--	28.05	27.93	25.65	25.54	24.04	23.98	--	--	24.24	23.92
24	--	--	27.93	27.92	25.53	25.49	23.99	23.94	--	--	24.33	24.24
25	--	--	27.93	27.86	25.48	25.38	23.95	23.88	--	--	24.31	24.15
26	--	--	27.86	27.81	25.37	25.30	23.88	23.82	--	--	24.27	24.07
27	--	--	27.82	27.77	25.30	25.22	23.82	23.73	--	--	24.41	24.29
28	--	--	27.80	27.72	25.25	25.17	23.80	23.71	--	--	24.39	24.27
29	--	--	27.72	27.61	--	--	23.85	23.80	--	--	24.26	24.19
30	--	--	27.61	27.51	--	--	23.81	23.74	--	--	24.36	24.26
31	--	--	--	--	--	--	23.76	23.73	--	--	--	--
Month	--	--	--	--	--	--	25.10	23.71	--	--	--	--

Table 4.—Continuous water levels recorded in observation wells in Howard County—Continued

Well number: HO Cd 341 (continued)

Water Year October 1989 to September 1990

	October		November		December		January		February		March	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	24.36	24.29	25.08	24.88	25.71	25.59	26.43	26.05	--	--	26.40	26.28
2	24.29	24.22	--	--	25.71	25.42	26.46	26.41	--	--	26.27	26.17
3	24.39	24.26	--	--	25.60	25.44	26.41	26.37	--	--	26.24	26.14
4	24.42	24.37	--	--	25.65	25.55	26.37	26.20	--	--	26.35	26.26
5	24.43	24.37	--	--	25.64	25.54	26.40	26.25	--	--	26.39	26.33
6	24.37	24.33	--	--	25.66	25.59	26.43	26.32	--	--	26.45	26.33
7	24.51	24.36	25.07	25.00	25.93	25.69	26.43	26.36	--	--	26.50	26.42
8	24.51	24.44	25.05	24.97	25.94	25.78	26.35	26.26	--	--	26.42	26.26
9	24.61	24.51	25.09	24.92	25.80	25.70	26.41	26.27	--	--	26.25	26.16
10	24.62	24.54	25.24	25.09	25.76	25.70	26.42	26.25	26.46	26.27	26.26	26.20
11	24.65	24.55	25.25	25.14	25.82	25.76	--	--	26.49	26.43	26.24	26.21
12	24.65	24.58	25.37	25.13	25.85	25.79	--	--	26.59	26.45	26.22	26.18
13	24.65	24.62	25.39	25.24	25.89	25.78	--	--	--	--	26.22	26.18
14	24.67	24.63	25.25	25.21	--	--	--	--	--	--	26.20	26.17
15	24.68	24.63	25.21	25.08	--	--	--	--	26.56	26.42	26.23	26.19
16	24.70	24.66	25.24	24.91	--	--	--	--	26.41	26.33	26.21	26.16
17	24.70	24.66	25.39	25.25	--	--	--	--	26.67	26.40	26.15	26.04
18	24.81	24.70	25.51	25.36	--	--	--	--	26.68	26.46	26.30	26.12
19	24.77	24.71	25.52	25.27	--	--	--	--	26.44	26.33	--	--
20	24.76	24.65	25.26	24.98	--	--	--	--	26.56	26.46	--	--
21	24.85	24.75	25.45	25.11	--	--	--	--	26.56	26.46	--	--
22	25.00	24.85	25.51	25.38	26.24	26.19	--	--	26.46	26.17	26.31	26.19
23	25.04	24.99	25.51	25.35	26.26	26.21	--	--	26.19	26.14	26.33	26.17
24	25.01	24.96	25.58	25.52	26.20	26.10	--	--	26.34	26.17	26.37	26.31
25	24.97	24.93	25.55	25.41	26.08	25.96	--	--	26.63	26.36	26.31	26.26
26	24.98	24.94	25.55	25.37	26.24	25.95	--	--	26.64	26.52	26.29	26.25
27	24.99	24.95	25.62	25.46	26.28	26.16	--	--	26.51	26.34	26.36	26.29
28	24.98	24.94	25.55	25.37	26.32	26.15	--	--	26.37	26.34	26.36	26.29
29	25.00	24.98	25.66	25.56	26.34	26.27	--	--	--	--	26.36	26.32
30	25.00	24.95	25.61	25.51	26.32	26.25	--	--	--	--	26.31	26.23
31	24.95	24.82	--	--	26.31	26.04	--	--	--	--	26.22	26.19
Month	25.04	24.22	--	--	--	--	--	--	--	--	--	--

	April		May		June		July		August		September	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	26.22	26.19	--	--	--	--	--	--	--	--	--	--
2	26.21	26.13	--	--	--	--	--	--	--	--	--	--
3	26.14	26.11	--	--	--	--	--	--	--	--	--	--
4	26.16	26.09	--	--	--	--	--	--	--	--	--	--
5	26.27	26.16	--	--	--	--	--	--	--	--	--	--
6	26.35	26.29	--	--	--	--	--	--	--	--	--	--
7	26.38	26.27	--	--	--	--	--	--	--	--	--	--
8	26.43	26.38	--	--	--	--	--	--	--	--	--	--
9	26.45	26.33	--	--	--	--	--	--	--	--	--	--
10	26.32	26.07	--	--	--	--	--	--	--	--	--	--
11	26.27	26.07	--	--	--	--	--	--	--	--	--	--
12	26.40	26.28	--	--	--	--	--	--	--	--	--	--
13	26.43	26.37	--	--	--	--	--	--	--	--	--	--
14	26.37	26.21	--	--	--	--	--	--	--	--	--	--
15	26.20	26.16	--	--	--	--	--	--	--	--	--	--
16	26.25	26.20	--	--	--	--	--	--	--	--	--	--
17	26.34	26.15	--	--	--	--	--	--	--	--	--	--
18	26.42	26.35	--	--	--	--	--	--	--	--	--	--
19	26.45	26.39	--	--	--	--	--	--	--	--	--	--
20	26.38	26.21	--	--	--	--	--	--	--	--	--	--
21	26.20	26.15	--	--	--	--	--	--	--	--	--	--
22	26.24	26.19	--	--	--	--	--	--	--	--	--	--
23	26.22	26.18	--	--	--	--	--	--	--	--	--	--
24	--	--	--	--	--	--	--	--	--	--	--	--
25	--	--	--	--	--	--	--	--	--	--	--	--
26	--	--	--	--	--	--	--	--	--	--	--	--
27	--	--	--	--	--	--	--	--	--	--	--	--
28	--	--	--	--	--	--	--	--	--	--	--	--
29	--	--	--	--	--	--	--	--	--	--	--	--
30	--	--	--	--	--	--	--	--	--	--	--	--
31	--	--	--	--	--	--	--	--	--	--	--	--

Table 4.—Continuous water levels recorded in observation wells in Howard County—Continued

Well number: HO Cd 342
Owner: U.S. Geological Survey.
Geologic unit: Loch Raven Schist.
Altitude: 434.27 feet.
Well characteristics: Drilled unused water-table well, depth 25 feet, diameter 3.5 inches.
Period of record: August 1988 to current year.
Extremes for period of record: Highest water level recorded, 17.46 feet, June 27-28, 1989;
Lowest water level recorded, 23.86 feet, February 17, 1989.

Water Year October 1987 to September 1988

	April		May		June		July		August		September	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	--	--	--	--	--	--	--	--	--	--	22.18	22.15
2	--	--	--	--	--	--	--	--	--	--	22.19	22.19
3	--	--	--	--	--	--	--	--	--	--	22.20	22.19
4	--	--	--	--	--	--	--	--	--	--	22.20	22.17
5	--	--	--	--	--	--	--	--	--	--	22.22	22.17
6	--	--	--	--	--	--	--	--	--	--	22.26	22.22
7	--	--	--	--	--	--	--	--	--	--	22.30	22.26
8	--	--	--	--	--	--	--	--	--	--	22.32	22.30
9	--	--	--	--	--	--	--	--	--	--	--	--
10	--	--	--	--	--	--	--	--	--	--	--	--
11	--	--	--	--	--	--	--	--	--	--	--	--
12	--	--	--	--	--	--	--	--	--	--	--	--
13	--	--	--	--	--	--	--	--	--	--	--	--
14	--	--	--	--	--	--	--	--	--	--	--	--
15	--	--	--	--	--	--	--	--	--	--	--	--
16	--	--	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--	22.44	22.44
18	--	--	--	--	--	--	--	--	--	--	22.45	22.44
19	--	--	--	--	--	--	--	--	--	--	22.46	22.45
20	--	--	--	--	--	--	--	--	--	--	22.48	22.46
21	--	--	--	--	--	--	--	--	--	--	22.51	22.48
22	--	--	--	--	--	--	--	--	--	--	22.53	22.51
23	--	--	--	--	--	--	--	--	--	--	22.55	22.53
24	--	--	--	--	--	--	--	--	21.93	21.91	22.59	22.55
25	--	--	--	--	--	--	--	--	21.97	21.93	22.62	22.59
26	--	--	--	--	--	--	--	--	22.01	21.97	22.65	22.62
27	--	--	--	--	--	--	--	--	22.05	22.01	22.66	22.65
28	--	--	--	--	--	--	--	--	22.08	22.05	22.70	22.66
29	--	--	--	--	--	--	--	--	22.09	22.05	22.72	22.70
30	--	--	--	--	--	--	--	--	22.11	22.09	22.73	22.72
31	--	--	--	--	--	--	--	--	22.15	22.11	--	--

Water Year October 1988 to September 1989

	October		November		December		January		February		March	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	22.75	22.74	23.37	23.33	23.31	23.31	23.61	23.60	23.43	23.42	23.47	23.46
2	22.77	22.75	23.33	23.33	23.32	23.31	23.61	23.60	23.45	23.43	23.47	23.46
3	22.80	22.77	23.35	23.33	23.32	23.31	23.60	23.58	23.47	23.45	23.46	23.46
4	22.82	22.80	23.35	23.34	23.34	23.31	23.62	23.58	23.48	23.47	23.46	23.46
5	22.85	22.82	23.34	23.31	23.35	23.34	23.62	23.61	23.49	23.48	23.46	23.45
6	22.89	22.85	23.32	23.31	23.35	23.35	23.63	23.62	23.49	23.49	23.46	23.45
7	22.90	22.89	23.35	23.32	23.37	23.35	23.65	23.63	23.51	23.49	23.45	23.45
8	22.92	22.90	23.35	23.34	23.40	23.37	23.64	23.63	23.51	23.51	23.45	23.41
9	22.95	22.92	23.36	23.35	23.40	23.40	23.66	23.64	23.52	23.51	23.41	23.37
10	22.96	22.95	23.36	23.34	23.46	23.40	23.66	23.65	23.52	23.52	23.37	23.35
11	22.99	22.96	23.36	23.34	23.49	23.46	23.66	23.65	23.52	23.51	23.35	23.32
12	23.03	22.99	23.37	23.36	23.54	23.49	23.66	23.58	23.54	23.51	23.32	23.31
13	23.07	23.04	23.37	23.36	23.54	23.54	23.58	23.52	23.55	23.54	23.31	23.29
14	23.09	23.07	23.36	23.36	--	--	23.52	23.44	23.54	23.52	23.29	23.26
15	23.12	23.09	23.37	23.36	--	--	23.44	23.33	--	--	--	--
16	23.15	23.12	23.36	23.36	--	--	23.33	23.27	--	--	--	--
17	--	--	23.36	23.35	--	--	23.27	23.21	23.86	23.80	--	--
18	--	--	23.38	23.36	--	--	23.21	23.17	23.80	23.75	--	--
19	--	--	23.38	23.38	--	--	--	--	23.75	23.74	--	--
20	--	--	23.38	23.30	--	--	--	--	23.74	23.73	--	--
21	23.38	23.34	23.32	23.30	--	--	23.29	23.24	23.73	23.70	--	--
22	23.34	23.32	23.32	23.31	--	--	23.29	23.29	23.69	23.64	--	--
23	23.35	23.33	--	--	--	--	23.30	23.29	23.64	23.57	--	--
24	23.34	23.34	--	--	--	--	23.32	23.30	23.57	23.52	--	--
25	23.35	23.34	--	--	--	--	23.36	23.32	23.52	23.49	--	--
26	23.36	23.34	23.33	23.33	--	--	23.36	23.35	23.48	23.45	--	--
27	23.37	23.36	23.34	23.33	--	--	23.37	23.35	23.46	23.45	--	--
28	23.37	23.36	23.34	23.33	--	--	23.39	23.37	23.46	23.46	--	--
29	23.37	23.36	23.35	23.34	--	--	23.39	23.39	--	--	--	--
30	23.38	23.37	23.34	23.31	23.60	23.59	23.40	23.39	--	--	--	--
31	23.37	23.37	--	--	23.60	23.59	23.42	23.40	--	--	--	--

Table 4.—Continuous water levels recorded in observation wells in Howard County—Continued

Well number: HO Cd 342 (continued)

Water Year October 1988 to September 1989

	April		May		June		July		August		September	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	--	--	21.32	21.31	--	--	17.50	17.49	18.31	18.30	19.31	19.28
2	--	--	21.31	21.30	18.34	18.29	17.53	17.50	18.31	18.30	19.43	19.31
3	--	--	--	--	18.38	18.34	17.58	17.54	18.32	18.31	19.49	19.43
4	--	--	--	--	18.45	18.35	17.61	17.58	18.33	18.32	19.55	19.50
5	--	--	21.30	21.03	18.46	18.40	17.64	17.61	18.38	18.32	19.56	19.55
6	--	--	21.20	21.04	18.44	18.43	17.65	17.64	18.41	18.37	19.59	19.56
7	21.94	21.92	21.13	21.03	18.44	18.36	17.65	17.63	18.48	18.41	19.61	19.59
8	21.92	21.87	21.03	20.95	18.35	18.26	17.70	17.63	18.57	18.48	19.63	19.61
9	21.87	21.85	20.95	20.82	18.26	18.11	17.73	17.70	18.62	18.57	19.66	19.63
10	21.85	21.81	20.82	20.66	18.12	18.11	17.76	17.73	18.64	18.62	19.71	19.66
11	21.81	21.74	20.66	20.53	18.12	18.08	17.83	17.76	18.65	18.63	19.78	19.71
12	21.73	21.68	20.53	20.41	18.08	18.00	17.85	17.83	18.67	18.65	19.84	19.79
13	21.68	21.63	20.41	20.30	18.00	17.97	17.85	17.84	18.71	18.67	19.87	19.84
14	21.63	21.59	20.29	20.15	18.03	18.00	17.94	17.85	18.72	18.71	--	--
15	21.59	21.53	20.14	20.00	18.03	18.00	17.98	17.94	18.73	18.72	--	--
16	21.53	21.52	20.00	19.86	18.04	18.01	17.98	17.94	18.77	18.73	--	--
17	21.52	21.49	19.86	19.69	18.08	18.03	17.99	17.94	18.85	18.77	--	--
18	21.49	21.46	19.68	19.51	18.08	18.07	18.01	17.99	18.88	18.85	--	--
19	21.47	21.46	19.51	19.28	18.11	18.08	18.01	17.98	18.88	18.88	20.03	20.02
20	21.47	21.43	19.27	19.05	18.12	18.01	18.01	17.96	18.91	18.88	20.04	20.02
21	21.43	21.40	19.05	18.89	18.08	17.99	18.07	18.01	18.95	18.91	20.05	20.04
22	21.40	21.38	18.88	18.70	17.99	17.84	18.09	18.07	18.97	18.95	20.04	19.94
23	21.38	21.37	18.70	18.51	17.84	17.71	18.11	18.09	19.00	18.97	20.10	19.94
24	21.37	21.36	18.51	18.45	17.70	17.64	18.13	18.11	19.07	19.01	20.17	20.11
25	21.36	21.34	18.45	18.35	17.64	17.56	18.14	18.12	19.10	19.07	20.17	20.13
26	21.34	21.34	18.35	18.30	17.56	17.50	18.14	18.12	19.13	19.10	20.17	20.09
27	21.34	21.32	18.33	18.28	17.50	17.46	18.14	18.11	19.18	19.13	20.24	20.18
28	21.32	21.32	18.34	18.29	17.48	17.46	18.19	18.12	19.20	19.18	20.38	20.21
29	21.32	21.32	18.30	18.25	--	--	18.25	18.19	19.20	19.19	20.41	20.38
30	21.32	21.32	18.25	18.23	--	--	18.26	18.24	19.25	19.19	20.43	20.41
31	--	--	--	--	--	--	18.29	18.26	19.31	19.25	--	--
Month	--	--	--	--	--	--	18.29	17.49	19.31	18.30	--	--

Water Year October 1989 to September 1990

	October		November		December		January		February		March	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	20.44	20.42	--	--	20.56	20.53	21.07	20.99	--	--	20.15	20.11
2	20.45	20.44	--	--	20.55	20.53	21.07	21.01	--	--	20.11	20.04
3	20.45	20.45	--	--	20.56	20.55	21.01	20.97	--	--	20.07	20.03
4	20.50	20.45	--	--	20.70	20.56	20.97	20.90	--	--	20.13	20.07
5	20.51	20.47	--	--	20.71	20.68	20.96	20.91	--	--	20.15	20.13
6	20.47	20.37	--	--	20.68	20.65	20.97	20.93	--	--	20.21	20.14
7	20.37	20.30	20.18	20.13	20.67	20.65	20.97	20.95	--	--	20.24	20.21
8	20.34	20.30	20.29	20.19	20.69	20.67	20.95	20.91	--	--	20.23	20.17
9	20.38	20.34	20.30	20.23	20.70	20.69	20.96	20.92	--	--	20.16	20.12
10	20.37	20.35	20.37	20.30	20.71	20.68	20.96	20.91	--	--	20.16	20.13
11	20.35	20.32	20.33	20.31	--	--	--	--	--	--	20.16	20.15
12	20.32	20.31	20.31	20.27	--	--	--	--	--	--	20.16	20.14
13	20.31	20.29	20.28	20.18	--	--	--	--	--	--	20.16	20.15
14	20.29	20.26	20.34	20.28	--	--	--	--	--	--	20.17	20.16
15	20.26	20.25	20.39	20.33	--	--	--	--	20.14	20.09	20.19	20.17
16	20.25	20.23	20.42	20.35	20.82	20.73	--	--	20.09	20.05	20.19	20.18
17	20.23	20.16	20.34	20.19	20.85	20.82	--	--	20.18	20.06	20.17	20.13
18	20.22	20.15	20.37	20.21	20.88	20.85	--	--	20.19	20.11	20.25	20.16
19	--	--	20.42	20.37	20.89	20.85	--	--	20.11	20.05	--	--
20	--	--	20.43	20.38	20.90	20.85	--	--	20.15	20.09	--	--
21	--	--	20.48	20.43	20.93	20.90	--	--	20.15	20.12	--	--
22	--	--	20.48	20.43	20.98	20.93	--	--	20.12	20.00	20.35	20.31
23	--	--	20.46	20.40	20.99	20.98	--	--	20.00	19.98	20.38	20.35
24	--	--	20.50	20.46	20.99	20.96	--	--	20.06	19.99	20.39	19.20
25	--	--	20.47	20.41	20.96	20.91	--	--	20.20	20.06	19.25	19.23
26	--	--	20.54	20.47	21.00	20.90	--	--	20.23	20.20	19.31	19.25
27	--	--	20.53	20.48	21.02	20.99	--	--	20.20	20.12	19.38	19.31
28	--	--	20.57	20.50	21.05	20.99	--	--	20.13	20.12	19.40	19.38
29	--	--	20.57	20.46	21.07	21.06	--	--	--	--	19.40	19.38
30	--	--	20.53	20.46	21.08	21.06	20.72	20.68	--	--	19.41	19.39
31	--	--	--	--	21.08	20.99	--	--	--	--	19.42	19.40

Table 4.—Continuous water levels recorded in observation wells in Howard County—Continued

Well number: HO Cd 342 (continued)

Water Year October 1989 to September 1990

	April		May		June		July		August		September	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	19.41	19.37	--	--	--	--	--	--	--	--	--	--
2	19.37	19.34	--	--	--	--	--	--	--	--	--	--
3	19.41	19.33	--	--	--	--	--	--	--	--	--	--
4	19.47	19.41	--	--	--	--	--	--	--	--	--	--
5	19.48	19.45	--	--	--	--	--	--	--	--	--	--
6	19.54	19.48	--	--	--	--	--	--	--	--	--	--
7	19.59	19.54	--	--	--	--	--	--	--	--	--	--
8	19.56	19.49	--	--	--	--	--	--	--	--	--	--
9	19.50	19.43	--	--	--	--	--	--	--	--	--	--
10	19.56	19.48	--	--	--	--	--	--	--	--	--	--
11	19.62	19.56	--	--	--	--	--	--	--	--	--	--
12	19.61	19.56	--	--	--	--	--	--	--	--	--	--
13	19.56	19.52	--	--	--	--	--	--	--	--	--	--
14	19.56	19.52	--	--	--	--	--	--	--	--	--	--
15	19.55	19.52	--	--	--	--	--	--	--	--	--	--
16	19.67	19.54	--	--	--	--	--	--	--	--	--	--
17	19.70	19.66	--	--	--	--	--	--	--	--	--	--
18	19.69	19.65	--	--	--	--	--	--	--	--	--	--
19	19.65	19.61	--	--	--	--	--	--	--	--	--	--
20	19.66	19.61	--	--	--	--	--	--	--	--	--	--
21	19.68	19.65	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--	--
23	--	--	--	--	--	--	--	--	--	--	--	--
24	--	--	--	--	--	--	--	--	--	--	--	--
25	--	--	--	--	--	--	--	--	--	--	--	--
26	--	--	--	--	--	--	--	--	--	--	--	--
27	--	--	--	--	--	--	--	--	--	--	--	--
28	--	--	--	--	--	--	--	--	--	--	--	--
29	--	--	--	--	--	--	--	--	--	--	--	--
30	--	--	--	--	--	--	--	--	--	--	--	--
31	--	--	--	--	--	--	--	--	--	--	--	--

Well number: HO Ce 38
Owner: Johns Hopkins University Applied Physics Lab.
Geologic unit: Sykesville Formation, schist member.
Altitude: 430 feet.
Well characteristics: Drilled unused water-table well, depth 125 feet, diameter 6 inches.
Period of record: December 1987 to April 1990.
Extremes for period of record: Highest water level recorded, 32.22 feet, July 29, 1989;
Lowest water level recorded, 36.36 feet, January 21-22, 1989.

Water Year October 1987 to September 1988

	October		November		December		January		February		March	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	--	--	--	--	--	--	36.10	36.07	35.81	35.77	35.20	35.19
2	--	--	--	--	--	--	36.13	36.11	35.78	35.75	35.19	35.13
3	--	--	--	--	--	--	36.13	36.06	35.77	35.71	35.13	35.10
4	--	--	--	--	--	--	36.07	36.03	35.70	35.65	35.10	35.06
5	--	--	--	--	--	--	36.11	36.08	35.76	35.66	35.10	35.08
6	--	--	--	--	--	--	--	--	35.66	35.65	35.09	35.04
7	--	--	--	--	--	--	35.92	35.87	35.66	35.65	35.11	34.95
8	--	--	--	--	--	--	35.87	35.84	35.67	35.66	35.11	35.05
9	--	--	--	--	--	--	35.89	35.86	35.67	35.66	35.05	35.00
10	--	--	--	--	36.05	36.03	35.89	35.88	35.68	35.67	35.02	34.99
11	--	--	--	--	36.05	36.03	35.89	35.88	35.67	35.48	35.04	35.01
12	--	--	--	--	36.08	36.03	35.88	35.83	35.48	35.45	35.01	34.95
13	--	--	--	--	36.14	36.08	35.89	35.83	35.48	35.45	34.95	34.93
14	--	--	--	--	36.15	36.11	35.91	35.89	35.50	35.47	34.95	34.93
15	--	--	--	--	36.11	35.96	35.90	35.87	35.47	35.44	34.97	34.95
16	--	--	--	--	36.06	36.02	35.88	35.86	35.48	35.44	34.98	34.97
17	--	--	--	--	36.10	36.06	35.87	35.84	35.48	35.47	34.98	34.96
18	--	--	--	--	36.13	36.10	35.84	35.83	35.47	35.46	34.96	34.89
19	--	--	--	--	36.14	36.13	35.84	35.79	35.46	35.30	34.88	34.86
20	--	--	--	--	36.13	36.07	35.77	35.70	35.32	35.30	34.92	34.87
21	--	--	--	--	36.14	36.11	35.71	35.70	35.36	35.32	34.93	34.91
22	--	--	--	--	36.13	36.10	35.71	35.71	35.35	35.31	34.94	34.92
23	--	--	--	--	36.16	36.12	35.76	35.71	35.31	35.29	34.92	34.83
24	--	--	--	--	36.15	36.09	35.76	35.75	35.29	35.29	34.83	34.80
25	--	--	--	--	36.09	36.06	35.76	35.74	35.29	35.27	34.80	34.73
26	--	--	--	--	36.12	36.06	35.83	35.75	35.28	35.25	34.71	34.67
27	--	--	--	--	36.13	36.10	35.85	35.83	35.24	35.21	34.71	34.68
28	--	--	--	--	36.10	36.03	35.87	35.85	35.23	35.22	34.73	34.72
29	--	--	--	--	36.13	36.02	35.90	35.85	35.22	35.20	34.72	34.69
30	--	--	--	--	36.14	36.13	35.85	35.82	--	--	34.69	34.69
31	--	--	--	--	36.13	36.08	35.82	35.80	--	--	34.73	34.69
Month	--	--	--	--	--	--	--	--	35.81	35.20	35.20	34.67

Table 4.—Continuous water levels recorded in observation wells in Howard County—Continued

Well number: HO Ce 38 (continued)

Water Year October 1987 to September 1988

	April		May		June		July		August		September	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	34.73	34.72	34.45	34.44	34.16	34.11	33.95	33.90	34.23	34.17	34.77	34.74
2	34.73	34.71	34.44	34.42	34.18	34.15	33.93	33.91	34.25	34.23	34.78	34.75
3	34.71	34.66	34.43	34.41	34.17	34.16	33.94	33.92	34.27	34.25	34.75	34.73
4	34.65	34.63	34.40	34.38	34.17	34.16	33.96	33.94	34.27	34.26	34.72	34.66
5	34.64	34.64	34.38	34.34	34.16	34.12	33.96	33.95	34.27	34.25	34.80	34.68
6	34.64	34.56	34.37	34.34	34.14	34.10	33.95	33.92	34.26	34.24	34.83	34.80
7	34.59	34.55	34.41	34.37	34.11	34.08	33.93	33.92	34.29	34.26	34.87	34.83
8	--	--	34.42	34.39	34.11	34.08	33.93	33.91	34.31	34.29	34.88	34.85
9	--	--	34.39	34.34	34.11	34.08	33.91	33.91	34.33	34.31	34.86	34.85
10	--	--	34.35	34.33	34.13	34.11	33.92	33.92	34.35	34.33	34.89	34.86
11	--	--	34.38	34.35	34.12	34.09	33.93	33.92	34.37	34.35	34.92	34.89
12	--	--	34.39	34.37	34.09	34.08	33.94	33.93	34.38	34.36	34.93	34.89
13	--	--	34.37	34.32	34.09	34.08	33.95	33.94	34.39	34.38	34.89	34.86
14	--	--	34.34	34.33	34.09	34.06	33.95	33.94	34.40	34.39	34.95	34.90
15	--	--	34.34	34.30	34.06	34.03	33.97	33.95	34.41	34.38	34.99	34.95
16	34.58	34.57	34.30	34.28	34.03	34.01	33.98	33.98	34.44	34.41	35.01	35.00
17	34.56	34.50	34.31	34.29	34.02	34.01	34.01	33.95	34.44	34.41	35.00	34.97
18	34.54	34.48	34.29	34.28	34.02	34.02	34.02	33.99	34.46	34.43	34.98	34.97
19	34.54	34.47	34.30	34.28	34.02	34.00	34.04	34.01	34.47	34.46	34.99	34.97
20	34.52	34.48	34.29	34.28	34.00	33.98	34.04	34.03	34.48	34.47	34.99	34.98
21	34.48	34.45	34.28	34.27	33.98	33.97	34.05	34.03	34.56	34.48	35.02	34.99
22	34.51	34.48	34.27	34.25	33.97	33.95	34.07	34.05	34.59	34.56	35.06	35.03
23	34.50	34.44	34.25	34.23	34.00	33.95	34.07	34.06	34.59	34.52	35.05	35.01
24	34.46	34.42	34.23	34.21	34.01	33.99	34.10	34.07	34.52	34.51	35.10	35.06
25	34.48	34.46	34.27	34.22	33.99	33.92	34.11	34.10	34.57	34.53	35.13	35.10
26	34.46	34.44	34.28	34.27	33.97	33.91	34.12	34.10	34.63	34.57	35.14	35.12
27	34.44	34.41	34.27	34.22	33.97	33.96	34.15	34.13	34.66	34.63	35.16	35.14
28	34.43	34.39	34.22	34.20	33.97	33.95	34.16	34.14	34.67	34.66	35.17	35.15
29	34.42	34.42	34.20	34.20	33.95	33.92	34.17	34.16	34.67	34.61	35.21	35.18
30	34.45	34.42	34.20	34.18	33.95	33.93	34.16	34.14	34.71	34.67	35.21	35.20
31	--	--	34.18	34.16	--	--	34.17	34.14	34.74	34.71	--	--
Month	--	--	34.45	34.16	34.18	33.91	34.17	33.90	34.74	34.17	35.21	34.66

Water Year October 1988 to September 1989

	October		November		December		January		February		March	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	35.21	35.18	--	--	36.07	36.03	36.22	36.21	36.31	36.29	36.16	36.15
2	35.19	35.17	--	--	36.07	36.06	36.21	36.20	36.32	36.30	36.17	36.11
3	35.22	35.19	--	--	36.07	36.04	36.21	36.17	36.34	36.29	36.11	36.10
4	35.25	35.22	--	--	36.11	36.07	36.26	36.21	36.35	36.34	36.09	36.08
5	35.31	35.25	--	--	36.10	36.08	36.27	36.25	36.35	36.33	36.08	36.00
6	35.34	35.31	--	--	36.11	36.09	36.26	36.23	36.32	36.30	36.03	36.01
7	35.34	35.33	--	--	36.11	36.09	36.27	36.24	36.33	36.31	36.09	36.03
8	35.35	35.33	--	--	36.13	36.11	36.26	36.22	36.33	36.30	36.09	36.07
9	35.36	35.35	--	--	36.13	36.11	36.28	36.26	36.35	36.32	36.06	36.02
10	35.36	35.32	--	--	36.14	36.12	36.28	36.27	36.33	36.31	36.03	36.01
11	35.38	35.31	--	--	36.17	36.13	36.29	36.28	36.31	36.27	36.01	35.96
12	35.44	35.39	--	--	36.18	36.17	36.28	36.22	36.29	36.27	35.96	35.95
13	35.46	35.44	--	--	36.16	36.13	36.31	36.23	36.32	36.27	35.96	35.94
14	35.47	35.46	--	--	36.17	36.14	36.31	36.27	36.27	36.26	35.94	35.88
15	35.47	35.46	--	--	36.20	36.14	36.27	36.24	36.26	36.22	35.88	35.86
16	35.49	35.47	--	--	36.20	36.18	36.30	36.27	36.28	36.25	35.90	35.88
17	35.50	35.48	--	--	36.19	36.16	36.30	36.29	36.28	36.27	35.89	35.83
18	35.49	35.46	--	--	36.21	36.19	36.31	36.28	36.27	36.24	35.83	35.80
19	35.52	35.47	--	--	36.23	36.21	36.30	36.28	36.24	36.22	35.84	35.83
20	35.56	35.52	--	--	36.22	36.20	36.32	36.28	36.22	36.18	35.83	35.78
21	35.57	35.55	--	--	36.24	36.21	36.36	36.32	36.17	36.10	35.78	35.75
22	35.54	35.47	--	--	36.25	36.24	36.36	36.34	36.16	36.15	35.82	35.78
23	35.59	35.49	--	--	36.24	36.19	36.34	36.31	36.18	36.16	35.81	35.77
24	35.58	35.56	--	--	36.21	36.16	36.31	36.30	36.20	36.18	35.76	35.71
25	35.62	35.57	--	--	36.25	36.20	36.33	36.30	36.21	36.19	35.72	35.70
26	35.65	35.62	--	--	36.28	36.25	36.32	36.24	36.18	36.14	35.71	35.70
27	35.70	35.65	--	--	36.28	36.22	36.28	36.24	36.16	36.15	35.70	35.67
28	35.70	35.68	--	--	36.27	36.16	36.30	36.27	36.16	36.15	35.66	35.62
29	35.73	35.66	--	--	36.29	36.28	36.27	36.24	--	--	35.62	35.62
30	35.74	35.73	--	--	36.29	36.18	36.30	36.19	--	--	35.62	35.57
31	35.76	35.74	--	--	36.22	36.18	36.32	36.31	--	--	35.58	35.53
Month	35.76	35.17	--	--	36.29	36.03	36.36	36.17	36.35	36.10	36.17	35.53

Table 4.—Continuous water levels recorded in observation wells in Howard County—Continued

Well number: HO Ce 38 (continued)

Water Year October 1988 to September 1989

	April		May		June		July		August		September	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	--	--	--	--	33.71	33.60	32.64	32.61	--	--	--	--
2	--	--	--	--	33.60	33.58	32.61	32.57	--	--	--	--
3	--	--	--	--	33.58	33.49	32.58	32.56	--	--	--	--
4	--	--	--	--	33.50	33.46	32.56	32.53	--	--	--	--
5	--	--	--	--	33.46	33.43	32.53	32.52	--	--	--	--
6	--	--	--	--	33.43	33.36	32.52	32.49	--	--	--	--
7	--	--	--	--	33.36	33.30	32.49	32.45	--	--	--	--
8	--	--	--	--	33.33	33.31	32.47	32.44	--	--	--	--
9	--	--	--	--	33.32	33.27	32.46	32.45	--	--	--	--
10	--	--	--	--	33.27	33.16	32.45	32.43	--	--	--	--
11	--	--	--	--	33.18	33.16	32.43	32.39	--	--	--	--
12	--	--	--	--	33.18	33.11	32.42	32.39	--	--	--	--
13	--	--	--	--	33.11	33.06	32.42	32.38	--	--	--	--
14	--	--	--	--	33.08	33.03	32.37	32.35	--	--	--	--
15	--	--	--	--	33.07	33.02	32.37	32.34	--	--	--	--
16	--	--	--	--	33.02	32.99	32.42	32.37	--	--	--	--
17	--	--	--	--	32.99	32.95	32.41	32.34	--	--	--	--
18	--	--	--	--	32.95	32.94	32.35	32.32	--	--	--	--
19	--	--	--	--	32.94	32.91	32.35	32.34	--	--	--	--
20	--	--	--	--	32.92	32.88	32.35	32.32	--	--	--	--
21	--	--	--	--	32.89	32.86	32.32	32.27	--	--	--	--
22	--	--	--	--	32.85	32.82	32.30	32.26	--	--	--	--
23	--	--	--	--	32.83	32.79	32.34	32.30	--	--	--	--
24	--	--	--	--	32.79	32.77	32.35	32.34	--	--	--	--
25	--	--	--	--	32.78	32.77	32.34	32.33	--	--	--	--
26	--	--	--	--	32.76	32.72	32.33	32.31	--	--	--	--
27	--	--	--	--	32.72	32.69	32.32	32.27	--	--	--	--
28	--	--	--	--	32.69	32.66	32.27	32.24	--	--	--	--
29	--	--	--	--	32.71	32.69	32.28	32.22	--	--	--	--
30	--	--	--	--	32.70	32.64	32.30	32.25	--	--	--	--
31	--	--	33.77	33.72	--	--	32.26	32.25	--	--	--	--
Month	--	--	--	--	33.71	32.64	32.64	32.22	--	--	--	--

Water Year October 1989 to September 1990

	October		November		December		January		February		March	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	32.93	32.87	33.34	33.22	33.49	33.41	33.71	33.49	33.91	33.81	33.68	33.56
2	32.86	32.84	33.34	33.24	33.48	33.27	33.72	33.67	33.83	33.75	33.56	33.45
3	32.95	32.86	33.36	33.23	33.42	33.31	33.69	33.65	33.88	33.77	33.50	33.41
4	32.99	32.95	33.38	33.33	33.45	33.35	33.65	33.54	33.83	33.68	33.57	33.50
5	33.01	32.93	33.36	33.29	33.41	33.35	33.68	33.62	33.90	33.83	33.61	33.55
6	32.94	32.93	33.28	33.25	33.43	33.34	33.70	33.60	33.87	33.82	33.62	33.54
7	33.05	32.95	33.29	33.22	33.57	33.43	33.70	33.64	33.84	33.79	33.68	33.62
8	33.07	33.00	33.24	33.18	33.57	33.47	33.66	33.57	33.86	33.78	33.63	33.51
9	33.12	33.07	33.29	33.15	33.49	33.43	33.70	33.56	33.77	33.65	33.51	33.43
10	33.13	33.06	33.37	33.28	33.46	33.43	33.68	33.56	33.75	33.62	33.47	33.43
11	33.13	33.07	33.37	33.30	33.48	33.44	33.69	33.51	33.77	33.71	33.43	33.40
12	33.13	33.07	33.43	33.30	33.48	33.44	33.72	33.58	33.83	33.73	33.39	33.36
13	33.13	33.09	33.43	33.35	33.51	33.43	33.81	33.73	33.83	33.70	33.38	33.35
14	33.13	33.09	33.35	33.31	33.53	33.49	33.81	33.76	33.75	33.71	33.36	33.34
15	33.12	33.09	33.31	33.19	33.56	33.37	33.76	33.72	33.75	33.65	33.37	33.34
16	33.13	33.09	33.35	33.07	33.59	33.48	33.79	33.76	33.66	33.59	33.35	33.29
17	33.12	33.09	33.41	33.35	33.60	33.59	33.76	33.67	33.83	33.67	33.29	33.24
18	33.19	33.13	33.50	33.39	33.62	33.59	33.78	33.67	33.84	33.68	33.39	33.29
19	33.16	33.06	33.50	33.33	33.61	33.52	33.80	33.76	33.71	33.62	33.39	33.31
20	33.19	33.06	33.32	33.17	33.59	33.52	33.76	33.59	33.80	33.72	33.33	33.31
21	33.26	33.18	33.46	33.27	33.66	33.56	33.68	33.58	33.80	33.71	33.37	33.32
22	33.33	33.26	33.48	33.38	33.67	33.65	33.74	33.66	33.71	33.49	33.37	33.30
23	33.35	33.31	33.49	33.37	33.68	33.65	33.79	33.70	33.51	33.46	33.38	33.29
24	33.34	33.30	33.53	33.49	33.65	33.57	33.74	33.69	33.64	33.48	33.43	33.38
25	33.32	33.30	33.50	33.39	33.57	33.47	33.73	33.61	33.84	33.65	33.40	33.35
26	33.33	33.30	33.48	33.37	33.65	33.46	33.83	33.67	33.85	33.77	33.40	33.35
27	33.33	33.29	33.51	33.37	33.67	33.58	33.85	33.78	33.77	33.64	33.44	33.40
28	33.31	33.28	33.47	33.33	33.65	33.58	33.81	33.79	33.65	33.61	33.45	33.39
29	33.31	33.29	33.53	33.47	33.66	33.60	--	--	--	--	33.44	33.37
30	--	--	33.49	33.34	33.64	33.59	--	--	--	--	33.37	33.30
31	33.23	33.15	--	--	33.61	33.45	33.93	33.87	--	--	33.30	33.28
Month	--	--	33.53	33.07	33.68	33.27	--	--	33.91	33.46	33.68	33.24

Table 4.—Continuous water levels recorded in observation wells in Howard County—Continued

Well number: HO Ce 38 (continued)

Water Year October 1989 to September 1990

	April		May		June		July		August		September	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	33.28	33.25	--	--	--	--	--	--	--	--	--	--
2	33.26	33.20	--	--	--	--	--	--	--	--	--	--
3	33.21	33.19	--	--	--	--	--	--	--	--	--	--
4	33.24	33.19	--	--	--	--	--	--	--	--	--	--
5	33.30	33.24	--	--	--	--	--	--	--	--	--	--
6	33.34	33.30	--	--	--	--	--	--	--	--	--	--
7	33.39	33.30	--	--	--	--	--	--	--	--	--	--
8	33.44	33.38	--	--	--	--	--	--	--	--	--	--
9	33.45	33.35	--	--	--	--	--	--	--	--	--	--
10	33.34	33.18	--	--	--	--	--	--	--	--	--	--
11	33.30	33.18	--	--	--	--	--	--	--	--	--	--
12	33.40	33.30	--	--	--	--	--	--	--	--	--	--
13	33.43	33.37	--	--	--	--	--	--	--	--	--	--
14	33.38	33.24	--	--	--	--	--	--	--	--	--	--
15	33.23	33.20	--	--	--	--	--	--	--	--	--	--
16	33.24	33.20	--	--	--	--	--	--	--	--	--	--
17	33.29	33.16	--	--	--	--	--	--	--	--	--	--
18	33.35	33.29	--	--	--	--	--	--	--	--	--	--
19	33.37	33.31	--	--	--	--	--	--	--	--	--	--
20	33.30	33.17	--	--	--	--	--	--	--	--	--	--
21	33.17	33.16	--	--	--	--	--	--	--	--	--	--
22	33.18	33.15	--	--	--	--	--	--	--	--	--	--
23	33.15	33.13	--	--	--	--	--	--	--	--	--	--
24	33.15	33.14	--	--	--	--	--	--	--	--	--	--
25	33.14	33.09	--	--	--	--	--	--	--	--	--	--
26	33.10	33.05	--	--	--	--	--	--	--	--	--	--
27	--	--	--	--	--	--	--	--	--	--	--	--
28	--	--	--	--	--	--	--	--	--	--	--	--
29	--	--	--	--	--	--	--	--	--	--	--	--
30	--	--	--	--	--	--	--	--	--	--	--	--
31	--	--	--	--	--	--	--	--	--	--	--	--

Well number: HO Ce 75
Owner: Hobbits Glen Golf Club.
Geologic unit: Oella Formation.
Altitude: 435 feet.
Well characteristics: Drilled unused water-table well, depth 227 feet, diameter 6 inches.
Period of record: March 1988 to June 1989.
Extremes for period of record: Highest water level recorded, 16.12 feet, June 9, 1989;
Lowest water level recorded, 23.44 feet, January 7-8, 1989.

Water Year October 1987 to September 1988

	October		November		December		January		February		March	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	--	--	--	--	--	--	--	--	--	--	--	--
2	--	--	--	--	--	--	--	--	--	--	--	--
3	--	--	--	--	--	--	--	--	--	--	--	--
4	--	--	--	--	--	--	--	--	--	--	--	--
5	--	--	--	--	--	--	--	--	--	--	--	--
6	--	--	--	--	--	--	--	--	--	--	--	--
7	--	--	--	--	--	--	--	--	--	--	--	--
8	--	--	--	--	--	--	--	--	--	--	--	--
9	--	--	--	--	--	--	--	--	--	--	--	--
10	--	--	--	--	--	--	--	--	--	--	--	--
11	--	--	--	--	--	--	--	--	--	--	--	--
12	--	--	--	--	--	--	--	--	--	--	19.41	19.36
13	--	--	--	--	--	--	--	--	--	--	19.39	19.34
14	--	--	--	--	--	--	--	--	--	--	19.38	19.35
15	--	--	--	--	--	--	--	--	--	--	19.41	19.37
16	--	--	--	--	--	--	--	--	--	--	19.41	19.40
17	--	--	--	--	--	--	--	--	--	--	19.40	19.40
18	--	--	--	--	--	--	--	--	--	--	19.41	19.36
19	--	--	--	--	--	--	--	--	--	--	19.37	19.36
20	--	--	--	--	--	--	--	--	--	--	19.43	19.37
21	--	--	--	--	--	--	--	--	--	--	19.48	19.43
22	--	--	--	--	--	--	--	--	--	--	19.49	19.48
23	--	--	--	--	--	--	--	--	--	--	19.49	19.43
24	--	--	--	--	--	--	--	--	--	--	19.43	19.42
25	--	--	--	--	--	--	--	--	--	--	19.44	19.43
26	--	--	--	--	--	--	--	--	--	--	19.43	19.37
27	--	--	--	--	--	--	--	--	--	--	19.44	19.38
28	--	--	--	--	--	--	--	--	--	--	19.44	19.43
29	--	--	--	--	--	--	--	--	--	--	19.44	19.40
30	--	--	--	--	--	--	--	--	--	--	19.40	19.40
31	--	--	--	--	--	--	--	--	--	--	19.41	19.40

Table 4.—Continuous water levels recorded in observation wells in Howard County—Continued

Well number: HO Ce 75 (continued)

Water Year October 1987 to September 1988

	April		May		June		July		August		September	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	19.53	19.39	--	--	18.86	18.83	19.27	19.19	20.37	20.33	--	--
2	19.54	19.53	--	--	18.86	18.83	19.31	19.27	20.41	20.37	21.42	21.41
3	19.54	19.49	19.76	19.74	18.83	18.83	19.36	19.31	20.44	20.41	21.44	21.43
4	19.51	19.49	19.76	19.73	18.83	18.83	19.41	19.36	20.46	20.44	21.45	21.43
5	19.54	19.51	19.74	19.68	18.83	18.79	19.43	19.41	20.49	20.46	21.51	21.45
6	19.52	19.46	19.68	19.60	18.80	18.79	19.45	19.43	20.52	20.49	21.54	21.51
7	19.51	19.46	19.60	19.58	18.79	18.78	19.49	19.45	20.56	20.52	21.58	21.54
8	19.54	19.51	19.58	19.52	18.79	18.79	19.51	19.49	20.60	20.56	21.61	21.58
9	19.54	19.54	19.52	19.45	18.82	18.79	19.54	19.51	20.63	20.60	21.63	21.61
10	19.54	19.54	19.45	19.42	18.86	18.83	19.58	19.54	20.67	20.63	21.67	21.63
11	19.56	19.53	19.45	19.43	18.85	18.84	19.61	19.58	20.70	20.67	21.70	21.67
12	19.56	19.54	19.46	19.41	18.86	18.84	19.65	19.62	20.74	20.70	21.72	21.70
13	19.56	19.55	19.41	19.37	18.88	18.85	19.68	19.65	20.77	20.74	21.75	21.71
14	19.56	19.54	19.40	19.38	18.90	18.87	19.71	19.68	20.80	20.77	21.78	21.75
15	19.56	19.51	19.38	19.34	18.89	18.88	19.77	19.71	20.83	20.80	21.83	21.79
16	19.57	19.56	19.36	19.33	18.88	18.87	19.80	19.77	20.86	20.83	21.85	21.83
17	19.56	19.52	19.36	19.32	18.90	18.87	19.84	19.80	20.88	20.86	21.86	21.85
18	19.54	19.50	19.32	19.29	18.94	18.90	19.88	19.84	20.92	20.89	21.89	21.87
19	--	--	19.30	19.27	18.96	18.93	19.92	19.88	20.95	20.93	21.92	21.89
20	--	--	19.27	19.25	18.96	18.95	19.95	19.92	20.98	20.95	21.93	21.92
21	--	--	19.25	19.22	18.96	18.95	19.98	19.94	21.03	20.98	21.96	21.93
22	--	--	19.22	19.19	18.97	18.96	20.03	19.99	21.06	21.03	21.98	21.96
23	--	--	19.19	19.12	19.00	18.97	20.05	20.00	21.07	21.05	22.02	21.98
24	--	--	19.12	19.05	19.08	19.00	20.09	20.05	21.07	21.04	22.05	22.02
25	--	--	19.07	19.05	19.08	19.07	20.12	20.10	21.11	21.08	22.07	22.05
26	--	--	19.06	19.02	19.08	19.03	20.15	20.12	21.16	21.11	22.10	22.07
27	--	--	19.02	18.98	19.12	19.05	20.20	20.15	21.20	21.16	22.13	22.10
28	--	--	18.98	18.94	19.15	19.12	20.23	20.20	21.23	21.20	22.16	22.13
29	--	--	18.94	18.92	19.16	19.15	20.26	20.24	21.26	21.20	22.17	22.15
30	--	--	18.92	18.89	19.18	19.16	20.29	20.26	21.30	21.26	22.18	22.16
31	--	--	18.89	18.86	--	--	20.33	20.29	21.34	21.30	--	--
Month	--	--	--	--	19.18	18.78	20.33	19.19	21.34	20.33	--	--

Water Year October 1988 to September 1989

	October		November		December		January		February		March	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	22.20	22.18	22.95	22.94	23.14	23.14	23.40	23.39	22.62	22.61	21.96	21.93
2	22.22	22.20	22.98	22.95	23.15	23.14	23.40	23.39	22.62	22.61	21.93	21.86
3	22.25	22.22	22.99	22.97	23.15	23.14	23.40	23.39	22.63	22.60	21.86	21.83
4	22.28	22.25	23.00	22.99	23.16	23.14	23.42	23.40	22.62	22.61	21.83	21.80
5	22.32	22.28	23.01	22.99	23.16	23.15	23.43	23.42	22.61	22.59	21.80	21.76
6	22.35	22.32	23.04	23.01	23.17	23.16	23.43	23.41	22.59	22.58	21.77	21.72
7	22.37	22.35	23.08	23.04	23.18	23.16	23.44	23.43	22.59	22.58	21.73	21.72
8	22.40	22.37	23.08	23.07	23.19	23.18	23.44	23.42	22.59	22.57	21.72	21.67
9	22.43	22.40	23.10	23.09	23.19	23.18	23.43	23.42	22.58	22.57	21.67	21.62
10	22.44	22.43	23.11	23.10	23.20	23.19	23.42	23.41	22.57	22.56	21.62	21.58
11	22.47	22.44	23.14	23.11	23.22	23.20	23.41	23.37	22.56	22.55	21.58	21.50
12	22.51	22.47	23.15	23.14	23.22	23.22	23.37	23.31	22.57	22.55	21.50	21.48
13	22.54	22.51	23.15	23.14	23.23	23.21	23.31	23.27	22.57	22.54	21.48	21.42
14	22.56	22.54	23.17	23.15	23.24	23.23	23.26	23.19	22.54	22.53	21.42	21.37
15	22.58	22.56	23.18	23.17	23.26	23.24	23.18	23.09	22.53	22.52	21.37	21.34
16	22.61	22.58	23.19	23.18	23.26	23.26	23.09	23.03	22.52	22.51	21.35	21.33
17	22.63	22.61	23.21	23.19	23.28	23.26	23.02	22.96	22.51	22.48	21.33	21.27
18	22.64	22.63	23.22	23.21	23.29	23.28	22.95	22.90	22.48	22.44	21.27	21.22
19	22.68	22.65	23.22	23.21	23.30	23.29	22.90	22.85	22.44	22.42	21.25	21.22
20	22.71	22.68	23.21	23.18	23.31	23.30	22.84	22.83	22.41	22.38	21.22	21.15
21	22.73	22.71	23.20	23.20	23.34	23.31	22.83	22.80	22.38	22.31	21.15	21.13
22	22.73	22.71	23.20	23.19	23.34	23.33	22.80	22.79	22.31	22.26	21.15	21.13
23	22.76	22.73	23.19	23.17	23.34	23.33	22.79	22.75	22.26	22.21	21.13	21.09
24	22.77	22.76	23.18	23.16	23.34	23.32	22.75	22.73	22.21	22.16	21.08	20.95
25	22.80	22.77	23.18	23.17	23.37	23.35	22.73	22.71	22.16	22.09	20.94	20.88
26	22.82	22.80	23.18	23.18	23.37	23.37	22.71	22.67	22.09	22.04	20.88	20.83
27	22.85	22.82	23.18	23.17	23.37	23.36	22.67	22.66	22.04	22.00	20.83	20.76
28	22.86	22.85	23.17	23.16	23.39	23.35	22.67	22.64	22.00	21.96	20.76	20.69
29	22.88	22.86	23.17	23.16	23.39	23.39	22.64	22.62	--	--	20.68	20.64
30	22.90	22.88	23.20	23.14	23.39	23.33	22.64	22.60	--	--	20.64	20.56
31	22.94	22.90	--	--	23.40	23.38	22.63	22.62	--	--	20.56	20.49
Month	22.94	22.18	23.22	22.94	23.40	23.14	23.44	22.60	22.63	21.96	21.96	20.49

Table 4.—Continuous water levels recorded in observation wells in Howard County—Continued

Well number: HO Ce 75 (continued)
Water Year October 1988 to September 1989

	April		May		June		July		August		September	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	20.53	20.50	19.78	19.70	16.93	16.90	--	--	--	--	--	--
2	20.52	20.46	19.75	19.70	16.91	16.89	--	--	--	--	--	--
3	20.46	20.42	19.76	19.74	16.93	16.87	--	--	--	--	--	--
4	20.42	20.37	19.76	19.71	16.93	16.86	--	--	--	--	--	--
5	20.39	20.35	19.71	19.10	16.93	16.59	--	--	--	--	--	--
6	20.35	20.32	19.09	18.92	16.50	16.42	--	--	--	--	--	--
7	20.33	20.27	18.92	18.87	16.43	16.24	--	--	--	--	--	--
8	20.28	20.24	18.86	18.82	16.23	16.20	--	--	--	--	--	--
9	20.27	20.24	18.82	18.71	16.20	16.12	--	--	--	--	--	--
10	20.26	20.24	18.70	18.63	16.15	16.13	--	--	--	--	--	--
11	20.24	20.21	18.63	18.56	16.16	16.13	--	--	--	--	--	--
12	20.21	20.18	18.56	18.51	--	--	--	--	--	--	--	--
13	20.18	20.16	18.51	18.46	--	--	--	--	--	--	--	--
14	20.16	20.12	18.46	18.40	--	--	--	--	--	--	--	--
15	20.12	20.08	18.40	18.32	--	--	--	--	--	--	--	--
16	20.10	20.08	18.31	17.95	--	--	--	--	--	--	--	--
17	20.10	20.05	17.93	17.82	--	--	--	--	--	--	--	--
18	20.06	20.03	17.82	17.71	--	--	--	--	--	--	--	--
19	20.04	20.02	17.71	17.58	--	--	--	--	--	--	--	--
20	20.02	19.98	17.58	17.48	--	--	--	--	--	--	--	--
21	19.98	19.95	17.48	17.43	--	--	--	--	--	--	--	--
22	19.95	19.92	17.44	17.37	--	--	--	--	--	--	--	--
23	19.94	19.90	17.36	17.26	--	--	--	--	--	--	--	--
24	19.90	19.87	17.26	17.24	--	--	--	--	--	--	--	--
25	19.87	19.84	17.25	17.19	--	--	--	--	--	--	--	--
26	19.84	19.83	17.19	17.18	--	--	--	--	--	--	--	--
27	19.83	19.80	17.18	17.09	--	--	--	--	--	--	--	--
28	19.82	19.80	17.10	17.04	--	--	--	--	--	--	--	--
29	19.80	19.78	17.04	16.99	--	--	--	--	--	--	--	--
30	19.80	19.78	16.98	16.94	--	--	--	--	--	--	--	--
31	--	--	16.95	16.91	--	--	--	--	--	--	--	--
Month	20.53	19.78	19.78	16.91	--	--	--	--	--	--	--	--

Well number: HO Cf 37
Owner: Meadowridge Pub & Spirit.
Geologic unit: Mount Washington Amphibolite.
Altitude: 335 feet.
Well characteristics: Drilled unused well[1], depth 145 feet, diameter 6 inches.
Remarks: Water levels may be affected by nearby pumpage.
Period of record: June 1988 to June 1989.
Extremes for period of record: Highest water level recorded, 20.52 feet,May 24, 1989;
Lowest water level recorded, 22.16 feet, October 20, 1988.
Water Year October 1987 to September 1988

	April		May		June		July		August		September	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	--	--	--	--	--	--	21.60	21.48	21.67	21.64	21.94	21.86
2	--	--	--	--	--	--	21.57	21.53	21.68	21.67	21.94	21.87
3	--	--	--	--	--	--	21.55	21.52	21.69	21.68	21.88	21.83
4	--	--	--	--	20.92	20.86	21.57	21.54	21.70	21.68	21.82	21.70
5	--	--	--	--	20.91	20.88	21.56	21.55	21.69	21.67	21.75	21.71
6	--	--	--	--	20.91	20.87	21.57	21.56	21.69	21.66	21.82	21.75
7	--	--	--	--	20.96	20.86	21.57	21.56	21.68	21.66	21.86	21.80
8	--	--	--	--	20.99	20.94	21.57	21.55	21.71	21.67	21.88	21.80
9	--	--	--	--	21.00	20.99	21.57	21.55	21.73	21.68	21.84	21.80
10	--	--	--	--	21.07	21.00	21.62	21.55	21.75	21.71	21.84	21.80
11	--	--	--	--	21.12	21.05	21.62	21.56	21.77	21.72	21.88	21.83
12	--	--	--	--	21.15	21.07	21.59	21.57	21.78	21.73	21.88	21.79
13	--	--	--	--	21.16	21.11	21.66	21.57	21.80	21.75	21.84	21.78
14	--	--	--	--	21.20	21.12	21.65	21.61	21.79	21.76	21.88	21.83
15	--	--	--	--	21.19	21.11	21.66	21.61	21.78	21.76	21.99	21.89
16	--	--	--	--	21.16	21.08	21.67	21.65	21.81	21.78	21.99	21.95
17	--	--	--	--	21.14	21.09	21.66	21.64	21.81	21.79	21.96	21.88
18	--	--	--	--	21.20	21.12	--	--	21.86	21.80	21.90	21.87
19	--	--	--	--	21.19	21.17	--	--	21.89	21.88	21.90	21.86
20	--	--	--	--	21.21	21.18	21.70	21.70	21.89	21.82	21.90	21.85
21	--	--	--	--	21.22	21.19	21.70	21.70	21.87	21.83	21.96	21.87
22	--	--	--	--	21.28	21.23	21.70	21.70	21.94	21.87	21.97	21.86
23	--	--	--	--	21.47	21.28	21.71	21.68	21.95	21.82	21.92	21.86
24	--	--	--	--	21.49	21.47	21.68	21.68	21.86	21.78	21.99	21.88
25	--	--	--	--	21.49	21.40	21.69	21.67	21.85	21.78	21.95	21.88
26	--	--	--	--	21.46	21.38	21.69	21.64	21.89	21.79	21.99	21.91
27	--	--	--	--	21.49	21.43	21.64	21.62	21.92	21.83	21.99	21.94
28	--	--	--	--	21.51	21.45	21.64	21.62	21.93	21.88	22.01	21.95
29	--	--	--	--	21.50	21.44	21.64	21.63	21.90	21.80	22.01	21.97
30	--	--	--	--	21.51	21.44	21.64	21.63	21.83	21.79	22.01	21.95
31	--	--	--	--	--	--	21.64	21.63	21.85	21.83	--	--
Month	--	--	--	--	--	--	--	--	21.95	21.64	22.01	21.70

Table 4.—Continuous water levels recorded in observation wells in Howard County—Continued

Well number: HO Cf 37 (continued)

Water Year October 1988 to September 1989

	October		November		December		January		February		March	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	21.98	21.92	21.66	21.65	21.69	21.68	21.69	21.67	21.41	21.39	--	--
2	21.93	21.87	21.66	21.61	21.69	21.69	21.67	21.65	21.43	21.39	--	--
3	21.92	21.87	21.64	21.57	21.69	21.68	21.64	21.62	21.43	21.40	21.29	21.25
4	21.94	21.89	21.58	21.55	21.71	21.68	21.71	21.63	21.44	21.41	21.30	21.25
5	21.97	21.91	21.57	21.53	21.71	21.69	21.72	21.67	21.42	21.40	21.27	21.20
6	22.02	21.97	21.63	21.56	21.70	21.68	21.70	21.60	21.42	21.39	21.22	21.18
7	22.00	21.96	21.64	21.61	21.68	21.64	21.68	21.64	21.43	21.39	21.27	21.20
8	21.99	21.95	21.69	21.64	21.71	21.67	21.66	21.59	21.42	21.40	21.28	21.23
9	21.99	21.95	21.76	21.69	21.70	21.68	21.68	21.62	21.43	21.41	21.25	21.21
10	21.98	21.88	21.75	21.69	21.70	21.68	21.68	21.63	21.42	21.40	21.23	21.20
11	21.99	21.88	21.85	21.74	21.72	21.70	21.65	21.63	21.41	21.40	21.20	21.17
12	22.04	21.98	21.85	21.83	--	--	21.64	21.53	21.44	21.40	21.17	21.11
13	22.11	22.06	21.84	21.77	--	--	21.57	21.53	21.44	21.40	21.17	21.16
14	22.13	22.04	21.84	21.81	--	--	21.57	21.50	21.42	21.40	21.16	21.13
15	22.09	22.04	21.84	21.84	--	--	21.49	21.48	21.41	21.39	21.15	21.11
16	22.10	22.06	21.85	21.82	--	--	21.50	21.47	21.43	21.40	21.22	21.15
17	22.10	22.06	21.84	21.81	--	--	21.49	21.46	21.42	21.40	21.22	21.20
18	22.06	22.00	21.88	21.85	--	--	21.47	21.43	21.40	21.37	21.21	21.14
19	22.07	22.01	21.87	21.75	--	--	21.46	21.43	21.39	21.36	21.26	21.21
20	22.16	22.07	21.75	21.69	--	--	21.47	21.41	21.38	21.35	21.26	21.20
21	22.15	22.01	21.82	21.71	--	--	21.50	21.46	--	--	21.20	21.13
22	22.01	21.93	21.81	21.79	--	--	21.48	21.44	--	--	21.24	21.20
23	22.03	21.99	21.78	21.74	--	--	21.46	21.43	--	--	21.25	21.22
24	22.04	21.96	21.78	21.74	--	--	21.44	21.42	--	--	21.22	21.09
25	22.05	21.86	21.77	21.74	--	--	21.44	21.43	--	--	21.12	21.09
26	21.97	21.71	21.76	21.74	--	--	21.44	21.38	--	--	21.14	21.09
27	21.82	21.72	21.74	21.70	--	--	21.40	21.39	--	--	21.13	21.11
28	21.80	21.73	21.70	21.66	--	--	21.41	21.40	--	--	21.11	21.07
29	21.81	21.69	21.70	21.70	--	--	21.40	21.38	--	--	21.07	21.06
30	21.73	21.69	21.71	21.68	--	--	21.39	21.22	--	--	21.07	21.02
31	21.81	21.66	--	--	21.71	21.69	21.40	21.39	--	--	21.01	20.96
Month	22.16	21.66	21.88	21.53	--	--	21.72	21.22	--	--	--	--

	April		May		June		July		August		September	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	21.11	21.01	21.09	20.98	20.65	20.58	--	--	--	--	--	--
2	21.11	21.09	21.02	20.98	20.67	20.59	--	--	--	--	--	--
3	21.11	21.00	21.07	21.01	20.70	20.61	--	--	--	--	--	--
4	21.05	21.00	21.09	21.02	20.70	20.62	--	--	--	--	--	--
5	21.07	21.01	21.04	20.86	20.72	20.66	--	--	--	--	--	--
6	21.04	20.99	20.91	20.83	20.68	20.64	--	--	--	--	--	--
7	21.04	20.97	20.91	20.83	20.65	20.63	--	--	--	--	--	--
8	21.02	20.97	20.91	20.84	20.64	20.63	--	--	--	--	--	--
9	21.05	20.98	20.89	20.82	20.63	20.59	--	--	--	--	--	--
10	21.07	21.03	20.81	20.75	20.60	20.59	--	--	--	--	--	--
11	21.07	21.05	20.75	20.74	20.61	20.60	--	--	--	--	--	--
12	21.06	21.06	20.76	20.74	--	--	--	--	--	--	--	--
13	21.06	21.04	20.77	20.75	--	--	--	--	--	--	--	--
14	21.05	21.04	20.77	20.76	--	--	--	--	--	--	--	--
15	21.04	20.99	20.76	20.74	--	--	--	--	--	--	--	--
16	21.02	20.98	20.73	20.64	--	--	--	--	--	--	--	--
17	21.03	21.00	20.66	20.63	--	--	--	--	--	--	--	--
18	21.02	20.98	20.72	20.65	--	--	--	--	--	--	--	--
19	21.01	20.98	20.72	20.66	--	--	--	--	--	--	--	--
20	21.04	20.99	20.69	20.63	--	--	--	--	--	--	--	--
21	21.02	20.98	20.69	20.63	--	--	--	--	--	--	--	--
22	21.02	20.99	20.71	20.65	--	--	--	--	--	--	--	--
23	21.03	21.00	20.67	20.53	--	--	--	--	--	--	--	--
24	21.03	21.00	20.56	20.52	--	--	--	--	--	--	--	--
25	21.02	20.99	20.55	20.55	--	--	--	--	--	--	--	--
26	21.02	20.99	20.55	20.53	--	--	--	--	--	--	--	--
27	21.02	21.01	20.55	20.54	--	--	--	--	--	--	--	--
28	21.05	21.01	20.59	20.55	--	--	--	--	--	--	--	--
29	21.06	21.05	20.61	20.58	--	--	--	--	--	--	--	--
30	21.09	21.05	20.60	20.56	--	--	--	--	--	--	--	--
31	--	--	20.60	20.56	--	--	--	--	--	--	--	--
Month	21.11	20.97	21.09	20.52	--	--	--	--	--	--	--	--

[1] Well drilled through Coastal Plain sediments and ends in crystalline rock.

Table 4.—Continuous water levels recorded in observation wells in Howard County—Continued

Well number: HO Cf 49
Owner: Manekin Corporation.
Geologic unit: Mount Washington Amphibolite.
Altitude: 180 feet.
Well characteristics: Drilled unused well[1], depth 200 feet, diameter 6 inches.
Period of record: November 1989 to February 1990.
Extremes for period of record: Highest water level recorded, 18.96 feet, February 4, 1990;
Lowest water level recorded. 24.92 feet, December 30-31, 1989.

Water Year October 1989 to September 1990

	October		November		December		January		February		March	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	--	--	--	--	23.53	23.38	24.64	24.40	19.33	19.08	--	--
2	--	--	--	--	23.54	23.27	24.40	24.03	19.09	19.00	--	--
3	--	--	23.73	23.53	23.46	23.30	24.02	23.79	19.22	19.09	--	--
4	--	--	23.77	23.73	23.52	23.45	--	--	19.16	18.96	--	--
5	--	--	23.79	23.77	23.54	23.45	23.60	23.53	19.33	19.17	--	--
6	--	--	23.77	23.71	23.56	23.53	23.51	23.41	19.34	19.28	--	--
7	--	--	23.80	23.75	23.94	23.56	23.46	23.31	19.47	19.29	--	--
8	--	--	23.80	23.73	23.95	23.88	23.31	23.16	19.54	19.47	--	--
9	--	--	23.79	23.70	23.89	23.85	23.17	22.82	19.53	19.49	--	--
10	--	--	23.88	23.76	23.92	23.82	22.81	22.69	19.51	19.40	--	--
11	--	--	23.89	23.78	24.00	23.90	22.70	22.35	19.51	19.41	--	--
12	--	--	24.03	23.77	--	--	22.41	22.32	19.59	19.41	--	--
13	--	--	24.04	23.95	--	--	22.57	22.41	19.59	19.46	--	--
14	--	--	23.96	23.90	24.19	24.11	22.57	22.50	19.67	19.48	--	--
15	--	--	23.94	23.83	24.20	24.01	22.50	22.40	19.68	19.62	--	--
16	--	--	23.82	23.45	24.32	24.10	22.45	22.43	19.67	19.61	--	--
17	--	--	23.44	23.25	24.38	24.32	22.43	22.34	--	--	--	--
18	--	--	23.25	23.13	24.46	24.39	22.41	22.31	--	--	--	--
19	--	--	23.24	23.00	24.47	24.36	22.56	22.41	--	--	--	--
20	--	--	22.99	22.67	24.48	24.36	22.54	22.34	--	--	--	--
21	--	--	23.06	22.74	24.59	24.46	22.40	22.27	--	--	--	--
22	--	--	23.13	23.03	24.70	24.59	22.49	22.40	--	--	--	--
23	--	--	23.15	22.99	24.73	24.70	22.61	22.50	--	--	--	--
24	--	--	23.27	23.15	24.72	24.62	22.64	22.52	--	--	--	--
25	--	--	23.26	23.15	24.62	24.48	22.64	22.23	--	--	--	--
26	--	--	23.25	23.09	24.72	24.43	--	--	--	--	--	--
27	--	--	23.34	23.23	24.78	24.71	21.56	21.06	--	--	--	--
28	--	--	23.28	23.11	24.87	24.68	21.06	20.75	--	--	--	--
29	--	--	23.42	23.28	24.90	24.86	--	--	--	--	--	--
30	--	--	23.41	23.28	24.92	24.83	--	--	--	--	--	--
31	--	--	--	--	24.92	24.64	19.58	19.34	--	--	--	--

[1] Well drilled through Coastal Plain sediments and ends in crystalline rock.

Table 4.—Continuous water levels recorded in observation wells in Howard County—Continued

Well number: HO De 42
Owner: Maryland and Virginia Milk Producers Association.
Geologic unit: Sykesville Formation, gneiss member.
Altitude: 365 feet.
Well characteristics: Drilled unused water-table well, depth 700 feet, diameter 6 inches.
Remarks: Water levels may be affected by nearby pumpage.
Period of record: June 1989 to August 1989.
Extremes for period of record: Highest water level recorded, 18.90 feet, June 13, 1989;
Lowest water level recorded, 20.48 feet, July 31, 1989.

Water Year October 1988 to September 1989

	April		May		June		July		August		September	
Day	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
1	--	--	--	--	--	--	19.49	19.23	20.41	20.29	--	--
2	--	--	--	--	--	--	19.51	19.26	--	--	--	--
3	--	--	--	--	--	--	19.53	19.28	--	--	--	--
4	--	--	--	--	--	--	19.55	19.34	--	--	--	--
5	--	--	--	--	--	--	19.56	19.36	--	--	--	--
6	--	--	--	--	--	--	19.54	19.40	--	--	--	--
7	--	--	--	--	--	--	19.52	19.41	--	--	--	--
8	--	--	--	--	--	--	19.56	19.42	--	--	--	--
9	--	--	--	--	--	--	19.57	19.49	--	--	--	--
10	--	--	--	--	--	--	19.62	19.53	--	--	--	--
11	--	--	--	--	--	--	19.67	19.55	--	--	--	--
12	--	--	--	--	--	--	19.77	19.62	--	--	--	--
13	--	--	--	--	18.99	18.90	19.77	19.64	--	--	--	--
14	--	--	--	--	19.10	18.94	19.83	19.65	--	--	--	--
15	--	--	--	--	19.14	18.96	19.98	19.72	--	--	--	--
16	--	--	--	--	19.21	19.00	19.97	19.82	--	--	--	--
17	--	--	--	--	19.28	19.05	20.03	19.77	--	--	--	--
18	--	--	--	--	19.32	19.11	20.10	19.84	--	--	--	--
19	--	--	--	--	19.36	19.14	20.10	19.89	--	--	--	--
20	--	--	--	--	19.36	19.13	20.07	19.80	--	--	--	--
21	--	--	--	--	19.37	19.18	20.04	19.87	--	--	--	--
22	--	--	--	--	19.37	19.21	20.12	19.99	--	--	--	--
23	--	--	--	--	19.34	19.13	20.15	20.04	--	--	--	--
24	--	--	--	--	19.23	19.14	20.19	20.06	--	--	--	--
25	--	--	--	--	19.20	19.10	20.24	20.09	--	--	--	--
26	--	--	--	--	19.20	19.09	20.26	20.11	--	--	--	--
27	--	--	--	--	19.20	19.09	20.27	20.11	--	--	--	--
28	--	--	--	--	19.25	19.09	20.27	20.07	--	--	--	--
29	--	--	--	--	19.36	19.16	20.42	20.10	--	--	--	--
30	--	--	--	--	19.42	19.22	20.48	20.22	--	--	--	--
31	--	--	--	--	--	--	20.48	20.23	--	--	--	--
Month	--	--	--	--	--	--	20.48	19.23	--	--	--	--

Table 5.—Records of selected springs in Howard County

[ft = feet; gal/min = gallons per minute; -- = data not available]

Spring no.	Owner or name	Altitude of land surface (ft)	Topo-graphic setting	Use of water	Geologic unit	Discharge (gal/min)		Date discharge measured	Im-prove-ments	Other data available
HO Ac 78	Franklin, Elsie	580	W	U	300PLGV	1	E	10-17-1980	H	O
HO Ac 91	--	555	S	-	300PRTB	1	E	09-18-1987	H	--
HO Ad 23	H Thomas Wldlf Mgt Ar	460	W	U	300SKVL	--		--	B	--
HO Ad 48	Erickson	460	S	U	300SKVL	--		--	G	--
HO Bb 50	Bugler, John L	690	W	H	300GLLS	--		--	H	--
HO Bb 60	Burrier, Kenneth	680	W	H,S	300GLLS	--		--	H	--
HO Bc 114	Streaker, William E	520	S	H	300MRGR	3	E	05-09-1980	H	--
HO Bc 142	Debernardo, David	540	U	U	300MRGR	2.5	E	09-24-1980	H	O
HO Bc 176	Walnut Sprgs Nursery	540	V	U	300SKVL	1.1		11-05-1987	R	O,Q
HO Bc 189	Placella, Davina	575	W	H,I	300SKVL	--		--	H	--
HO Bc 264	Maisals, Janeva S	445	W	H	300SKVL	2.6		11-05-1987	G	O,Q
HO Bd 15	University of Md Farm	400	V	H,S	300LCRV	20	E	07 -- 1952	-	--
HO Bd 18	Franciscan Fathers	450	W	R	400BLMR	3.00		11-07-1980	H	O,Q
HO Bd 188	University of Md Farm	355	V	S,T	300CCKV	--		--	H	--
HO Bf 35	Patapsco Valley St Pk	270	S	U	300STRS	5.0		09-24-1980	G	O
HO Bf 80	McGinty, Edward F Jr	280	S	S	300ELCC	--		--	H	--
HO Cd 80	University of Md Farm	414.56	W	U	300LCRV	--		--	N	Q
HO Cd 81	University of Md Farm	414.00	W	U	300LCRV	--		--	N	Q
HO Cd 240	Owings, Harwood	495	W	A	400BLMR	12.0		02-05-1988	H	O,Q
HO Ce 25	W R Grace & Co	385	W	H	300OELL	<1	E	10-19-1955	N	--
HO Ce 28	Woodall, R Earle	350	W	U	300OELL	2.5	E	10-19-1955	N	--
HO Ce 34	Phillips, John W	380	W	H	300OELL	2.5		10-21-1955	T	--
HO Ce 35	Vogel	300	V	-	300OELL	15	E	10-21-1955	N	--
HO Ce 36	Gallagher, V J	400	W	S	300LCRV	4.5	E	11-02-1955	N	--
HO Ce 54	Rouse Associates	380	V	U	300OELL	2	E	10-20-1980	H	O
HO Cf 32	Schnellenger, Ernest	260	S	H	300MWSG	2.00		03-06-1981	B	O
HO Cf 38	Balto Gas & Electric	320	U	H	300MWSG	5	E	04-08-1981	H	O
HO Cg 20	Howard County	155	S	U	300RELY	--		--	C	O
HO Dd 13	Thomas	415	W	U	300LCRV	--		--	H	--

EXPLANATION OF CODES

Topographic setting

S Hillside
U Undulating
V Valley
W Draw

Use of water

A Heat pump
H Domestic
I Irrigation
R Recreation
S Stock
T Institution
U Unused

Discharge

E Estimated

Improvements

B Boxed basin
C Concrete basin
G Gallery
H Spring house
N None
R Pipe
T Trough

Other data available

O Observation spring, see table 6
Q Water quality, see table 10

Geologic Unit

300CCKV Cockeysville Marble
300ELCC Ellicott City Granite
300GLLS Gillis Formation
300LCRV Loch Raven Schist
300MRGR Morgan Run Formation
300MWSG Mount Washington Amphibolite
300OELL Oella Formation
300PLGV Pleasant Grove Schist
300PRTB Prettyboy Schist
300RELY James Run Formation, Relay Gneiss Member
300STRS Setters Formation
300SKVL Sykesville Formation
400BLMR Baltimore Gneiss

Table 6.—Discharge, temperature, pH, and specific conductance of selected springs in Howard County

[gal/min = gallons per minute; deg C = degrees Celsius; µS/cm = microsiemens per centimeter at 25° Celsius; -- = data not collected]

SPRING HO Ac 78
GEOLOGIC UNIT: Pleasant Grove Schist
ALTITUDE: 580 feet

Date	Discharge (gal/min)	Temperature (deg C)	pH (standard units)	Specific conductance (µS/cm)
09-29-1980	--	13.5	7.6	--
10-17-1980	--	14.0	6.6	132
11-10-1980	--	10.0	7.2	140
12-08-1980	--	12.0	6.8	133
02-10-1981	--	1.5	6.1	150
03-06-1981	--	7.0	6.6	120
04-08-1981	--	9.0	6.5	130
05-19-1981	--	10.0	6.6	124
06-12-1981	--	11.0	6.5	126
07-09-1981	--	13.0	6.8	124
08-20-1981	--	10.0	6.0	138

SPRING HO Bc 142
GEOLOGIC UNIT: Morgan Run Formation
ALTITUDE: 540 feet

Date	Discharge (gal/min)	Temperature (deg C)	pH (standard units)	Specific conductance (µS/cm)
09-24-1980	--	13.0	6.8	45
10-10-1980	--	12.5	--	--
10-20-1980	--	13.0	6.9	56
11-10-1980	--	--	6.6	57
12-08-1980	--	12.0	6.8	55
01-07-1981	--	12.0	6.8	55
02-10-1981	--	11.5	6.3	56
03-06-1981	--	11.5	6.2	53
04-08-1981	--	12.0	6.2	55
05-19-1981	--	12.0	6.3	55
06-12-1981	--	12.0	6.4	55
07-09-1981	--	12.0	6.5	58
08-12-1981	--	12.0	6.7	54
09-11-1981	--	12.0	6.7	52

SPRING HO Bc 176
GEOLOGIC UNIT: Sykesville Formation
ALTITUDE: 540 feet

Date	Discharge (gal/min)	Temperature (deg C)	pH (standard units)	Specific conductance (µS/cm)
11-05-1987	1.1	15.0	--	--
11-30-1987	2.5	13.0	--	--
01-06-1988	2.2	9.0	--	--
02-05-1988	2.1	9.5	--	--
03-02-1988	2.0	9.0	--	--
04-01-1988	1.23	--	--	--
05-02-1988	.88	13.0	--	--
06-02-1988	.39	16.0	--	--
07-01-1988	0	--	--	--
08-01-1988	.1	--	--	--
08-31-1988	.01	--	--	--
09-28-1988	.07	--	--	--
10-31-1988	0	--	--	--
11-30-1988	1.6	12.0	--	--
01-30-1989	1.9	9.5	--	--
03-01-1989	1.7	9.0	--	--
04-06-1989	1.3	12.0	6.9	167
05-04-1989	1.3	13.5	6.7	155
05-30-1989	1.4	15.0	6.8	173
07-03-1989	1.2	18.0	6.7	184
08-02-1989	.4	19.0	7.4	229
09-01-1989	.3	20.0	7.2	226
09-28-1989	.38	16.5	7.3	174
11-02-1989	.67	14.0	6.5	197
12-01-1989	.63	10.0	6.9	202
01-02-1990	.67	7.0	7.0	180
01-31-1990	.67	9.0	7.0	179
03-02-1990	.4	8.0	6.9	186
04-02-1990	.49	11.0	6.7	307

Table 6.—Discharge, temperature, pH, and specific conductance of selected springs in Howard County—Continued

SPRING HO Bc 264
GEOLOGIC UNIT: Sykesville Formation
ALTITUDE: 445 feet

Date	Discharge (gal/min)	Temperature (deg C)	pH (standard units)	Specific conductance (µS/cm)
11-05-1987	2.6	12.0	--	--
11-30-1987	7.9	12.0	--	--
01-06-1988	3.8	10.0	--	--
02-05-1988	8.0	10.0	--	--
03-02-1988	5.4	9.5	--	--
04-01-1988	3.4	--	--	--
05-02-1988	5.0	10.0	--	--
06-02-1988	8.3	11.0	--	--
07-01-1988	4.05	12.0	--	--
08-01-1988	2.3	13.0	--	--
08-31-1988	2.9	13.5	--	--
09-28-1988	2.1	14.0	--	--
11-03-1988	1.9	11.5	--	--
12-02-1988	2.2	10.5	--	--
01-02-1989	2.0	9.0	--	--
02-01-1989	2.4	9.5	--	--
03-01-1989	3.8	9.0	--	--
04-06-1989	6.0	10.0	6.1	302
05-04-1989	4.6	10.5	5.6	328
05-31-1989	6.3	11.5	5.8	336
07-03-1989	7.7	12.5	5.5	357
08-02-1989	4.6	13.0	6.4	403
09-01-1989	3.2	13.5	6.6	334
09-28-1989	3.3	13.0	6.7	264
10-25-1989	3.5	12.0	5.4	334
12-01-1989	3.2	10.5	6.1	350
01-02-1990	4.0	9.5	5.8	350
01-31-1990	8.6	10.0	5.9	291
03-02-1990	4.1	9.5	6.1	341
04-02-1990	5.2	10.0	5.8	340

SPRING HO Bd 18
GEOLOGIC UNIT: Baltimore Gneiss
ALTITUDE: 450 feet

Date	Discharge (gal/min)	Temperature (deg C)	pH (standard units)	Specific conductance (µS/cm)
10-02-1980	--	13.0	8.7	131
11-07-1980	3.0	12.0	7.4	275
12-08-1980	4.0	11.0	6.5	143
01-07-1981	--	--	6.9	151
02-10-1981	--	11.0	6.2	320
03-06-1981	--	11.0	6.4	250
04-08-1981	5.0	12.0	6.2	151
05-19-1981	6.0	12.0	6.2	152
06-12-1981	--	16.0	6.5	153
07-09-1981	20.0	15.0	6.6	270
08-14-1981	12.0	14.0	6.8	272
09-11-1981	24.0	15.0	6.9	260
10-05-1981	15.0	13.0	6.8	250

SPRING HO Bf 35
GEOLOGIC UNIT: Setters Formation
ALTITUDE: 270 feet

Date	Discharge (gal/min)	Temperature (deg C)	pH (standard units)	Specific conductance (µS/cm)
09-24-1980	5.0	16.0	6.7	122
10-17-1980	4.0	13.5	6.7	130
11-07-1980	3.9	11.0	6.5	120
12-30-1980	3.0	6.0	6.9	132
01-08-1981	3.0	4.0	6.3	132
02-10-1981	3.0	3.5	6.3	142
03-06-1981	3.5	4.5	6.0	126
04-08-1981	4.0	7.5	6.0	134
05-19-1981	3.8	11.0	6.2	134
06-12-1981	3.5	15.0	6.3	146
07-09-1981	5.0	15.0	6.3	140
08-11-1981	5.0	17.0	6.1	132
09-11-1981	5.0	16.0	6.3	134

Table 6.—Discharge, temperature, pH, and specific conductance of selected springs in Howard County—Continued

SPRING HO Cd 240
GEOLOGIC UNIT: Baltimore Gneiss
ALTITUDE: 495 feet

Date	Discharge (gal/min)	Temperature (deg C)	pH (standard units)	Specific conductance (µS/cm)
02-05-1988	12.0	13.0	--	--
03-02-1988	13.3	12.0	--	--
04-01-1988	12.0	--	--	--
05-02-1988	8.6	12.0	--	--
06-02-1988	10.0	12.0	--	--
07-01-1988	10.0	13.0	--	--
08-03-1988	6.0	14.0	--	--
08-31-1988	7.5	13.0	--	--
09-28-1988	4.4	13.0	--	--
11-03-1988	6.4	13.0	--	--
12-02-1988	5.7	12.0	--	--
01-02-1989	5.0	12.5	--	--
02-01-1989	7.5	12.5	--	--
03-01-1989	10.9	12.0	--	--
04-06-1989	10.0	12.0	6.1	83
05-03-1989	10.0	12.5	5.5	80
05-31-1989	13.0	13.0	5.4	96
07-03-1989	14.3	13.0	5.5	103
08-02-1989	12.0	13.5	6.2	72
09-01-1989	5.5	13.5	6.5	83
09-28-1989	5.5	13.0	6.7	72
10-25-1989	4.3	13.0	5.7	78
12-01-1989	12.0	12.5	5.7	102
01-02-1990	12.8	12.5	6.1	83
01-31-1990	13.3	12.0	6.0	80
03-02-1990	15.0	12.0	5.7	83
04-02-1990	8.6	12.5	6.1	80

SPRING HO Ce 54
GEOLOGIC UNIT: Oella Formation
ALTITUDE: 380 feet

Date	Discharge (gal/min)	Temperature (deg C)	pH (standard units)	Specific conductance (µS/cm)
09-25-1980	--	12.5	6.5	41
10-20-1980	--	12.5	6.0	49
11-10-1980	--	12.0	6.6	39
12-08-1980	--	11.5	6.3	40
01-08-1981	--	3.5	6.6	41
02-10-1981	--	9.0	6.7	40
03-06-1981	--	9.5	5.9	36
04-08-1981	--	10.0	6.3	37
05-19-1981	--	10.0	5.8	36
06-12-1981	--	11.0	6.3	38
07-09-1981	--	10.0	6.1	40
08-20-1981	--	--	5.5	43
09-11-1981	--	13.0	6.3	37

SPRING HO Cf 32
GEOLOGIC UNIT: Mount Washington Amphibolite
ALTITUDE: 260 feet

Date	Discharge (gal/min)	Temperature (deg C)	pH (standard units)	Specific conductance (µS/cm)
09-22-1980	--	13.5	7.6	235
10-20-1980	--	11.5	6.6	240
11-07-1980	--	11.0	6.4	255
12-08-1980	--	11.5	5.9	240
01-07-1981	--	9.0	6.4	240
02-10-1981	--	4.0	6.8	250
03-06-1981	2.0	9.0	6.1	230
04-08-1981	--	12.0	6.2	235
05-19-1981	--	11.0	6.7	230
06-12-1981	--	13.0	6.7	235
07-09-1981	--	14.0	6.7	235
08-13-1981	--	11.0	5.7	220
09-11-1981	--	11.0	6.8	235

Table 6.—Discharge, temperature, pH, and specific conductance of selected springs in Howard County—Continued

SPRING HO Cf 38
GEOLOGIC UNIT: Mount Washington Amphibolite
ALTITUDE: 320 feet

Date	Discharge (gal/min)	Temperature (deg C)	pH (standard units)	Specific conductance (µS/cm)
02-16-1981	--	--	--	155
03-12-1981	--	11.0	6.2	--
04-08-1981	--	13.0	6.0	154
05-19-1981	--	12.5	6.4	156
06-12-1981	--	13.5	6.6	154
07-09-1981	--	14.0	6.9	155
08-12-1981	--	12.0	5.6	170
09-11-1981	--	12.0	6.7	152
10-05-1981	--	12.0	6.3	148
11-04-1981	--	13.0	6.4	152
12-09-1981	--	12.0	6.2	151
01-12-1982	--	10.0	6.9	151
02-16-1982	--	--	6.8	--
03-17-1982	--	12.0	6.6	154

SPRING HO Cg 20
GEOLOGIC UNIT: James Run Formation, Relay Gneiss member
ALTITUDE: 155 feet

Date	Discharge (gal/min)	Temperature (deg C)	pH (standard units)	Specific conductance (µS/cm)
09-24-1980	--	15.5	6.3	139
10-20-1980	--	14.5	5.9	157
11-07-1980	--	--	5.9	151
12-08-1980	--	11.5	6.1	142
01-07-1981	--	9.0	6.6	144
02-10-1981	--	8.0	6.4	152
03-06-1981	--	8.5	6.1	136
04-08-1981	--	10.0	5.9	148
06-12-1981	--	14.0	6.2	140
07-09-1991	--	14.0	6.2	140
08-12-1981	--	14.0	5.5	143
09-11-1981	--	15.0	5.9	143

Table 7.—Streamflow and drainage-basin characteristics for gaging stations in Howard County

[° = degrees; ′ = minutes; ″ = seconds; mi² = square miles; mi = miles; ft = feet; ft/mi = feet per mile; ft³/s = cubic feet per second; K = peak flow; L = low flow; Q = water quality; C = continuous; R = regulated; W = Maryland Water Resources Administration; WY = water year, October 1 to September 30; -- = not determined]

Station no.	Station name	Period of record (WY)	Type of record	Latitude Longitude (°	′	″)	Drainage area (mi^2)	Main channel length (mi)	Mean basin altitude (ft)
01587050	Hay Meadow Branch tributary at Poplar Springs	1966-76	K	39 77	20 06	55 02	0.54	1.1	723
01587070	South Branch Patapsco River at Woodbine	1975-79, 88-90 1989-90	L Q	39 77	21 04	44 00	11.4	6.5	700
01587500	South Branch Patapsco River at Henryton	1948-80 1954-55, 60, 1963-80, 89 1988-90	C Q L	39 76	21 54	05 50	64.4	16.4	642
01588500	Patapsco River at Woodstock	1897-1908	C	39 76	19 52	54 18	251	--	--
01589000	Patapsco River at Hollofield	1944-present 1970-83, 89 1954-present	C Q R	39 76	18 47	36 34	285	--	--
01589040	Rockburn Branch at Elkridge	1988-90 1989-90	L Q	39 76	13 43	30 12	3.69	5.0	307
01589050	Patapsco River at Elkridge	1964-67	W	39 76	13 42	05 23	--	--	--
01589080	Deep Run at Hanover	1975-79, 88-90 1989-90	L Q	39 76	11 43	24 12	18.0	9.0	207
01590800	Patuxent River at Mullinix	1988-90 1989-90	L Q	39 77	17 08	40 42	10.7	5.1	765
01590900	Cabin Branch near Florence	1975-79,88-90 1989-90	L Q	39 77	16 06	36 20	8.36	6.4	639
01591000	Patuxent River at Unity	1944-present 1985-present	C Q	39 77	14 03	18 23	34.8	12.5	589
01591200	Cattail Creek tributary at Carrs Mill	1956-66, 88-90 1989-90	L Q	39 77	18 03	57 41	3.93	3.2	623
01591350	Cattail Creek near Cooksville	1977-81 1988-90 1989-90	C L Q	39 77	18 03	50 15	8.37	4.2	603
01591375	Cattail Creek tributary at Daisy	1977-82, 88-90 1989-90	L Q	39 77	17 03	58 52	3.12	3.9	597
01591400	Cattail Creek near Glenwood[1]	1978-present 1989-90	C Q	39 77	15 03	21 05	22.9	8.8	563
01591475	Dorsey Branch near Knollwood	1964, 88-90 1989-90	L Q	39 77	15 02	41 17	3.78	3.0	547
01591500	Cattail Creek at Roxbury Mills	1944-56	C	39 77	15 02	17 43	27.7	8.9	559
01591610	Patuxent River below Brighton Dam near Brighton	1981-present 1989	C,R Q	39 77	11 00	31 16	78.6	17.7	--
01592000	Patuxent River near Burtonsville	1911-12 1913-45	C	30 76	07 55	47 04	127	28.5	508
01592500	Patuxent River near Laurel	1945-present	C,R	39 76	06 52	56 27	132	31.8	--
01593200	Little Patuxent River at Pine Orchard	1956-66, 88-90 1989-90	L Q	39 76	16 51	42 11	7.03	7.3	481
01593300	Red Hill Branch near Columbia	1988-90 1989-90	L Q	39 76	14 50	44 43	5.98	4.6	405

[1] Formerly published as Cattail Creek at Roxbury Mills Road at Roxbury Mills, 1978-83.

Slope of main channel (ft/mi)	Slope of main channel (percent)	Area of lakes (percent)	Forested area (percent)	Discharge of record (ft^3/s) Maximum	Date of maximum	Minimum	Average discharge (ft^3/s)	Station no.
104	1.97	0	1.0	630	9/11/71	--	--	01587050
38.7	.73	.16	29.3	--	--	--	--	01587070
26.2	.50	.12	25.8	26,900	6/22/72	0.40	75	01587500
--	--	--	--	11,000	2/26/08	44.0	373	01588500
--	--	--	--	80,600	6/22/72	6.0	--	01589000
64.6	1.22	.08	42.5	--	--	--	--	01589040
--	--	--	--	--	--	--	--	01589050
45.2	.86	.05	51.6	--	--	--	--	01589080
85.8	1.63	.15	28.0	--	--	--	--	01590800
38.5	.73	.16	26.7	--	--	--	--	01590900
28.2	.53	.19	35.3	21,800	9/11/71	.20	39	01591000
69.3	1.31	.38	13.2	--	--	--	--	01591200
64.5	1.22	.38	17.0	2,460	9/ 6/79	1.2	11.8	01591350
59.5	1.13	.34	21.4	--	--	--	--	01591375
28.0	.53	.47	19.5	4,040	2/12/85	1.8	24.9	01591400
65.0	1.23	.18	18.1	--	--	--	--	01591475
26.2	.50	.43	18.0	10,100	7/21/56	2.9	28.6	01591500
--	--	--	--	17,800	6/22/72	2.1	--	01591610
17.7	.34	--	--	11,000	8/24/33	4.6	124	01592000
--	--	--	--	26,000	6/22/72	.05	--	01592500
31.2	0 .59	0 .08	25.4	--	--	--	--	01593200
25.0	.47	.09	9.8	--	--	--	--	01593300

Table 7.—Streamflow and drainage-basin characteristics for gaging stations in Howard County—Continued

Station no.	Station name	Period of record (WY)	Type of record	Latitude (°	'	")	Longitude (°	'	")	Drainage area (mi^2)	Main channel length (mi)	Mean basin altitude (ft)
01593350	Little Patuxent River tributary at Guilford Downs	1966-76	K	39	13	39	76	50	41	0.95	1.8	422
01593500	Little Patuxent River at Guilford	1932-present 1989	C Q	39	10	04	76	51	07	38.0	16.1	409
01593600	Middle Patuxent River near West Friendship	1956-66, 88-90 1989-90	L Q	39	17	14	76	57	33	11.4	5.4	557
01593650	Middle Patuxent River tributary near Dayton	1977-82	L	39	14	12	76	56	27	4.25	4.1	496
01593675	Middle Patuxent River tributary near Columbia	1988-90 1989	L Q	39	14	02	76	55	04	9.12	5.7	462
01593700	Middle Patuxent River tributary near Clarksville	1977-82, 88-90 1989-90	L Q	39	12	00	76	55	12	6.24	4.3	455
01593710	Middle Patuxent River near Simpsonville	1988-present 1989	C Q	39	11	48	76	53	59	48.4	15.5	479
01594000	Little Patuxent River at Savage	1940-58 1976-80 1986-present 1959-66,68, 72,75 1985-present	C K Q	39	08	06	76	48	58	98.4	24.4	439
01594100	Hammond Branch at Scaggsville	1956-66	L	39	09	13	76	53	35	3.01	3.4	446
01594200	Hammond Branch near Laurel	1988-90 1989	L Q	39	07	23	76	49	31	6.83	8.7	378
01594395	Dorsey Run at Jessup	1964, 89-91 1989	L Q	39	08	57	76	47	14	6.59	5.6	308

Slope of main channel (ft/mi)	Slope of main channel (percent)	Area of lakes (percent)	Forested area (percent)	Discharge of record (ft^3/s) Maximum	Discharge of record (ft^3/s) date of maximum	Discharge of record (ft^3/s) Minimum	Average discharge (ft^3/s)	Station no.
80.6	1.53	.04	2.3	620	6/22/72	--	--	01593350
22.1	.42	.52	18.7	12,400	6/22/72	0	42.7	01593500
37.3	.71	.21	18.9	--	--	--	--	01593600
59.4	1.13	.34	30.3	--	--	--	--	01593650
41.9	.79	.25	25.4	--	--	--	--	01593675
44.1	.84	.39	20.6	--	--	--	--	01593700
17.4	.33	.22	25.8	2,340	1/20/88	6.6	--	01593710
9.80	.19	.34	24.4	35,400	6/22/72	7.0	106	01594000
42.5	.80	.14	15.7	--	--	--	--	01594100
35.9	.68	.27	26.2	--	--	--	--	01594200
41.5	.79	.36	24.9	--	--	--	--	01594395

Table 8.—Monthly and annual flow statistics for continuous-record streamflow-gaging stations in Howard County

[All values are in cubic feet per second; water year = October 1 to September 30]

Station: 01587500 South Branch Patapsco River at Henryton
Period of record: August 1948 to September 1980 (32 water years)

	October	November	December	January	February	March	April
Minimum	12.8	16.8	16.3	17.8	43.8	55.0	42.4
Mean	47.7	53.2	72.6	88.6	103	113	105
Median	31.9	39.1	57.5	62.4	87.2	114	101
Maximum	253	139	176	236	258	184	254

	May	June	July	August	September	Annual
Minimum	32.3	21.3	10.6	6.82	8.98	34.5
Mean	88.9	75.4	50.9	47.6	55.4	74.9
Median	76.3	59.9	44.1	34.2	36.6	65.6
Maximum	254	521	162	180	343	163

Station: 01588500 Patapsco River at Woodstock
Period of record: August 1896 to March 1909 (12 water years)

	October	November	December	January	February	March	April
Minimum	137	136	156	200	234	332	189
Mean	256	258	414	420	619	667	497
Median	174	250	372	410	520	613	449
Maximum	830	558	906	902	1,336	1,158	982

	May	June	July	August	September	Annual
Minimum	145	120	174	114	106	257
Mean	381	374	355	390	213	412
Median	368	290	298	331	226	407
Maximum	575	1,272	766	1,093	383	799

Station: 01589000 Patapsco River at Hollofield
Period of record: May 1944 to present (46 water years)

	October	November	December	January	February	March	April
Minimum	14.7	35.2	32.7	33.3	92.0	74.3	85.3
Mean	120	144	192	218	268	285	285
Median	65.6	95.5	139	166	172	238	214
Maximum	857	590	675	770	724	804	1,071

	May	June	July	August	September	Annual
Minimum	58.3	33.5	22.4	20.1	19.4	64.3
Mean	260	228	155	120	141	202
Median	218	146	89.9	76.2	80.4	153
Maximum	1,102	2,024	601	516	1,493	524

Station: 01591000 Patuxent River near Unity
Period of record: July 1944 to present (46 water years)

	October	November	December	January	February	March	April
Minimum	4.19	9.09	8.51	10.0	19.6	23.9	21.6
Mean	21.2	27.5	38.4	44.9	55.2	58.5	56.8
Median	14.3	21.0	29.5	37.4	51.1	55.0	49.4
Maximum	150	82.8	106	135	152	104	150

	May	June	July	August	September	Annual
Minimum	15.2	8.75	4.15	2.79	4.51	19.8
Mean	50.5	37.5	27.0	22.5	27.3	38.9
Median	42.0	30.6	22.9	14.8	16.4	35.5
Maximum	141	206	102	120	214	82.3

Station: 01591400 Cattail Creek near Glenwood[1]
Period of record: June 1978 to present (12 water years)

	October	November	December	January	February	March	April
Minimum	3.73	5.96	9.24	8.38	20.1	14.5	14.9
Mean	16.8	20.0	25.1	27.8	40.8	33.0	34.5
Median	10.1	17.8	18.5	22.2	30.1	27.5	27.2
Maximum	76.6	37.9	83.1	83.0	103	58.7	90.6

	May	June	July	August	September	Annual
Minimum	14.1	6.96	4.23	5.29	4.67	13.1
Mean	34.6	22.9	16.5	13.0	16.1	24.8
Median	29.7	21.6	15.9	10.4	7.68	23.1
Maximum	92.5	38.4	31.5	30.7	81.6	42.0

Table 8.—Monthly and annual flow statistics for continuous-record streamflow-gaging stations in Howard County—Continued

Station: 01591500 Cattail Creek at Roxbury Mills
Period of record: July 1944 to September 1956 (12 water years)

	October	November	December	January	February	March	April
Minimum	7.09	9.72	14.8	11.1	17.2	24.6	16.8
Mean	15.5	23.6	30.8	34.0	41.2	38.8	33.7
Median	15.7	21.9	27.0	33.5	41.6	37.3	29.4
Maximum	25.9	51.0	59.3	70.3	64.8	70.1	76.8

	May	June	July	August	September	Annual
Minimum	11.3	10.2	6.93	5.73	4.16	18.1
Mean	32.9	29.6	25.9	20.3	16.3	28.6
Median	29.1	25.0	20.3	17.8	15.2	26.6
Maximum	80.4	59.8	57.9	51.6	36.0	41.8

Station: 01591610 Patuxent River below Brighton Dam near Brighton
Period of record: October 1980 to present (10 water years)

	October	November	December	January	February	March	April
Minimum	7.87	17.1	24.2	9.33	10.1	8.90	8.49
Mean	58.0	44.0	85.3	54.9	69.7	86.8	118
Median	48.7	38.6	52.5	45.4	58.5	80.4	97.3
Maximum	117	82.1	373	157	142	205	261

	May	June	July	August	September	Annual
Minimum	8.63	22.4	49.2	18.1	34.6	48.7
Mean	104	76.2	60.2	65.1	79.6	75.2
Median	79.6	64.6	62.6	64.0	63.0	62.6
Maximum	229	170	66.9	86.4	205	134

Station: 01592000 Patuxent River near Burtonsville
Period of record: July 1913 to February 1945 (31 water years)

	October	November	December	January	February	March	April
Minimum	11.0	19.4	35.1	40.4	36.8	64.6	73.2
Mean	81.7	97.3	106	148	193	183	181
Median	69.2	88.3	108	142	168	164	163
Maximum	273	266	170	375	414	347	341

	May	June	July	August	September	Annual
Minimum	62.2	45.4	20.9	10.4	9.37	51.7
Mean	138	109	88.7	96.7	74.0	124
Median	125	89.9	79.7	73.4	59.9	121
Maximum	319	351	247	352	231	201

Station: 01592500 Patuxent River near Laurel
Period of record: October 1944 to present (46 water years)

	October	November	December	January	February	March	April
Minimum	7.76	7.21	8.45	7.84	7.92	7.88	7.47
Mean	43.5	53.5	76.6	104	120	126	137
Median	19.1	18.3	37.8	65.3	79.4	113	121
Maximum	379	272	390	480	462	373	444

	May	June	July	August	September	Annual
Minimum	9.04	7.88	7.81	5.72	4.91	9.09
Mean	120	92.2	64.2	51.5	68.2	87.6
Median	89.2	54.7	32.3	22.9	19.5	73.6
Maximum	397	822	280	226	587	241

Station: 01593500 Little Patuxent River at Guilford
Period of record: April 1932 to present (58 water years)

	October	November	December	January	February	March	April
Minimum	5.90	9.31	11.6	12.9	19.7	24.9	21.0
Mean	26.0	36.1	43.1	51.2	61.3	61.4	59.2
Median	18.3	29.3	35.6	45.2	56.9	57.9	50.3
Maximum	107	108	119	145	147	123	160

	May	June	July	August	September	Annual
Minimum	15.7	9.32	6.66	4.91	3.88	23.3
Mean	50.2	39.1	29.7	27.9	31.2	43.1
Median	43.1	29.7	25.2	20.3	16.8	39.7
Maximum	197	265	119	130	214	93.7

Table 8.—Monthly and annual flow statistics for continuous-record streamflow-gaging stations in Howard County—Continued

Station: 01594000 Little Patuxent River at Savage
Period of record: October 1939 to September 1958, October 1975 to September 1980, and May 1985 to present (29 water years)

	October	November	December	January	February	March	April
Minimum	14.7	22.5	35.8	34.0	57.7	85.3	60.0
Mean	73.0	92.3	111	143	142	152	138
Median	49.2	83.4	97.7	125	134	135	124
Maximum	336	228	260	386	375	308	351

	May	June	July	August	September	Annual
Minimum	39.5	25.5	21.9	15.1	12.8	59.3
Mean	130	96.8	78.3	64.7	69.1	107
Median	113	75.5	64.4	46.5	43.0	95.7
Maximum	367	294	312	315	432	196

[1] Formerly published as Cattail Creek at Roxbury Mills Road at Roxbury Mills, 1978-83.

Table 9.—Discharge measurements at partial-record streamflow-gaging stations in Howard County

[Discharge is in cubic feet per second. An asterisk (*) indicates annual peak flow in water year. Lat = latitude; long = longitude; mi = mile; ° = degrees; ′ = minutes; ″ = seconds]

Location	Date	Discharge	Date	Discharge
01587050 Hay Meadow Branch tributary at Poplar Springs				
Lat 39°20′55″, long 77°06′02″, Hydrologic Unit 02060003, at upstream side of culvert on U.S. Highway 40, 0.4 mi northwest of Poplar Springs, and 0.5 mi above mouth.	Sept. 14, 1966	50 *	June 21, 1972	190 *
	Aug. 27, 1967	190 *	June 4, 1973	80 *
	Sept. 10, 1968	120 *	Aug. 19, 1974	65 *
	July 26, 1969	160 *	Sept. 26, 1975	170 *
	July 20, 1970	74 *	Jan. 1, 1976	84 *
	Sept. 11, 1971	630 *		
01587070 South Branch Patapsco River at Woodbine				
Lat 39°21′44″, long 77°04′00″, Hydrologic Unit 02060003, at bridge on county highway, 0.1 mi upstream from Gillis Falls, and 0.3 mi west of Woodbine.	Nov. 11, 1974	3.39	Oct. 20, 1987	5.32
	July 31, 1975	5.96	Nov. 9, 1987	4.99
	Nov. 19, 1975	16.5	March 19, 1988	10.2
	April 20, 1976	12.2	July 1, 1988	7.12
	July 28, 1976	6.35	Aug. 18, 1988	3.57
	Aug. 24, 1976	4.23	Oct. 13, 1988	3.03
	Aug. 5, 1977	2.45	Dec. 5, 1988	4.45
	Sept. 21, 1977	2.14	Dec. 20, 1988	3.79
	Sept. 11, 1978	4.69	April 26, 1989	10.3
	Nov. 3, 1978	3.56	Oct. 6, 1989	5.48
	May 1, 1979	12.0		
01587500 South Branch Patapsco River at Henryton[1]				
Lat 39°21′05″, long 76°54′50″, Hydrologic Unit 02060003, at downstream side of bridge on Henryton Road at Henryton, 1.3 mi upstream from Piney Run, and 3.2 mi southeast of Sykesville.	Oct. 19, 1987	29.5	Dec. 15, 1988	31.6
	Nov. 9, 1987	30.3	Dec. 20, 1988	24.7
	Nov. 24, 1987	44.2	April 26, 1989	61.7
	March 1, 1988	72.2	Sept. 8, 1989	35.4
	March 11, 1989	76.1	Oct. 16, 1989	41.9
	March 18, 1989	71.2	March 8, 1990	55.4
	June 30, 1989	40.3	March 28, 1990	66.9
	Aug. 17, 1989	18.5	April 27, 1990	73.3
	Sept. 12, 1989	23.2	June 27, 1990	47.3
	Oct. 14, 1989	19.5		
01589040 Rockburn Branch at Elkridge				
Lat 39°13′30″, long 76°43′12″, Hydrologic Unit 02060003, at bridge on Levering Avenue, 0.1 mi upstream from mouth, and 0.8 mi west of Elkridge.	Oct. 19, 1987	.63	Dec. 4, 1988	1.30
	Nov. 9, 1987	.99	Dec. 19, 1988	1.05
	March 1, 1988	3.69	April 25, 1989	3.42
	March 18, 1988	3.26	Sept. 8, 1989	1.44
	June 30, 1988	.92	March 8, 1990	3.32
	Aug. 17, 1988	.33	March 28, 1990	3.67
	Sept. 12, 1988	.48	April 27, 1990	3.64
	Oct. 14, 1988	.43	June 27, 1990	1.68
01589050 Patapsco River at Elkridge				
Lat 39°13′05″, long 76°42′23″, Hydrologic Unit 02060003, at U.S. Highway 1 bridge at Elkridge, 0.7 mi upstream from Deep Run, and 17.4 mi upstream from mouth.	March 16, 1964	179.	Sept. 30, 1965	24.8
	June 4, 1964	89.8	Nov. 12, 1965	38.0
	June 23, 1964	98.8	June 23, 1966	35.4
	July 20, 1964	73.6	Aug. 4, 1966	18.7
	Sept. 24, 1964	20.6	Oct. 26, 1966	70.4
	June 23, 1965	89.8	Jan. 23, 1967	99.2
	Aug. 18, 1965	22.0		
01589080 Deep Run at Hanover				
Lat 39°11′24″, long 76°43′12″, Hydrologic Unit 02060003, at bridge on county highway, 0.3 mi southeast of Hanover, and 2.4 mi upstream from mouth.	Aug. 21, 1975	5.66	Oct. 19, 1987	2.59
	Nov. 3, 1975	11.3	Nov. 9, 1987	4.63
	March 8, 1976	12.8	March 1, 1988	12.9
	July 28, 1976	4.30	March 18, 1988	10.3
	Aug. 23, 1976	3.40	June 30, 1988	2.27
	June 7, 1977	4.34	Aug. 17, 1988	.78
	July 11, 1977	2.75	Oct. 14, 1988	1.76
	Sept. 16, 1977	1.72	Dec. 4, 1988	5.49
	Sept. 12, 1978	3.33	Dec. 19, 1988	5.19
	Nov. 6, 1978	3.81	April 25, 1989	12.5
	May 1, 1979	16.8	Oct. 16, 1989	5.53
01590800 Patuxent River at Mullinix				
Lat 39°17′40″, long 77°08′42″, Hydrologic Unit 02060006, at bridge on Mullinix Mill Road, 0.8 mi upstream from Scott Branch, and 3.1 mi east of Damascus.	Oct. 20, 1987	4.30	Dec. 20, 1988	2.52
	Nov. 9, 1987	4.62	April 26, 1989	10.9
	March 2, 1988	12.5	Oct. 5, 1989	2.65
	March 19, 1988	10.4	March 8, 1990	8.20
	July 1, 1988	5.92	March 29, 1990	10.8
	Aug. 18, 1988	1.32	April 27, 1990	11.6
	Oct. 13, 1988	1.48	June 27, 1990	4.95
	Dec. 5, 1988	3.18		

[1] Operated as a continuous-record gaging station from August 1948, to September 1980.

Table 9.—Discharge measurements at partial-record streamflow-gaging stations in Howard County–Continued

Location	Date	Discharge	Date	Discharge
	01590900 Cabin Branch near Florence			
Lat 39°16'36", long 77°06'20", Hydrologic Unit 02060006, at bridge on light duty road, 0.9 mi upstream from mouth, and 2.3 mi south of Florence.	Aug. 4, 1975	5.24	Oct. 20, 1987	3.38
	Sept. 16, 1975	4.99	Nov. 9, 1987	3.69
	Nov. 17, 1975	13.3	March 2, 1988	8.08
	March 8, 1976	13.0	March 19, 1988	7.04
	Aug. 5, 1976	4.10	July 1, 1988	5.23
	Aug. 24, 1976	2.83	Oct. 13, 1988	2.31
	Aug. 5, 1977	2.15	Dec. 5, 1988	3.97
	Sept. 22, 1977	1.50	Dec. 20, 1988	3.38
	Sept. 21, 1978	5.03	April 26, 1989	6.80
	Nov. 7, 1978	4.24	Oct. 13, 1989	3.97
	May 3, 1979	10.3		
	01591200 Cattail Creek tributary at Carrs Mill			
Lat 39°18'57", long 77°03'41", Hydrologic Unit 02060006, at bridge on Daisy Road, 0.3 mi upstream from mouth, and 0.5 mi west of Carrs Mill.	May 26, 1956	2.47	July 20, 1966	.49
	May 6, 1957	2.96	Sept. 13, 1966	.16
	Aug. 22, 1957	.65	Oct. 20, 1987	1.32
	Dec. 20, 1957	4.76	Nov. 9, 1987	1.65
	May 19, 1958	5.64	March 2, 1988	3.87
	June 6, 1958	3.79	March 19, 1988	3.19
	Sept. 9, 1958	2.08	July 1, 1988	2.31
	May 12, 1959	1.91	Aug. 18, 1988	1.17
	Sept. 25, 1959	1.32	Oct. 13, 1988	1.10
	Sept. 6, 1961	1.85	Dec. 20, 1988	1.53
	July 13, 1962	1.49	April 26, 1989	2.85
	July 23, 1963	.65	Oct. 13, 1989	1.83
	Sept. 28, 1963	.48		
	01591350 Cattail Creek near Cooksville[2]			
Lat 39°18'50", long 77°03'15", Hydrologic Unit 02060006, at upstream side of bridge on Bushy Park Road, 0.1 mi west of intersection of Carrs Mill Road, 2.3 mi west of Cooksville, and 6.8 mi upstream from mouth.	June 25, 1980	6.65	July 1, 1988	4.69
	Aug. 8, 1980	3.95	Aug. 18, 1988	2.33
	Sept. 3, 1980	2.85	Oct. 13, 1988	2.48
	Oct. 20, 1987	3.21	Dec. 20, 1988	3.64
	Nov. 9, 1987	3.92	April 26, 1989	6.31
	March 2, 1988	7.87	Oct. 16, 1989	4.28
	March 19, 1988	7.39		
	01591375 Cattail Creek tributary at Daisy			
Lat 39°17'58", long 77°03'52", Hydrologic Unit 02060006, at bridge on Daisy Road, 0.3 mi upstream from mouth, and 0.5 mi north of Daisy.	May 31, 1977	1.50	Sept. 14, 1982	.52
	Aug. 4, 1977	.94	Oct. 20, 1987	1.55
	Sept. 15, 1977	.77	Nov. 9, 1987	1.24
	Sept. 21, 1978	2.05	March 2, 1988	3.01
	Nov. 7, 1978	1.83	March 19, 1988	2.71
	May 3, 1979	3.38	July 1, 1988	1.27
	May 15, 1980	2.15	Aug. 18, 1988	.73
	June 24, 1980	3.11	Oct. 13, 1988	1.20
	Sept. 2, 1980	.97	Dec. 5, 1988	1.61
	March 27, 1981	1.95	Dec. 20, 1988	1.51
	Aug. 27, 1981	.53	April 26, 1989	2.59
	May 17, 1982	1.59	Oct. 13, 1989	1.67
	01591475 Dorsey Branch near Knollwood			
Lat 39°15'41", long 77°02'17", Hydrologic Unit 02060006, at bridge on Roxbury Road, 0.4 mi upstream from mouth, and 0.8 mi west of Knollwood.	Oct. 22, 1963	0.75	Oct. 13, 1988	1.13
	March 26, 1964	4.95	Dec. 5, 1988	2.10
	Oct. 20, 1987	1.54	Dec. 20, 1988	1.53
	Nov. 9, 1987	1.80	April 26, 1989	3.38
	March 2, 1988	3.74	Oct. 13, 1989	2.10
	March 19, 1988	3.37	March 8, 1990	3.41
	July 1, 1988	1.61	March 29, 1990	3.30
	Aug. 18, 1988	1.25	April 27, 1990	3.60
	Sept. 12, 1988	1.13	June 27, 1990	2.38

[2] Operated as a continuous-record gaging station from April 1977, to September 1981.

Table 9.—Discharge measurements at partial-record streamflow-gaging stations in Howard County–Continued

Location	Date	Discharge	Date	Discharge
01593200 Little Patuxent River at Pine Orchard				
Lat 39°16'42", long 76°51'11", Hydrologic Unit 02060006, at bridge on U.S. Highway 40, 0.4 mi east of Pine Orchard, and 2.4 mi upstream from Red Hill Branch.	May 26, 1956	4.20	Nov. 26, 1963	3.35
	May 6, 1957	4.71	July 20, 1966	1.14
	Aug. 22, 1957	1.40	Sept. 13, 1966	.83
	Dec. 20, 1957	8.63	Oct. 20, 1987	1.12
	May 19, 1958	8.26	Nov. 9, 1987	2.70
	June 6, 1958	5.95	March 2, 1988	6.38
	Sept. 9, 1958	3.05	July 1, 1988	1.79
	May 12, 1959	3.40	Aug. 17, 1988	1.01
	Sept. 25, 1959	1.93	Oct. 17, 1988	2.52
	Sept. 6, 1961	2.44	Dec. 19, 1988	3.67
	Aug. 1, 1962	2.47	April 25, 1989	5.95
	Aug. 30, 1962	1.55	Oct. 16, 1989	3.91
	July 23, 1963	1.30		
01593300 Red Hill Branch near Columbia				
Lat 39°14'44", long 76°50'43", Hydrologic Unit 02060006, 0.05 mi upstream from mouth, 0.1 mi downstream from culvert on Columbia Road, and 2.1 mi north of Columbia.	Oct. 19, 1987	1.63	Dec. 4, 1988	2.45
	Nov. 9, 1987	1.79	Dec. 19, 1988	2.04
	March 1, 1988	4.65	April 25, 1989	4.25
	March 18, 1988	3.65	Sept. 8, 1989	2.54
	June 30, 1988	1.49	Oct. 16, 1989	2.86
	Aug. 17, 1988	.94	March 8, 1990	3.92
	Sept. 12, 1988	1.23	April 27, 1990	4.36
	Oct. 14, 1988	.93	June 27, 1990	2.51
01593350 Little Patuxent River tributary at Guilford Downs				
Lat 39°13'39", long 76°50'41", Hydrologic Unit 02060006, at upstream side of culvert on U.S. Highway 29 at Guilford Downs, 0.3 mi above mouth, and 4.1 mi north of Guilford.	Feb. 13, 1966	68 *	June 22, 1972	620 *
	July 2, 1967	95 *	April 1, 1973	380 *
	Sept. 4, 1969	115 *	March 30, 1974	68 *
	July 20, 1970	84 *	Sept. 26, 1975	410 *
	Aug. 2, 1971	265 *	Sept. 16, 1976	270 *
01593600 Middle Patuxent River near West Friendship				
Lat 39°17'14", long 76°57'33", Hydrologic Unit 02060006, at bridge on State Highway 32, 0.25 mi upstream from Terrapin Branch, and 1.1 mi south of West Friendship.	May 26, 1956	6.13	July 20, 1966	1.31
	May 6, 1957	7.58	Sept. 13, 1966	.64
	Aug. 22, 1957	1.72	Oct. 19, 1987	4.28
	Dec. 20, 1957	13.6	Nov. 9, 1987	5.23
	May 19, 1958	13.0	March 18, 1988	22.1
	June 6, 1958	9.27	June 30, 1988	4.87
	Sept. 9, 1958	4.99	Sept. 12, 1988	3.36
	May 12, 1959	5.19	Oct. 13, 1988	3.02
	Sept. 25, 1959	3.01	Dec. 5, 1988	6.69
	Sept. 6, 1961	4.62	Dec. 20, 1988	5.34
	Aug. 1, 1962	3.83	April 26, 1989	8.93
	July 23, 1963	2.53	Oct. 16, 1989	5.35
	Sept. 25, 1963	1.79	April 26, 1990	10.8
	Nov. 27, 1963	4.35	Sept. 10, 1990	4.44
01593650 Middle Patuxent River tributary near Dayton				
Lat 39°14'12", long 76°56'27", Hydrologic Unit 02060006, at bridge on Sheppard Road, 1.6 mi upstream from mouth, and 2.5 mi east of Dayton.	May 31, 1977	2.18	June 24, 1980	3.41
	Aug. 4, 1977	1.15	Sept. 2, 1980	1.22
	Sept. 15, 1977	.69	March 27, 1981	2.39
	Sept. 21, 1978	1.72	Aug. 27, 1981	.84
	Nov. 6, 1978	1.72	May 17, 1982	2.08
	May 3, 1979	3.86	Sept. 14, 1982	.34
	May 15, 1980	4.60		
01593675 Middle Patuxent River tributary near Columbia				
Lat 39°14'02", long 76°55'04", Hydrologic Unit 02060006, 0.05 mi upstream from mouth, and 3.1 mi west of Columbia.	Oct. 19, 1987	3.47	Dec. 19, 1988	3.56
	Nov. 9, 1987	4.19	April 25, 1989	7.89
	March 2, 1988	8.62	Sept. 8, 1989	5.13
	March 18, 1988	7.95	March 8, 1990	8.89
	June 30, 1988	3.53	April 27, 1990	8.53
	Aug. 17, 1988	1.80	April 27, 1990	9.19
	Sept. 12, 1988	2.41	June 27, 1990	5.56
	Oct. 14, 1988	2.11	Sept. 10, 1990	3.61
	Dec. 4, 1988	4.66		

Table 9.—Discharge measurements at partial-record streamflow-gaging stations in Howard County–Continued

Location	Date	Discharge	Date	Discharge
01593700 Middle Patuxent River tributary near Clarksville				
Lat 39°12'00", long 76°55'12", Hydrologic Unit 02060006, 0.1 mi upstream from bridge on Trotter Road, 0.8 mi upstream from mouth, and 1.3 mi southeast of Clarksville.	May 31, 1977	2.82	Oct. 20, 1987	2.14
	Aug. 4, 1977	1.64	Nov. 9, 1987	2.48
	Sept. 15, 1977	1.10	March 18, 1988	5.18
	Sept. 21, 1978	2.41	June 30, 1988	2.08
	Nov. 6, 1978	2.47	Sept. 12, 1988	1.46
	May 3, 1979	5.36	Oct. 13, 1988	1.30
	May 15, 1980	5.81	Dec. 4, 1988	2.51
	June 24, 1980	4.01	Dec. 19, 1988	2.33
	Sept. 2, 1980	1.24	April 25, 1989	4.86
	March 27, 1981	3.44	Oct. 16, 1989	3.17
	Aug. 27, 1981	1.52	April 26, 1990	5.98
	May 17, 1982	3.09	Sept. 10, 1990	2.21
	Sept. 14, 1982	1.35		
01594100 Hammond Branch at Scaggsville				
Lat 39°09'13", long 76°53'35", Hydrologic Unit 02060006, at bridge on U.S. Highway 29, 0.7 mi northeast of Scaggsville.	May 25, 1956	1.53	Sept. 25, 1959	.75
	May 6, 1957	1.82	Aug. 1, 1962	1.09
	Aug. 22, 1957	.59	July 23, 1963	.61
	May 19, 1958	3.00	Sept. 25, 1963	.71
	June 6, 1958	2.62	Oct. 22, 1963	.78
	Sept. 9, 1958	1.18	July 20, 1966	.34
	May 12, 1959	1.16	Sept. 13, 1966	.27
01594200 Hammond Branch near Laurel				
Lat 39°07'23", long 76°49'31", Hydrologic Unit 02060006, at bridge on U.S. Highway 1, 0.5 mi upstream from mouth, and 1.6 mi northeast of Laurel.	Oct. 19, 1987	1.80	Dec. 4, 1988	2.50
	Nov. 9, 1987	2.38	Dec. 19, 1988	2.37
	March 1, 1988	5.23	April 25, 1989	5.78
	March 18, 1988	4.31	Sept. 8, 1989	1.56
	June 30, 1988	1.29	March 8, 1990	5.45
	Aug. 17, 1988	.57	March 28, 1990	5.85
	Sept. 12, 1988	1.15	April 27, 1990	5.58
	Oct. 14, 1988	.86	June 27, 1990	2.44
01594395 Dorsey Run at Jessup				
Lat 39°08'57", long 76°47'14", Hydrologic Unit 02060006, at bridge on Dorsey Run Road, 0.6 mi west of Jessup, and 3.4 mi upstream from mouth.	Oct. 22, 1963	.99	March 28, 1990	5.02
	Dec. 4, 1988	5.99	April 27, 1990	4.36
	Dec. 19, 1988	1.27	June 27, 1990	1.45
	April 25, 1989	4.63	July 27, 1990	1.72
	Sept. 8, 1989	.93	Sept. 13, 1990	4.80
	March 8, 1990	4.72	Oct. 4, 1990	.65

Table 10.—Major-ion, nutrient, and organic-carbon concentrations in ground water in Howard County

[ft = feet; gal/min = gallons per minute; min = minute; µS/cm = microsiemens per centimeter; deg C = degrees Celsius; mg/L = milligrams per liter; -- = analysis not performed; < = actual value is less than value shown]

Explanation of Geologic Unit Codes

217PTXN	Patuxent Formation	300PGMT	Pegmatite dikes
300CCKV	Cockeysville Marble	300PLGV	Pleasant Grove Schist
300DDHL	James Run Formation, Druid Hill Amphibolite Member	300PRTB	Prettyboy Schist
300ELCC	Ellicott City Granite	300RELY	James Run Formation, Relay Gneiss Member
300GLLS	Gillis Formation	300STRS	Setters Formation
300GLFD	Guilford Granite	300SKVL	Sykesville Formation
300LCRV	Loch Raven Schist	300SKVLG	Sykesville Formation, gneiss Member
300MRGR	Morgan Run Formation	300SKVLS	Sykesville Formation, schist Member
300MWSG	Mount Washington Amphibolite	300UMFC	Ultramafic rocks
300OELL	Oella Formation	400BLMR	Baltimore Gneiss

Explanation of codes

A	Trace-element and radon concentrations, see table 11
B	Carbamate pesticide concentrations, see table 13
C	Triazine pesticide concentrations, see table 12
D	Volatile organic compound concentrations, see table 14
E	Tritium concentrations, see table 15
F	Nitrogen and phosphorus concentrations, see table 16

Table 10.—Major-ion, nutrient, and organic-carbon concentrations in ground water in Howard County—Continued

Site no.	Site type	Date	Geo-logic unit	Depth of well, total (ft)	Pumping or flow period prior to sam-pling (min)	Flow rate, instan-taneous (gal/min)	Spe-cific con-duct-ance (µS/cm)	pH (stand-ard units)	Temper-ature, air (deg C)
HO Aa 8	well	04-10-89	300GLLS	200	40	8.0	114	5.9	11.0
HO Ab 2	well	05-15-52	300GLLS	85	90	15	47	5.5	--
HO Ab 78	well	04-18-89	300GLLS	300	70	6.0	78	5.3	21.5
HO Ab 103	well	04-18-89	300GLLS	160	75	6.5	109	5.1	22.0
HO Ac 25	well	05-22-89	300MRGR	120	60	6.4	100	6.4	25.0
HO Ac 82	well	05-09-89	300PRTB	140	60	8.5	64	5.7	17.0
HO Ac 92	well	05-15-90	300MRGR	200	75	6.0	132	6.4	22.5
HO Ac 92	well	05-15-90	300MRGR	200	75	6.0	132	6.4	22.5
HO Ad 26	well	05-23-89	300SKVL	345	90	5.8	186	6.9	18.0
HO Ad 34	well	05-10-90	300SKVL	120	30	--	48	5.0	17.0
HO Ad 83	well	05-09-89	300UMFC	90	20	3.0	193	6.0	16.5
HO Ae 3	well	05-15-89	400BLMR	140	60	6.5	204	5.7	18.0
HO Bb 59	well	05-01-89	300GLLS	300	30	6.0	32	5.3	17.0
HO Bb 59	well	11-01-89	300GLLS	300	22	6.0	32	5.4	--
HO Bb 66	well	04-11-90	300GLLS	105	50	6.0	103	5.1	10.5
HO Bb 73	well	04-26-90	300GLLS	300	60	7.5	70	5.1	32.0
HO Bb 88	well	05-01-90	300PLGV	240	60	7.5	155	6.7	21.0
HO Bb 138	well	05-01-89	300MRGR	100	35	8.0	89	5.5	17.0
HO Bb 155	well	05-08-90	300MRGR	203	60	6.0	89	6.0	26.0
HO Bb 156	well	04-10-89	300MRGR	100	70	5.0	26	5.4	13.5
HO Bb 160	well	04-11-90	300PLGV	64	30	7.0	103	5.8	--
HO Bc 8	well	12-17-52	300SKVL	78	--	12	101	6.1	--
HO Bc 25	well	05-31-90	300MRGR	200	60	4.5	240	5.0	19.5
HO Bc 63	well	06-14-89	300SKVL	75	30	30	96	5.5	28.5
HO Bc 157	well	11-08-89	300MRGR	100	45	6.5	60	5.6	15.0
HO Bc 172	well	11-29-89	300MRGR	225	75	8.0	28	6.1	8.0
HO Bc 176	spring	04-17-90	300SKVL	--	--	0.5	187	6.7	16.5
HO Bc 187	well	12-09-88	300SKVL	145	100	3.5	75	5.5	--
HO Bc 203	well	04-26-90	300SKVL	300	60	7.5	103	5.8	29.5
HO Bc 203	well	04-26-90	300SKVL	300	60	7.5	103	5.8	29.5
HO Bc 246	well	03-20-89	300SKVL	105	60	4.5	122	5.6	6.5
HO Bc 264	spring	05-08-89	300SKVL	--	--	15	205	5.3	15.0
HO Bc 264	spring	10-25-89	300SKVL	--	--	3.5	334	5.4	11.0
HO Bc 294	well	05-03-90	300SKVL	140	30	6.0	33	4.9	18.0
HO Bc 304	well	01-09-90	300SKVL	103	60	6.5	153	5.8	--
HO Bd 3	well	05-15-52	300CCKV	203	--	306	263	7.8	--
HO Bd 4	well	05-15-52	400BLMR	173	--	5.0	65	6.6	--
HO Bd 9	well	12-16-52	300SKVL	54.5	--	20	34	6.3	--
HO Bd 18	spring	08-14-81	400BLMR	--	--	--	280	7.1	--
HO Bd 77	well	03-28-89	300SKVL	80	60	4.0	156	5.2	27.5
HO Bd 150	well	05-15-90	300LCRV	400	110	3.0	85	5.8	23.0
HO Bd 246	well	03-28-89	300LCRV	128	90	5.0	151	5.2	29.0
HO Bd 325	well	03-27-89	300LCRV	300	60	4.0	167	6.5	19.0
HO Bd 390	well	03-27-89	300SKVL	125	65	5.0	272	5.5	18.0
HO Bd 401	well	11-20-89	400BLMR	180	50	6.0	109	5.5	--
HO Bd 402	well	01-24-90	300LCRV	145	60	6.0	--	5.7	11.5
HO Bd 403	well	02-06-90	300LCRV	410	80	3.5	92	4.7	--
HO Bd 404	well	02-06-90	300SKVL	165	75	7.5	82	5.6	--
HO Bd 405	well	02-27-90	300LCRV	58	30	10	16	5.4	-1.0
HO Bd 406	well	02-27-90	300LCRV	85	30	7.5	35	5.6	1.0
HO Be 21	well	06-05-89	400BLMR	125	75	7.0	112	5.5	26.0
HO Be 33	well	05-01-90	300CCKV	350	100	8.5	308	7.8	26.0
HO Be 88	well	05-08-89	400BLMR	200	70	6.0	53	5.9	14.0
HO Be 96	well	05-15-89	300OELL	140	45	11	240	5.9	17.0
HO Be 109	well	06-14-89	300OELL	160	120	4.0	56	5.9	25.5
HO Be 112	well	05-31-90	300LCRV	453	120	5.0	167	8.0	25.5
HO Be 140	well	02-13-90	300OELL	202	60	6.0	93	6.6	--
HO Bf 4	well	03-21-51	300ELCC	28	--	--	258	6.6	--
HO Bf 8	well	02-05-52	300MWSG	106	--	--	169	7.0	--
HO Bf 8	well	05-18-54	300MWSG	106	--	--	173	7.3	--

Temperature, water (deg C)	Color (platinum-cobalt units)	Oxygen, dissolved (mg/L)	Hardness total (mg/L as $CaCO_3$)	Noncarbonate hardness, (mg/L as $CaCO_3$)	Calcium dissolved (mg/L as Ca)	Magnesium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)	Potassium, dissolved (mg/L as K)	Site no.
12.0	--	3.6	43	--	12	3.1	3.6	0.80	HO Aa 8
--	2	--	11	6	1.9	1.6	2.9	.90	HO Ab 2
13.0	--	7.5	19	--	3.8	2.3	6.4	1.0	HO Ab 78
12.5	--	8.5	32	--	6.7	3.7	6.0	1.0	HO Ab 103
14.0	--	9.8	42	--	14	1.6	3.3	.80	HO Ac 25
13.5	--	2.1	21	--	5.8	1.5	3.4	.60	HO Ac 82
13.5	--	7.8	53	--	9.8	6.8	5.9	.40	HO Ac 92
13.5	--	7.8	50	--	8.7	6.8	6.3	.60	HO Ac 92
13.0	--	.7	67	--	20	4.2	9.5	2.4	HO Ad 26
13.0	--	10.1	11	--	1.8	1.6	3.0	.60	HO Ad 34
12.0	--	.9	89	--	11	15	2.6	1.0	HO Ad 83
14.0	--	9.0	72	--	20	5.2	7.4	2.4	HO Ae 3
12.5	--	2.1	9	--	1.5	1.3	1.8	.50	HO Bb 59
12.5	--	9.3	10	--	1.6	1.4	1.6	.40	HO Bb 59
12.5	--	8.1	21	--	4.9	2.2	8.7	.60	HO Bb 66
13.0	--	10.9	21	--	3.5	3.0	3.3	.80	HO Bb 73
12.0	--	6.0	63	--	20	3.2	4.4	.30	HO Bb 88
13.5	--	5.7	26	--	5.0	3.2	5.0	1.4	HO Bb 138
13.0	--	8.2	28	--	5.2	3.7	7.3	.50	HO Bb 155
12.5	--	7.3	5	--	.85	.61	2.3	.60	HO Bb 156
12.0	--	9.4	31	--	6.5	3.5	5.8	.80	HO Bb 160
12.0	8	--	23	5	5.4	2.3	9.6	1.8	HO Bc 8
13.5	--	8.2	60	--	12	7.3	11	1.9	HO Bc 25
12.5	--	8.1	19	--	3.6	2.5	5.2	1.1	HO Bc 63
13.0	--	8.2	19	--	3.4	2.5	3.1	.60	HO Bc 157
12.0	--	10.0	8	--	1.7	1.0	2.3	.40	HO Bc 172
13.5	--	--	86	--	28	3.9	5.2	1.1	HO Bc 176
13.0	--	8.4	24	--	5.2	2.6	5.9	1.5	HO Bc 187
13.0	--	5.5	39	--	9.3	3.9	3.9	1.5	HO Bc 203
13.0	--	5.5	39	--	9.3	3.9	3.9	1.5	HO Bc 203
13.5	--	5.9	33	--	5.3	4.8	7.8	1.8	HO Bc 246
10.0	--	10.3	52	--	11	5.8	16	2.0	HO Bc 264
12.0	--	9.0	75	--	16	8.5	28	1.6	HO Bc 264
12.5	--	10.1	9	--	1.6	1.1	2.8	.60	HO Bc 294
13.0	--	9.0	44	--	8.1	5.8	8.0	1.8	HO Bc 304
13.0	3	--	130	15	45	5.3	2.0	2.6	HO Bd 3
--	0	--	13	0	3.4	1.0	4.9	1.2	HO Bd 4
11.0	8	--	7	0	1.8	.60	2.7	.90	HO Bd 9
14.0	--	6.0	120	--	31	11	4.6	1.8	HO Bd 18
13.5	--	8.0	45	--	7.4	6.3	9.3	1.7	HO Bd 77
14.5	--	8.2	26	--	6.5	2.4	5.5	1.5	HO Bd 150
14.0	--	7.8	35	--	8.4	3.4	13	1.9	HO Bd 246
13.5	--	.2	64	--	19	4.0	8.7	2.6	HO Bd 325
13.5	--	7.1	46	--	11	4.4	32	2.1	HO Bd 390
12.5	--	6.6	33	--	8.3	3.0	7.7	2.0	HO Bd 401
12.5	--	2.3	120	--	31	11	11	3.9	HO Bd 402
13.0	--	8.3	250	--	52	29	56	6.4	HO Bd 403
12.0	--	9.2	23	--	4.7	2.8	4.5	1.4	HO Bd 404
12.5	--	9.4	42	--	8.6	5.0	9.2	2.1	HO Bd 405
12.5	--	7.7	95	--	18	12	16	4.1	HO Bd 406
13.5	--	9.2	33	--	8.8	2.6	6.4	1.8	HO Be 21
14.0	--	5.1	150	--	45	9.6	2.5	3.9	HO Be 33
13.5	--	7.7	10	--	2.5	.92	6.5	1.5	HO Be 88
14.5	--	5.7	76	--	20	6.1	12	2.9	HO Be 96
14.0	--	9.7	19	--	4.9	1.5	6.5	1.8	HO Be 109
14.5	--	.8	60	--	17	4.2	5.4	2.8	HO Be 112
10.5	--	7.6	34	--	7.9	3.4	5.9	1.7	HO Be 140
--	3	--	93	17	27	6.2	9.5	1.4	HO Bf 4
--	5	--	63	3	24	.80	6.6	3.1	HO Bf 8
--	--	--	64	5	16	5.8	--	--	HO Bf 8

Table 10.—Major-ion, nutrient, and organic-carbon concentrations in ground water in Howard County—Continued

Site no.	Date	Alkalinity, total (mg/L as $CaCO_3$)	Carbon dioxide, dissolved (mg/L as CO_2)	Sulfate, dissolved (mg/L as SO_4)	Chloride, dissolved (mg/L as Cl)	Fluoride, dissolved (mg/L as F)	Silica, dissolved (mg/L as SiO_2)	Solids, residue at 180 deg. C dissolved (mg/L)
HO Aa 8	04-10-89	29	--	3.2	5.8	0.1	7.8	67
HO Ab 2	05-15-52	6	35	1.0	3.5	.1	6.9	39
HO Ab 78	04-18-89	7	--	<1.0	8.3	.1	8.9	60
HO Ab 103	04-18-89	4	--	<1.0	14	.1	7.6	84
HO Ac 25	05-22-89	39	--	<1.0	1.8	<.1	10	71
HO Ac 82	05-09-89	16	--	<1.0	3.0	.1	11	41
HO Ac 92	05-15-90	39	--	7.8	5.9	<.1	20	87
HO Ac 92	05-15-90	39	--	<1.0	6.4	.2	19	85
HO Ad 26	05-23-89	55	--	21	5.7	.1	17	119
HO Ad 34	05-10-90	4	--	<1.0	3.8	<.1	7.9	34
HO Ad 83	05-09-89	50	--	31	3.4	.1	19	116
HO Ae 3	05-15-89	24	--	27	8.7	.1	18	139
HO Bb 59	05-01-89	9	--	<1.0	2.9	.1	5.9	20
HO Bb 59	11-01-89	5	--	<1.0	2.8	<.1	5.9	2
HO Bb 66	04-11-90	4	--	<1.0	11	.1	9.3	82
HO Bb 73	04-26-90	--	--	<1.0	5.3	<.1	7.3	49
HO Bb 88	05-01-90	55	--	3.2	11	<.1	12	96
HO Bb 138	05-01-89	12	--	<1.0	8.2	.1	10	65
HO Bb 155	05-08-90	29	--	<1.0	4.0	.1	27	66
HO Bb 156	04-10-89	5	--	<.20	1.8	.1	6.1	20
HO Bb 160	04-11-90	10	--	2.3	7.8	.2	14	87
HO Bc 8	12-17-52	18	28	12	9.0	<.1	29	77
HO Bc 25	05-31-90	8	--	<1.0	45	<.1	11	186
HO Bc 63	06-14-89	15	--	<1.0	9.3	<.1	9.6	61
HO Bc 157	11-08-89	11	--	<1.0	3.2	<.1	9.2	30
HO Bc 172	11-29-89	12	--	<1.0	.80	<.1	13	31
HO Bc 176	04-17-90	80	--	2.5	5.7	<.1	16	109
HO Bc 187	12-09-88	10	--	1.0	9.8	<.1	13	64
HO Bc 203	04-26-90	--	--	7.6	4.4	<.1	16	64
HO Bc 203	04-26-90	--	--	7.7	4.5	<.1	16	63
HO Bc 246	03-20-89	10	--	<.20	11	.1	11	81
HO Bc 264	05-08-89	11	--	13	35	.1	13	149
HO Bc 264	10-25-89	11	--	5.0	76	<.1	17	197
HO Bc 294	05-03-90	4	--	<1.0	3.0	<.1	10	27
HO Bc 304	01-09-90	14	--	<1.0	22	<.1	15	120
HO Bd 3	05-15-52	119	3.7	17	3.0	.1	15	166
HO Bd 4	05-15-52	30	15	.80	2.5	.1	26	62
HO Bd 9	12-16-52	10	9.6	1.6	1.0	<.1	15	34
HO Bd 18	08-14-81	--	--	1.9	5.3	<.1	24	166
HO Bd 77	03-28-89	7	--	<.20	16	.1	13	88
HO Bd 150	05-15-90	17	--	<1.0	4.3	<.1	16	66
HO Bd 246	03-28-89	10	--	<.20	11	.1	15	99
HO Bd 325	03-27-89	7	--	5.0	8.9	.1	30	120
HO Bd 390	03-27-89	17	--	.60	65	.1	14	157
HO Bd 401	11-20-89	35	--	2.0	4.4	<.1	28	79
HO Bd 402	01-24-90	55	--	3.0	61	<.1	25	232
HO Bd 403	02-06-90	8	--	6.0	250	.1	16	554
HO Bd 404	02-06-90	12	--	8.0	6.4	.1	13	62
HO Bd 405	02-27-90	6	--	<1.0	23	.3	13	121
HO Bd 406	02-27-90	10	--	10	67	<.1	16	244
HO Be 21	06-05-89	14	--	4.0	12	.1	22	88
HO Be 33	05-01-90	133	--	17	7.9	<.1	13	187
HO Be 88	05-08-89	23	--	<1.0	2.1	.2	29	58
HO Be 96	05-15-89	31	--	15	17	.1	26	165
HO Be 109	06-14-89	12	--	<1.0	5.2	<.1	22	78
HO Be 112	05-31-90	71	--	8.8	1.0	<.1	16	101
HO Be 140	02-13-90	43	--	<1.0	2.5	.1	28	73
HO Bf 4	03-21-51	76	37	32	5.2	<.1	39	184
HO Bf 8	02-05-52	61	12	11	3.6	<.1	36	128
HO Bf 8	05-18-54	59	5.8	11	4.0	.1	35	--

Solids, sum of constituents, dissolved (mg/L)	Nitrate, dissolved (mg/L as N)	Nitrite plus nitrate, total (mg/L as N)	Nitrogen, ammonia total (mg/L as N)	Phosphorus, total (mg/L as P)	Carbon, organic total (mg/L as C)	Additional water quality information	Site no.
54	--	3.6	<0.01	0.02	0.1	A	HO Aa 8
30	1.8	--	--	--	--	A	HO Ab 2
--	--	3.6	<.01	.02	.2	A,B,C	HO Ab 78
--	--	4.7	<.01	<.01	.3	A,B,C	HO Ab 103
--	--	2.5	.05	<.01	<.1	A,C	HO Ac 25
--	--	2.3	.01	.03	.2	A,B,C	HO Ac 82
79	--	4.6	<.01	.03	<.1	A,B,C,E	HO Ac 92
--	--	4.8	.02	.03	.3	A,D,E	HO Ac 92
114	--	.70	<.01	<.01	.6	A,B,C	HO Ad 26
--	--	2.9	<.01	<.01	<.1	A,C,E	HO Ad 34
113	--	1.9	<.01	.03	1.2	A	HO Ad 83
103	--	7.2	<.01	.04	.5	A,B,C	HO Ae 3
--	--	1.3	.01	<.01	.2	A,C	HO Bb 59
--	--	1.5	.01	.01	.2	A,B,C	HO Bb 59
--	--	6.6	<.01	<.01	<.1	A,B,C	HO Bb 66
--	--	4.9	<.01	.04	--	A,B,C,E	HO Bb 73
87	--	1.2	<.01	<.01	.3	A,B,C	HO Bb 88
--	--	4.9	.01	.01	.2	A,B,C	HO Bb 138
--	--	2.6	<.01	.05	<.1	A,B,C	HO Bb 155
--	--	1.5	<.01	<.01	<.1	A,C	HO Bb 156
47	--	6.1	<.01	.03	.2	A,B,C,E	HO Bb 160
84	.97	--	--	--	--	A	HO Bc 8
--	--	8.0	<.01	<.01	.2	A	HO Bc 25
--	--	3.9	.01	<.01	.3	A	HO Bc 63
--	--	3.9	<.01	.03	<.1	A,B	HO Bc 157
--	--	<.1	<.01	.05	.1	A,B	HO Bc 172
109	--	2.2	<.01	<.01	.2	A,B,C,E	HO Bc 176
45	--	3.8	--	<.01	1.0	A,C	HO Bc 187
62	--	2.0	<.01	.04	--	A,B,C,E	HO Bc 203
63	--	2.0	<.01	.04	--	A,B,C	HO Bc 203
--	--	5.8	.07	.01	.3	A,C	HO Bc 246
102	--	3.6	.01	.03	1.1	A,B,C	HO Bc 264
158	--	6.2	.02	.03	.5	A,B,C	HO Bc 264
--	--	1.6	<.01	.02	<.1	A,B,C	HO Bc 294
--	--	6.9	<.01	.01	.2	A,B,C	HO Bc 304
163	.29	--	--	--	--	A	HO Bd 3
59	.25	--	--	--	--	A	HO Bd 4
33	.84	--	--	--	--	A	HO Bd 9
152	--	--	--	--	--	A	HO Bd 18
--	--	8.0	.02	<.01	.2	A	HO Bd 77
--	--	4.6	.02	.04	.3	A,B,C	HO Bd 150
--	--	8.9	.04	.03	.3	A,B	HO Bd 246
118	--	.1	<.01	<.01	.3	A	HO Bd 325
140	--	2.3	<.01	<.01	.3	A,B	HO Bd 390
77	--	2.5	.02	.09	.7	A	HO Bd 401
179	--	2.2	.03	.01	--	A,B,C,E	HO Bd 402
421	--	1.2	<.01	<.01	.6	A,C,E	HO Bd 403
45	--	2.9	<.01	.02	.3	A,C	HO Bd 404
--	--	7.3	<.01	.02	.3	A,B,C,E	HO Bd 405
150	--	9.4	.01	.03	.6	A,B,C,E	HO Bd 406
68	--	3.2	.02	.07	.3	A,B,C	HO Be 21
177	--	1.6	<.01	<.01	.4	A,B,C	HO Be 33
--	--	.9	.02	.23	.2	A,B	HO Be 88
118	--	9.6	<.01	.04	.3	A	HO Be 96
--	--	3.7	.01	.04	.3	A,B,C	HO Be 109
100	--	.4	<.01	.01	.2	A	HO Be 112
--	--	--	--	--	.3	A,B	HO Be 140
174	1.7	--	--	--	--	A	HO Bf 4
127	1.2	--	--	--	--	A	HO Bf 8
--	--	--	--	--	--	A	HO Bf 8

Table 10.—Major-ion, nutrient, and organic-carbon concentrations in ground water in Howard County—Continued

Site no.	Site type	Date	Geo-logic unit	Depth of well, total (ft)	Pumping or flow period prior to sam-pling (min)	Flow rate, instan-taneous (gal/min)	Spe-cific con-duct-ance (µS/cm)	pH (stand-ard units)	Temper-ature, air (deg C)
HO Bf 56	well	06-05-89	400BLMR	190	75	8.2	239	5.9	27.0
HO Bf 68	well	05-17-90	300MWSG	300	65	6.5	345	6.5	26.5
HO Bf 77	well	05-23-89	300MWSG	100	432	2.0	410	6.1	19.5
HO Bf 81	well	05-29-90	300OELL	200	60	8.0	306	5.1	14.0
HO Cc 1	well	12-19-52	300LCRV	100	--	3.0	113	6.1	--
HO Cc 12	well	04-24-90	300SKVL	140	60	5.0	84	6.2	23.0
HO Cc 38	well	01-18-89	300LCRV	280	90	6.0	276	7.2	15.0
HO Cd 20	well	11-12-86	300LCRV	96	75	1.0	112	6.8	11.0
HO Cd 20	well	08-31-87	300LCRV	96	60	1.0	103	6.9	28.0
HO Cd 20	well	09-15-88	300LCRV	96	140	1.0	78	7.0	21.0
HO Cd 20	well	12-22-88	300LCRV	96	70	1.0	101	--	--
HO Cd 20	well	04-06-89	300LCRV	96	85	1.0	80	6.5	--
HO Cd 20	well	06-30-89	300LCRV	96	90	1.0	94	6.8	--
HO Cd 21	well	11-12-86	300LCRV	96	75	1.0	106	7.0	11.0
HO Cd 21	well	11-12-86	300LCRV	96	75	1.0	106	7.0	11.0
HO Cd 21	well	08-31-87	300LCRV	96	60	1.0	74	6.7	27.5
HO Cd 21	well	09-15-88	300LCRV	96	60	1.0	68	6.8	19.0
HO Cd 21	well	12-22-88	300LCRV	96	85	1.0	62	--	--
HO Cd 21	well	04-06-89	300LCRV	96	85	1.0	81	6.8	--
HO Cd 21	well	06-30-89	300LCRV	96	120	1.0	70	6.7	--
HO Cd 25	well	09-14-88	300LCRV	97	100	1.0	57	6.7	22.0
HO Cd 25	well	12-22-88	300LCRV	97	65	1.0	72	--	--
HO Cd 25	well	04-05-89	300LCRV	97	60	1.0	58	6.7	--
HO Cd 25	well	06-30-89	300LCRV	97	75	1.0	60	6.5	--
HO Cd 26	well	09-14-88	300LCRV	143	100	1.0	86	8.5	20.5
HO Cd 26	well	12-22-88	300LCRV	143	90	1.0	101	--	--
HO Cd 26	well	04-06-89	300LCRV	143	95	1.0	97	8.5	--
HO Cd 26	well	06-29-89	300LCRV	143	75	1.0	93	8.7	--
HO Cd 28	well	08-31-87	300LCRV	46	30	1.0	21	5.7	26.0
HO Cd 28	well	03-17-88	300LCRV	46	40	.5	26	6.0	6.5
HO Cd 28	well	06-09-88	300LCRV	46	15	1.0	26	6.0	13.0
HO Cd 28	well	09-14-88	300LCRV	46	15	1.0	26	5.6	19.5
HO Cd 28	well	12-22-88	300LCRV	46	20	1.0	26	5.7	--
HO Cd 28	well	04-05-89	300LCRV	46	--	--	26	5.9	18.5
HO Cd 28	well	06-29-89	300LCRV	46	35	.5	23	5.8	24.5
HO Cd 29	well	08-31-87	300LCRV	68	60	1.0	22	5.5	26.0
HO Cd 29	well	09-14-88	300LCRV	68	25	1.0	21	5.5	20.0
HO Cd 29	well	12-22-88	300LCRV	68	30	.6	23	5.6	--
HO Cd 29	well	04-05-89	300LCRV	68	45	.7	21	5.6	21.0
HO Cd 29	well	06-29-89	300LCRV	68	35	.5	21	5.6	22.5
HO Cd 78	well	03-17-88	300LCRV	19	20	.5	83	5.6	7.5
HO Cd 78	well	06-09-88	300LCRV	19	10	1.0	84	5.5	13.0
HO Cd 78	well	09-14-88	300LCRV	19	10	1.0	74	5.4	21.0
HO Cd 78	well	12-22-88	300LCRV	19	7	1.0	81	4.6	--
HO Cd 78	well	04-05-89	300LCRV	19	10	1.5	93	7.1	13.0
HO Cd 78	well	06-29-89	300LCRV	19	15	1.2	92	4.9	20.5
HO Cd 79	well	03-17-88	300LCRV	53	60	.5	36	5.9	5.0
HO Cd 79	well	06-09-88	300LCRV	53	50	.8	33	5.7	12.5
HO Cd 79	well	09-14-88	300LCRV	53	30	1.0	32	5.6	21.0
HO Cd 79	well	12-22-88	300LCRV	53	40	.6	35	5.5	--
HO Cd 79	well	04-05-89	300LCRV	53	25	.8	35	5.8	--
HO Cd 79	well	06-29-89	300LCRV	53	50	.6	31	5.6	25.0
HO Cd 80	spring	03-17-88	300LCRV	2	--	--	--	--	9.0
HO Cd 80	spring	06-09-88	300LCRV	2	--	--	133	5.7	14.5
HO Cd 80	spring	09-15-88	300LCRV	2	--	--	113	5.5	20.5
HO Cd 80	spring	01-19-89	300LCRV	2	--	--	143	5.6	--
HO Cd 80	spring	04-06-89	300LCRV	2	--	--	129	5.6	--
HO Cd 81	spring	03-17-88	300LCRV	2	--	--	103	5.8	8.0
HO Cd 81	spring	06-09-88	300LCRV	2	--	--	98	5.9	14.5
HO Cd 81	spring	09-15-88	300LCRV	2	--	--	86	5.9	20.0

Temperature, water (deg C)	Color (platinum-cobalt units)	Oxygen, dissolved (mg/L)	Hardness total (mg/L as $CaCO_3$)	Noncarbonate hardness, (mg/L as $CaCO_3$)	Calcium dissolved (mg/L as Ca)	Magnesium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)	Potassium, dissolved (mg/L as K)	Site no.
14.0	--	3.7	62	--	16	5.2	20	2.8	HO Bf 56
14.5	--	.8	150	--	36	14	12	2.6	HO Bf 68
14.0	--	3.8	170	--	45	14	14	2.2	HO Bf 77
12.5	--	8.3	100	--	28	7.0	15	2.9	HO Bf 81
--	7	--	23	8	6.7	1.5	10	1.5	HO Cc 1
13.0	--	7.5	29	--	6.8	2.8	5.5	1.1	HO Cc 12
14.0	--	1.1	98	--	28	6.7	12	4.1	HO Cc 38
13.0	--	--	--	--	7.8	3.9	5.9	2.6	HO Cd 20
13.0	--	1.4	--	--	7.5	3.7	5.8	2.6	HO Cd 20
11.5	--	1.3	--	--	5.9	3.2	5.2	2.6	HO Cd 20
11.0	--	--	--	--	7.0	3.4	5.5	2.0	HO Cd 20
12.0	--	.6	--	--	5.3	2.7	5.2	2.3	HO Cd 20
12.0	--	.4	--	--	6.7	3.4	5.4	2.5	HO Cd 20
11.0	--	--	--	--	7.1	4.0	5.1	2.7	HO Cd 21
11.0	--	--	--	--	7.1	3.9	5.1	2.7	HO Cd 21
13.0	--	1.4	--	--	5.7	3.1	4.8	2.6	HO Cd 21
12.0	--	.6	--	--	4.7	2.8	4.5	9.3	HO Cd 21
--	--	--	--	--	5.8	3.2	4.7	2.1	HO Cd 21
12.5	--	.5	--	--	5.5	2.9	4.8	2.5	HO Cd 21
12.5	--	.3	--	--	4.5	2.7	4.3	2.3	HO Cd 21
--	--	--	--	--	3.8	2.2	4.4	4.1	HO Cd 25
--	--	--	--	--	4.2	2.4	4.3	2.0	HO Cd 25
12.5	--	.8	--	--	3.5	1.8	4.4	2.2	HO Cd 25
13.5	--	3.4	--	--	3.2	1.8	4.4	1.9	HO Cd 25
--	--	--	--	--	9.2	2.1	4.5	4.4	HO Cd 26
13.0	--	1.8	--	--	8.9	2.3	4.6	1.2	HO Cd 26
--	--	--	--	--	9.7	2.3	4.5	3.3	HO Cd 26
--	--	--	--	--	10	2.4	4.9	4.1	HO Cd 26
13.0	--	7.5	--	--	1.1	.79	1.3	1.0	HO Cd 28
10.0	--	11.8	--	--	1.1	.87	1.4	1.3	HO Cd 28
12.0	--	5.6	--	--	1.2	1.0	1.3	1.2	HO Cd 28
14.0	--	2.7	--	--	1.8	1.0	1.3	7.8	HO Cd 28
12.5	--	5.9	--	--	1.1	.91	1.2	.80	HO Cd 28
15.0	--	4.3	--	--	1.1	.90	1.4	1.2	HO Cd 28
19.0	--	4.8	--	--	1.1	1.0	1.3	1.0	HO Cd 28
12.5	--	9.3	--	--	1.1	.57	1.3	1.1	HO Cd 29
12.5	--	10.2	--	--	.97	.60	1.2	.90	HO Cd 29
12.5	--	8.2	--	--	.97	.57	1.2	.90	HO Cd 29
13.0	--	7.1	--	--	.96	.50	1.3	1.1	HO Cd 29
14.0	--	7.0	--	--	1.0	.63	1.2	1.0	HO Cd 29
10.0	--	9.2	--	--	4.1	3.2	3.5	1.6	HO Cd 78
10.0	--	9.4	--	--	4.4	3.5	3.3	1.5	HO Cd 78
13.0	--	10.9	--	--	4.2	3.4	3.5	2.1	HO Cd 78
12.5	--	8.7	--	--	4.3	3.1	3.4	1.4	HO Cd 78
9.5	--	7.7	--	--	4.9	3.9	3.5	1.5	HO Cd 78
11.5	--	8.6	--	--	4.7	3.8	3.4	1.6	HO Cd 78
12.5	--	8.4	--	--	2.1	1.2	1.9	1.4	HO Cd 79
13.0	--	8.6	--	--	1.9	1.2	1.6	1.3	HO Cd 79
12.5	--	9.0	--	--	1.8	1.3	1.8	1.3	HO Cd 79
12.5	--	9.0	--	--	1.7	1.0	1.7	1.1	HO Cd 79
13.0	--	6.1	--	--	1.8	1.1	1.7	1.3	HO Cd 79
13.5	--	6.6	--	--	1.6	1.2	1.7	1.3	HO Cd 79
8.5	--	9.7	--	--	8.4	6.7	2.9	1.5	HO Cd 80
11.0	--	9.4	--	--	7.6	6.3	2.8	1.7	HO Cd 80
13.5	--	7.6	--	--	7.6	6.5	2.8	11	HO Cd 80
--	--	9.0	--	--	7.3	6.1	2.6	1.4	HO Cd 80
9.5	--	8.8	--	--	6.9	5.7	2.7	1.5	HO Cd 80
9.0	--	9.2	--	--	6.1	3.8	3.8	1.9	HO Cd 81
12.0	--	8.8	--	--	6.0	3.7	3.5	1.8	HO Cd 81
14.0	--	8.1	--	--	6.0	3.9	3.6	1.0	HO Cd 81

Table 10.—Major-ion, nutrient, and organic-carbon concentrations in ground water in Howard County—Continued

Site no.	Date	Alkalinity, total (mg/L as $CaCO_3$)	Carbon dioxide, dissolved (mg/L as CO_2)	Sulfate, dissolved (mg/L as SO_4)	Chloride, dissolved (mg/L as Cl)	Fluoride, dissolved (mg/L as F)	Silica, dissolved (mg/L as SiO_2)	Solids, residue at 180 deg. C dissolved (mg/L)
HO Bf 56	06-05-89	31	--	18	33	0.1	28	166
HO Bf 68	05-17-90	130	--	33	11	.5	30	207
HO Bf 77	05-23-89	76	--	44	42	.2	42	294
HO Bf 81	05-29-90	19	--	51	24	<.1	25	212
HO Cc 1	12-19-52	15	23	1.0	17	<.1	15	66
HO Cc 12	04-24-90	21	--	<1.0	5.9	<.1	21	55
HO Cc 38	01-18-89	54	--	9.1	44	.1	25	169
HO Cd 20	11-12-86	43	--	10	1.4	.2	29	--
HO Cd 20	08-31-87	42	--	12	1.5	.2	28	--
HO Cd 20	09-15-88	37	--	4.6	1.6	.2	15	--
HO Cd 20	12-22-88	--	--	15	1.4	.2	25	--
HO Cd 20	04-06-89	26	--	6.6	3.7	.1	19	--
HO Cd 20	06-30-89	39	--	6.0	2.0	.2	24	--
HO Cd 21	11-12-86	43	--	10	1.4	.2	27	--
HO Cd 21	11-12-86	43	--	12	1.6	.2	26	--
HO Cd 21	08-31-87	29	--	6.8	1.7	.2	24	--
HO Cd 21	09-15-88	32	--	5.4	1.7	.1	17	--
HO Cd 21	12-22-88	--	--	12	1.3	.2	23	--
HO Cd 21	04-06-89	33	--	8.0	1.6	.2	21	--
HO Cd 21	06-30-89	30	--	4.0	1.3	.2	20	--
HO Cd 25	09-14-88	22	--	5.5	1.1	.2	20	--
HO Cd 25	12-22-88	--	--	7.5	1.2	.2	13	--
HO Cd 25	04-05-89	20	--	5.5	1.0	.1	21	--
HO Cd 25	06-30-89	20	--	4.0	1.0	.2	25	--
HO Cd 26	09-14-88	38	--	7.4	1.1	.2	3.7	--
HO Cd 26	12-22-88	--	--	8.6	1.2	.2	3.0	--
HO Cd 26	04-06-89	39	--	8.7	1.0	.1	7.6	--
HO Cd 26	06-29-89	36	--	9.0	1.0	.2	3.4	--
HO Cd 28	08-31-87	6	--	.60	1.1	.1	9.7	--
HO Cd 28	03-17-88	8	--	.70	1.3	.1	8.6	--
HO Cd 28	06-09-88	7	--	.90	1.2	.3	9.6	--
HO Cd 28	09-14-88	8	--	.90	1.3	.1	9.4	--
HO Cd 28	12-22-88	--	--	.50	1.2	.1	9.4	--
HO Cd 28	04-05-89	7	--	.70	1.2	.1	9.7	--
HO Cd 28	06-29-89	8	--	<1.0	1.2	.1	9.8	--
HO Cd 29	08-31-87	4	--	.50	1.4	.1	7.4	--
HO Cd 29	09-14-88	4	--	.60	1.3	<.1	7.5	--
HO Cd 29	12-22-88	--	--	.30	1.2	<.1	7.4	--
HO Cd 29	04-05-89	4	--	.40	1.1	.1	7.0	--
HO Cd 29	06-29-89	4	--	<1.0	1.1	.1	7.6	--
HO Cd 78	03-17-88	8	--	4.0	8.1	.1	12	--
HO Cd 78	06-09-88	8	--	3.9	8.7	.3	13	--
HO Cd 78	09-14-88	7	--	3.6	8.4	<.1	13	--
HO Cd 78	12-22-88	7	--	3.4	8.5	<.1	13	--
HO Cd 78	04-05-89	7	--	4.0	8.9	.1	12	--
HO Cd 78	06-29-89	8	--	4.0	8.8	.1	12	--
HO Cd 79	03-17-88	12	--	.70	1.1	.1	11	--
HO Cd 79	06-09-88	10	--	<.20	1.0	.2	11	--
HO Cd 79	09-14-88	9	--	<.20	1.1	<.1	10	--
HO Cd 79	12-22-88	--	--	<.20	1.0	.1	10	--
HO Cd 79	04-05-89	10	--	.70	1.0	.1	11	--
HO Cd 79	06-29-89	10	--	<1.0	0.90	.1	11	--
HO Cd 80	03-17-88	--	--	7.5	11	.1	8.9	--
HO Cd 80	06-09-88	5	--	7.8	9.8	.2	9.4	--
HO Cd 80	09-15-88	5	--	7.7	10	<.1	9.8	--
HO Cd 80	01-19-89	6	--	9.6	9.8	.1	9.1	--
HO Cd 80	04-06-89	6	--	7.6	9.5	<.1	9.5	--
HO Cd 81	03-17-88	9	--	3.1	8.0	.1	14	--
HO Cd 81	06-09-88	10	--	3.1	7.8	.2	14	--
HO Cd 81	09-15-88	8	--	3.2	8.5	.1	14	--

Solids, sum of constituents, dissolved (mg/L)	Nitrate dissolved (mg/L as N)	Nitrite plus nitrate, total (mg/L as N)	Nitrogen, ammonia total (mg/L as N)	Phosphorus, total (mg/L as P)	Carbon, organic total (mg/L as C)	Additional water quality information	Site no.
143	--	1.8	0.02	0.04	0.4	A	HO Bf 56
215	--	.60	<.01	.01	.3	A,B,C	HO Bf 68
250	--	2.8	<.01	.03	.8	A,B	HO Bf 77
168	--	7.7	<.01	.04	.9	A,B,C	HO Bf 81
70	1.8	--	--	--	--	A	HO Cc 1
--	--	2.8	<.01	.19	<.1	A,B,C,E	HO Cc 12
160	--	<.10	--	<.01	.2	A,B,C	HO Cc 38
88	--	--	--	--	--	F	HO Cd 20
88	--	--	--	--	.8	F	HO Cd 20
63	--	--	--	--	2.3	F	HO Cd 20
84	--	--	--	--	.8	F	HO Cd 20
63	.29	--	--	--	--	F	HO Cd 20
77	.11	--	--	--	.9	F	HO Cd 20
85	--	--	--	--	--	F	HO Cd 21
86	--	--	--	--	--	F	HO Cd 21
67	--	--	--	--	.9	F	HO Cd 21
66	--	--	--	--	2.7	F	HO Cd 21
74	--	--	--	--	1.6	F	HO Cd 21
68	--	--	--	--	--	F	HO Cd 21
59	--	--	--	--	1.0	F	HO Cd 21
56	--	--	--	--	3.3	F	HO Cd 25
52	--	--	--	--	1.3	F	HO Cd 25
54	--	--	--	--	--	F	HO Cd 25
58	.71	--	--	--	2.6	F	HO Cd 25
53	--	--	--	--	.4	F	HO Cd 26
56	--	--	--	--	2.0	F	HO Cd 26
62	--	--	--	--	--	F	HO Cd 26
56	--	--	--	--	2.2	F	HO Cd 26
22	--	--	--	--	.6	F	HO Cd 28
22	--	--	--	--	<.1	F	HO Cd 28
23	--	--	--	--	.2	F	HO Cd 28
31	--	--	--	--	1.2	F	HO Cd 28
22	--	--	--	--	13	F	HO Cd 28
23	--	--	--	--	--	F	HO Cd 28
--	.47	--	--	--	1.0	F	HO Cd 28
19	--	--	--	--	4.0	F	HO Cd 29
18	--	--	--	--	1.0	F	HO Cd 29
18	--	--	--	--	<.1	F	HO Cd 29
18	--	--	--	--	--	F	HO Cd 29
--	.66	--	--	--	4.6	F	HO Cd 29
54	--	--	--	--	<.1	F	HO Cd 78
56	--	--	--	--	<.1	F	HO Cd 78
55	--	--	--	--	3.3	F	HO Cd 78
55	--	--	--	--	<.1	F	HO Cd 78
57	--	--	--	--	--	F	HO Cd 78
59	3.5	--	--	--	.4	F	HO Cd 78
32	--	--	--	--	<.1	F	HO Cd 79
--	--	--	--	--	<.1	F	HO Cd 79
--	.88	--	--	--	.5	F	HO Cd 79
--	--	--	--	--	.3	F	HO Cd 79
30	--	--	--	--	--	F	HO Cd 79
--	1.2	--	--	--	2.7	F	HO Cd 79
87	--	--	--	--	33	F	HO Cd 80
80	--	--	--	--	2.9	F	HO Cd 80
81	--	--	--	--	5.0	F	HO Cd 80
75	--	--	--	--	21	F	HO Cd 80
72	--	--	--	--	--	F	HO Cd 80
69	--	--	--	--	1.2	F	HO Cd 81
68	--	--	--	--	1.1	F	HO Cd 81
61	3.5	--	--	--	0.9	F	HO Cd 81

Table 10.—Major-ion, nutrient, and organic-carbon concentrations in ground water in Howard County—Continued

Site no.	Site type	Date	Geo-logic unit	Depth of well, total (ft)	Pumping or flow period prior to sam-pling (min)	Flow rate, instan-taneous (gal/min)	Spe-cific con-duct-ance (µS/cm)	pH (stand-ard units)	Temper-ature, air (deg C)
HO Cd 81	spring	01-19-89	300LCRV	2	--	--	102	5.8	--
HO Cd 81	spring	04-06-89	300LCRV	2	--	--	99	5.7	--
HO Cd 81	spring	06-30-89	300LCRV	2	--	--	92	6.0	--
HO Cd 102	well	10-25-89	400BLMR	150	80	7.0	245	5.8	16.0
HO Cd 206	well	06-06-89	300CCKV	205	90	4.0	111	5.9	23.0
HO Cd 240	spring	05-08-89	400BLMR	--	--	15	77	5.4	19.0
HO Cd 240	spring	10-25-89	400BLMR	--	--	4.3	78	5.7	15.5
HO Cd 249	well	05-24-90	400BLMR	205	50	8.0	192	6.7	22.5
HO Cd 334	well	06-27-89	300LCRV	200	50	6.0	28	5.5	30.0
HO Cd 334	well	06-27-89	300LCRV	200	50	6.0	28	5.5	30.0
HO Cd 341	well	09-14-88	300LCRV	30	5	1.0	46	5.6	20.0
HO Cd 341	well	06-29-89	300LCRV	30	10	.3	79	5.3	23.0
HO Cd 342	well	09-14-88	300LCRV	25	5	1.0	66	6.0	21.5
HO Cd 342	well	04-05-89	300LCRV	25	--	--	73	5.9	17.5
HO Cd 342	well	06-29-89	300LCRV	25	10	.8	67	5.8	22.5
HO Cd 344	well	05-22-90	300STRS	245	75	4.0	179	5.7	11.0
HO Cd 384	well	11-20-89	400BLMR	305	90	7.0	204	7.4	20.0
HO Cd 385	well	11-29-89	300PGMT	100	40	7.5	181	5.9	4.0
HO Cd 386	well	02-13-90	300LCRV	125	90	5.0	47	6.3	--
HO Cd 387	well	05-17-90	400BLMR	400	60	5.0	637	5.5	23.5
HO Cd 388	well	05-08-90	400BLMR	400	90	4.5	286	6.2	22.0
HO Cd 389	well	05-24-90	300MRGR	165	50	5.0	88	5.8	22.5
HO Ce 41	well	02-20-57	300GLFD	286	--	20	124	7.5	--
HO Ce 76	well	06-06-89	400BLMR	120	35	12	78	6.7	27.0
HO Ce 76	well	06-06-89	400BLMR	120	35	12	78	6.7	27.0
HO Ce 83	well	11-08-89	300OELL	165	90	5.0	42	6.0	13.0
HO Ce 102	well	06-19-89	300OELL	160	75	6.0	239	6.3	33.5
HO Ce 102	well	06-19-89	300OELL	160	75	6.0	239	6.3	33.5
HO Ce 117	well	11-01-89	300OELL	500	90	10	245	7.6	16.5
HO Ce 126	well	04-05-90	300GLFD	120	40	4.5	90	6.4	10.0
HO Ce 126	well	04-05-90	300GLFD	120	40	4.5	90	6.4	10.0
HO Ce 132	well	06-26-89	300OELL	85	60	3.0	54	5.8	36.0
HO Ce 163	well	05-03-90	300OELL	160	40	9.0	95	5.5	15.5
HO Ce 183	well	04-17-90	300GLFD	340	15	5.5	115	6.9	19.0
HO Cf 11	well	12-23-52	300MWSG	75	--	2.5	77	6.7	--
HO Cf 66	well	07-03-89	300MWSG	250	90	5.0	175	6.8	25.0
HO Cf 79	well	04-05-90	300MWSG	178	55	2.0	83	6.1	17.5
HO Cf 105	well	04-17-90	300MWSG	100	35	6.0	96	6.1	9.0
HO Cf 107	well	06-19-89	300OELL	160	70	7.5	88	6.1	24.0
HO Cf 112	well	04-10-90	300MWSG	150	30	4.0	166	7.1	17.5
HO Cf 121	well	01-24-90	300MWSG	360	70	6.0	24	7.1	12.0
HO Cf 122	well	04-24-90	300RELY	175	80	6.0	174	6.1	24.5
HO Cg 1	well	04-26-44	300DDHL	165	--	--	255	8.5	--
HO Cg 22	well	12-15-88	300RELY	127	--	<1.0	186	5.9	9.0
HO Cg 27	well	12-15-88	300MWSG	260	30	3.5	249	7.5	8.0
HO Cg 27	well	05-19-89	300MWSG	260	30	4.0	25	7.5	28.0
HO Cg 34	well	05-10-90	300RELY	300	75	5.5	367	6.8	19.5
HO Dd 40	well	05-29-90	300LCRV	240	120	5.0	77	5.8	12.5
HO Dd 94	well	07-03-89	300LCRV	300	60	6.0	216	5.3	27.0
HO Dd 94	well	07-03-89	300LCRV	300	60	6.0	216	5.3	27.0
HO Dd 97	well	01-09-90	300LCRV	300	90	6.0	161	6.5	6.0
HO De 2	well	05-23-52	300MWSG	35	--	5.0	259	5.6	--
HO De 16	well	02-05-53	300SKVLS	62	1,440	18	25	6.4	--
HO De 16	well	01-03-55	300SKVLS	62	--	15	38	6.3	--
HO De 17	well	01-03-55	300SKVLS	100	--	--	31	6.1	--
HO De 51	well	12-14-88	300MWSG	125	30	3.0	94	6.1	6.0
HO De 85	well	05-22-90	300OELL	225	100	5.0	78	5.7	19.0
HO Df 54	well	12-14-88	217PTXN	150	70	3.0	61	7.3	8.0
HO Df 55	well	06-26-89	300RELY	600	120	8.0	313	8.4	30.5

Temperature, water (deg C)	Color (platinum-cobalt units)	Oxygen, dissolved (mg/L)	Hardness total (mg/L as $CaCO_3$)	Noncarbonate hardness, (mg/L as $CaCO_3$)	Calcium dissolved (mg/L as Ca)	Magnesium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)	Potassium, dissolved (mg/L as K)	Site no.
9.5	--	8.0	--	--	6.7	4.0	3.4	2.0	HO Cd 81
--	--	8.3	--	--	6.6	3.9	3.5	2.1	HO Cd 81
13.5	--	8.1	--	--	6.2	3.8	3.5	1.9	HO Cd 81
13.5	--	6.2	69	--	16	7.0	14	4.1	HO Cd 102
14.5	--	10.4	33	--	8.0	3.2	5.9	1.7	HO Cd 206
12.5	--	7.2	20	--	4.2	2.4	4.5	2.2	HO Cd 240
13.0	--	6.2	21	--	4.4	2.4	4.2	2.1	HO Cd 240
14.0	--	.8	30	--	3.6	5.0	4.7	1.2	HO Cd 249
15.5	--	11.6	6	--	.92	.83	2.4	.90	HO Cd 334
15.5	--	11.6	5	--	.87	.80	2.4	.80	HO Cd 334
12.5	--	10.5	--	--	2.6	1.7	2.6	1.3	HO Cd 341
15.5	--	8.6	--	--	3.0	3.3	3.2	1.7	HO Cd 341
11.0	--	10.4	--	--	5.6	2.5	2.6	7.9	HO Cd 342
14.5	--	7.4	--	--	5.9	2.5	2.8	1.7	HO Cd 342
11.5	--	7.1	--	--	5.1	2.4	2.6	1.5	HO Cd 342
13.0	--	7.4	51	--	13	4.4	8.6	2.4	HO Cd 344
14.0	--	.3	81	--	23	5.7	6.4	4.5	HO Cd 384
14.0	--	6.6	57	--	13	5.8	11	1.9	HO Cd 385
12.5	--	8.7	16	--	4.7	.96	2.8	1.2	HO Cd 386
14.0	--	6.2	230	--	53	23	17	5.4	HO Cd 387
14.0	--	5.9	80	--	17	9.0	13	3.1	HO Cd 388
13.5	--	9.4	59	--	14	5.7	8.1	4.6	HO Cd 389
--	10	--	14	0	4.1	1.0	19	1.2	HO Ce 41
13.5	--	9.4	24	--	5.9	2.2	6.1	1.1	HO Ce 76
13.5	--	9.4	24	--	5.8	2.2	6.0	1.1	HO Ce 76
14.0	--	8.9	14	--	2.6	1.7	2.7	.80	HO Ce 83
15.0	--	14.6	79	--	20	7.0	15	3.1	HO Ce 102
15.0	--	14.6	74	--	19	6.3	14	2.6	HO Ce 102
15.0	--	1.7	81	--	25	4.5	18	1.5	HO Ce 117
13.5	--	5.6	30	--	7.8	2.6	5.4	1.3	HO Ce 126
13.5	--	5.6	31	--	8.0	2.7	5.5	1.2	HO Ce 126
16.0	--	7.4	13	--	2.8	1.4	5.6	1.3	HO Ce 132
13.0	--	9.1	29	--	8.1	2.1	6.6	2.0	HO Ce 163
13.5	--	5.6	39	--	8.2	4.4	7.7	2.2	HO Ce 183
12.0	15	--	22	0	5.1	2.3	6.2	3.2	HO Cf 11
14.5	--	.7	74	--	19	6.3	6.4	2.7	HO Cf 66
12.0	--	7.2	30	--	7.3	2.9	5.2	.70	HO Cf 79
12.5	--	5.2	35	--	7.8	3.8	4.8	1.1	HO Cf 105
14.0	--	7.8	28	--	8.3	1.7	6.9	1.9	HO Cf 107
13.5	--	1.8	71	--	18	6.2	3.8	2.8	HO Cf 112
13.0	--	.1	110	--	33	6.2	4.2	2.7	HO Cf 121
13.0	--	.1	37	--	7.2	4.5	7.7	2.5	HO Cf 122
--	--	--	100	0	--	--	--	--	HO Cg 1
18.5	--	--	63	--	16	5.6	11	4.6	HO Cg 22
13.0	--	1.0	120	--	35	7.1	5.8	2.7	HO Cg 27
14.0	--	1.3	--	--	--	--	--	--	HO Cg 27
14.0	--	.1	62	--	15	5.9	49	3.5	HO Cg 34
14.0	--	5.1	28	--	8.7	1.5	3.2	1.5	HO Dd 40
15.5	--	4.7	0	--	.03	.03	43	.20	HO Dd 94
15.5	--	4.7	--	--	.05	<.01	44	.30	HO Dd 94
13.0	--	5.1	55	--	17	3.1	4.2	1.4	HO Dd 97
--	3	--	81	65	16	10	15	1.5	HO De 2
12.0	4	--	5	0	1.2	.50	2.2	.80	HO De 16
12.0	25	--	7	0	2.0	.50	2.1	.20	HO De 16
12.0	20	--	9	0	2.1	1.0	2.7	.20	HO De 17
12.5	--	8.1	38	--	8.4	4.1	3.4	.30	HO De 51
13.5	--	8.4	22	--	4.9	2.4	4.3	1.2	HO De 85
12.5	--	3.7	14	--	2.8	1.6	3.0	1.4	HO Df 54
16.0	--	.0	16	--	3.7	1.6	70	3.0	HO Df 55

Table 10.—Major-ion, nutrient, and organic-carbon concentrations in ground water in Howard County—Continued

Site no.	Date	Alkalinity, total (mg/L as CaCO3)	Carbon dioxide, dissolved (mg/L as CO_2)	Sulfate, dissolved (mg/L as SO_4)	Chloride, dissolved (mg/L as Cl)	Fluoride, dissolved (mg/L as F)	Silica, dissolved (mg/L as SiO_2)	Solids, residue at 180 deg. C dissolved (mg/L)
HO Cd 81	01-19-89	9	--	4.4	8.3	0.1	13	--
HO Cd 81	04-06-89	8	--	5.2	8.5	.1	13	--
HO Cd 81	06-30-89	8	--	3.0	8.1	.1	14	--
HO Cd 102	10-25-89	36	--	2.0	34	<.1	32	155
HO Cd 206	06-06-89	12	--	<1.0	20	.1	14	67
HO Cd 240	05-08-89	13	--	2.0	6.4	.1	14	65
HO Cd 240	10-25-89	8	--	2.0	6.8	<.1	15	36
HO Cd 249	05-24-90	66	--	2.1	6.0	<.1	15	51
HO Cd 334	06-27-89	6	--	<1.0	2.2	<.1	9.3	31
HO Cd 334	06-27-89	6	--	<1.0	2.2	<.1	9.1	20
HO Cd 341	09-14-88	9	--	1.1	2.9	.1	9.3	--
HO Cd 341	06-29-89	4	--	<1.0	14	.1	8.0	--
HO Cd 342	09-14-88	15	--	1.0	4.5	<.1	14	--
HO Cd 342	04-05-89	14	--	.40	4.3	.1	15	--
HO Cd 342	06-29-89	21	--	<1.0	4.9	.1	15	--
HO Cd 344	05-22-90	12	--	2.6	30	<.1	21	123
HO Cd 384	11-20-89	90	--	14	3.3	.1	30	133
HO Cd 385	11-29-89	26	--	32	8.8	.1	28	122
HO Cd 386	02-13-90	23	--	1.0	2.0	.1	13	40
HO Cd 387	05-17-90	33	--	1.3	160	.2	27	446
HO Cd 388	05-08-90	37	--	2.5	36	.1	28	190
HO Cd 389	05-24-90	24	--	9.4	11	<.1	23	115
HO Ce 41	02-20-57	52	3.2	.20	3.5	.1	22	86
HO Ce 76	06-06-89	24	--	<1.0	4.3	.1	28	55
HO Ce 76	06-06-89	24	--	<1.0	4.2	.1	27	60
HO Ce 83	11-08-89	20	--	<1.0	1.6	.1	20	32
HO Ce 102	06-19-89	43	--	21	37	.2	29	142
HO Ce 102	06-19-89	43	--	21	37	.2	26	174
HO Ce 117	11-01-89	75	--	33	7.8	.4	25	151
HO Ce 126	04-05-90	28	--	<1.0	5.1	<.1	28	79
HO Ce 126	04-05-90	28	--	<1.0	5.2	<.1	29	78
HO Ce 132	06-26-89	17	--	<1.0	1.8	.1	26	50
HO Ce 163	05-03-90	39	--	<1.0	6.5	<.1	23	66
HO Ce 183	04-17-90	48	--	7.0	1.6	<.1	26	85
HO Cf 11	12-23-52	30	12	9.2	1.0	<.1	39	91
HO Cf 66	07-03-89	83	--	5.0	1.7	.2	40	126
HO Cf 79	04-05-90	33	--	2.7	2.0	<.1	32	78
HO Cf 105	04-17-90	38	--	1.4	4.6	<.1	30	75
HO Cf 107	06-19-89	37	--	<1.0	2.3	.1	38	72
HO Cf 112	04-10-90	56	--	5.2	11	.1	33	112
HO Cf 121	01-24-90	115	--	12	3.5	.2	45	170
HO Cf 122	04-24-90	75	--	7.9	7.5	.2	38	84
HO Cg 1	04-26-44	105	.6	20	5.0	--	--	--
HO Cg 22	12-15-88	64	--	18	6.5	.3	32	132
HO Cg 27	12-15-88	105	--	15	3.4	.1	28	156
HO Cg 27	05-19-89	--	--	--	--	--	--	--
HO Cg 34	05-10-90	150	--	41	5.1	.5	25	226
HO Dd 40	05-29-90	27	--	2.8	2.0	.1	18	56
HO Dd 94	07-03-89	16	--	<1.0	19	<.1	8.7	140
HO Dd 94	07-03-89	16	--	<1.0	20	<.1	8.7	134
HO Dd 97	01-09-90	57	--	4.0	3.1	<.1	15	86
HO De 2	05-23-52	16	80	59	25	.1	21	172
HO De 16	02-05-53	8	6.4	.20	2.3	.1	9.6	25
HO De 16	01-03-55	15	14	.10	1.7	.1	8.6	28
HO De 17	01-03-55	10	15	.10	2.9	.1	11	26
HO De 51	12-14-88	31	--	1.1	5.5	<.1	26	70
HO De 85	05-22-90	11	--	<1.0	8.5	<.1	15	50
HO Df 54	12-14-88	21	--	8.5	1.3	.1	11	41
HO Df 55	06-26-89	156	--	11	3.0	.8	13	194

Solids, sum of constituents, dissolved (mg/L)	Nitrate, dissolved (mg/L as N)	Nitrite plus nitrate, total (mg/L as N)	Nitrogen, ammonia total (mg/L as N)	Phosphorus, total (mg/L as P)	Carbon, organic total (mg/L as C)	Additional water quality information	Site no.
71	--	--	--	--	2.1	F	HO Cd 81
68	--	--	--	--	--	F	HO Cd 81
66	4.6	--	--	--	.7	F	HO Cd 81
132	--	5.3	.02	.04	.2	D	HO Cd 102
--	--	1.8	<.01	.54	.1	A	HO Cd 206
41	--	3.5	.02	.02	.2	A,B,C	HO Cd 240
42	--	4.1	.02	.02	<.1	A,B,C	HO Cd 240
51	--	2.6	<.01	.02	<.1	A,B,C	HO Cd 249
--	--	.70	.02	<.01	.4	A,B,C	HO Cd 334
--	--	.90	<.01	.03	.1	A,B,C	HO Cd 334
34	1.6	--	--	--	2.5	F	HO Cd 341
--	1.2	--	--	--	.7	F	HO Cd 341
59	--	--	--	--	.8	F	HO Cd 342
55	--	--	--	--	--	F	HO Cd 342
--	.76	--	--	--	2.7	F	HO Cd 342
90	--	5.0	<.01	.03	.1	A,B,C	HO Cd 344
136	--	<.10	.02	<.01	.1	A,B,C	HO Cd 384
117	--	2.0	<.01	.05	.5	A,B,C	HO Cd 385
35	--	--	--	--	.3	A,C,E	HO Cd 386
308	--	7.5	<.01	.02	<.1	A,B,C	HO Cd 387
131	--	7.3	<.01	.03	<.1	A,B,C,E	HO Cd 388
115	--	1.5	<.01	<.01	<.1	A,B,C	HO Cd 389
86	.68	--	--	--	--	A	HO Ce 41
--	--	2.2	<.01	.38	.1	A,B,C	HO Ce 76
--	--	2.1	<.01	.05	.1	A,B,C	HO Ce 76
--	--	.90	<.01	.06	<.1	A,D	HO Ce 83
158	--	<.10	<.01	.01	<.1	A,B,C	HO Ce 102
152	--	<.10	<.01	<.01	.9	A,B,C	HO Ce 102
160	--	<.10	<.01	.01	.2	A,D	HO Ce 117
--	--	2.5	<.01	.04	1.2	A,B,C,E	HO Ce 126
--	--	2.5	<.01	.04	<.1	A,D,E	HO Ce 126
--	--	1.3	.01	.11	<.1	A,B,C	HO Ce 132
--	--	1.4	<.01	1.30	.1	A,B,C	HO Ce 163
86	--	<.10	<.01	.04	<.1	A,D,E	HO Ce 183
85	.07	--	--	--	--	A	HO Cf 11
131	--	<.10	<.01	.03	<.1	A,B,C	HO Cf 66
73	--	1.1	<.01	.02	<.1	A,B,C	HO Cf 79
75	--	1.1	<.01	.03	<.1	A,B,C,E	HO Cf 105
--	--	1.1	<.01	.09	<.1	A,B,C	HO Cf 107
115	--	.80	<.01	1.80	<.1	A,D	HO Cf 112
170	--	<.10	.05	.02	--	A,D,E	HO Cf 121
118	--	<.10	.01	.09	<.1	A,D	HO Cf 122
--	.02	--	--	--	--	A	HO Cg 1
133	--	<.10	--	<.01	1.3	A,D	HO Cg 22
159	--	.50	--	.02	<.1	A,B,C	HO Cg 27
--	--	--	--	--	--	A	HO Cg 27
232	--	<.10	.05	.02	<.1	A,B,C,E	HO Cg 34
55	--	1.0	<.01	.03	.2	A,B,C	HO Dd 40
--	--	13.0	<.01	<.01	<.1	A,B,C	HO Dd 94
--	--	13.0	.02	<.01	.2	A,B,C	HO Dd 94
81	--	1.1	.01	.03	.3	A,B	HO Dd 97
160	.50	--	--	--	--	A	HO De 2
22	.02	--	--	--	--	A	HO De 16
25	.11	--	--	--	--	A	HO De 16
26	.09	--	--	--	--	A	HO De 17
68	--	1.7	--	.02	<.1	A,B,C	HO De 51
--	--	3.5	.03	<.01	.2	A,B,C	HO De 85
42	--	<.10	--	.08	<.1	A,D	HO Df 54
198	--	<.10	.05	.02	<.1	A	HO Df 55

Table 11.—Trace-element and radon concentrations in ground water in Howard County

[µg/L = micrograms per liter; * = results listed as total recoverable obtained from unfiltered samples; -- = analysis not performed; < = actual value is less than value shown; pCi/L = picoCuries per liter]

Site no.	Date	Aluminum, dissolved (µg/L as Al)	Barium, dissolved (µg/L as Ba)	Beryllium, dissolved (µg/L as Be)	Cadmium, dissolved (µg/L as Cd)	Chromium, dissolved (µg/L as Cr)	Cobalt, dissolved (µg/L as Co)	Copper, dissolved (µg/L as Cu)	Iron, dissolved (µg/L as Fe)
HO Aa 8	04-10-89	<10	<2	<0.5	<1	<5	<3	10	31
HO Ab 2	05-15-52	100*	--	--	--	--	--	--	410*
HO Ab 78	04-18-89	<10	20	<.5	<1	<5	<3	<10	18
HO Ab 103	04-18-89	<10	16	<.5	<1	<5	<3	80	25
HO Ac 25	05-22-89	<10	12	<.5	<1	<5	<3	70	5
HO Ac 82	05-09-89	<10	4	<.5	2	<5	<3	30	4
HO Ac 92	05-15-90	20	5	<.5	<1	<5	<3	30	<3
HO Ac 92	05-15-90	<10	4	<.5	<1	<5	<3	30	5
HO Ad 26	05-23-89	<10	5	<.5	2	<5	<3	<10	5
HO Ad 34	05-10-90	<10	19	<.5	2	<5	<3	10	6
HO Ad 83	05-09-89	<10	33	<.5	1	<5	<3	60	<3
HO Ae 3	05-15-89	<10	56	<.5	<1	<5	<3	40	12
HO Bb 59	05-01-89	<10	14	<.5	<1	<5	<3	40	5
HO Bb 59	11-01-89	.10	11	<.5	<1	<5	<3	40	8
HO Bb 66	04-11-90	20	29	<.5	<1	<5	<3	170	9
HO Bb 73	04-26-90	40	30	<.5	3	<5	<3	40	6
HO Bb 88	05-01-90	<10	<2	<.5	<1	<5	<3	<10	8
HO Bb 138	05-01-89	<10	35	<.5	<1	<5	<3	30	6
HO Bb 155	05-08-90	<10	<2	<.5	<1	<5	<3	<10	6
HO Bb 156	04-10-89	10	9	<.5	2	<5	<3	50	6
HO Bb 160	04-11-90	<10	13	<.5	<1	<5	<3	50	10
HO Bc 8	12-17-52	200*	--	--	--	--	--	--	1,100*
HO Bc 25	05-31-90	<10	47	<.5	<1	<5	<3	80	10
HO Bc 63	06-14-89	20	25	<.5	<1	<5	<3	120	3
HO Bc 157	11-08-89	<10	11	<.5	<1	<5	<3	50	12
HO Bc 172	11-29-89	<10	<2	<.5	<1	<5	<3	20	<3
HO Bc 176	04-17-90	<10	19	<.5	2	<5	<3	<10	6
HO Bc 187	12-09-88	<10	19	<.5	4	<5	<3	30	110
HO Bc 203	04-26-90	<10	10	<.5	<1	<5	<3	30	29
HO Bc 203	04-26-90	<10	10	<.5	<1	<5	<3	30	30
HO Bc 246	03-20-89	40	50	<.5	2	<5	<3	20	11
HO Bc 264	05-08-89	10	48	<.5	2	<5	<3	<10	25
HO Bc 264	10-25-89	20	94	<.5	<1	<5	<3	10	8
HO Bc 294	05-03-90	<10	7	<.5	2	<5	<3	<10	6
HO Bc 304	01-09-90	10	43	<.5	<1	<5	<3	20	3
HO Bd 3	05-15-52	<50*	--	--	--	--	--	--	120*
HO Bd 4	05-15-52	1,200*	--	--	--	--	--	--	310*
HO Bd 9	12-16-52	300*	--	--	--	--	--	--	480*
HO Bd 18[1]	08-14-81	<100	--	--	1*	2*	--	3*	20
HO Bd 77	03-28-89	10	40	<.5	4	<5	<3	30	11
HO Bd 150	05-15-90	20	18	<.5	<1	<5	<3	40	<3
HO Bd 246	03-28-89	30	49	<.5	3	<5	<3	30	14
HO Bd 325	03-27-89	<10	8	<.5	2	<5	<3	10	27
HO Bd 390	03-27-89	40	140	<.5	2	<5	<3	20	8
HO Bd 401	11-20-89	<10	55	<.5	<1	<5	<3	50	34
HO Bd 402	01-24-90	<10	55	<.5	2	<5	<3	40	49
HO Bd 403	02-06-90	50	310	<.5	<1	<5	<3	70	36
HO Bd 404	02-06-90	20	24	<.5	1	<5	<3	20	16
HO Bd 405	02-27-90	30	88	.7	3	<5	<3	20	19
HO Bd 406	02-27-90	20	130	<.5	<1	<5	<3	40	8
HO Be 21	06-05-89	20	46	<.5	<1	<5	<3	60	6
HO Be 33	05-01-90	<10	64	<.5	4	<5	<3	<10	5
HO Be 88	05-08-89	<10	23	1	2	10	<3	<10	6
HO Be 96	05-15-89	<10	66	<.5	<1	<5	<3	20	7
HO Be 109	06-14-89	<10	35	<.5	<1	<5	<3	30	6
HO Be 112	05-31-90	<10	10	<.5	<1	<5	<3	<10	<3
HO Be 140	02-13-90	<10	21	<.5	<1	<5	<3	10	19
HO Bf 4	03-21-51	900*	--	--	--	--	--	--	1,600*
HO Bf 8	02-05-52	270*	--	--	--	--	--	--	150*
HO Bf 8	05-18-54	--	--	--	--	--	--	--	70*
HO Bf 56	06-05-89	<10	39	<0.5	1	<5	<3	<10	24
HO Bf 68	05-17-90	<10	<2	<.5	<1	<5	<3	<10	5
HO Bf 77	05-23-89	<10	75	<.5	2	<5	<3	<10	6
HO Bf 81	05-29-90	<10	190	<.5	<1	<5	<3	50	6
HO Cc 1	12-19-52	<50*	--	--	--	--	--	--	430*

Lead, dis- solved (µg/L as Pb)	Lithium, dis- solved (µg/L as Li)	Manga- nese, dis- solved (µg/L as Mn)	Molyb- denum, dis- solved (µg/L as Mo)	Nickel, dis- solved (µg/L as Ni)	Silver, dis- solved (µg/L as Ag)	Stron- tium, dis- solved (µg/L as Sr)	Vana- dium, dis- solved (µg/L as V)	Zinc, dis- solved (µg/L as Zn)	Radon 222, total (pCi/L)	Site no.
<10	<4	12	<10	<10	<1.0	52	<6	4	7,300	HO Aa 8
--	--	40*	--	--	--	--	--	500*	--	HO Ab 2
<10	<4	19	<10	<10	<1.0	32	<6	7	3,100	HO Ab 78
<10	<4	1	<10	<10	<1.0	34	<6	11	3,400	HO Ab 103
<10	<4	12	<10	<10	<1.0	38	<6	310	3,500	HO Ac 25
<10	<4	8	<10	<10	2.0	41	<6	<3	4,100	HO Ac 82
<10	<4	<1	<10	<10	<1.0	48	<6	<3	3,200	HO Ac 92
<10	<4	<1	<10	<10	<1.0	48	<6	<3	--	HO Ac 92
<10	6	29	<10	10	<1.0	120	<6	9	2,500	HO Ad 26
<10	<4	4	<10	<10	<1.0	19	<6	6	2,600	HO Ad 34
<10	<4	5	<10	<10	<1.0	47	<6	13	170	HO Ad 83
<10	<4	<1	<10	<10	<1.0	120	<6	4	15,000	HO Ae 3
<10	<4	9	<10	<10	<1.0	7	<6	9	2,800	HO Bb 59
<10	<4	8	<10	<10	1.0	8	<6	11	2,400	HO Bb 59
<10	<4	19	<10	<10	<1.0	33	<6	18	2,500	HO Bb 66
10	<4	41	<10	<10	1.0	15	<6	12	3,300	HO Bb 73
<10	5	13	<10	<10	<1.0	150	<6	<3	1,700	HO Bb 88
<10	<4	23	<10	<10	<1.0	51	<6	19	3,700	HO Bb 138
<10	7	5	<10	<10	<1.0	66	<6	<3	6,900	HO Bb 155
<10	<4	15	<10	<10	<1.0	4	<6	14	3,600	HO Bb 156
<10	<4	1	<10	<10	<1.0	55	<6	7	1,800	HO Bb 160
--	--	10*	--	--	--	--	--	80*	--	HO Bc 8
20	10	11	<10	<10	<1.0	190	<6	28	3,800	HO Bc 25
<10	<4	32	<10	<10	<1.0	51	<6	25	3,400	HO Bc 63
<10	<4	1	<10	<10	<1.0	36	<6	18	2,700	HO Bc 157
<10	<4	1	<10	<10	<1.0	22	<6	<3	--	HO Bc 172
<10	<4	4	<10	<10	<1.0	55	<6	<3	--	HO Bc 176
<10	<4	46	<10	<10	<1.0	47	<6	17	3,400	HO Bc 187
10	<4	4	<10	<10	<1.0	58	<6	4	1,500	HO Bc 203
10	<4	4	<10	<10	<1.0	58	<6	5	1,400	HO Bc 203
10	<4	31	<10	<10	<1.0	67	<6	15	2,600	HO Bc 246
<10	<4	9	<10	<10	<1.0	110	<6	6	--	HO Bc 264
<10	<4	9	<10	<10	<1.0	160	<6	10	--	HO Bc 264
<10	<4	3	<10	<10	<1.0	17	<6	4	3,700	HO Bc 294
<10	<4	8	<10	<10	<1.0	100	<6	12	3,200	HO Bc 304
--	--	<5*	--	--	--	--	--	--	--	HO Bd 3
--	--	10*	--	--	--	--	--	5,500*	--	HO Bd 4
--	--	10*	--	--	--	--	--	840*	--	HO Bd 9
1*	--	2	--	3*	<1.0*	--	--	30*	--	HO Bd 18
<10	<4	25	<10	<10	<1.0	90	<6	10	3,100	HO Bd 77
<10	9	8	<10	<10	<1.0	57	<6	4	4,800	HO Bd 150
<10	<4	180	<10	<10	1.0	91	<6	14	6,700	HO Bd 246
<10	11	140	<10	<10	<1.0	81	<6	6	1,900	HO Bd 325
20	<4	49	<10	<10	2.0	140	<6	17	2,500	HO Bd 390
20	<4	200	<10	<10	4.0	87	<6	9	3,300	HO Bd 401
<10	15	3	<10	20	<1.0	240	<6	<3	5,200	HO Bd 402
10	4	74	<10	<10	<1.0	670	<6	18	--	HO Bd 403
<10	<4	3	<10	<10	<1.0	49	<6	8	--	HO Bd 404
<10	<4	10	<10	10	<1.0	97	<6	20	15,000	HO Bd 405
10	<4	16	<10	10	<1.0	250	<6	10	4,100	HO Bd 406
<10	<4	3	<10	<10	<1.0	120	<6	15	9,000	HO Be 21
<10	4	<1	<10	<10	<1.0	220	<6	5	1,400	HO Be 33
<10	<4	<1	<10	<10	<1.0	66	<6	<3	25,000	HO Be 88
<10	6	15	<10	<10	<1.0	340	<6	23	3,400	HO Be 96
<10	<4	2	<10	<10	<1.0	68	<6	14	16,000	HO Be 109
<10	12	4	<10	<10	<1.0	100	<6	<3	860	HO Be 112
20	<4	6	<10	<10	2.0	71	<6	21	--	HO Be 140
--	--	<5*	--	--	--	--	--	--	--	HO Bf 4
--	--	<5*	--	--	--	--	--	800*	--	HO Bf 8
--	--	--	--	--	--	--	--	--	--	HO Bf 8
<10	12	21	<10	<10	<1.0	110	<6	25	3,500	HO Bf 56
<10	8	4	<10	<10	<1.0	110	<6	5	3,400	HO Bf 68
<10	6	1	<10	<10	<1.0	470	<6	11	--	HO Bf 77
10	5	4	<10	<10	2.0	620	<6	6	1,600	HO Bf 81
--	--	50*	--	--	--	--	--	590*	--	HO Cc 1

Table 11.—Trace-element and radon concentrations in ground water in Howard County—Continued

Site no.	Date	Aluminum, dissolved (µg/L as Al)	Barium, dissolved (µg/L as Ba)	Beryllium, dissolved (µg/L as Be)	Cadmium, dissolved (µg/L as Cd)	Chromium, dissolved (µg/L as Cr)	Cobalt, dissolved (µg/L as Co)	Copper, dissolved (µg/L as Cu)	Iron, dissolved (µg/L as Fe)
HO Cc 12	04-24-90	<10	10	<.5	<1	<5	<3	20	6
HO Cc 38	01-18-89	<10	53	<.5	2	<5	<3	<10	10
HO Cd 102	10-25-89	<10	110	<.5	<1	<5	<3	40	55
HO Cd 206	06-06-89	<10	21	<.5	<1	<5	<3	60	7
HO Cd 240	05-08-89	10	49	1	1	6	<3	<10	12
HO Cd 240	10-25-89	20	53	<.5	<1	<5	<3	<10	5
HO Cd 249	05-24-90	<10	10	<.5	<1	5	<3	10	5
HO Cd 334	06-27-89	10	10	<.5	<1	<5	<3	40	8
HO Cd 334	06-27-89	10	9	<.5	<1	<5	<3	70	5
HO Cd 344	05-22-90	10	81	<.5	<1	<5	<3	30	11
HO Cd 384	11-20-89	<10	29	<.5	<1	<5	<3	<10	120
HO Cd 385	11-29-89	<10	71	<.5	<1	<5	<3	20	14
HO Cd 386	02-13-90	<10	11	<.5	<1	<5	<3	30	12
HO Cd 387	05-17-90	<10	380	<.5	2	<5	<3	20	12
HO Cd 388	05-08-90	<10	96	<.5	<1	<5	<3	20	7
HO Cd 389[1]	05-24-90	<10	28	<.5	1	<5	<3	<10	19
HO Ce 41	02-20-57	<50*	--	--	--	--	--	--	480*
HO Ce 76	06-06-89	<10	41	<.5	<1	<5	<3	20	8
HO Ce 76	06-06-89	<10	41	<.5	<1	<5	<3	20	7
HO Ce 83	11-08-89	<10	17	<.5	<1	20	<3	20	31
HO Ce 102	06-19-89	<10	15	<.5	<1	<5	7	30	900
HO Ce 102	06-19-89	<10	14	<.5	<1	<5	6	50	840
HO Ce 117	11-01-89	10	27	<.5	<1	<5	<3	<10	9
HO Ce 126	04-05-90	<10	3	<.5	<1	<5	<3	<10	9
HO Ce 126	04-05-90	<10	3	<.5	<1	<5	<3	<10	7
HO Ce 132	06-26-89	<10	17	<.5	<1	7	<3	20	11
HO Ce 163	05-03-90	<10	61	<.5	<1	<5	<3	<10	7
HO Ce 183	04-17-90	<10	36	<.5	1	<5	<3	20	19
HO Cf 11	12-23-52	<50*	--	--	--	--	--	--	5,100*
HO Cf 66	07-03-89	<10	15	<.5	1	<5	<3	20	27
HO Cf 79	04-05-90	<10	3	<.5	<1	<5	<3	<10	20
HO Cf 105	04-17-90	<10	28	<.5	1	<5	<3	10	24
HO Cf 107	06-19-89	<10	51	<.5	<1	<5	<3	10	6
HO Cf 112	04-10-90	<10	120	<.5	<1	<5	<3	<10	81
HO Cf 121	01-24-90	20	66	<.5	<1	<5	20	<10	2,000
HO Cf 122	04-24-90	<10	320	<.5	3	<5	30	<10	18,000
HO Cg 1	04-26-44	--	--	--	--	--	--	--	1,000*
HO Cg 22	12-15-88	<10	81	<.5	1	<5	4	20	410
HO Cg 27	12-15-88	<10	7	<.5	2	<5	<3	20	9
HO Cg 27	05-19-89	--	--	--	--	--	--	--	--
HO Cg 34	05-10-90	<10	52	<.5	2	<5	<3	<10	19
HO Dd 40	05-29-90	<10	8	<.5	<1	<5	<3	<10	57
HO Dd 94	07-03-89	<10	<2	<.5	<1	<5	<3	30	4
HO Dd 94	07-03-89	<10	<2	<.5	<1	<5	<3	30	5
HO Dd 97	01-09-90	<10	12	<.5	<1	<5	<3	60	24
HO De 2	05-23-52	300*	--	--	--	--	--	--	1,200*
HO De 16	02-05-53	<50*	<50*	--	--	--	--	--	130*
HO De 16	01-03-55	<50*	--	--	--	--	--	--	2,900*
HO De 17	01-03-55	<50*	--	--	--	--	--	--	1,500*
HO De 51	12-14-88	--	<2	<.5	2	<5	<3	70	9
HO De 85	05-22-90	<10	29	<.5	<1	<5	<3	20	44
HO Df 54	12-14-88	<10	26	1	6	<5	<3	120	4,300
HO Df 55	06-26-89	<10	23	<.5	<1	6	<3	<10	1,100

Lead, dis-solved (µg/L as Pb)	Lithium, dis-solved (µg/L as Li)	Manga-nese, dis-solved (µg/L as Mn)	Molyb-denum, dis-solved (µg/L as Mo)	Nickel, dis-solved (µg/L as Ni)	Silver, dis-solved (µg/L as Ag)	Stron-tium, dis-solved (µg/L as Sr)	Vana-dium, dis-solved (µg/L as V)	Zinc, dis-solved (µg/L as Zn)	Radon 222, total (pCi/L)	Site no.
20	<4	1	<10	<10	<1.0	53	<6	4	2,600	HO Cc 12
<10	18	40	<10	10	<1.0	220	<6	<3	2,800	HO Cc 38
20	9	4	<10	<10	<1.0	170	<6	49	13,000	HO Cd 102
<10	<4	<1	<10	<10	<1.0	74	<6	32	20,000	HO Cd 206
<10	<4	4	<10	<10	<1.0	35	<6	<3	--	HO Cd 240
<10	<4	3	<10	<10	<1.0	34	<6	4	--	HO Cd 240
<10	<4	1	<10	<10	<1.0	23	<6	<3	5,000	HO Cd 249
<10	<4	4	<10	10	<1.0	10	<6	12	1,900	HO Cd 334
<10	<4	6	<10	<10	<1.0	10	<6	11	--	HO Cd 334
<10	<4	3	<10	<10	2.0	110	<6	8	15,000	HO Cd 344
<10	4	110	<10	<10	<1.0	93	<6	5	19,000	HO Cd 384
<10	<4	<1	<10	<10	<1.0	140	<6	4	--	HO Cd 385
<10	<4	3	<10	<10	1.0	21	<6	8	--	HO Cd 386
10	13	9	<10	20	<1.0	490	<6	10	9,900	HO Cd 387
<10	8	13	<10	<10	<1.0	270	<6	<3	9,300	HO Cd 388
<10	9	92	<10	<10	2.0	61	<6	47	2,900	HO Cd 389
--	400*	20*	--	--	--	--	--	110*	--	HO Ce 41
<10	<4	1	<10	<10	1.0	38	<6	<3	7,300	HO Ce 76
<10	<4	2	<10	<10	<1.0	39	<6	<7	7,300	HO Ce 76
10	<4	8	<10	<10	2.0	21	<6	8	1,900	HO Ce 83
<10	26	410	<10	<10	2.0	120	<6	4	8,300	HO Ce 102
<10	25	370	<10	<10	<1.0	110	<6	15	--	HO Ce 102
<10	17	14	<10	<10	<1.0	150	<6	<3	7,100	HO Ce 117
10	<4	25	<10	<10	<1.0	42	<6	<3	--	HO Ce 126
10	<4	27	<10	<10	<1.0	45	<6	5	3,600	HO Ce 126
<10	6	15	<10	<10	2.0	54	<6	7	23,000	HO Ce 132
<10	<4	3	<10	<10	<1.0	97	<6	<3	2,000	HO Ce 163
<10	26	14	<10	<10	1.0	84	<6	11	5,100	HO Ce 183
--	--	190*	--	--	--	--	--	1,700*	--	HO Cf 11
<10	13	44	<10	<10	<1.0	77	<6	7	30,000	HO Cf 66
<10	<4	4	<10	<10	<1.0	32	<6	8	2,500	HO Cf 79
<10	<4	5	<10	<10	<1.0	81	<6	21	4,600	HO Cf 105
<10	4	1	<10	<10	2.0	140	<6	4	13,000	HO Cf 107
<10	12	110	<10	<10	<1.0	110	<6	16	6,000	HO Cf 112
<10	11	340	<10	<10	<1.0	160	<6	<3	2,400	HO Cf 121
10	8	2,400	<10	50	<1.0	45	<6	120	1,600	HO Cf 122
--	--	--	--	--	--	--	--	--	--	HO Cg 1
<10	11	430	<10	<10	<1.0	120	<6	50	--	HO Cg 22
<10	11	2	<10	<10	2.0	98	<6	5	38,000	HO Cg 27
--	--	--	--	--	--	--	--	--	42,000	HO Cg 27
<10	12	22	<10	<10	<1.0	150	<6	<3	2,700	HO Cg 34
<10	5	2	<10	<10	<1.0	32	<6	6	2,400	HO Dd 40
20	<4	<1	<10	<10	<1.0	<1	<6	7	1,900	HO Dd 94
<10	<4	<1	<10	<10	<1.0	1	<6	<3	--	HO Dd 94
<10	<4	15	<10	<10	<1.0	82	<6	9	2,100	HO Dd 97
--	--	160*	--	--	--	--	--	<50*	--	HO De 2
--	<50*	10*	--	--	--	--	--	420*	--	HO De 16
--	<50*	100*	--	--	--	--	--	4,600*	--	HO De 16
--	<50*	60*	--	--	--	--	--	100*	--	HO De 17
20	<4	<1	<10	<10	<1.0	22	<6	<3	97	HO De 51
<10	<4	16	<10	<10	<1.0	40	<6	21	6,300	HO De 85
<10	22	130	<10	<10	<1.0	20	<6	8	<80	HO Df 54
<10	8	27	<10	<10	<1.0	34	<6	<3	2,500	HO Df 55

[1] Additional assorted radiochemical concentrations

Site no.	Date	Gross beta-partical activity, total (pCi/L as Cs-137)	Potas-sium 40, dis-solved (pCi/L as K40)	Radium 226, total (pCi/L)	Uranium natural, dis-solved (µg/L as U)
HO Bd 18	08-14-81	<5.0	--	0.3	0.90
HO Ce 41	02-20-57	--	1.3	--	--

Table 12.—Triazine-group pesticide concentrations in ground water in Howard County

[µg/L = micrograms per liter; < = actual value is less than value shown]

Site no.	Date	Alachlor, total recoverable (µg/L)	Ametryne, total (µg/L)	Atrazine, total (µg/L)	Cyanazine, total (µg/L)	Metolachlor, total recoverable (µg/L)
HO Ab 78	04-18-89	<0.10	<0.10	<0.10	<0.10	<0.1
HO Ab 103	04-18-89	<.10	<.10	<.10	<.10	<.1
HO Ac 25	05-22-89	<.10	<.10	<.10	<.10	<.1
HO Ac 82	05-09-89	<.10	<.10	<.10	<.10	<.1
HO Ac 92	05-15-90	<.10	<.10	<.10	<.10	<.1
HO Ad 26	05-23-89	<.10	<.10	<.10	<.10	<.1
HO Ad 34	05-10-90	<.10	<.10	<.10	<.10	<.1
HO Ae 3	05-15-89	<.10	<.10	<.10	<.10	<.1
HO Bb 59	11-01-89	<.10	<.10	<.10	<.10	<.1
HO Bb 66	04-11-90	<.10	<.10	.20	<.10	<.1
HO Bb 73	04-26-90	<.10	<.10	<.10	<.10	<.1
HO Bb 88	05-01-90	<.10	<.10	.10	<.10	1.8
HO Bb 138	05-01-89	<.10	<.10	<.10	<.10	<.1
HO Bb 155	05-08-90	<.10	<.10	<.10	<.10	<.1
HO Bb 156	04-10-89	<.10	<.10	<.10	<.10	<.1
HO Bb 160	04-11-90	<.10	<.10	<.10	<.10	<.1
HO Bc 176	04-17-90	<.10	<.10	<.10	<.10	<.1
HO Bc 187	12-09-88	<.10	<.10	<.10	<.10	<.1
HO Bc 203	04-26-90	<.10	<.10	.10	<.10	<.1
HO Bc 203	04-26-90	<.10	<.10	.10	<.10	<.1
HO Bc 246	03-20-89	<.10	<.10	<.10	<.10	<.1
HO Bc 264	05-08-89	<.10	<.10	.30	<.10	<.1
HO Bc 264	10-25-89	<.10	<.10	.20	<.10	.2
HO Bc 294	05-03-90	<.10	<.10	<.10	<.10	<.1
HO Bc 304	01-09-90	<.10	<.10	<.10	<.10	<.1
HO Bd 150	05-15-90	<.10	<.10	<.10	<.10	<.1
HO Bd 402	01-24-90	<.10	<.10	<.10	<.10	<.1
HO Bd 403	02-06-90	<.10	<.10	<.10	<.10	<.1
HO Bd 404	02-06-90	<.10	<.10	<.10	<.10	<.1
HO Bd 405	02-27-90	<.10	<.10	<.10	<.10	<.1
HO Bd 406	02-27-90	<.10	<.10	<.10	<.10	<.1
HO Be 21	06-05-89	<.10	<.10	<.10	<.10	<.1
HO Be 33	05-01-90	<.10	<.10	<.10	<.10	<.1
HO Be 109	06-14-89	<.10	<.10	<.10	<.10	<.1
HO Bf 68	05-17-90	<.10	<.10	<.10	<.10	<.1
HO Bf 81	05-29-90	<.10	<.10	<.10	<.10	<.1
HO Cc 12	04-24-90	<.10	<.10	<.10	<.10	<.1
HO Cc 38	01-18-89	<.10	<.10	<.10	<.10	<.1
HO Cd 240	05-08-89	<.10	<.10	<.10	<.10	<.1
HO Cd 240	10-25-89	<.10	<.10	<.10	<.10	<.1
HO Cd 249	05-24-90	<.10	<.10	<.10	<.10	<.1
HO Cd 334	06-27-89	<.10	<.10	<.10	<.10	<.1
HO Cd 334	06-27-89	<.10	<.10	<.10	<.10	<.1
HO Cd 344	05-22-90	<.10	<.10	<.10	<.10	<.1
HO Cd 384	11-20-89	<.10	<.10	<.10	<.10	<.1
HO Cd 385	11-29-89	<.10	<.10	<.10	<.10	<.1
HO Cd 386	02-13-90	<.10	<.10	<.10	<.10	<.1
HO Cd 387	05-17-90	<.10	<.10	<.10	<.10	.2
HO Cd 388	05-08-90	<.10	<.10	<.10	<.10	<.1
HO Cd 389	05-24-90	<.10	<.10	<.10	<.10	<.1
HO Ce 76	06-06-89	<.10	<.10	<.10	<.10	<.1
HO Ce 76	06-06-89	<.10	<.10	<.10	<.10	<.1
HO Ce 102	06-19-89	<.10	<.10	<.10	<.10	<.1
HO Ce 102	06-19-89	<.10	<.10	<.10	<.10	<.1
HO Ce 126	04-05-90	<.10	<.10	<.10	<.10	<.1
HO Ce 132	06-26-89	<.10	<.10	<.10	<.10	<.1
HO Ce 163	05-03-90	<.10	<.10	<.10	<.10	<.1
HO Cf 66	07-03-89	<.10	<.10	<.10	<.10	<.1
HO Cf 79	04-05-90	<.10	<.10	<.10	<.10	<.1
HO Cf 105	04-17-90	<.10	<.10	<.10	<.10	<.1
HO Cf 107	06-19-89	<.10	<.10	<.10	<.10	<.1
HO Cg 27	12-15-88	<.10	<.10	<.10	<.10	<.1
HO Cg 34	05-10-90	<.10	<.10	<.10	<.10	<.1
HO Dd 40	05-29-90	<.10	<.10	<.10	<.10	<.1
HO Dd 94	07-03-89	<.10	<.10	.10	<.10	<.1
HO Dd 94	07-03-89	<.10	<.10	.10	<.10	<.1
HO De 51	12-14-88	<.10	<.10	<.10	<.10	<.1
HO De 85	05-22-90	<.10	<.10	<.10	<.10	<.1

Metribuzin, total recoverable (µg/L)	Prometone, total (µg/L)	Prometryne, total (µg/L)	Propazine, total (µg/L)	Simazine, total (µg/L)	Simetryne, total (µg/L)	Trifluralin, total recoverable (µg/L)	Site no.
<0.1	<0.1	<0.1	<0.10	<0.10	<0.1	<0.10	HO Ab 78
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO Ab 103
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO Ac 25
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO Ac 82
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO Ac 92
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO Ad 26
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO Ad 34
<.1	.2	<.1	<.10	<.10	<.1	<.10	HO Ae 3
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO Bb 59
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO Bb 66
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO Bb 73
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO Bb 88
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO Bb 138
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO Bb 155
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO Bb 156
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO Bb 160
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO Bc 176
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO Bc 187
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO Bc 203
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO Bc 203
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO Bc 246
<.1	<.1	<.1	<.10	.10	<.1	<.10	HO Bc 264
<.1	.1	<.1	<.10	<.10	<.1	<.10	HO Bc 264
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO Bc 294
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO Bc 304
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO Bd 150
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO Bd 402
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO Bd 403
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO Bd 404
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO Bd 405
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO Bd 406
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO Be 21
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO Be 33
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO Be 109
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO Bf 68
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO Bf 81
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO Cc 12
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO Cc 38
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO Cd 240
<.1	.1	<.1	<.10	<.10	<.1	<.10	HO Cd 240
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO Cd 249
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO Cd 334
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO Cd 334
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO Cd 344
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO Cd 384
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO Cd 385
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO Cd 386
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO Cd 387
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO Cd 388
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO Cd 389
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO Ce 76
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO Ce 76
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO Ce 102
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO Ce 102
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO Ce 126
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO Ce 132
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO Ce 163
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO Cf 66
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO Cf 79
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO Cf 105
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO Cf 107
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO Cg 27
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO Cg 34
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO Dd 40
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO Dd 94
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO Dd 94
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO De 51
<.1	<.1	<.1	<.10	<.10	<.1	<.10	HO De 85

Table 13.—Carbamate-group pesticide concentrations in ground water in Howard County

[μg/L = micrograms per liter; < = actual value is less than value shown]

Site no.	Date	Aldicarb, total (μg/L)	Aldicarb sulfone, total (μg/L)	Aldicarb sulfoxide, total (μg/L)	Carbofuran, total (μg/L)
HO Ab 78	04-18-89	<0.5	<0.5	<0.5	<0.5
HO Ab 103	04-18-89	<.5	<.5	<.5	<.5
HO Ac 82	05-09-89	<.5	<.5	<.5	<.5
HO Ac 92	05-15-90	<.5	<.5	<.5	<.5
HO Ad 26	05-23-89	<5.0	<5.0	<5.0	<5.0
HO Ae 3	05-15-89	<5.0	<5.0	<5.0	<5.0
HO Bb 59	05-01-89	<.5	<.5	<.5	<.5
HO Bb 59	11-01-89	<.5	<.5	<.5	<.5
HO Bb 66	04-11-90	<.5	<.5	<.5	<.5
HO Bb 73	04-26-90	<.5	<.5	<.5	<.5
HO Bb 88	05-01-90	<.5	<.5	<.5	<.5
HO Bb 138	05-01-89	<.5	<.5	<.5	<.5
HO Bb 155	05-08-90	<.5	<.5	<.5	<.5
HO Bb 160	04-11-90	<.5	<.5	<.5	<.5
HO Bc 157	11-08-89	<.5	<.5	<.5	<.5
HO Bc 172	11-29-89	<.5	<.5	<.5	<.5
HO Bc 176	04-17-90	<.5	<.5	<.5	<.5
HO Bc 203	04-26-90	<.5	<.5	<.5	<.5
HO Bc 203	04-26-90	<.5	<.5	<.5	<.5
HO Bc 264	05-08-89	<.5	<.5	<.5	<.5
HO Bc 264	10-25-89	<.5	<.5	<.5	<.5
HO Bc 294	05-03-90	<.5	<.5	<.5	<.5
HO Bc 304	01-09-90	<.5	<.5	<.5	<.5
HO Bd 150	05-15-90	<.5	<.5	<.5	<.5
HO Bd 246	03-28-89	<.5	<.5	<.5	<.5
HO Bd 390	03-27-89	<.5	<.5	<.5	<.5
HO Bd 402	01-24-90	<.5	<.5	<.5	<.5
HO Bd 405	02-27-90	<.5	<.5	<.5	<.5
HO Bd 406	02-27-90	<.5	<.5	<.5	<.5
HO Be 21	06-05-89	<.5	<.5	<.5	<.5
HO Be 33	05-01-90	<.5	<.5	<.5	<.5
HO Be 88	05-08-89	<.5	<.5	<.5	<.5
HO Be 109	06-14-89	<.5	<.5	<.5	<.5
HO Be 140	02-13-90	<.5	<.5	<.5	<.5
HO Bf 68	05-17-90	<.5	<.5	<.5	<.5
HO Bf 77	05-23-89	<5.0	<5.0	<5.0	<5.0
HO Bf 81	05-29-90	<.5	<.5	<.5	<.5
HO Cc 12	04-24-90	<.5	<.5	<.5	<.5
HO Cc 38	01-18-89	<.5	<.5	<.5	<.5
HO Cd 240	05-08-89	<.5	<.5	<.5	<.5
HO Cd 240	10-25-89	<.5	<.5	<.5	<.5
HO Cd 249	05-24-90	<.5	<.5	<.5	<.5
HO Cd 334	06-27-89	<.5	<.5	<.5	<.5
HO Cd 334	06-27-89	<.5	<.5	<.5	<.5
HO Cd 344	05-22-90	<.5	<.5	<.5	<.5
HO Cd 384	11-20-89	<.5	<.5	<.5	<.5
HO Cd 385	11-29-89	<.5	<.5	<.5	<.5
HO Cd 387	05-17-90	<.5	<.5	<.5	.7
HO Cd 388	05-08-90	<.5	<.5	<.5	<.5
HO Cd 389	05-24-90	<.5	<.5	<.5	<.5
HO Ce 76	06-06-89	<.5	<.5	<.5	<.5
HO Ce 76	06-06-89	<.5	<.5	<.5	<.5
HO Ce 102	06-19-89	<.5	<.5	<.5	<.5
HO Ce 102	06-19-89	<.5	<.5	<.5	<.5
HO Ce 126	04-05-90	<.5	<.5	<.5	<.5
HO Ce 132	06-26-89	<.5	<.5	<.5	<.5
HO Ce 163	05-03-90	<.5	<.5	<.5	<.5
HO Cf 66	07-03-89	<.5	<.5	<.5	<.5
HO Cf 79	04-05-90	<.5	<.5	<.5	<.5
HO Cf 105	04-17-90	<.5	<.5	<.5	<.5
HO Cf 107	06-19-89	<.5	<.5	<.5	<.5
HO Cg 27	12-15-88	<.5	<.5	<.5	<.5
HO Cg 34	05-10-90	<.5	<.5	<.5	<.5
HO Dd 40	05-29-90	<.5	<.5	<.5	<.5
HO Dd 94	07-03-89	<.5	<.5	<.5	<.5
HO Dd 94	07-03-89	<.5	<.5	<.5	<.5
HO Dd 97	01-09-90	<.5	<.5	<.5	<.5
HO De 51	12-14-88	<.5	<.5	<.5	<.5
HO De 85	05-22-90	<.5	<.5	<.5	<.5

3-Hydroxy carbo-furan, total (µg/L)	Metho-myl, total (µg/L)	1-Nap-thol, total (µg/L)	Oxamyl, total (µg/L)	Propham, total (µg/L)	Sevin, total (µg/L)	Site no.
<0.5	<0.5	<0.50	<0.5	<0.5	<0.50	HO Ab 78
<.5	<.5	<.50	<.5	<.5	<.50	HO Ab 103
<.5	<.5	<.50	<.5	<.5	<.50	HO Ac 82
<.5	<.5	<.50	<.5	<.5	<.50	HO Ac 92
<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	HO Ad 26
<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	HO Ae 3
<.5	<.5	<.50	<.5	<.5	<.50	HO Bb 59
<.5	<.5	<.50	<.5	<.5	<.50	HO Bb 59
<.5	<.5	<.50	<.5	<.5	<.50	HO Bb 66
<.5	<.5	<.50	<.5	<.5	<.50	HO Bb 73
<.5	<.5	<.50	<.5	<.5	<.50	HO Bb 88
<.5	<.5	<.50	<.5	<.5	<.50	HO Bb 138
<.5	<.5	<.50	<.5	<.5	<.50	HO Bb 155
<.5	<.5	<.50	<.5	<.5	<.50	HO Bb 160
<.5	<.5	<.50	<.5	<.5	<.50	HO Bc 157
<.5	<.5	<.50	<.5	<.5	<.50	HO Bc 172
<.5	<.5	<.50	<.5	<.5	<.50	HO Bc 176
<.5	<.5	<.50	<.5	<.5	<.50	HO Bc 203
<.5	<.5	<.50	<.5	<.5	<.50	HO Bc 203
<.5	<.5	<.50	<.5	<.5	<.50	HO Bc 264
<.5	<.5	<.50	<.5	<.5	<.50	HO Bc 264
<.5	<.5	<.50	<.5	<.5	<.50	HO Bc 294
<.5	<.5	<.50	<.5	<.5	<.50	HO Bc 304
<.5	<.5	<.50	<.5	<.5	<.50	HO Bd 150
<.5	<.5	<.50	<.5	<.5	<.50	HO Bd 246
<.5	<.5	<.50	<.5	<.5	<.50	HO Bd 390
<.5	<.5	<.50	<.5	<.5	<.50	HO Bd 402
<.5	<.5	<.50	<.5	<.5	<.50	HO Bd 405
<.5	<.5	<.50	<.5	<.5	<.50	HO Bd 406
<.5	<.5	<.50	<.5	<.5	<.50	HO Be 21
<.5	<.5	<.50	<.5	<.5	<.50	HO Be 33
<.5	<.5	<.50	<.5	<.5	<.50	HO Be 88
<.5	<.5	<.50	<.5	<.5	<.50	HO Be 109
<.5	<.5	<.50	<.5	<.5	<.50	HO Be 140
<.5	<.5	<.50	<.5	<.5	<.50	HO Bf 68
<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	HO Bf 77
<.5	<.5	<.50	<.5	<.5	<.50	HO Bf 81
<.5	<.5	<.50	<.5	<.5	<.50	HO Cc 12
<.5	<.5	<.50	<.5	<.5	<.50	HO Cc 38
<.5	<.5	<.50	<.5	<.5	<.50	HO Cd 240
<.5	<.5	<.50	<.5	<.5	<.50	HO Cd 240
<.5	<.5	<.50	<.5	<.5	<.50	HO Cd 249
<.5	<.5	<.50	<.5	<.5	<.50	HO Cd 334
<.5	<.5	<.50	<.5	<.5	<.50	HO Cd 334
<.5	<.5	<.50	<.5	<.5	<.50	HO Cd 344
<.5	<.5	<.50	<.5	<.5	<.50	HO Cd 384
<.5	<.5	<.50	<.5	<.5	<.50	HO Cd 385
<.5	<.5	<.50	<.5	<.5	<.50	HO Cd 387
<.5	<.5	<.50	<.5	<.5	<.50	HO Cd 388
<.5	<.5	<.50	<.5	<.5	<.50	HO Cd 389
<.5	<.5	<.50	<.5	<.5	<.50	HO Ce 76
<.5	<.5	<.50	<.5	<.5	<.50	HO Ce 76
<.5	<.5	<.50	<.5	<.5	<.50	HO Ce 102
<.5	<.5	<.50	<.5	<.5	<.50	HO Ce 102
<.5	<.5	<.50	<.5	<.5	<.50	HO Ce 126
<.5	<.5	<.50	<.5	<.5	<.50	HO Ce 132
<.5	<.5	<.50	<.5	<.5	<.50	HO Ce 163
<.5	<.5	<.50	<.5	<.5	<.50	HO Cf 66
<.5	<.5	<.50	<.5	<.5	<.50	HO Cf 79
<.5	<.5	<.50	<.5	<.5	<.50	HO Cf 105
<.5	<.5	<.50	<.5	<.5	<.50	HO Cf 107
<.5	<.5	<.50	<.5	<.5	<.50	HO Cg 27
<.5	<.5	<.50	<.5	<.5	<.50	HO Cg 34
<.5	<.5	<.50	<.5	<.5	<.50	HO Dd 40
<.5	<.5	<.50	<.5	<.5	<.50	HO Dd 94
<.5	<.5	<.50	<.5	<.5	<.50	HO Dd 94
<.5	<.5	<.50	<.5	<.5	<.50	HO Dd 97
<.5	<.5	<.50	<.5	<.5	<.50	HO De 51
<.5	<.5	<.50	<.5	<.5	<.50	HO De 85

Table 14.—Volatile organic compound concentrations in ground water in Howard County

[μg/L = micrograms per liter; < = actual value is less than value shown]

Site no.	Date	Benzene total (μg/L)	Bromoform, total (μg/L)	Carbon-tetrachloride, total (μg/L)	Chlorobenzene, total (μg/L)	Chlorodibromomethane, total (μg/L)	Chloroethane, total (μg/L)	2-Chloroethylvinylether, total (μg/L)	Chloroform, total (μg/L)
HO Ac 92	05-15-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
HO Cd 102	10-25-89	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20
HO Ce 83	11-08-89	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20
HO Ce 117	11-01-89	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20
HO Ce 126	04-05-90	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20
HO Ce 183	04-17-90	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20
HO Cf 112	04-10-90	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20
HO Cf 121	01-24-90	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20
HO Cf 122	04-24-90	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20
HO Cg 22	12-15-88	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20
HO Df 54	12-14-88	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20

Site no.	Date	1,2-Dichloropropane total (μg/L)	1,3-Dichloropropene total (μg/L)	Ethylbenzene total (μg/L)	Methylbromide total (μg/L)	Methylchloride, total (μg/L)	Methylene chloride, total (μg/L)	Styrene total (μg/L)	1,1,2,2 Tetrachloroethane, total (μg/L)
HO Ac 92	05-15-90	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.2	<0.20
HO Cd 102	10-25-89	<.20	<.20	<.20	<.20	<.20	0.20	<.2	<.20
HO Ce 83	11-08-89	<.20	<.20	<.20	<.20	<.20	<.20	<.2	<.20
HO Ce 117	11-01-89	<.20	<.20	<.20	<.20	<.20	<.20	<.2	<.20
HO Ce 126	04-05-90	<.20	<.20	<.20	<.20	<.20	<.20	<.2	<.20
HO Ce 183	04-17-90	<.20	<.20	<.20	<.20	<.20	<.20	<.2	<.20
HO Cf 112	04-10-90	<.20	<.20	<.20	<.20	<.20	<.20	<.2	<.20
HO Cf 121	01-24-90	<.20	<.20	<.20	<.20	<.20	<.20	<.2	<.20
HO Cf 122	04-24-90	<.20	<.20	<.20	<.20	<.20	<.20	<.2	<.20
HO Cg 22	12-15-88	<.20	<.20	<.20	<.20	<.20	<.20	<.2	<.20
HO Df 54	12-14-88	<.20	<.20	<.20	<.20	<.20	<.20	<.2	<.20

Cis 1,3-dichloropropene, total (µg/L)	1,2-Dibromoethane, total (µg/L)	1,2-Dichlorobenzene, total (µg/L)	1,3-Dichlorobenzene, total (µg/L)	1,4-Dichlorobenzene, total (µg/L)	Dichlorobromomethane, total (µg/L)	Dichlorodifluoromethane, total (µg/L)	1,1-Dichloroethane, total (µg/L)	1,2-Dichloroethane, total (µg/L)	1,1-Dichloroethylene, total (µg/L)	Site no.
<0.20	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	HO Ac 92
<.20	<.2	<.20	<.20	<.20	<.20	<.20	<.20	0.30	<.20	HO Cd 102
<.20	<.2	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20	HO Ce 83
<.20	<.2	<.20	<.20	<.20	<.20	3.4	<.20	<.20	<.20	HO Ce 117
<.20	<.2	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20	HO Ce 126
<.20	<.2	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20	HO Ce 183
<.20	<.2	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20	HO Cf 112
<.20	<.2	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20	HO Cf 121
<.20	<.2	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20	HO Cf 122
<.20	<.2	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20	HO Cg 22
<.20	<.2	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20	HO Df 54

Tetrachloroethylene, total (µg/L)	Toluene, total (µg/L)	1,2-Transdichloroethene, total (µg/L)	Trans-1,3-dichloropropene, total (µg/L)	1,1,1-Trichloroethane, total (µg/L)	1,1,2-Trichloroethane, total (µg/L)	Trichloroethylene, total (µg/L)	Trichlorofluoromethane, total (µg/L)	Vinyl chloride, total (µg/L)	Xylene, total recoverable (µg/L)	Site no.
<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.2	<0.20	<0.20	<0.2	HO Ac 92
<.20	<.20	<.20	<.20	<.20	<.20	<.2	<.20	<.20	<.2	HO Cd 102
<.20	<.20	<.20	<.20	<.20	<.20	<.2	<.20	<.20	<.2	HO Ce 83
<.20	<.20	<.20	<.20	<.20	<.20	<.2	<.20	<.20	<.2	HO Ce 117
<.20	<.20	<.20	<.20	<.20	<.20	<.2	<.20	<.20	<.2	HO Ce 126
<.20	<.20	<.20	<.20	<.20	<.20	<.2	<.20	<.20	<.2	HO Ce 183
<.20	<.20	<.20	<.20	<.20	<.20	<.2	<.20	<.20	<.2	HO Cf 112
<.20	<.20	<.20	<.20	<.20	<.20	<.2	<.20	<.20	<.2	HO Cf 121
<.20	<.20	<.20	<.20	<.20	<.20	<.2	<.20	<.20	<.2	HO Cf 122
<.20	<.20	<.20	<.20	<.20	<.20	<.2	<.20	<.20	<.2	HO Cg 22
<.20	<.20	<.20	<.20	<.20	<.20	<.2	<.20	<.20	<.2	HO Df 54

Table 15.—Tritium concentrations in ground water in Howard County

[tu = tritium units; all values (+/−) 8 tritium units except where indicated; < = actual value is less than value shown]

Site no.	Date	Tritium (as tu)
HO Ac 92	05-15-90	17
HO Ac 92	05-15-90	18
HO Ad 34	05-10-90	15
HO Bb 73	04-26-90	16
HO Bb 160	04-11-90	22
HO Bc 176	04-17-90	28
HO Bc 203	04-26-90	20
HO Bd 402	01-24-90	29
HO Bd 403	02-06-90	23
HO Bd 405	02-27-90	15
HO Bd 406	02-27-90	24
HO Cc 12	04-24-90	17
HO Cd 20	05-16-90	3.9 +/- 0.7
HO Cd 29	05-16-90	29.9 +/- 2.1
HO Cd 80	05-16-90	28.0 +/- 2.0
HO Cd 341	05-16-90	30.4 +/- 2.2
HO Cd 386	02-13-90	30
HO Cd 388	05-08-90	16
HO Ce 126	04-05-90	23
HO Ce 126	04-05-90	27
HO Ce 183	04-17-90	10
HO Cf 105	04-17-90	14
HO Cf 121	01-24-90	<6
HO Cg 34	05-10-90	<6

Table 16.—Nitrogen and phosphorus concentrations in ground water in Howard County

[mg/L = milligrams per liter; < = actual value is less than value shown; -- = analysis not performed]

Site no.	Date	Nitrite, dis-solved (mg/L as N)	Nitrite plus, nitrate, dis-solved (mg/L as N)	Nitro-gen, ammonia dis-solved (mg/L as N)	Nitro-gen, am-monia + organic, dis-solved (mg/L as N)	Phos-phorus, dis-solved (mg/L as P)	Phos-phorus ortho, dis-solved (mg/L as P)
HO Cd 20	11-12-86	<0.01	<0.10	<0.01	0.40	--	--
HO Cd 20	08-31-87	<.01	<.10	.03	<.20	0.01	--
HO Cd 20	09-15-88	<.01	<.10	.10	.30	<.01	<0.01
HO Cd 20	12-22-88	<.01	<.10	.02	<.20	.02	<.01
HO Cd 20	04-06-89	.01	.30	.13	.20	<.01	<.01
HO Cd 20	06-30-89	.01	.12	.07	<.20	<.01	<.01
HO Cd 21	11-12-86	<.01	<.10	.02	.30	--	--
HO Cd 21	11-12-86	<.01	<.10	.04	.40	--	--
HO Cd 21	08-31-87	<.01	<.10	<.01	.30	<.01	--
HO Cd 21	09-15-88	<.01	<.10	<.01	.20	<.01	<.01
HO Cd 21	12-22-88	<.01	<.10	.01	.20	<.01	<.01
HO Cd 21	04-06-89	<.01	<.10	.02	<.20	<.01	<.01
HO Cd 21	06-30-89	.01	<.10	.02	<.20	.01	<.01
HO Cd 25	09-14-88	<.01	.37	<.01	.30	<.01	<.01
HO Cd 25	12-22-88	<.01	.15	.04	<.20	<.01	<.01
HO Cd 25	04-05-89	<.01	.39	.02	<.20	<.01	<.01
HO Cd 25	06-30-89	.02	.73	.03	.20	<.01	<.01
HO Cd 26	09-14-88	<.01	<.10	<.01	.30	<.01	<.01
HO Cd 26	12-22-88	<.01	<.10	.02	.20	<.01	<.01
HO Cd 26	04-06-89	<.01	<.10	.02	<.20	<.01	<.01
HO Cd 26	06-29-89	.01	<.10	.03	<.20	<.01	<.01
HO Cd 28	08-31-87	<.01	.51	.01	<.20	<.01	--
HO Cd 28	03-17-88	<.01	.51	<.01	<.20	<.01	--
HO Cd 28	06-09-88	<.01	.57	<.01	1.2	<.01	--
HO Cd 28	09-14-88	<.01	.51	<.01	<.20	.03	<.01
HO Cd 28	12-22-88	<.01	.56	.02	.30	.14	<.01
HO Cd 28	04-05-89	<.01	.54	.01	<.20	<.01	<.01
HO Cd 28	06-29-89	.01	.48	.05	<.20	.05	<.01
HO Cd 29	08-31-87	<.01	.75	.02	.30	<.01	--
HO Cd 29	09-14-88	<.01	.63	<.01	.30	<.01	<.01
HO Cd 29	12-22-88	<.01	.69	<.01	<.20	<.01	<.01
HO Cd 29	04-05-89	<.01	.70	<.01	<.20	<.01	<.01
HO Cd 29	06-29-89	.01	.67	.01	<.20	<.01	<.01
HO Cd 78	03-17-88	<.01	2.9	<.01	<.20	<.01	--
HO Cd 78	06-09-88	<.01	3.0	<.01	1.3	<.01	--
HO Cd 78	09-14-88	<.01	2.8	<.01	.30	.01	<.01
HO Cd 78	12-22-88	<.01	3.0	.01	.30	<.01	<.01
HO Cd 78	04-05-89	<.01	3.2	<.01	.30	<.01	<.01
HO Cd 78	06-29-89	.01	3.5	.01	.30	<.01	<.01
HO Cd 79	03-17-88	<.01	.93	<.01	<.20	<.01	--
HO Cd 79	06-09-88	<.01	1.0	.02	.90	<.01	--
HO Cd 79	09-14-88	.02	.90	<.01	<.20	<.01	<.01
HO Cd 79	04-05-89	<.01	1.3	.01	<.20	<.01	<.01
HO Cd 79	06-29-89	.01	1.2	.02	.20	<.01	<.01
HO Cd 80	03-17-88	<.01	8.0	.03	<.20	<.01	--
HO Cd 80	06-09-88	<.01	7.1	.02	1.3	<.01	--
HO Cd 80	09-15-88	<.01	5.2	<.01	.50	<.01	<.01
HO Cd 80	01-19-89	<.01	5.8	<.01	.50	<.01	<.01
HO Cd 80	04-06-89	<.01	5.6	<.01	.40	<.01	<.01
HO Cd 81	03-17-88	<.01	5.2	<.01	<.20	.11	--
HO Cd 81	06-09-88	<.01	4.9	<.01	1.2	.02	--
HO Cd 81	09-15-88	.02	3.5	<.01	.30	.02	<.01
HO Cd 81	01-19-89	<.01	5.3	<.01	.80	.01	.02
HO Cd 81	04-06-89	<.01	4.5	<.01	.40	<.01	<.01
HO Cd 81	06-30-89	.01	4.6	.02	.30	.02	<.01
HO Cd 81	09-26-90	<.01	3.6	<.01	.70	--	.01
HO Cd 341	09-14-88	.02	1.6	<.01	.30	.01	<.01
HO Cd 341	06-29-89	.01	1.2	.01	<.20	<.01	<.01
HO Cd 342	09-14-88	<.01	2.7	<.01	<.20	.02	<.01
HO Cd 342	04-05-89	<.01	3.1	<.01	.30	.02	.01
HO Cd 342	06-29-89	.01	.77	.02	<.20	.02	.05

Table 17.—Major-ion, nutrient, and organic-carbon concentrations in surface water in Howard County

[-- = analysis not performed; ft³/s = cubic feet per second; µS/cm = microsiemens per centimeter; deg C = degrees Celsius; mg/L = milligrams per liter; µg/L = micrograms per liter; < = actual value is less than value shown]

Station no.	Station name	Date	Time	Discharge, instantaneous (ft^3/s)	Specific conductance (µS/cm)	pH (standard units)	Temperature, air (deg C)	Temperature, water (deg C)
01587070	South Branch Patapsco River at Woodbine	12-20-88	1045	3.8	235	6.4	10.0	0.5
		04-26-89	0850	10	304	6.7	17.0	11.0
		10-06-89	1040	5.5	--	6.9	19.5	12.5
01587500	South Branch Patapsco River at Henryton	12-08-54	--	--	80	7.3	--	--
		03-08-55	1100	102	78	7.0	--	--
		02-04-60	--	--	91	6.5	--	9.0
		08-27-63	1300	8.6	98	6.9	--	5.0
		10-31-63	1600	14	94	6.7	--	9.5
		06-04-64	1030	39	75	6.6	--	14.0
		11-12-65	1500	17	91	6.5	--	9.0
		11-30-65	1500	16	89	6.7	--	1.0
		01-04-66	1030	20	89	6.7	--	1.7
		02-04-66	1400	13	64	6.2	--	1.5
		03-02-66	1055	14	93	6.4	--	3.0
		04-05-66	1450	28	75	6.5	--	--
		05-13-66	1345	40	87	6.7	--	11.0
		06-08-66	1120	27	87	6.6	--	20.0
		07-22-66	--	8.3	105	6.4	--	--
		09-10-66	--	.40	278	7.3	--	17.0
		10-19-66	--	292	104	6.4	--	--
		12-16-66	--	28	90	6.6	--	--
		01-05-67	--	48	97	6.5	--	--
		02-14-67	--	36	87	6.5	--	--
		07-17-67	--	26	96	7.4	--	--
		10-05-67	1140	26	89	7.5	--	--
		11-02-67	1005	34	87	7.2	--	9.0
		12-04-67	1430	117	119	6.5	--	3.0
		12-27-67	1045	48	82	6.9	--	1.0
		02-01-68	1130	73	88	6.9	--	1.0
		04-02-68	1300	68	84	6.9	--	6.0
		04-24-68	1030	60	84	6.9	--	13.0
		06-06-68	0930	53	86	6.9	--	17.0
		07-19-68	1255	25	97	7.1	--	26.0
		09-03-68	1435	16	100	7.6	--	23.0
		10-11-68	1520	19	105	7.6	--	15.0
		11-25-68	--	54	98	6.5	--	--
		01-09-69	1300	34	86	7.1	--	1.0
		02-19-69	1520	34	84	7.1	--	3.0
		04-11-69	1245	49	92	7.2	--	14.0
		05-22-69	1600	29	104	7.3	--	--
		06-27-69	1128	14	105	7.1	--	22.0
		08-20-69	1230	28	121	7.2	--	22.0
		09-12-69	1000	18	113	7.0	--	11.0
		09-25-69	1310	18	121	7.3	--	14.0
		12-18-69	1400	29	100	7.1	--	2.0
		02-12-70	1040	106	108	6.8	--	2.0
		03-12-70	1130	51	94	6.7	--	4.0
		04-24-70	1000	122	86	7.4	--	8.0
		06-10-70	1230	42	98	7.1	--	21.0
		07-17-70	1030	33	119	6.8	--	20.0
		10-09-70	1110	12	108	7.3	--	16.0
		11-13-70	1013	58	116	7.0	--	5.0
		12-23-70	1035	103	118	6.6	--	3.0
		01-28-71	1315	45	115	6.8	--	.5
		03-09-71	1330	92	98	7.1	--	1.0
		04-15-71	1055	60	95	7.4	--	7.0
		05-18-71	1040	90	97	6.6	--	14.5
		06-23-71	1235	40	102	6.7	--	19.5
		08-24-71	1400	51	104	7.7	--	--
		09-16-71	0900	133	119	7.1	--	--
		10-19-71	1400	75	108	7.2	--	10.5
		12-03-71	1530	136	103	7.0	--	--
		01-20-72	1315	95	98	6.7	--	3.0

Color (platinum-cobalt units)	Oxygen, dissolved (mg/L)	Hardness, total (mg/L as $CaCO_3$)	Noncarbonate hardness, (mg/L as $CaCO_3$)	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 (mg/L as HCO_3)	Carbonate, total (mg/L as CO_3)	Alkalinity, total (mg/L as $CaCO_3$)	Station no.
1	14.8	53	--	13	5.0	22	2.9	--	--	30	01587070
3	11.9	50	--	12	4.9	17	2.1	--	--	27	
7	11.1	61	--	16	5.2	20	2.9	--	--	30	
2	--	25	5	5.9	2.6	4.4	1.6	25	0	21	01587500
7	--	29	18	8.5	2.0	2.5	1.0	14	0	11	
4	--	30	5	7.9	2.4	3.9	1.9	30	0	--	
--	--	32	0	9.5	2.1	--	--	41	0	34	
5	--	34	2	8.0	3.4	4.2	2.1	39	0	32	
2	--	25	6	6.1	2.4	3.5	1.4	24	0	20	
4	--	30	5	7.9	2.4	3.9	1.9	30	0	--	
5	--	23	7	7.5	2.4	3.9	1.7	27	0	--	
3	--	28	8	7.2	2.5	3.6	1.8	24	0	--	
2	--	21	6	5.8	1.5	3.4	1.0	17	0	14	
--	--	30	18	7.8	2.6	3.5	2.2	15	0	--	
3	--	26	6	7.1	1.9	4.0	1.2	23	0	--	
3	--	29	12	7.9	2.2	3.8	1.4	20	0	--	
--	--	29	6	7.6	2.4	4.6	2.8	28	0	--	
5	--	37	4	10	2.8	5.1	2.2	40	0	--	
40	--	45	0	13	3.1	35	3.7	88	0	--	
5	--	33	12	8.7	2.7	4.3	4.3	25	--	21	
1	--	28	9	7.0	2.5	5.0	1.7	23	--	19	
0	--	29	12	7.2	2.6	5.0	2.3	21	--	17	
1	--	30	13	7.1	3.0	4.1	1.2	21	--	17	
2	--	33	7	8.9	2.7	4.3	2.1	32	--	26	
3	--	33	8	9.1	2.4	3.9	1.8	31	0	25	
3	--	32	8	8.7	2.4	4.0	1.8	29	0	24	
--	--	36	17	--	--	--	--	23	0	19	
2	--	28	10	7.2	2.4	3.8	1.4	22	0	18	
3	--	30	13	7.4	2.7	4.2	1.7	20	0	16	
2	--	29	12	7.2	2.7	4.0	1.4	21	0	17	
4	--	27	9	7.0	2.4	3.8	1.4	23	0	19	
4	--	32	10	8.5	2.6	4.0	1.5	26	0	21	
4	--	37	9	10	2.8	4.1	2.1	34	0	28	
--	--	34	6	9.3	2.6	4.6	1.9	34	0	28	
3	--	37	7	10	2.8	4.6	3.3	36	0	30	
5	--	31	12	8.0	2.7	4.4	1.8	24	0	20	
1	--	32	16	7.9	3.0	4.2	1.3	20	0	16	
3	--	31	15	7.6	3.0	4.5	1.2	21	0	17	
3	--	34	14	8.4	3.1	4.4	1.6	25	0	20	
3	--	35	10	9.2	3.0	3.7	2.5	31	0	25	
3	--	36	8	9.6	2.8	4.8	2.1	34	0	28	
7	--	40	9	11	3.0	4.5	4.5	38	0	31	
5	--	36	8	9.5	3.0	4.8	3.4	34	0	28	
5	--	37	7	10	2.9	4.7	2.6	37	0	30	
0	--	33	12	8.4	2.8	4.7	2.0	25	0	20	
3	--	33	18	8.5	2.9	4.8	2.2	18	0	15	
1	--	29	12	7.3	2.7	4.5	1.3	21	0	17	
3	--	31	13	7.8	2.8	4.1	1.5	22	0	18	
0	--	31	9	8.1	2.7	4.6	1.8	27	0	22	
1	--	37	11	10	2.9	4.6	2.5	32	0	26	
2	--	35	7	9.2	2.8	5.2	2.2	34	0	28	
5	--	37	13	9.8	3.1	4.7	3.8	30	0	25	
8	--	34	19	9.0	2.9	5.4	4.0	19	0	16	
0	--	34	16	8.7	3.0	5.9	2.6	22	0	18	
0	--	32	15	8.0	2.8	4.7	1.6	21	0	17	
0	--	30	11	7.7	2.7	4.8	1.3	23	0	19	
0	--	33	15	8.6	2.8	4.6	2.0	22	0	18	
6	--	33	10	8.7	2.8	4.7	1.8	28	0	23	
0	--	36	11	9.5	2.9	4.7	1.6	30	0	25	
2	--	38	14	11	2.6	4.3	2.1	30	0	25	
2	--	35	11	9.6	2.7	4.6	1.9	30	0	25	
0	--	33	15	8.3	2.9	4.6	1.8	22	0	18	
2	--	30	15	7.5	2.8	4.3	1.5	19	0	16	

Table 17.—Major-ion, nutrient, and organic-carbon concentrations in surface water in Howard County—Continued

Station no.	Date	Carbon dioxide, dis-solved (mg/L)	Sulfate, dis-solved (mg/L as SO_4)	Chlo-ride, dis-solved (mg/L as Cl)	Fluo-ride, dis-solved (mg/L as F)	Silica, dis-solved (mg/L as SiO_2)	Solids, residue at 180 deg. C dis-solved (mg/L)	Solids, sum of constit-uents, dis-solved (mg/L)	Solids, dis-solved (tons per day)	Nitro-gen, nitrate dis-solved (mg/L as N)
01587070	12-20-88	--	8.9	33	<0.1	4.7	135	105	1.38	--
	04-26-89	--	7.1	30	.1	2.5	113	91	3.14	--
	10-06-89	--	8.0	35	.1	6.1	154	111	2.28	--
01587500	12-08-54	--	3.2	4.0	.1	9.4	62	43	10.5	--
	03-08-55	--	14	4.0	.1	7.1	54	46	14.9	--
	02-04-60	--	4.0	6.3	0	7.6	55	49	2.52	--
	08-27-63	--	5.2	7.5	.1	5.9	57	62	1.54	--
	10-31-63	12	4.6	5.4	0	7.7	60	55	2.27	--
	06-04-64	9.6	5.0	4.9	0	7.2	54	42	5.69	--
	11-12-65	--	4.0	6.3	0	7.6	55	52	--	--
	11-30-65	--	5.4	6.2	0	6.0	52	49	--	--
	01-04-66	--	5.8	6.2	0	7.5	54	52	--	--
	02-04-66	--	4.2	5.7	.1	7.5	37	38	1.30	--
	03-02-66	--	13	6.3	.1	7.1	57	50	2.09	--
	04-05-66	--	5.6	7.0	0	5.3	48	43	3.63	--
	05-13-66	--	8.4	6.5	.1	7.0	52	47	5.62	--
	06-08-66	--	5.6	6.0	.1	7.6	--	50	3.68	--
	07-22-66	--	6.2	7.8	.1	4.6	76	58	1.70	--
	09-10-66	--	16	18	.3	8.3	167	141	.18	--
	10-19-66	--	11	6.6	.1	6.3	70	56	55.2	--
	12-16-66	--	7.2	8.0	.1	6.1	60	49	4.54	--
	01-05-67	--	9.2	8.3	.1	7.2	64	52	8.29	--
	02-14-67	--	8.8	6.7	0	8.0	59	49	5.73	--
	07-17-67	--	5.4	5.8	.1	7.3	60	52	4.21	--
	10-05-67	2.0	5.2	6.8	0	8.5	--	53	3.72	--
	11-02-67	3.0	5.6	6.4	0	9.3	--	52	4.82	--
	12-04-67	--	--	13	--	--	--	--	--	--
	12-27-67	4.0	7.0	6.8	0	8.4	--	48	6.20	--
	02-01-68	4.0	9.2	7.3	.1	8.7	--	51	10.1	--
	04-02-68	4.2	8.0	6.7	.2	6.4	--	47	8.62	--
	04-24-68	4.6	5.4	5.7	0	6.5	--	44	7.05	--
	06-06-68	5.2	7.4	5.8	.1	7.6	--	50	7.20	--
	07-19-68	4.3	5.6	6.7	.1	7.3	--	55	3.74	--
	09-03-68	1.4	5.2	6.8	.1	6.3	--	54	2.31	--
	10-11-68	1.4	6.9	7.7	.1	7.0	--	60	3.08	--
	11-25-68	12	8.1	6.9	.1	8.3	--	52	7.60	--
	01-09-69	2.5	8.5	6.9	.1	8.3	--	50	4.59	--
	02-19-69	2.6	10	6.9	.1	5.2	--	49	4.48	--
	04-11-69	2.5	7.4	7.7	1.0	4.0	--	50	6.60	--
	05-22-69	2.5	7.2	7.2	.1	6.4	--	55	4.27	--
	06-27-69	4.3	6.1	7.0	.1	6.9	--	56	2.12	--
	08-20-69	3.8	8.7	8.0	.1	9.1	--	68	5.11	--
	09-12-69	5.4	7.3	8.6	.1	8.0	--	61	2.98	--
	09-25-69	3.0	6.7	7.5	.1	9.7	--	62	3.03	--
	12-18-69	3.2	8.6	7.5	.1	10	--	56	4.42	--
	02-12-70	4.5	13	8.5	.1	6.1	--	55	15.7	--
	03-12-70	6.7	8.0	7.5	.1	6.5	--	48	6.64	--
	04-24-70	1.4	9.4	7.2	.1	4.0	--	48	15.7	--
	06-10-70	3.4	5.8	6.8	.1	11	--	54	6.14	--
	07-17-70	8.1	7.8	7.8	.1	7.7	--	59	5.27	--
	10-09-70	2.7	5.6	7.2	.1	6.8	--	56	1.81	--
	11-13-70	4.8	9.2	7.8	.1	9.1	--	62	9.76	--
	12-23-70	7.6	14	11	.1	6.9	--	63	17.4	--
	01-28-71	5.5	10	11	.1	9.1	--	61	7.44	--
	03-09-71	2.6	9.8	8.0	.1	7.5	--	53	13.1	--
	04-15-71	1.4	7.2	7.2	.1	3.2	--	46	7.37	--
	05-18-71	8.8	13	6.7	.1	7.4	--	56	13.6	--
	06-23-71	8.9	6.8	7.0	.1	8.4	--	54	5.84	--
	08-24-71	.1	5.4	8.7	.1	6.7	--	54	7.48	--
	09-16-71	3.8	9.8	7.7	.1	9.6	--	62	22.2	--
	10-19-71	3.0	7.2	7.6	.1	9.1	--	64	13.0	1.5
	12-03-71	3.5	9.4	7.0	.1	7.7	--	61	22.2	1.8
	01-20-72	6.1	8.0	7.3	.1	7.8	--	58	14.9	2.1

Nitrogen, nitrate dissolved (mg/L as NO_3)	Nitrogen, nitrite plus nitrate, total (mg/L as N)	Phosphorus, total (mg/L as P)	Phosphate, total (mg/L as PO_4)	Phosphorus, total (mg/L as PO_4)	Iron, total recoverable (µg/L as Fe)	Iron, dissolved (µg/L as Fe)	Manganese, total recoverable (µg/L as Mn)	Manganese, dissolved (µg/L as Mn)	Carbon, organic total (mg/L as C)	Additional water-quality information[1]	Station no.
--	4.8	0.28	--	--	60	27	20	16	2.1	B	01587070
--	3.4	.14	--	--	200	43	--	28	1.3		
--	4.6	.21	--	--	30	20	--	7	1.9		
10	--	--	--	--	310	--	0	--	--	C	01587500
7.2	--	--	--	--	260	--	10	--	--		
3.1	--	--	0.12	--	--	--	0	--	--		
2.4	--	--	--	--	--	--	--	--	--		
.60	--	--	--	--	70	--	0	--	--		
5.6	--	--	--	--	200	--	100	--	--		
3.1	--	--	.12	--	--	--	0	--	--		
3.2	--	--	.06	--	--	--	0	--	--		
5.0	--	--	0	--	--	--	0	--	--		
4.0	--	--	.05	--	--	--	--	--	--		
7.4	--	--	0	--	--	--	0	--	--		
3.1	--	--	.01	--	--	--	20	--	--		
4.9	--	--	.05	--	--	--	20	--	--		
4.0	--	--	.02	--	--	--	0	--	--		
.40	--	--	.05	--	--	--	0	--	--		
12	--	--	--	--	--	--	0	--	--		
5.8	--	--	--	--	20	--	10	--	--		
3.8	--	--	--	--	10	--	0	--	--		
7.0	--	--	--	--	10	--	20	--	--		
6.9	--	--	--	--	--	--	--	--	--		
4.7	--	--	--	--	--	--	--	--	--		
6.1	--	--	--	--	--	--	--	0	--		
5.1	--	--	--	--	230	--	50	--	--		
--	--	--	--	--	--	--	--	--	--		
6.2	--	--	--	--	440	--	100	--	--		
6.2	--	--	--	--	220	--	0	--	--		
4.8	--	--	--	--	210	--	0	--	--		
6.3	--	--	--	--	230	--	10	--	--		
5.5	--	--	--	--	200	--	70	--	--		
3.8	--	--	--	--	--	--	--	--	--		
5.4	--	--	--	--	--	--	--	--	--		
5.7	--	--	--	--	170	--	60	--	--		
7.0	--	--	--	--	170	--	30	--	--		
8.5	--	--	--	--	--	--	--	--	--		
6.4	--	--	--	--	200	--	40	--	--		
5.8	--	--	--	--	--	--	--	--	--		
4.3	--	--	--	--	400	--	60	--	--		
4.2	--	--	--	--	--	--	--	--	--		
5.0	--	--	--	--	310	--	80	--	--		
4.6	--	--	--	--	240	--	60	--	--		
5.0	--	--	--	--	280	--	80	--	--		
6.1	--	--	--	--	290	--	70	--	--		
8.4	--	--	--	--	150	--	40	--	--		
7.1	--	--	--	--	170	--	40	--	--		
5.6	--	--	--	--	--	--	--	--	--		
6.8	--	--	--	--	330	--	100	--	--		
6.6	--	--	--	--	460	--	60	--	--		
6.7	--	--	--	--	--	--	--	--	--		
5.3	--	--	--	--	--	--	--	--	--		
8.6	--	--	--	--	330	--	120	--	--		
10	--	--	--	--	200	--	40	--	--		
7.7	--	--	--	--	110	--	40	--	--		
6.2	--	--	--	--	160	--	80	--	--		
7.0	--	--	--	--	290	--	100	--	--		
6.6	--	--	--	--	200	--	50	--	--		
6.5	--	--	--	--	130	--	10	--	--		
6.6	--	--	--	--	--	--	--	--	--		
6.8	--	--	--	--	--	--	--	--	--		
8.0	--	--	--	--	200	--	40	--	--		
9.4	--	--	--	--	150	--	40	--	--		

Table 17.—Major-ion, nutrient, and organic-carbon concentrations in surface water in Howard County—Continued

Station no.	Station name	Date	Time	Discharge, instantaneous (ft^3/s)	Specific conductance (µS/cm)	pH (standard units)	Temperature, air (deg C)	Temperature, water (deg C)
01587500	South Branch Patapsco River at Henryton	04-11-72	1100	109	90	6.4	--	9.0
		05-22-72	1045	145	108	7.3	--	15.0
		11-02-72	1115	50	120	7.2	--	9.0
		12-12-72	1400	130	109	7.0	--	4.0
		01-23-73	1110	136	113	6.8	--	5.0
		02-27-73	1600	110	101	7.3	--	5.0
		04-09-73	0930	181	115	7.2	--	7.0
		05-25-73	1235	220	111	6.6	--	--
		07-03-73	1105	72	107	7.1	21.0	21.0
		08-21-73	1100	45	132	7.1	21.0	21.0
		10-05-73	1245	38	130	6.7	24.0	19.0
		11-13-73	1530	36	111	7.2	--	8.0
		12-20-73	1420	46	116	7.2	--	1.0
		01-24-74	1230	109	103	7.0	--	6.0
		03-01-74	1145	60	104	7.1	--	5.5
		04-16-74	1445	100	101	7.2	14.0	14.0
		05-28-74	1530	58	116	7.1	16.0	17.5
		10-29-74	1500	30	118	--	--	10.5
		12-03-75	1500	79	130	7.5	3.5	4.5
		01-14-76	1330	199	140	7.5	5.0	3.0
		02-20-76	1030	100	140	7.5	8.0	7.0
		03-30-76	1215	82	132	7.4	12.0	11.0
		08-23-76	1300	26	150	7.8	27.0	23.5
		10-15-76	1015	54	125	8.2	12.0	11.0
		11-12-76	1005	53	125	7.2	3.0	5.0
		12-28-76	1515	46	139	7.3	2.0	.5
		02-16-77	1035	44	128	6.9	-4.0	0
		03-21-77	1045	58	145	8.0	7.0	6.0
		05-11-77	1130	54	120	7.6	20.0	14.5
		09-12-77	1430	14	155	8.4	25.0	19.0
		10-11-77	0930	20	--	7.5	9.5	12.0
		11-18-77	--	50	140	7.3	8.0	7.5
		12-09-77	1130	53	140	7.7	3.0	2.0
		01-24-78	1200	84	144	7.2	0	.5
		06-19-78	1045	66	140	7.5	26.5	21.0
		09-08-78	1130	34	153	7.9	24.0	21.0
		09-22-78	1330	31	155	8.0	25.0	21.0
		12-13-78	1400	54	180	7.5	12.5	2.5
		03-15-79	1200	136	150	7.1	-3.0	4.5
		05-01-79	1515	79	140	9.1	18.5	16.0
		08-29-79	1315	58	159	7.8	26.5	23.5
		12-28-79	1200	75	115	7.7	--	4.0
		03-05-80	1000	68	180	7.5	6.5	1.0
		05-01-80	1330	271	140	7.7	21.0	13.5
		06-06-80	1040	82	132	7.5	--	17.0
		07-22-80	1345	40	160	8.0	31.0	27.0
		08-19-80	1400	49	163	7.6	--	21.0
		12-20-88	0830	25	201	6.8	-2.5	0
		04-26-89	1620	62	163	8.3	19.0	17.0
		09-11-89	1120	34	185	7.0	30.5	20.0
01589000	Patapsco River at Hollofield	10-09-69	1340	41	140	6.8	--	18.0
		10-15-70	1253	32	125	7.1	--	18.0
		09-23-71	1250	335	165	6.5	--	17.5
		09-27-72	1000	75	145	7.5	--	18.5
		12-08-72	0925	380	125	7.2	--	5.0
		03-05-73	1145	355	115	7.2	--	7.0
		05-29-73	1050	1420	115	7.2	--	16.0
		09-13-73	1015	78	150	7.5	--	18.5
		12-04-73	0940	66	145	7.1	--	3.0
		03-01-74	1510	112	126	7.2	--	7.5
		05-15-74	1620	138	135	7.6	--	22.0
		10-29-74	1130	61	151	--	--	10.5
		12-03-75	1145	164	150	7.4	5.0	5.5
		08-23-76	1200	39	170	8.3	26.0	26.0

Color (platinum-cobalt units)	Oxygen, dissolved (mg/L)	Hardness, total (mg/L as $CaCO_3$)	Noncarbonate hardness, (mg/L as $CaCO_3$)	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 (mg/L as HCO_3)	Carbonate, total (mg/L as CO_3)	Alkalinity, total (mg/L as $CaCO_3$)	Station no.
0	--	31	16	7.7	2.9	6.0	1.7	19	0	16	01587500
--	--	34	13	8.8	3.0	5.6	1.5	26	0	21	
--	--	43	12	12	3.2	5.3	2.6	38	0	31	
--	--	39	18	11	2.8	5.2	2.0	25	0	21	
--	--	37	19	10	3.0	5.2	2.4	22	0	18	
--	--	34	18	8.7	2.9	4.9	1.3	19	0	16	
--	--	39	18	11	2.8	6.9	1.5	26	0	21	
--	--	38	15	10	3.2	5.0	3.2	28	0	23	
--	--	37	11	10	2.9	4.6	1.8	32	0	26	
--	--	41	9	11	3.4	6.4	2.4	40	0	33	
--	--	45	11	12	3.6	6.0	3.4	41	0	34	
--	--	37	12	10	3.0	4.5	1.5	31	0	25	
--	--	35	11	8.9	3.0	6.6	1.7	29	0	24	
--	--	34	15	8.9	2.9	4.9	1.7	23	0	19	
--	--	29	11	7.0	2.8	4.6	1.8	22	0	18	
2	--	33	13	8.6	2.7	5.4	1.5	24	0	20	
0	--	38	16	10	3.2	5.0	1.8	27	0	22	
4	--	41	13	11	3.2	5.2	2.0	34	--	28	
1	--	40	15	11	3.0	4.7	1.5	30	0	25	
--	--	--	--	--	--	--	--	--	--	--	
--	--	--	--	--	--	--	--	--	--	--	
--	--	--	--	--	--	--	--	--	--	--	
2	--	48	11	15	2.5	6.7	2.3	45	0	37	
--	--	--	--	--	--	--	--	--	--	--	
--	--	--	--	--	--	--	--	--	--	--	
--	--	--	--	--	--	--	--	--	--	--	
--	--	--	--	--	--	--	--	--	--	--	
5	--	38	13	9.8	3.3	7.0	2.4	30	0	25	
--	--	--	--	--	--	--	--	--	--	--	
10	--	54	8	16	3.5	8.5	3.1	56	0	46	
--	--	--	--	--	--	--	--	--	--	--	
--	--	--	--	--	--	--	--	--	--	--	
2	--	41	13	11	3.3	6.6	2.4	34	0	28	
--	--	--	--	--	--	--	--	--	--	--	
--	--	--	--	--	--	--	--	--	--	--	
--	--	--	--	--	--	--	--	--	--	--	
10	--	51	13	14	3.8	7.3	2.4	46	0	38	
15	--	48	18	13	3.7	8.0	2.8	36	0	30	
5	--	37	18	9.7	3.1	6.4	1.7	23	0	19	
--	--	--	--	--	--	--	--	--	--	--	
5	--	51	13	14	3.8	8.5	2.5	46	0	38	
5	--	41	7	11	3.4	6.1	2.0	--	--	34	
5	--	37	3	9.7	3.2	15	1.4	--	--	34	
--	--	--	--	--	--	--	--	--	--	--	
0	--	42	15	11	3.6	7.6	1.7	--	--	27	
--	--	--	--	--	--	--	--	--	--	--	
4	--	50	11	14	3.6	8.2	2.6	--	--	39	
3	13.2	54	--	14	4.7	14	2.1	--	--	35	
10	6.4	52	--	13	4.7	11	2.2	--	--	38	
2	7.4	59	--	16	4.7	13	2.4	--	--	42	
5	10.2	67	24	--	--	--	--	53	0	43	01589000
10	7.8	51	9	--	--	--	--	51	0	42	
0	10.0	46	13	--	--	--	--	40	0	33	
5	9.2	52	13	15	3.6	5.7	2.1	48	0	39	
4	12.4	45	16	13	3.0	5.6	2.4	35	0	29	
5	12.5	44	21	12	3.3	5.2	2.0	28	0	23	
5	10.0	41	17	11	3.2	4.6	1.7	29	0	24	
--	9.7	54	12	15	4.1	6.3	2.2	52	0	43	
--	13.2	51	15	14	3.9	6.5	2.3	44	0	36	
--	--	42	16	11	3.5	5.8	1.6	31	0	25	
10	--	44	14	12	3.5	5.8	2.2	37	0	30	
3	--	55	16	15	4.2	6.6	2.4	47	--	39	
1	--	52	19	15	3.5	5.2	1.8	40	0	33	
5	--	56	8	17	3.2	7.2	2.5	58	0	48	

Table 17.—Major-ion, nutrient, and organic-carbon concentrations in surface water in Howard County—Continued

Station no.	Date	Carbon dioxide, dis-solved (mg/L)	Sulfate, dis-solved (mg/L as SO_4)	Chlo-ride, dis-solved (mg/L as Cl)	Fluo-ride, dis-solved (mg/L as F)	Silica, dis-solved (mg/L as SiO_2)	Solids, residue at 180 deg. C dis-solved (mg/L)	Solids, sum of constit-uents, dis-solved (mg/L)	Solids, dis-solved (tons per day)	Nitro-gen, nitrate dis-solved (mg/L as N)
01587500	04-11-72	12	7.4	9.6	0.1	6.4	--	59	17.4	1.8
	05-22-72	2.1	7.7	8.8	.1	8.2	--	65	25.4	1.9
	11-02-72	3.8	6.3	8.9	<.1	8.1	--	73	9.80	1.7
	12-12-72	4.0	9.5	9.5	.1	7.5	--	70	24.4	2.2
	01-23-73	5.6	10	9.0	<.1	7.2	--	69	25.4	2.6
	02-27-73	1.5	6.5	8.6	<.1	6.4	--	60	17.9	2.6
	04-09-73	2.6	9.7	11	.1	8.0	--	72	35.1	1.8
	05-25-73	11	10	8.7	.3	6.8	--	69	41.2	1.9
	07-03-73	4.1	4.2	7.5	.3	8.5	--	56	11.0	.19
	08-21-73	5.1	6.0	11	.2	8.8	--	79	9.55	2.2
	10-05-73	13	5.0	9.6	.3	6.3	--	66	6.81	--
	11-13-73	3.1	4.5	7.8	.1	6.9	--	54	5.20	--
	12-20-73	2.9	5.5	11	.2	7.3	--	58	7.26	--
	01-24-74	3.7	7.5	8.2	.2	6.9	--	53	15.5	--
	03-01-74	2.8	5.7	8.4	.2	5.9	--	47	7.65	--
	04-16-74	2.4	6.4	8.5	.1	3.9	--	49	13.2	--
	05-28-74	3.4	5.0	8.8	<.1	7.9	--	55	8.61	--
	10-29-74	--	5.3	7.5	.1	6.8	--	58	4.68	--
	12-03-75	1.5	6.0	8.6	.2	7.6	--	57	12.2	--
	01-14-76	--	--	--	--	--	--	--	--	--
	02-20-76	--	--	--	--	--	--	--	--	--
	03-30-76	--	--	--	--	--	--	--	--	--
	08-23-76	1.1	3.7	9.3	.1	7.5	92	69	6.46	--
	10-15-76	--	--	--	--	--	--	--	--	--
	11-12-76	--	--	--	--	--	--	--	--	--
	12-28-76	--	--	--	--	--	--	--	--	--
	02-16-77	--	--	--	--	--	--	--	--	--
	03-21-77	.5	8.1	11	.1	7.4	77	64	12.1	--
	05-11-77	--	--	--	--	--	--	--	--	--
	09-12-77	.4	7.7	11	.2	6.8	95	85	3.59	--
	10-11-77	--	--	--	--	--	--	--	--	--
	11-18-77	--	--	--	--	--	--	--	--	--
	12-09-77	1.1	8.9	11	.1	9.2	69	69	9.87	--
	01-24-78	--	--	--	--	--	--	--	--	--
	06-19-78	--	--	--	--	--	--	--	--	--
	09-08-78	--	--	--	--	--	--	--	--	--
	09-22-78	.7	5.8	12	.1	8.3	93	76	7.78	--
	12-13-78	1.8	13	13	.2	3.5	97	75	14.1	--
	03-15-79	2.9	8.8	13	.1	8.9	80	63	29.4	--
	05-01-79	--	--	--	--	--	--	--	--	--
	08-29-79	1.2	7.3	13	.2	9.3	92	81	14.4	--
	12-28-79	1.3	7.8	12	.2	8.0	78	71	15.8	--
	03-05-80	--	7.1	25	.1	7.9	99	90	18.2	--
	05-01-80	--	--	--	--	--	--	--	--	--
	06-06-80	--	6.6	11	.2	7.4	94	65	20.8	--
	07-22-80	--	--	--	--	--	--	--	--	--
	08-19-80	--	4.5	12	.3	8.5	93	77	12.3	--
	12-20-88	--	11	21	.2	6.5	105	93	7.00	--
	04-26-89	--	8.5	18	.1	3.6	145	80	24.2	--
	09-11-89	--	8.0	18	.1	8.3	122	96	11.0	--
01589000	10-09-69	--	9.1	11	.2	--	92	--	9.94	--
	10-15-70	--	8.4	9.1	.2	--	84	--	7.71	--
	09-23-71	--	10	8.5	.1	--	88	--	45.4	--
	09-27-72	1.2	7.6	9.0	.1	10	91	84	18.4	1.6
	12-08-72	3.5	9.2	8.7	.1	7.2	75	73	76.9	1.4
	03-05-73	14	9.4	9.5	.1	6.5	71	70	68.1	1.8
	05-29-73	5.8	9.0	8.3	.3	5.6	80	67	307	1.8
	09-13-73	2.1	7.0	9.5	.2	9.4	92	85	19.4	1.4
	12-04-73	5.6	7.9	8.8	.3	9.4	76	75	13.5	--
	03-01-74	3.1	9.0	9.5	.3	9.0	--	65	19.6	--
	05-15-74	1.5	9.6	8.4	.2	9.0	--	69	25.7	--
	10-29-74	--	12	9.0	.2	9.0	--	82	13.4	--
	12-03-75	2.5	8.9	8.8	.2	9.2	--	72	32.0	--
	08-23-76	.5	8.0	9.0	.2	9.2	100	85	10.5	--

Nitrogen, nitrate dissolved (mg/L as NO_3)	Nitrogen, nitrite plus nitrate, total (mg/L as N)	Phosphorus, total (mg/L as P)	Phosphate, total (mg/L as PO_4)	Phosphorus, total (mg/L as PO_4)	Iron, total recoverable (µg/L as Fe)	Iron, dissolved (µg/L as Fe)	Manganese, total recoverable (µg/L as Mn)	Manganese, dissolved (µg/L as Mn)	Carbon, organic total (mg/L as C)	Additional water-quality information[1]	Station no.
8.1	--	--	--	--	80	--	60	--	--	C	01587500
8.4	--	--	--	--	210	--	70	--	--		
7.5	--	--	--	--	220	--	40	--	--		
9.7	--	--	--	--	360	--	70	--	--		
12	--	--	--	--	1100	--	130	--	--		
12	--	--	--	--	160	--	50	--	--		
8.0	--	--	--	--	210	--	90	--	--		
8.4	--	--	--	--	590	--	170	--	--		
.80	--	--	--	--	310	--	50	--	--		
9.7	--	--	--	--	770	--	90	--	--		
--	1.7	--	--	--	250	--	40	--	--		
--	2.2	--	--	--	250	--	60	--	--		
--	2.2	--	--	--	230	--	75	--	--		
--	2.3	--	--	--	380	--	50	--	--		
--	2.3	--	--	--	160	--	50	--	--		
--	1.8	0.04	--	--	420	--	50	--	--		
--	1.9	.06	--	--	800	--	90	--	--		
--	1.5	.08	--	--	230	--	70	--	--		
--	2.4	.05	--	--	190	--	50	--	--		
--	--	--	--	--	--	--	--	--	--		
--	--	--	--	--	--	--	--	--	--		
--	--	--	--	--	--	--	--	--	--		
--	1.7	.16	--	--	410	70	70	50	--		
--	--	--	--	--	--	--	--	--	--		
--	--	--	--	--	--	--	--	--	--		
--	--	--	--	--	--	--	--	--	--		
--	--	--	--	--	--	--	--	--	--		
--	2.1	.11	--	--	490	70	--	50	--		
--	--	--	--	--	--	--	--	--	--		
--	1.4	.35	--	--	230	110	60	60	--		
--	--	--	--	--	--	--	--	--	--		
--	--	--	--	--	--	--	--	--	--		
--	2.4	.13	--	--	300	120	60	60	--		
--	--	--	--	--	--	--	--	--	--		
--	--	--	--	--	--	--	--	--	--		
--	--	--	--	--	--	--	--	--	--		
--	2.0	.16	--	--	210	80	30	30	--		
--	2.5	.20	--	0.61	300	110	50	20	--		
--	2.5	.08	--	.24	370	70	50	50	--		
--	--	--	--	--	--	--	--	--	--		
--	1.9	.17	--	.52	660	150	70	60	--		
--	2.8	.22	--	.67	160	70	40	40	--		
--	2.9	.03	--	.09	240	60	40	40	--		
--	--	--	--	--	--	--	--	--	--		
--	2.6	.10	--	.31	540	90	60	50	--		
--	--	--	--	--	--	--	--	--	--		
--	2.3	.42	--	1.3	1100	100	90	40	--		
--	3.4	.27	--	--	200	72	60	51	2.2		
--	2.8	.07	--	--	200	64	--	24	2.5		
--	4.0	.10	--	--	180	36	30	20	1.8		
--	--	.11	--	--	--	170	--	280	--	A,C	01589000
--	--	--	--	.16	--	110	--	70	--		
--	--	.08	--	--	--	70	--	26	--		
7.1	--	.07	0.21	--	--	60	--	20	--		
6.2	--	.06	--	--	--	80	--	50	--		
8.0	--	.02	--	--	--	80	--	40	--		
8.1	--	.04	--	--	--	50	--	30	--		
6.1	--	.06	--	--	390	--	100	--	--		
--	1.6	.08	--	--	290	--	70	--	--		
--	2.2	--	--	--	340	--	90	--	--		
--	1.5	.07	--	--	710	--	160	--	--		
--	1.2	.13	--	--	350	--	120	--	--		
--	2.0	.05	--	--	300	--	60	--	--		
--	1.1	.09	--	--	320	40	60	20	--		

Table 17.—Major-ion, nutrient, and organic-carbon concentrations in surface water in Howard County—Continued

Station no.	Station name	Date	Time	Discharge, instantaneous (ft^3/s)	Specific conductance ($\mu S/cm$)	pH (standard units)	Temperature, air (deg C)	Temperature, water (deg C)
01589000	Patapsco River at Hollofield	03-21-77	0945	142	165	8.5	7.5	7.0
		09-12-77	1300	24	190	8.8	22.0	21.0
		12-09-77	1245	87	175	7.5	4.0	2.0
		09-22-78	1415	63	175	8.4	24.0	22.5
		12-13-78	1500	98	175	7.3	11.0	3.5
		03-15-79	1245	399	158	7.2	-1.0	4.5
		08-29-79	1400	108	169	7.9	28.0	24.0
		12-28-79	1245	153	155	8.1	--	4.0
		03-05-80	1100	113	178	7.6	5.5	1.5
		06-06-80	0945	158	150	7.8	--	19.0
		08-19-80	1500	66	181	7.7	--	23.0
		11-04-80	0945	53	190	8.7	12.0	7.5
		01-28-81	0945	45	150	6.5	0	.5
		06-30-81	1530	72	175	8.5	32.0	27.0
		09-18-81	1015	53	202	7.9	--	19.0
		11-20-81	0930	40	209	7.2	--	8.0
		04-19-82	1015	120	166	7.8	--	15.5
		12-28-82	0930	75	188	7.8	10.0	7.5
		02-25-83	1245	209	175	7.5	7.0	5.0
		07-26-83	1000	43	180	7.6	23.5	22.0
		12-19-88	0950	48	113	7.3	2.5	0
		04-25-89	1005	101	234	7.8	29.0	13.5
		09-11-89	0955	68	185	7.7	29.0	21.0
01589040	Rockburn Branch at Elkridge	12-19-88	0954	1.0	232	7.3	7.0	1.0
		04-25-89	0830	3.4	208	7.7	16.0	9.0
		09-12-89	0930	--	196	7.5	24.5	19.0
01589080	Deep Run at Hanover	12-19-88	1126	5.2	325	6.7	8.0	2.0
		04-25-89	0945	12	241	7.5	20.0	10.5
		10-16-89	0955	5.5	273	7.2	24.0	15.5
01590800	Patuxent River at Mullinix	12-20-88	1240	2.5	126	7.1	14.5	1.5
		04-26-89	1015	11	156	6.5	19.0	12.5
		10-06-89	1320	2.7	101	6.6	22.0	12.0
01590900	Cabin Branch near Florence	12-20-88	1345	3.4	95	6.6	10.0	2.0
		04-26-89	1145	6.8	133	6.4	21.0	14.0
		10-13-89	1015	4.0	101	8.5	24.5	12.0
01591000	Patuxent River near Unity	12-20-88	1400	14	91	6.8	12.5	4.5
		04-26-89	1120	32	94	7.0	--	11.5
		09-11-89	1310	12	89	6.7	31.5	19.5
01591200	Cattail Creek tributary at Carrs Mill	12-20-88	1250	1.5	152	6.5	12.5	7.0
		04-26-89	0950	2.9	163	7.0	19.5	11.0
		10-13-89	1555	1.8	161	6.8	29.0	17.5
01591350	Cattail Creek near Cooksville	12-20-88	1130	3.6	196	6.6	6.5	3.5
		04-26-89	0850	6.3	197	7.0	16.0	9.0
		10-16-89	1435	4.3	202	6.9	29.0	17.5
01591375	Cattail Creek tributary at Daisy	12-20-88	1030	1.5	95	6.4	8.5	4.0
		04-26-89	1030	2.6	93	6.9	21.0	11.0
		10-13-89	1505	1.7	97	6.9	27.0	15.0
01591400	Cattail Creek near Glenwood	12-21-88	0930	11	124	7.5	8.0	4.0
		04-26-89	1350	20	132	7.3	--	14.0
		10-13-89	1300	13	143	7.0	28.0	13.0
01591475	Dorsey Branch near Knollwood	12-20-88	0910	1.5	141	6.5	-1.5	1.0
		04-26-89	1342	3.4	130	7.2	22.0	15.5
		10-13-89	1400	2.1	140	7.0	25.0	14.0

Color (plat-inum-cobalt units)	Oxygen, dis-solved (mg/L)	Hard-ness, total (mg/L as $CaCO_3$)	Noncar-bonate hard-ness, (mg/L as $CaCO_3$)	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 (mg/L as HCO_3)	Car-bonate, total (mg/L as CO_3)	Alka-linity, total (mg/L as $CaCO_3$)	Station no.
5	--	49	18	13	3.9	7.5	2.4	37	0	30	01589000
15	--	68	6	19	5.0	9.8	3.2	73	1	62	
3	--	52	9	14	4.2	7.3	2.7	53	0	43	
10	--	61	15	17	4.6	7.3	2.7	56	0	46	
5	--	52	20	14	4.1	6.7	2.6	39	0	32	
5	--	44	20	12	3.4	6.1	1.9	29	0	24	
5	--	61	18	17	4.5	7.5	2.8	52	0	43	
5	--	49	14	13	4.0	6.1	2.0	--	--	35	
5	--	47	8	12	4.1	12	1.7	--	--	39	
2	--	52	15	14	4.1	7.1	1.8	--	--	37	
5	--	62	9	17	4.8	7.9	2.5	--	--	53	
0	10.0	--	--	--	--	--	--	--	--	--	
<5	13.5	52	--	14	4.2	10	2.0	--	--	--	
2	11.0	62	--	18	4.1	7.2	3.1	--	--	--	
5	--	67	--	18	5.3	9.0	2.4	--	--	--	
7	--	63	--	17	5.0	9.6	2.4	--	--	--	
17	--	53	--	14	4.3	8.2	2.4	--	--	--	
--	--	60	--	16	4.9	9.5	2.2	--	--	--	
--	15.1	52	--	14	4.2	9.1	3.2	--	--	--	
--	8.9	62	--	17	4.8	8.7	2.3	--	--	--	
2	12.6	70	--	18	6.2	11	2.2	--	--	47	
12	10.3	63	--	16	5.7	10	2.3	--	--	41	
10	7.1	71	--	19	5.7	12	2.7	--	--	55	
1	14.0	85	--	21	8.0	11	1.8	--	--	49	01589040
15	11.6	69	--	17	6.4	11	1.6	--	--	41	
3	7.7	72	--	18	6.6	9.0	2.1	--	--	51	
15	14.2	88	--	25	6.3	24	2.2	--	--	51	01589080
15	13.4	71	--	20	5.1	18	2.0	--	--	43	
5	10.3	80	--	23	5.4	21	2.8	--	--	57	
1	14.1	40	--	9.2	4.2	6.7	1.6	--	--	21	01590800
3	10.1	35	--	7.4	4.0	5.7	1.3	--	--	15	
18	8.4	42	--	9.8	4.2	6.1	2.5	--	--	31	
2	--	28	--	6.4	3.0	5.4	1.5	--	--	13	01590900
10	10.8	30	--	6.7	3.3	5.8	1.6	--	--	15	
3	11.0	30	--	6.9	3.2	5.8	1.7	--	--	24	
2	13.0	28	--	6.4	2.9	5.1	1.2	--	--	15	01591000
10	11.9	29	--	6.6	3.1	5.3	1.2	--	--	20	
5	7.8	29	--	6.8	2.9	5.2	1.5	--	--	18	
5	11.6	48	--	10	5.5	6.3	2.0	--	--	15	01591200
15	11.6	52	--	11	6.0	7.1	2.6	--	--	24	
12	8.9	51	--	11	5.7	6.7	3.1	--	--	18	
1	14.0	55	--	12	6.0	10	1.5	--	--	13	01591350
10	11.7	59	--	13	6.4	12	1.6	--	--	22	
5	8.3	58	--	13	6.3	12	3.7	--	--	23	
3	13.2	28	--	6.5	2.9	4.6	1.2	--	--	15	01591375
10	10.9	30	--	6.8	3.2	5.0	1.3	--	--	16	
7	9.6	30	--	7.0	3.1	5.1	1.6	--	--	17	
5	13.0	40	--	9.0	4.3	7.9	1.6	--	--	15	01591400
15	11.6	41	--	9.3	4.4	7.8	1.3	--	--	21	
5	10.5	42	--	9.4	4.5	7.8	1.7	--	--	21	
1	14.0	41	--	9.6	4.2	6.2	1.5	--	--	20	01591475
12	10.2	42	--	9.9	4.2	6.7	1.7	--	--	23	
3	9.4	44	--	10	4.5	6.4	2.0	--	--	21	

Table 17.—Major-ion, nutrient, and organic-carbon concentrations in surface water in Howard County—Continued

Station no.	Date	Carbon dioxide, dis-solved (mg/L)	Sulfate, dis-solved (mg/L as SO_4)	Chlo-ride, dis-solved (mg/L as Cl)	Fluo-ride, dis-solved (mg/L as F)	Silica, dis-solved (mg/L as SiO_2)	Solids, residue at 180 deg. C dis-solved (mg/L)	Solids, sum of constit-uents, dis-solved (mg/L)	Solids, dis-solved (tons per day)	Nitro-gen, nitrate dis-solved (mg/L as N)
01589000	03-21-77	0.2	11	11	0.1	9.6	86	77	33.0	--
	09-12-77	.2	10	13	.2	8.5	117	106	7.58	--
	12-09-77	2.7	12	11	.1	12	87	90	20.4	--
	09-22-78	.4	9.7	11	<.1	5.8	102	86	17.4	--
	12-13-78	3.1	13	12	.1	12	94	84	24.9	--
	03-15-79	2.9	9.7	12	.1	8.8	79	68	85.1	--
	08-29-79	1.0	11	11	.1	13	102	93	29.7	--
	12-28-79	.5	11	11	.1	10	90	78	37.2	--
	03-05-80	--	10	20	.1	11	103	94	31.4	--
	06-06-80	--	8.6	11	.1	9.3	105	78	44.8	--
	08-19-80	--	6.8	12	.2	12	99	95	17.7	--
	11-04-80	--	13	16	.2	--	111	--	15.8	--
	01-28-81	--	10	15	.2	8.9	106	85	12.9	--
	06-30-81	--	10	13	.1	9.1	116	95	22.6	--
	09-18-81	--	12	14	.3	9.6	123	105	17.6	--
	11-20-81	--	11	12	.2	5.2	109	91	11.8	--
	04-19-82	--	11	12	.1	6.6	110	82	35.6	--
	12-28-82	--	12	16	.1	9.6	123	106	24.9	--
	02-25-83	--	15	16	.2	8.7	103	99	58.1	--
	07-26-83	--	11	14	.2	11	111	97	12.9	--
	12-19-88	--	16	17	.1	9.4	124	108	16.1	--
	04-25-89	--	12	17	.1	4.6	108	92	29.5	--
	09-11-89	--	11	17	.2	11	129	111	23.5	--
01589040	12-19-88	--	17	22	.1	17	114	126	.32	--
	04-25-89	--	16	22	.2	9.4	118	107	1.09	--
	09-12-89	--	12	18	.1	18	122	113	--	--
01589080	12-19-88	--	25	41	.1	9.3	164	164	2.30	--
	04-25-89	--	24	30	.1	4.7	144	129	4.86	--
	10-16-89	--	19	34	.1	7.5	150	147	2.24	--
01590800	12-20-88	--	5.0	14	.1	3.4	70	55	.48	--
	04-26-89	--	4.5	12	.1	3.5	72	48	2.12	--
	10-06-89	--	4.0	14	.1	5.3	70	61	.50	--
01590900	12-20-88	--	3.3	10	<.1	7.6	62	45	.57	--
	04-26-89	--	2.5	11	.1	5.8	66	46	1.21	--
	10-13-89	--	2.0	10	<.1	8.9	56	48	.60	--
01591000	12-20-88	--	11	10	<.1	7.2	52	53	1.92	--
	04-26-89	--	3.8	10	.1	5.7	60	46	5.18	--
	09-11-89	--	2.0	9.3	.1	8.4	67	47	2.17	--
01591200	12-20-88	--	4.1	14	<.1	9.0	94	60	.39	--
	04-26-89	--	4.3	17	.1	6.8	112	65	.86	--
	10-13-89	--	3.0	15	<.1	9.4	104	64	.51	--
01591350	12-20-88	--	4.3	29	<.1	8.4	114	81	1.12	--
	04-26-89	--	4.5	30	.1	7.0	134	87	2.28	--
	10-16-89	--	4.0	32	.1	9.4	110	92	1.27	--
01591375	12-20-88	--	3.4	10	<.1	7.1	50	44	.20	--
	04-26-89	--	2.7	10	.1	7.7	60	46	.42	--
	10-13-89	--	2.0	9.9	<.1	8.3	57	47	.26	--
01591400	12-21-88	--	4.8	16	<.1	7.9	87	61	2.58	--
	04-26-89	--	4.8	17	.1	6.1	95	62	5.13	--
	10-13-89	--	4.0	17	<.1	10	73	66	2.64	--
01591475	12-20-88	--	4.8	13	<.1	11	84	61	.35	--
	04-26-89	--	6.3	13	.1	7.8	79	61	.72	--
	10-13-89	--	4.0	14	<.1	12	86	66	.49	--

Nitrogen, nitrate dissolved (mg/L as NO_3)	Nitrogen, nitrite plus nitrate, total (mg/L as N)	Phosphorus, total (mg/L as P)	Phosphate, total (mg/L as PO_4)	Phosphorus, total (mg/L as PO_4)	Iron, total recoverable (µg/L as Fe)	Iron, dissolved (µg/L as Fe)	Manganese, total recoverable (µg/L as Mn)	Manganese, dissolved (µg/L as Mn)	Carbon, organic total (mg/L as C)	Additional water-quality information[1]	Station no.
--	1.6	0.05	--	--	360	80	60	60	--	A,C	01589000
--	.45	.06	--	--	330	40	100	60	--		
--	1.9	.10	--	--	360	80	60	60	--		
--	1.5	.09	--	--	520	<10	100	60	--		
--	1.9	.06	--	0.18	340	90	70	40	--		
--	1.8	.04	--	.12	330	60	60	50	--		
--	1.5	.08	--	.25	1100	120	110	70	--		
--	2.1	.07	--	.21	210	70	50	50	--		
--	2.4	.19	--	.58	190	60	60	60	--		
--	2.0	.06	--	.18	780	80	130	100	--		
--	1.5	.13	--	.40	940	60	190	120	--		
--	1.9	.15	--	.46	640	--	70	--	--		
--	2.3	.14	--	.43	310	30	60	50	--		
--	1.5	.12	--	.37	840	40	100	60	--		
--	1.6	.17	--	.52	890	40	110	40	--		
--	1.6	.16	--	.49	580	59	100	78	--		
--	1.5	.13	--	.40	840	140	130	97	--		
--	--	--	--	--	--	86	--	52	--		
--	--	--	--	--	--	100	--	59	--		
--	--	--	--	--	--	59	--	89	--		
--	2.9	.07	--	--	310	57	--	53	2.3		
--	2.0	.03	--	--	560	97	--	92	1.8		
--	2.8	.08	--	--	620	47	80	46	2.2		
--	2.1	<.01	--	--	130	69	40	32	1.4	B	01589040
--	1.2	<.01	--	--	220	61	40	38	1.6		
--	1.7	.02	--	--	80	40	10	4	1.8		
--	1.1	.01	--	--	560	480	220	220	2.7	C	01589080
--	.50	.01	--	--	380	160	--	130	2.9		
--	.70	.01	--	--	530	150	70	67	2.5		
--	2.8	.01	--	--	70	37	--	21	1.0	B	01590800
--	2.6	.01	--	--	370	33	30	21	1.2		
--	2.2	.02	--	--	90	33	--	13	1.9		
--	3.0	.01	--	--	180	110	40	33	1.4	C	01590900
--	2.9	.02	--	--	270	92	--	34	1.2		
--	3.3	.02	--	--	160	68	20	19	1.2		
--	2.4	<.01	--	--	140	75	40	34	1.2	C	01591000
--	2.3	.01	--	--	220	69	--	43	1.3		
--	2.5	.02	--	--	270	100	30	23	1.5		
--	7.2	.07	--	--	350	51	60	51	2.9	C	01591200
--	6.3	.21	--	--	4500	150	250	170	7.5		
--	7.5	.14	--	--	430	63	60	46	2.7		
--	5.8	.05	--	--	170	50	60	47	1.6	B	01591350
--	5.1	.03	--	--	300	55	80	77	1.7		
--	5.4	.09	--	--	620	150	60	59	3.0		
--	2.9	.01	--	--	220	58	30	24	1.8	C	01591375
--	2.8	.02	--	--	310	49	60	51	1.4		
--	2.8	.01	--	--	150	45	40	20	1.4		
--	3.7	.01	--	--	310	70	50	34	2.1	B	01591400
--	3.4	.03	--	--	670	83	60	45	2.3		
--	4.0	.02	--	--	240	76	30	26	1.5		
--	4.6	<.01	--	--	--	130	30	19	1.1	B	01591475
--	3.8	.02	--	--	210	59	20	20	1.4		
--	4.7	.02	--	--	290	52	40	16	1.4		

Table 17.—Major-ion, nutrient, and organic-carbon concentrations in surface water in Howard County—Continued

Station no.	Station name	Date	Time	Discharge, instantaneous (ft^3/s)	Specific conductance (µS/cm)	pH (standard units)	Temperature, air (deg C)	Temperature, water (deg C)
01591610	Patuxent River below Brighton Dam near Brighton	12-21-88	1445	53	73	7.1	9.0	5.0
		04-26-89	1410	50	162	7.0	22.0	14.0
		09-11-89	1400	106	117	6.8	37.0	22.5
01592500	Patuxent River near Laurel	07-01-63	--	14	75	6.5	--	--
		07-23-63	--	13	77	6.9	--	--
		08-16-63	--	12	78	6.5	--	--
		09-09-63	--	10	79	6.3	--	--
		09-19-63	--	11	78	6.7	--	--
		10-02-63	--	11	81	6.6	--	--
		10-16-63	--	10	81	6.6	--	--
		10-22-63	--	10	115	6.1	--	--
		10-25-63	--	10	88	6.4	--	--
		11-04-63	--	9.7	74	6.6	--	--
		11-14-63	--	11	72	6.7	--	--
		11-25-63	--	12	76	7.0	--	--
		12-07-63	--	12	73	6.8	--	--
		12-18-63	--	12	71	6.7	--	--
		01-10-64	--	13	72	6.6	--	--
		01-24-64	--	90	71	7.1	--	--
		02-04-64	--	52	69	7.5	--	--
		02-14-64	--	51	71	6.6	--	--
		02-26-64	--	46	70	6.9	--	--
		03-05-64	--	148	70	6.8	--	--
		03-16-64	--	115	70	7.1	--	--
		03-25-64	--	155	68	7.3	--	--
		04-02-64	--	107	71	6.7	--	--
		04-14-64	--	150	74	6.8	--	--
01593200	Little Patuxent River at Pine Orchard	12-19-88	1120	3.7	265	7.4	8.0	5.0
		04-25-89	1120	6.0	298	7.3	24.5	14.0
		10-16-89	1650	3.9	225	7.2	25.0	17.5
01593300	Red Hill Branch near Columbia	12-19-88	1510	2.0	373	7.2	8.0	3.0
		04-25-89	1315	4.3	369	7.6	23.5	17.0
		10-16-89	1135	2.9	340	7.1	28.0	15.0
01593500	Little Patuxent River at Guilford	12-21-88	1315	16	278	6.9	9.5	4.5
		04-25-89	1410	28	272	8.0	28.0	14.5
		09-12-89	1345	17	269	7.1	27.5	21.0
01593600	Middle Patuxent River near West Friendship	12-20-88	1525	5.3	141	6.7	10.5	1.5
		04-26-89	1510	8.9	182	7.1	22.5	17.5
		10-16-89	1540	5.4	132	7.2	27.0	16.5
01593675	Middle Patuxent River tributary near Columbia	12-19-88	1500	3.6	240	7.3	9.0	.5
		04-25-89	1530	7.9	271	8.3	--	15.5
		09-12-89	1500	--	232	7.7	30.0	19.5
01593700	Middle Patuxent River tributary near Clarksville	12-19-88	1615	2.3	134	7.0	-1.5	0
		04-25-89	1635	4.9	180	7.3	20.0	15.0
		10-16-89	1320	3.2	142	7.2	29.0	16.0
01593710	Middle Patuxent River near Simpsonville	12-21-88	1115	23	181	7.0	9.0	.5
		04-26-89	1450	40	187	8.7	19.0	15.5
		09-11-89	1515	26	188	7.1	35.0	21.0
01594000	Little Patuxent River at Savage	12-12-88	1406	42	205	7.2	-3.5	.5
		04-25-89	1225	82	228	8.6	21.0	14.5
		09-12-89	1125	54	222	7.6	27.5	20.5
01594200	Hammond Branch near Laurel	12-19-88	1400	2.4	327	7.8	8.0	1.0
		04-25-89	1315	5.8	239	9.1	21.5	15.0
		09-12-89	1250	--	293	7.5	29.5	21.0

Color (platinum-cobalt units)	Oxygen, dissolved (mg/L)	Hardness, total (mg/L as $CaCO_3$)	Noncarbonate hardness, (mg/L as $CaCO_3$)	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 (mg/L as HCO_3)	Carbonate, total (mg/L as CO_3)	Alkalinity, total (mg/L as $CaCO_3$)	Station no.
3	11.7	40	--	9.9	3.8	6.2	2.9	--	--	27	01591610
17	10.0	38	--	9.0	3.8	6.5	2.5	--	--	21	
5	7.5	40	--	9.9	3.6	5.9	2.8	--	--	29	
7	--	25	6	6.0	2.4	3.0	2.4	24	--	20	01592500
3	--	25	4	5.5	2.8	5.1	--	26	--	21	
30	--	27	5	6.5	2.7	4.4	--	27	--	22	
30	--	30	7	7.5	2.8	2.8	--	28	--	23	
30	--	26	2	9.0	.90	5.3	--	30	--	25	
70	--	28	4	8.0	1.9	3.0	2.2	30	--	25	
--	--	28	4	7.2	2.4	3.3	2.4	29	--	24	
--	--	--	--	--	--	--	--	--	--	--	
--	--	28	0	6.5	2.9	--	--	34	--	28	
--	--	24	5	5.9	2.3	--	--	24	--	20	
10	--	22	3	6.0	1.7	--	--	24	--	20	
--	--	23	5	6.4	1.7	3.0	2.8	22	--	18	
--	--	23	4	5.6	2.2	3.1	2.4	23	--	19	
10	--	23	4	6.3	1.8	--	--	23	--	19	
10	--	23	5	6.3	1.8	--	--	22	--	18	
--	--	23	7	6.2	1.8	--	--	10	--	8	
--	--	23	6	6.8	1.5	--	--	21	--	17	
3	--	22	5	5.6	1.9	3.5	2.2	21	--	17	
2	--	22	6	5.6	1.9	2.6	2.2	20	--	16	
4	--	22	6	5.6	1.9	3.4	2.2	20	--	16	
--	--	23	7	6.2	1.8	--	--	10	--	8	
--	--	21	6	8.2	.10	--	--	18	--	15	
3	--	21	6	5.2	1.9	3.2	1.9	18	--	15	
5	--	22	9	6.0	1.7	3.1	2.0	16	--	13	
1	12.2	91	--	25	7.0	11	2.0	--	--	61	01593200
15	13.1	84	--	23	6.4	13	2.3	--	--	52	
7	9.1	92	--	26	6.6	12	3.3	--	--	63	
3	12.8	130	--	40	8.5	16	2.3	--	--	86	01593300
17	--	120	--	36	7.8	18	2.6	--	--	79	
15	8.1	140	--	41	8.3	17	3.5	--	--	98	
10	11.8	99	--	30	5.9	14	3.0	--	--	58	01593500
15	13.5	89	--	26	5.9	18	2.5	--	--	69	
5	8.1	100	--	30	6.4	14	3.1	--	--	79	
2	--	46	--	10	5.1	9.4	1.8	--	--	19	01593600
15	11.3	46	--	10	5.2	8.7	1.8	--	--	21	
4	9.3	48	--	11	4.9	9.1	2.9	--	--	24	
3	12.0	96	--	26	7.6	7.9	1.6	--	--	67	01593675
10	12.9	87	--	23	7.1	8.9	2.0	--	--	63	
6	8.6	95	--	26	7.2	8.6	2.4	--	--	75	
3	10.8	43	--	11	3.7	7.1	1.6	--	--	27	01593700
15	10.6	44	--	11	3.9	8.6	2.0	--	--	25	
15	9.9	46	--	12	3.9	8.2	2.8	--	--	32	
3	12.7	61	--	16	5.2	8.3	2.0	--	--	38	01593710
15	11.2	65	--	17	5.4	9.1	1.8	--	--	53	
3	8.0	70	--	19	5.4	9.3	2.4	--	--	48	
12	--	89	--	25	6.4	12	2.7	--	--	57	01594000
15	10.8	73	--	20	5.5	12	2.2	--	--	51	
5	8.4	81	--	23	5.7	11	2.7	--	--	58	
16	--	51	--	14	3.9	50	2.6	--	--	100	01594200
20	13.0	46	--	12	3.9	28	2.7	--	--	59	
15	8.6	52	--	14	4.1	43	3.8	--	--	88	

Table 17.—Major-ion, nutrient, and organic-carbon concentrations in surface water in Howard County—Continued

Station no.	Date	Carbon dioxide, dis-solved (mg/L)	Sulfate, dis-solved (mg/L as SO_4)	Chlo-ride, dis-solved (mg/L as Cl)	Fluo-ride, dis-solved (mg/L as F)	Silica, dis-solved (mg/L as SiO_2)	Solids, residue at 180 deg. C dis-solved (mg/L)	Solids, sum of constit-uents, dis-solved (mg/L)	Solids, dis-solved (tons per day)	Nitro-gen, nitrate dis-solved (mg/L as N)
01591610	12-21-88	--	6.8	11	0.1	3.3	73	61	10.4	--
	04-26-89	--	6.8	13	.1	.45	71	55	9.59	--
	09-11-89	--	6.0	11	.1	5.7	81	62	23.2	--
01592500	07-01-63	--	6.0	4.4	.2	7.3	54	44	2.04	--
	07-23-63	--	6.4	4.1	0	7.2	51	--	1.79	--
	08-16-63	--	5.2	4.2	.4	7.0	54	--	1.75	--
	09-09-63	--	4.6	4.4	0	6.7	52	--	1.40	--
	09-19-63	--	4.4	4.6	0	7.4	54	--	1.60	--
	10-02-63	--	3.4	4.5	0	7.5	60	45	1.78	--
	10-16-63	--	3.4	4.3	.1	7.8	57	45	1.54	--
	10-22-63	--	--	--	--	--	--	--	--	--
	10-25-63	--	4.2	4.7	.1	7.6	59	--	1.59	--
	11-04-63	--	6.0	4.6	.1	2.6	42	--	1.10	--
	11-14-63	--	6.4	4.5	0	2.0	44	--	1.31	--
	11-25-63	--	7.4	4.5	.10	5.6	52	42	1.68	--
	12-07-63	--	6.2	4.2	.10	3.4	46	39	1.49	--
	12-18-63	--	6.2	5.5	0	3.2	42	--	1.36	--
	01-10-64	--	6.8	5.5	0	3.6	41	--	1.44	--
	01-24-64	--	6.8	4.7	.10	4.1	46	--	11.2	--
	02-04-64	--	7.2	4.6	.10	13	46	--	6.46	--
	02-14-64	--	7.4	4.9	0	4.4	45	40	6.20	--
	02-26-64	--	7.8	4.0	0	5.5	43	39	5.34	--
	03-05-64	--	7.6	5.1	.10	5.7	47	41	18.8	--
	03-16-64	--	6.8	4.7	.10	4.1	46	--	14.3	--
	03-25-64	--	7.6	4.6	.10	6.8	51	--	21.3	--
	04-02-64	--	5.8	4.8	0	6.8	47	38	13.6	--
	04-14-64	--	6.8	4.1	.10	6.3	50	38	20.3	--
01593200	12-19-88	--	7.6	30	.10	16	151	132	--	--
	04-25-89	--	8.3	32	.10	8.5	173	127	2.78	--
	10-16-89	--	7.0	30	.10	14	156	137	1.65	--
01593300	12-19-88	--	25	35	.10	22	230	202	1.27	--
	04-25-89	--	22	36	.10	11	202	182	2.32	--
	10-16-89	--	21	35	.10	20	203	202	1.57	--
01593500	12-21-88	--	13	38	.10	12	186	152	8.04	--
	04-25-89	--	16	36	.10	6.7	178	149	13.6	--
	09-12-89	--	11	29	.10	15	172	153	7.89	--
01593600	12-20-88	--	5.1	19	.10	11	95	72	1.37	--
	04-26-89	--	5.3	20	.10	6.7	100	69	2.41	--
	10-16-89	--	4.0	30	.10	10	92	85	1.33	--
01593675	12-19-88	--	8.9	19	.10	13	143	124	1.37	--
	04-25-89	--	9.3	19	.10	8.7	132	116	2.81	--
	09-12-89	--	7.0	19	.10	13	139	125	--	--
01593700	12-19-88	--	8.0	13	.10	18	79	78	.50	--
	04-25-89	--	8.8	17	.10	13	94	79	1.23	--
	10-16-89	--	8.0	14	.10	18	72	87	.62	--
01593710	12-21-88	--	6.9	17	<.10	12	114	91	7.08	--
	04-26-89	--	8.5	20	.10	6.7	111	95	12.0	--
	09-11-89	--	7.0	34	.10	14	127	119	8.95	--
01594000	12-12-88	--	12	27	.10	14	143	134	16.4	--
	04-25-89	--	13	27	.10	4.8	138	115	30.6	--
	09-12-89	--	9.0	23	.10	13	144	122	20.8	--
01594200	12-19-88	--	10	24	.10	8.3	168	174	1.08	--
	04-25-89	--	10	28	.10	4.3	135	124	2.11	--
	09-12-89	--	11	26	.10	6.4	183	162	--	--

Nitrogen, nitrate dissolved (mg/L as NO_3)	Nitrogen, nitrite plus nitrate, total (mg/L as N)	Phosphorus, total (mg/L as P)	Phosphate, total (mg/L as PO_4)	Phosphorus, total (mg/L as PO_4)	Iron, total recoverable (µg/L as Fe)	Iron, dissolved (µg/L as Fe)	Manganese, total recoverable (µg/L as Mn)	Manganese, dissolved (µg/L as Mn)	Carbon, organic total (mg/L as C)	Additional water quality information[1]	Station no.
--	1.0	0.02	--	--	90	10	20	2	3.8	C	01591610
--	1.8	.01	--	--	190	22	--	44	2.4		
--	1.5	.02	--	--	570	320	--	260	3.8		
2.5	--	--	0.02	--	1300	--	500	--	--		01592500
2.2	--	--	--	--	70	--	0	--	--		
2.3	--	--	--	--	260	--	0	--	--		
2.7	--	--	--	--	150	--	0	--	--		
2.5	--	--	--	--	280	--	10	--	--		
4.1	--	--	--	--	6900	--	0	--	--		
3.5	--	--	--	--	8000	--	3000	--	--		
--	--	--	--	--	--	--	--	--	--		
5.3	--	--	--	--	9400	--	3000	--	--		
.90	--	--	--	--	990	--	10	--	--		
1.2	--	--	--	--	660	--	610	--	--		
2.1	--	--	--	--	680	--	330	--	--		
1.6	--	--	--	--	440	--	140	--	--		
2.0	--	--	--	--	200	--	40	--	--		
2.9	--	--	--	--	400	--	50	--	--		
1.9	--	--	--	--	500	--	80	--	--		
.80	--	--	--	--	310	--	200	--	--		
1.6	--	--	--	--	300	--	360	--	--		
2.0	--	--	--	--	310	--	70	--	--		
2.1	--	--	--	--	330	--	390	--	--		
1.9	--	--	--	--	510	--	80	--	--		
2.7	--	--	--	--	330	--	180	--	--		
3.0	--	--	--	--	220	--	0	--	--		
3.6	--	--	--	--	200	--	100	--	--		
--	2.0	<.01	--	--	250	110	--	67	1.4	C	01593200
--	1.2	.01	--	--	420	70	--	58	1.8		
--	1.3	.02	--	--	230	88	40	37	1.9		
--	2.3	.01	--	--	260	200	130	130	1.9	C	01593300
--	1.2	.03	--	--	450	46	--	110	3.0		
--	1.4	.04	--	--	500	48	180	170	2.3		
--	1.7	.02	--	--	350	73	120	110	2.8	B	01593500
--	1.1	.02	--	--	350	51	90	87	2.5		
--	1.4	.03	--	--	210	62	60	52	2.8		
--	3.8	.01	--	--	190	120	40	32	1.4	C	01593600
--	3.2	.02	--	--	280	86	--	18	1.6		
--	3.2	.07	--	--	330	100	30	28	2.8		
--	3.1	<.01	--	--	180	69	60	56	1.2	C	01593675
--	2.2	.01	--	--	430	62	--	31	1.5		
--	2.8	.04	--	--	200	37	30	16	1.5		
--	2.0	.01	--	--	150	65	30	19	1.3	C	01593700
--	1.3	.01	--	--	220	84	--	16	1.5		
--	1.4	.02	--	--	150	53	20	10	1.5		
--	2.7	<.01	--	--	200	92	60	56	1.5	B	01593710
--	2.1	.02	--	--	290	85	50	38	1.7		
--	3.0	.02	--	--	140	66	--	26	1.5		
--	2.1	.02	--	--	310	81	80	77	2.1	B	01594000
--	1.4	.01	--	--	210	44	40	37	1.9		
--	1.7	.03	--	--	120	37	20	8	2.4		
--	2.0	2.8	--	--	690	510	100	100	3.6	C	01594200
--	1.0	1.3	--	--	440	99	60	36	3.5		
--	1.3	3.5	--	--	410	110	40	21	3.2		

Table 17.—Major-ion, nutrient, and organic-carbon concentrations in surface water in Howard County—Continued

Station no.	Station name	Date	Time	Discharge, instantaneous (ft^3/s)	Specific conductance (µS/cm)	pH (standard units)	Temperature, air (deg C)	Temperature, water (deg C)
01594395	Dorsey Run at Jessup	12-19-88	1252	1.3	319	6.9	9.0	2.5
		04-25-89	1050	4.6	251	7.3	19.0	11.0
		09-12-89	1025	--	312	6.7	26.5	20.0

Color (platinum-cobalt units)	Oxygen, dissolved (mg/L)	Hardness, total (mg/L as $CaCO_3$)	Noncarbonate hardness, (mg/L as $CaCO_3$)	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 (mg/L as HCO_3)	Carbonate, total (mg/L as CO_3)	Alkalinity, total (mg/L as $CaCO_3$)	Station no.
17	--	110	--	30	7.5	17	1.7	--	--	70	01594395
30	13.2	83	--	23	6.3	16	2.2	--	--	61	
50	9.9	100	--	32	5.5	15	16	--	--	66	

Station no.	Date	Carbon dioxide, dissolved (mg/L)	Sulfate, dissolved (mg/L as SO_4)	Chloride, dissolved (mg/L as Cl)	Fluoride, dissolved (mg/L as F)	Silica, dissolved (mg/L as SiO_2)	Solids, residue at 180 deg. C dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, dissolved (tons per day)	Nitrogen, nitrate dissolved (mg/L as N)
01594395	12-19-88	--	20	34	0.10	12	227	162	0.78	--
	04-25-89	--	22	32	.10	5.4	145	139	1.81	--
	09-12-89	--	22	31	.20	4.8	231	188	--	--

Nitrogen, nitrate dissolved (mg/L as NO_3)	Nitrogen, nitrite plus nitrate, total (mg/L as N)	Phosphorus, total (mg/L as P)	Phosphate, total (mg/L as PO_4)	Phosphorus, total (mg/L as PO_4)	Iron, total recoverable (µg/L as Fe)	Iron, dissolved (µg/L as Fe)	Manganese, total recoverable (µg/L as Mn)	Manganese, dissolved (µg/L as Mn)	Carbon, organic total (mg/L as C)	Additional water quality information[1]	Station no.
--	0.70	<0.01	--	--	820	730	--	370	2.3	B	01594395
--	.10	.02	--	--	800	250	--	230	2.5		
--	1.1	.68	--	--	3400	850	400	300	56		

[1]Explanation of codes

A Water-quality concentrations for Patapsco River at Hollofield, Maryland, see table 18
B Trace-element analysis from stream-bottom materials, see table 19
C Pesticide analysis from stream-botom materials, see table 20

Table 18.—Supplemental water-quality determinations for Patapsco River at Hollofield, Maryland

[ft³/s = cubic feet per second; µS/cm = microsiemens per centimeter; deg C = degrees Celsius; g/L = grams per liter; mg/L = milligrams per liter; µg/L = micrograms per liter; pCi/L = picoCuries per liter; mL = milliliter; U nat = natural uranium; ND = not detected (detection limit not reported); -- = analysis not performed; < = actual value is less than value shown]

Date	Time	Discharge, instantaneous (ft^3/s)	Specific conductance (µS/cm)	pH (standard units)	Temperature, air (deg C)	Temperature, water (deg C)	Oxygen, dissolved (mg/L)	Biochemical oxygen demand, 5 day (mg/L)	Coliform, fecal, membrane filter (colonies /100mL)	Solids residue at 105 deg. C, suspended (mg/L)
07-15-69	0945	24	150	6.8	--	24.0	5.0	--	1,600	--
08-27-69	1010	26	145	7.1	--	20.0	7.2	--	160	--
09-17-69	1325	35	100	6.7	--	23.0	9.6	--	100	--
10-09-69	1340	41	140	6.8	--	18.0	10.2	1.3	440	6
11-25-69	1217	49	130	7.2	--	4.5	12.6	--	120	--
12-16-69	0925	78	160	7.4	--	2.0	12.6	--	540	--
01-13-70	1015	73	140	7.4	--	0	13.3	--	K1,200	--
02-10-70	0935	974	130	7.9	--	3.5	12.8	--	5,200	--
03-18-70	1218	95	130	8.1	--	3.0	13.3	--	390	--
04-15-70	1419	628	110	7.4	--	8.0	11.4	--	K13,000	--
05-18-70	0950	174	130	6.7	--	14.0	8.9	--	K13,000	--
06-18-70	0945	138	140	7.4	--	20.0	7.8	--	24,000	--
07-27-70	1155	53	130	7.0	--	26.0	9.1	--	1,000	--
08-20-70	0925	118	130	7.2	--	22.0	8.3	--	2,000	--
09-29-70	1314	29	130	7.6	--	17.0	10.4	--	150	--
10-15-70	1253	32	125	7.1	--	18.0	7.8	1.0	440	28
12-21-70	1210	66	140	8.2	--	3.0	12.8	--	880	--
03-16-71	0921	130	123	7.5	--	7.5	11.5	--	160	--
06-21-71	1615	84	125	8.2	--	23.0	10.6	--	880	--
07-15-71	1410	58	140	8.1	--	23.0	8.9	--	320	--
08-23-71	0857	96	135	7.2	--	20.0	10.2	--	400	--
09-23-71	1250	335	165	6.5	--	17.5	10.0	.6	640	6
10-15-71	1316	242	135	7.5	--	16.0	9.6	--	2,300	--
01-06-72	1117	285	130	6.9	--	4.0	10.8	--	1,400	--
04-06-72	1400	288	120	8.0	--	10.5	--	--	K6	--
06-08-72	1300	237	130	7.4	--	19.0	10.0	--	1,700	--
07-24-72	1435	320	125	7.5	--	26.0	8.2	--	150	--
08-30-72	0900	109	145	7.6	--	19.5	8.4	--	K1,200	--
09-27-72	1000	75	145	7.5	--	18.5	9.2	1.0	210	22
10-26-72	1010	80	145	7.7	--	10.0	11.6	--	76	--
11-13-72	1150	165	155	7.5	--	9.0	11.6	--	170	--
12-08-72	0925	380	125	7.2	--	5.0	12.4	2.4	K1,400	22
03-05-73	1145	355	115	7.2	--	7.0	12.5	2.7	82	6
05-29-73	1050	1,420	115	7.2	--	16.0	10.0	.8	1,300	34
07-11-73	1430	108	130	8.0	--	25.5	8.5	--	K1,400	--
08-08-73	1450	72	140	8.7	--	28.0	10.8	--	8,200	--
09-13-73	1015	78	150	7.5	--	18.5	9.7	1.6	92	5
12-04-73	0940	66	--	--	--	--	--	1.0	--	--
03-01-74	1510	112	--	--	--	--	--	--	--	--
02-20-76	1400	275	150	7.4	8.0	8.0	--	--	--	--
03-30-76	0945	150	145	7.8	13.0	11.5	--	--	--	--
10-15-76	1330	102	150	7.6	16.0	13.0	--	--	--	--
11-12-76	1500	95	145	7.3	4.5	6.5	--	--	--	--
12-28-76	1100	80	180	7.8	5.0	.5	--	--	--	--
02-16-77	1145	100	200	7.1	-4.0	0	--	--	--	--
05-11-77	1430	96	140	8.2	20.0	16.0	--	--	--	--
07-22-77	1430	42	190	8.2	25.0	31.0	--	--	--	--
10-11-77	1215	36	--	7.8	17.0	15.0	--	--	--	--
11-18-77	--	112	155	7.8	10.5	10.0	--	--	--	--
01-24-78	1430	203	180	5.8	6.0	.5	--	--	--	--
09-08-78	1400	61	140	8.6	24.5	24.0	--	--	--	--
05-01-79	1545	154	150	9.3	16.0	17.0	--	--	--	--
05-01-80	1415	1,060	140	7.9	23.0	13.5	--	--	--	--
07-22-80	1445	66	165	8.6	31.0	30.0	--	--	--	--
12-28-82	0930	75	--	--	--	--	--	--	--	--
02-25-83	1245	209	--	--	--	--	--	--	--	--
07-26-83	1000	43	--	--	--	--	--	--	--	--

K: Results based on colony count outside of the accepted range (non-ideal colony).

Table 18.—Supplemental water-quality determinations for Patapsco River at Hollofield, Maryland—Continued

Nitrate, total mg/L as N)	Nitrite, total (mg/L as N)	Nitrite, dis-solved (mg/L as N)	Nitrite + nitrate, dis-solved (mg/L as N)	Ortho-phos-phate, dis-solved (mg/L as P)	Ortho-phos-phate, dis-solved (mg/L as PO_4)	Alum-inum, dis-solved (µg/L)	Cadmium, dis-solved (µg/L)	Chro-mium, total (µg/L)	Chro-mium, dis-solved (µg/L)	Copper, dis-solved (µg/L)	Date
--	--	--	--	--	--	--	--	--	--	--	07-15-69
--	--	--	--	--	--	--	--	--	--	--	08-27-69
--	--	--	--	--	--	--	--	--	--	--	09-17-69
--	--	--	--	--	--	100	1	0	--	14	10-09-69
--	--	--	--	--	--	--	--	--	--	--	11-25-69
--	--	--	--	--	--	--	--	--	--	--	12-16-69
--	--	--	--	--	--	--	--	--	--	--	01-13-70
--	--	--	--	--	--	--	--	--	--	--	02-10-70
--	--	--	--	--	--	--	--	--	--	--	03-18-70
--	--	--	--	--	--	--	--	--	--	--	04-15-70
--	--	--	--	--	--	--	--	--	--	--	05-18-70
--	--	--	--	--	--	--	--	--	--	--	06-18-70
--	--	--	--	--	--	--	--	--	--	--	07-27-70
--	--	--	--	--	--	--	--	--	--	--	08-20-70
--	--	--	--	--	--	--	--	--	--	--	09-29-70
--	--	--	--	--	--	0	0	0	--	5	10-15-70
--	--	--	--	--	--	--	--	--	--	--	12-21-70
--	--	--	--	--	--	--	--	--	--	--	03-16-71
--	--	--	--	--	--	--	--	--	--	--	06-21-71
--	--	--	--	--	--	--	--	--	--	--	07-15-71
--	--	--	--	--	--	--	--	--	--	--	08-23-71
--	--	--	--	--	--	0	0	--	0	2	09-23-71
--	--	--	--	--	--	--	--	--	--	--	10-15-71
--	--	--	--	--	--	--	--	--	--	--	01-06-72
--	--	--	--	--	--	--	--	--	--	--	04-06-72
--	--	--	--	--	--	--	--	--	--	--	06-08-72
--	--	--	--	--	--	--	--	--	--	--	07-24-72
--	--	--	--	--	--	--	--	--	--	--	08-30-72
--	--	--	--	--	--	200	0	--	0	0	09-27-72
--	--	--	--	--	--	--	--	--	--	--	10-26-72
--	--	--	--	--	--	--	--	--	--	--	11-13-72
--	--	--	--	--	--	<100	ND	--	--	ND	12-08-72
--	--	--	--	--	--	300	2	--	ND	ND	03-05-73
--	--	0.08	1.9	--	--	<100	<2	ND	--	ND	05-29-73
--	--	--	--	--	--	--	--	--	--	--	07-11-73
--	--	--	--	--	--	--	--	--	--	--	08-08-73
--	--	<.01	1.4	--	--	--	--	<20	--	--	09-13-73
1.6	0.01	--	--	--	--	--	--	<20	--	--	12-04-73
2.2	.05	--	--	--	--	--	--	--	--	--	03-01-74
--	--	--	--	--	--	--	--	--	--	--	02-20-76
--	--	--	--	--	--	--	--	--	--	--	03-30-76
--	--	--	--	--	--	--	--	--	--	--	10-15-76
--	--	--	--	--	--	--	--	--	--	--	11-12-76
--	--	--	--	--	--	--	--	--	--	--	12-28-76
--	--	--	--	--	--	--	--	--	--	--	02-16-77
--	--	--	--	--	--	--	--	--	--	--	05-11-77
--	--	--	--	--	--	--	--	--	--	--	07-22-77
--	--	--	--	--	--	--	--	--	--	--	10-11-77
--	--	--	--	--	--	--	--	--	--	--	11-18-77
--	--	--	--	--	--	--	--	--	--	--	01-24-78
--	--	--	--	--	--	--	--	--	--	--	09-08-78
--	--	--	--	--	--	--	--	--	--	--	05-01-79
--	--	--	--	--	--	--	--	--	--	--	05-01-80
--	--	--	--	--	--	--	--	--	--	--	07-22-80
--	--	--	2.2	0.12	0.37	--	--	--	--	--	12-28-82
--	--	--	2.1	.09	.28	--	--	--	--	--	02-25-83
--	--	--	.40	.01	.03	--	--	--	--	--	07-26-83

0 Used prior to 1974, indicates substance not detected (detection limits not reported).

Table 18.—Supplemental water-quality determinations for Patapsco River at Hollofield, Maryland—Continued

Date	Lead, dis-solved (µg/L)	Zinc, dis-solved (µg/L)	Gross alpha-partical activity, total (pCi/L as U nat)	Gross alpha, dis-solved (pCi/L as U nat)	Gross alpha, sus-pended (pCi/L as U nat)	Gross beta-partical activity, total (pCi/L as Cs-137)	Gross beta, dis-solved (pCi/L as Cs-137)	Gross beta, sus-pended (pCi/L as Cs-137)	Cyanide, dis-solved (mg/L)	Phenols, total (g/L)	Meth-ylene blue active sub-stance (mg/L)
07-15-69	--	--	--	--	--	--	--	--	--	--	--
08-27-69	--	--	--	--	--	--	--	--	--	--	--
09-17-69	--	--	--	--	--	--	--	--	--	--	--
10-09-69	2	71	0.3	<0.1	0.3	5.9	4.8	1.1	0	6	0.10
11-25-69	--	--	--	--	--	--	--	--	--	--	--
12-16-69	--	--	--	--	--	--	--	--	--	--	--
01-13-70	--	--	--	--	--	--	--	--	--	--	--
02-10-70	--	--	--	--	--	--	--	--	--	--	--
03-18-70	--	--	--	--	--	--	--	--	--	--	--
04-15-70	--	--	--	--	--	--	--	--	--	--	--
05-18-70	--	--	--	--	--	--	--	--	--	--	--
06-18-70	--	--	--	--	--	--	--	--	--	--	--
07-27-70	--	--	--	--	--	--	--	--	--	--	--
08-20-70	--	--	--	--	--	--	--	--	--	--	--
09-29-70	--	--	--	--	--	--	--	--	--	--	--
10-15-70	0	20	.8	<.3	.7	6.4	4.3	2.1	0	2	.01
12-21-70	--	--	--	--	--	--	--	--	--	--	--
03-16-71	--	--	--	--	--	--	--	--	--	--	--
06-21-71	--	--	--	--	--	--	--	--	--	--	--
07-15-71	--	--	--	--	--	--	--	--	--	--	--
08-23-71	--	--	--	--	--	--	--	--	--	--	--
09-23-71	0	140	.2	<.4	<.1	4.2	4.0	<.5	.01	2	.04
10-15-71	--	--	--	--	--	--	--	--	--	--	--
01-06-72	--	--	--	--	--	--	--	--	--	--	--
04-06-72	--	--	--	--	--	--	--	--	--	--	--
06-08-72	--	--	--	--	--	--	--	--	--	--	--
07-24-72	--	--	--	--	--	--	--	--	--	--	--
08-30-72	--	--	--	--	--	--	--	--	--	--	--
09-27-72	1	20	--	<.3	<.1	--	3.3	<.4	.01	1	--
10-26-72	--	--	--	--	--	--	--	--	--	--	--
11-13-72	--	--	--	--	--	--	--	--	--	--	--
12-08-72	ND	40	--	--	--	--	--	--	0	1	--
03-05-73	<2	ND	--	--	--	--	--	--	0	1	--
05-29-73	2	<20	--	--	--	--	--	--	.02	0	--
07-11-73	--	--	--	--	--	--	--	--	--	--	--
08-08-73	--	--	--	--	--	--	--	--	--	--	--
09-13-73	--	--	--	--	--	--	3.1	.5	.01	--	--
12-04-73	--	--	--	--	--	--	--	--	0	0	--
03-01-74	--	--	--	--	--	--	--	--	--	--	--
02-20-76	--	--	--	--	--	--	--	--	--	--	--
03-30-76	--	--	--	--	--	--	--	--	--	--	--
10-15-76	--	--	--	--	--	--	--	--	--	--	--
11-12-76	--	--	--	--	--	--	--	--	--	--	--
12-28-76	--	--	--	--	--	--	--	--	--	--	--
02-16-77	--	--	--	--	--	--	--	--	--	--	--
05-11-77	--	--	--	--	--	--	--	--	--	--	--
07-22-77	--	--	--	--	--	--	--	--	--	--	--
10-11-77	--	--	--	--	--	--	--	--	--	--	--
11-18-77	--	--	--	--	--	--	--	--	--	--	--
01-24-78	--	--	--	--	--	--	--	--	--	--	--
09-08-78	--	--	--	--	--	--	--	--	--	--	--
05-01-79	--	--	--	--	--	--	--	--	--	--	--
05-01-80	--	--	--	--	--	--	--	--	--	--	--
07-22-80	--	--	--	--	--	--	--	--	--	--	--
12-28-82	--	--	--	--	--	--	--	--	--	--	--
02-25-83	--	--	--	--	--	--	--	--	--	--	--
07-26-83	--	--	--	--	--	--	--	--	--	--	--

0 Used prior to 1974, indicates substance not detected (detection limits not reported).

Table 19.—Concentrations of trace elements in stream-bottom materials in Howard County

[Concentrations expressed in micrograms per gram; < = actual value is less than value shown]

Station no.	Station name	Date	Arsenic	Cadmium	Chromium	Copper	Iron	Lead	Manganese	Mercury	Zinc
01587070	South Branch Patapsco River at Woodbine	10-06-89	3	1	6	7	7,600	20	700	0.01	30
01589040	Rockburn Branch at Elkridge	09-12-89	<1	<1	10	7	11,000	<10	300	<.01	30
01590800	Patuxent River at Mullinix	10-06-89	2	<1	6	4	7,700	<10	620	.01	30
01591350	Cattail Creek tributary near Cooksville	10-16-89	1	<1	10	3	6,600	<10	520	<.01	20
01591400	Cattail Creek near Glenwood	10-13-89	<1	<1	6	6	7,200	<10	200	.01	30
01591475	Dorsey Branch near Knollwood	10-13-89	<1	<1	6	3	4,800	<10	170	<.01	20
01593500	Little Patuxent River at Guilford	09-12-89	<1	<1	3	1	3,300	<10	220	<.01	10
01593710	Middle Patuxent River near Simpsonville	09-11-89	1	<1	10	5	6,300	<10	310	<.01	20
01594000	Little Patuxent River at Savage	09-12-89	<1	<1	6	3	3,600	<10	210	<.01	10
01594395	Dorsey Run at Jessup	09-12-89	1	<1	4	3	3,700	<10	90	.03	20

Table 20.—Concentrations of pesticides in stream-bottom materials in Howard County

[Concentrations expressed in micrograms per kilogram; < = actual value is less than value shown]

Station no.	Station name	Date	Aldrin	Chlordane	DDD	DDE
01587500	South Branch Patapsco River at Henryton	09-11-89	<0.1	<1.0	<0.1	0.1
01589000	Patapsco River at Hollofield	09-11-89	.6	20	<.1	.5
01589080	Deep Run at Hanover	10-16-89	<.1	2.0	<.1	<.1
01590900	Cabin Branch near Florence	10-13-89	<.1	<1.0	<.1	.1
01591000	Patuxent River near Unity	09-11-89	<.1	<1.0	<.1	<.1
01591200	Cattail Creek tributary at Carrs Mill	10-13-89	<.1	<1.0	<.1	.1
01591375	Cattail Creek tributary at Daisy	10-13-89	<.1	1.0	<.1	.1
01591610	Patuxent River below Brighton Dam near Brighton	09-11-89	<.1	<1.0	<.1	.1
01593200	Little Patuxent River at Pine Orchard	10-16-89	<.1	5.0	.1	.1
01593300	Red Hill Branch near Columbia	10-16-89	<.1	1.0	<.1	.1
01593600	Middle Patuxent River near West Friendship	10-16-89	<.1	<1.0	<.1	<.1
01593675	Middle Patuxent River tributary near Columbia	09-12-89	<.1	<1.0	<.1	<.1
01593700	Middle Patuxent River tributary near Clarksville	10-16-89	<.1	<1.0	<.1	<.1
01594200	Hammond Branch near Laurel	09-12-89	<.1	5.0	<.1	.1

Station no.	Date	DDT	Diazinon	Dieldrin	Endosulfan	Endrin	Ethion	Heptachlor	Heptachlor epoxide	Lindane	Malathion
01587500	09-11-89	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
01589000	09-11-89	.8	<.1	<.1	<.1	<.1	<.1	.3	<.1	<.1	<.1
01589080	10-16-89	<.1	.1	.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1
01590900	10-13-89	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1
01591000	09-11-89	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1
01591200	10-13-89	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	.4	<.1
01591375	10-13-89	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1
01591610	09-11-89	.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1
01593200	10-16-89	.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1
01593300	10-16-89	.1	<.1	.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1
01593600	10-16-89	<.1	.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1
01593675	09-12-89	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1
01593700	10-16-89	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1
01594200	09-12-89	.4	.1	<.1	<.1	<.1	<.1	.2	<.1	<.1	<.1

Station no.	Date	Methoxychlor	Methyl parathion	Methyl trithion	Mirex	Parathion	PCB	PCN	Perthane	Toxaphene	Trithion
01587500	09-11-89	<0.1	<0.1	<0.1	<0.1	<0.1	<1	<1.0	<1.00	<10	<0.1
01589000	09-11-89	<.1	<.1	<.1	<.1	<.1	<1	<1.0	<1.00	<10	<.1
01589080	10-16-89	<.1	<.1	<.1	<.1	<.1	2	<1.0	<1.00	<10	<.1
01590900	10-13-89	<.1	<.1	<.1	<.1	<.1	<1	<1.0	<1.00	<10	<.1
01591000	09-11-89	<.1	<.1	<.1	<.1	<.1	<1	<1.0	<1.00	<10	<.1
01591200	10-13-89	<.1	<.1	<.1	<.1	<.1	<1	<1.0	<1.00	<10	<.1
01591375	10-13-89	<.1	.1	<.1	<.1	<.1	<1	<1.0	<1.00	<10	<.1
01591610	09-11-89	<.1	<.1	<.1	<.1	<.1	<1	<1.0	<1.00	<10	<.1
01593200	10-16-89	<.1	<.1	<.1	<.1	<.1	<1	<1.0	<1.00	<10	<.1
01593300	10-16-89	<.1	<.1	<.1	<.1	<.1	<1	<1.0	<1.00	<10	<.1
01593600	10-16-89	<10	<.1	<.1	<.1	<.1	<1	<1.0	<1.00	<10	<.1
01593675	09-12-89	<.1	<.1	<.1	<.1	<.1	<1	<1.0	<1.00	<10	<.1
01593700	10-16-89	<.1	<.1	<.1	<.1	<.1	<1	<1.0	<1.00	<10	<.1
01594200	09-12-89	<.1	<.1	<.1	<.1	<.1	1	<1.0	<1.00	<10	<.1

Table 21.—Water appropriations and withdrawals in Howard County

[appropriation = water in amounts greater than 10,000 gallons per day allotted for a specific user]

User	Ground-water appropriation permit no.	Appropriation (gallons per day) Average	Appropriation (gallons per day) High month[1]	Well permit no.	Well no.	Geologic unit	1989 reported pumpage (gallons) Daily average	1989 reported pumpage (gallons) High month daily average[1]	1989 reported pumpage (gallons) Yearly total
GROUND WATER									
W. R. Grace & Co.	HO55G001	60,000	80,000	HO-72-0006	HO Ce 117	300OELL	52,726	62,029	19,245,000
				HO-81-0408	HO Ce 115	300OELL			
				HO-81-0451	HO Ce 116	300OELL			
Concrete Pipe & Products Co., Inc.	HO57G005	35,000	45,000	HO-03-6803	HO Df 31	217PTXN	15,356	20,550	5,605,000
				HO-03-6804	HO Df 32	217PTXN			
Turf Valley Country Club	HO58G006	75,000	100,000	HO-03-3320	HO Be 116	300LCRV	17,424	24,743	6,359,867[2]
				HO-03-3321	HO Be 119	300LCRV			
				HO-03-9657	HO Be 120	300STRS			
				HO-03-9658	HO Be 114	300LCRV			
				HO-03-9659	HO Be 115	300LCRV			
				HO-65-0194	HO Be 117	400BLMR			
				HO-66-0279	HO Be 118	300LCRV			
Sisters of Bon Secours	HO63G008	17,000	22,000	HO-05-5013	HO Be 40	400BLMR	11,454	17,196	4,180,620
				HO-66-0001	HO Be 39	400BLMR			
				HO-71-0054	HO Be 38	400BLMR			
				HO-81-1753	HO Be 41	400BLMR			
				HO-81-2018	HO Be 37	400BLMR			
Howard County Public School System (Glenelg High School)	HO73G003	10,000	15,000	HO-02-6907	HO Bc 248	300SKVL	2,333	3,453	851,523
				HO-02-8474	HO Bc 249	300SKVL			
Maryland and Virginia Milk Producers Assoc., Inc.	HO79G001	132,000	216,000	HO-73-3448	HO De 44	300SKVL	20,807	33,356	7,594,560
				HO-73-3451	HO De 43	300SKVL			
				HO-73-3452	HO De 45	300SKVL			

User	Surface-water appropriation permit no.	Appropriation (gallons per day) Average	Appropriation (gallons per day) High month[1]	Basin	Source	1989 reported pumpage (gallons) Daily average	1989 reported pumpage (gallons) High month daily average[1]	1989 reported pumpage (gallons) Yearly total
SURFACE WATER								
W. R. Grace & Co.	HO65S007	60,000	150,000	Middle Patuxent River	Main stem	27,970	45,109	10,209,000
Maryland and Virginia Milk Producers Assoc., Inc.	HO65S008	430,000	600,000	Hammond Branch	Main stem	175,562	251,138	64,080,000

[1] Daily average during month of highest use.

[2] 1987 pumpage.

Explanation of Geologic Unit Codes

217PTXN Patuxent Formation
300LCRV Loch Raven Schist
300OELL Oella Formation
300STRS Setters Formation
300SKVL Sykesville Formation
400BLMR Baltimore Gneiss

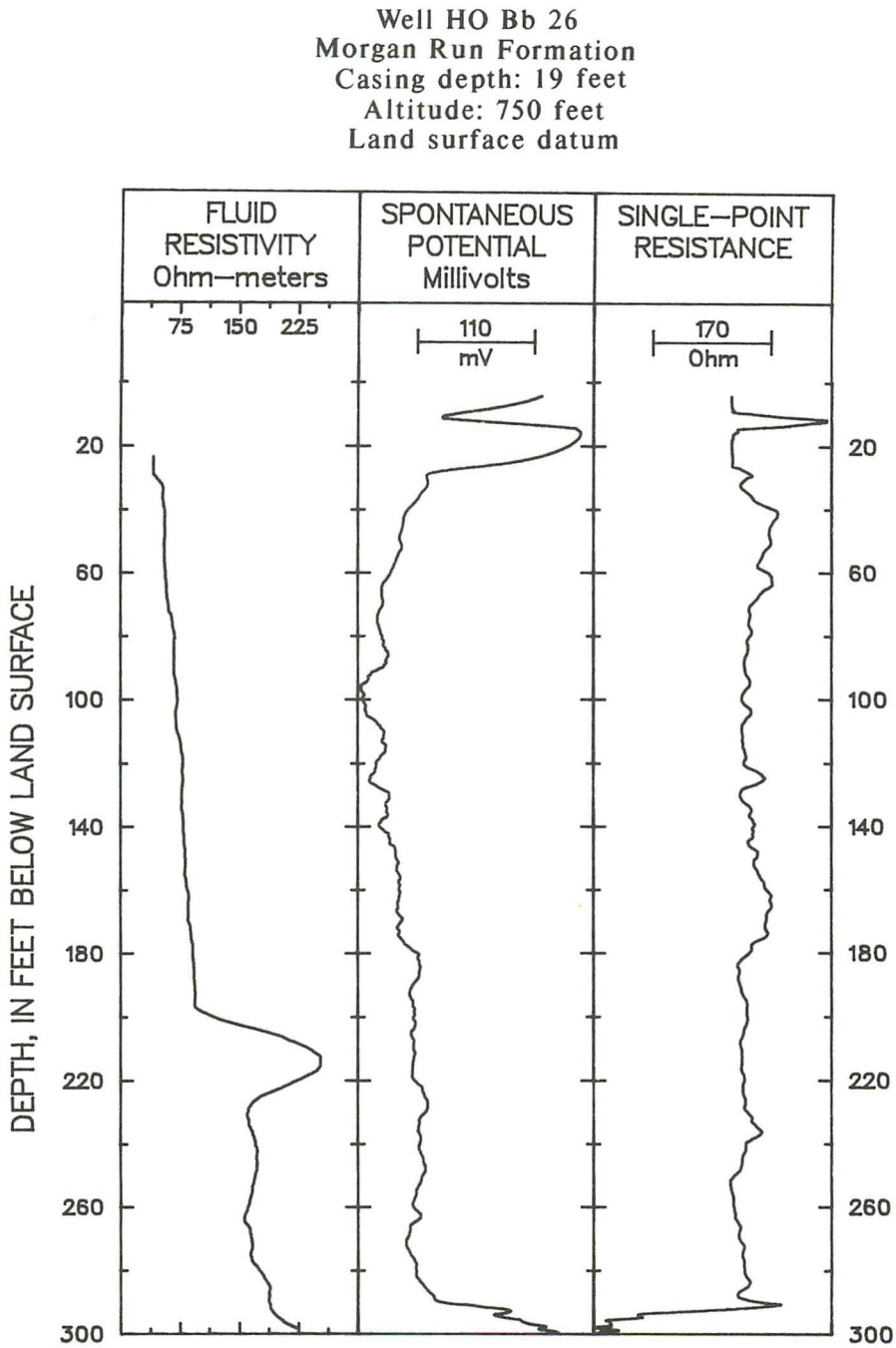


Figure 4. Geophysical logs of selected wells.

Well HO Bb 26--continued
Morgan Run Formation
Casing depth: 19 feet
Altitude: 750 feet
Land surface datum

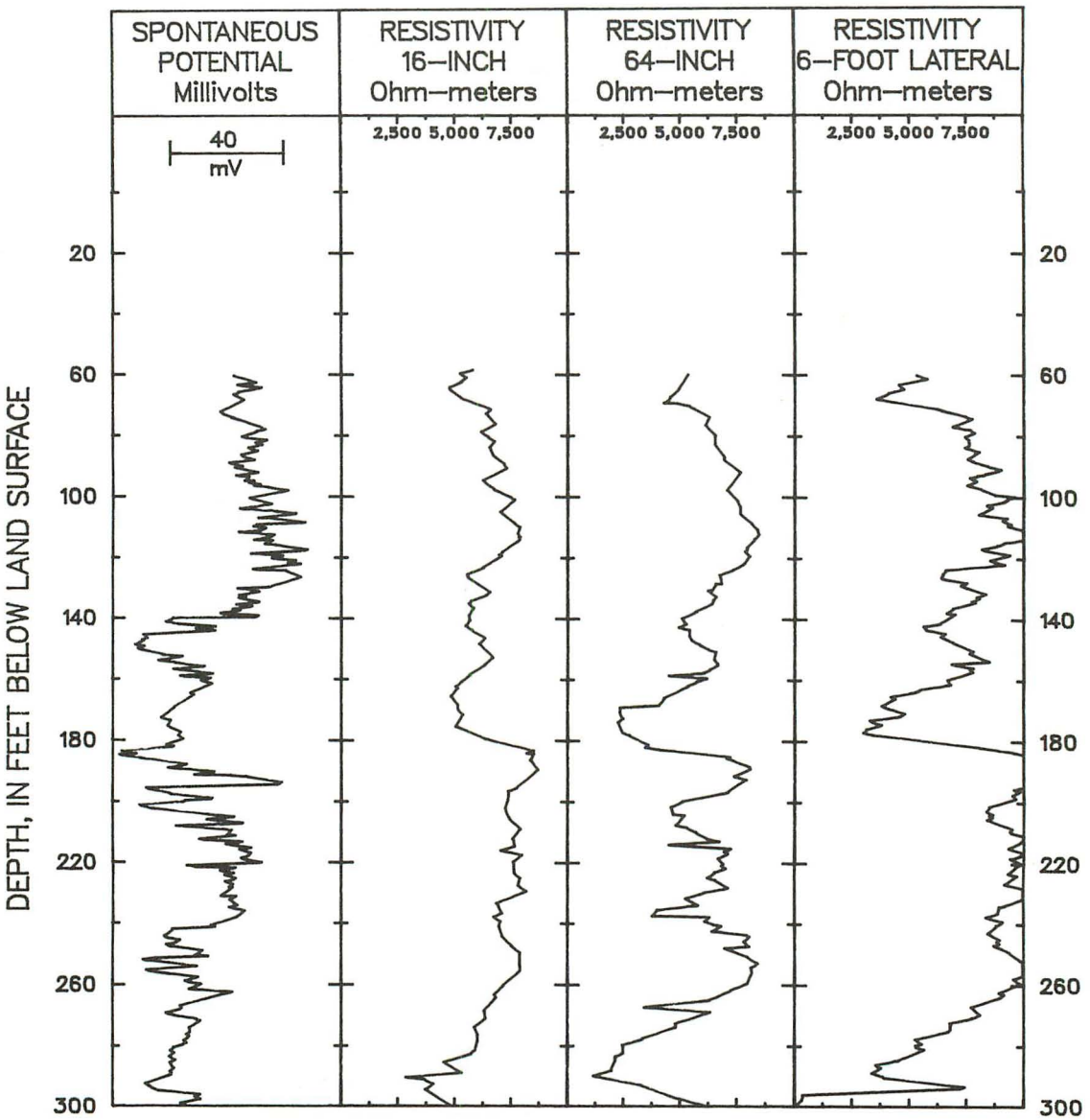


Figure 4.—Continued.

Well HO Bc 247
Sykesville Formation
Casing depth: 44 feet
Altitude: 595 feet
Land surface datum

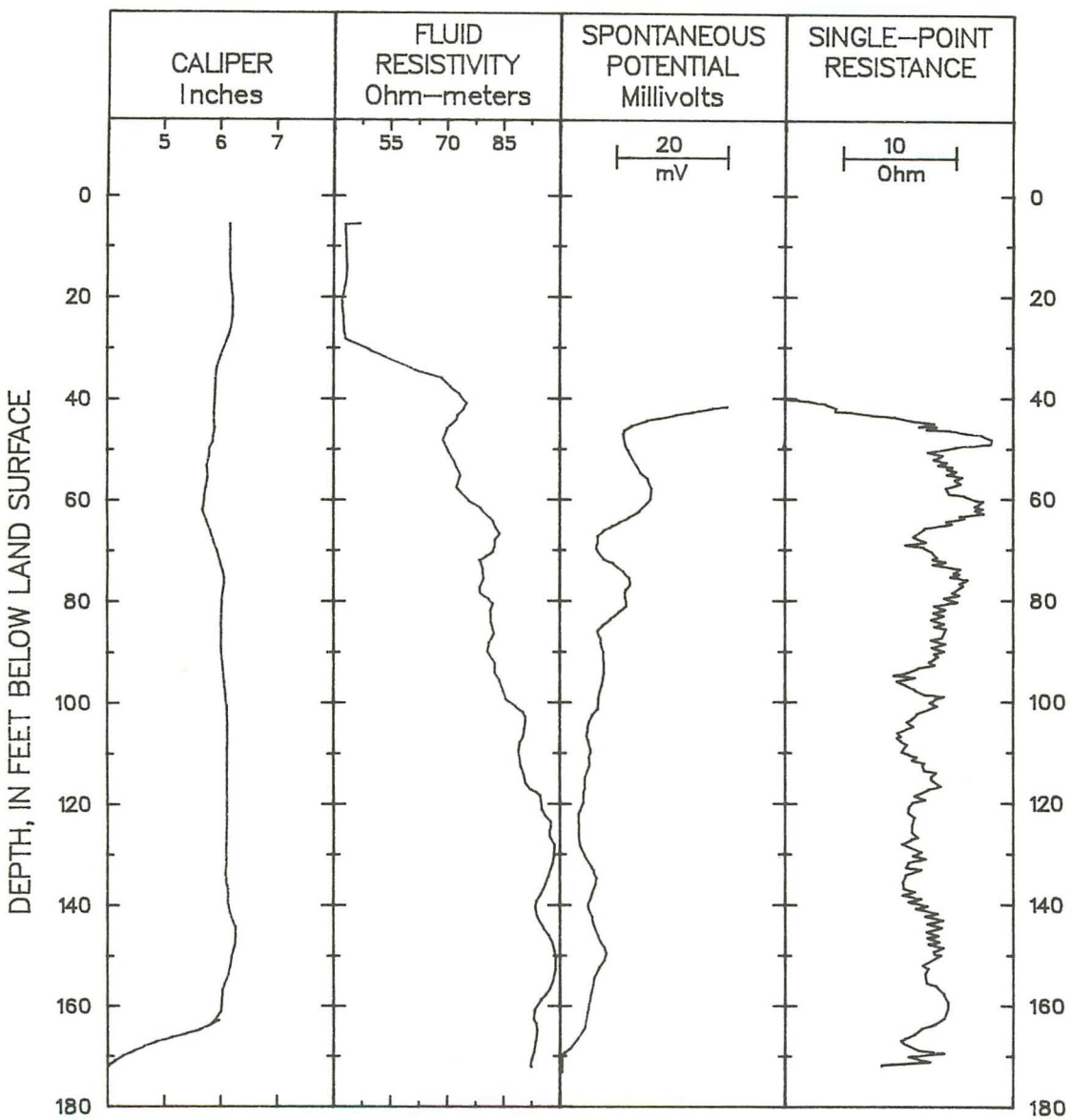


Figure 4.—Continued.

Well HO Bc 247--continued
Sykesville Formation
Casing depth: 44 feet
Altitude: 595 feet
Land surface datum

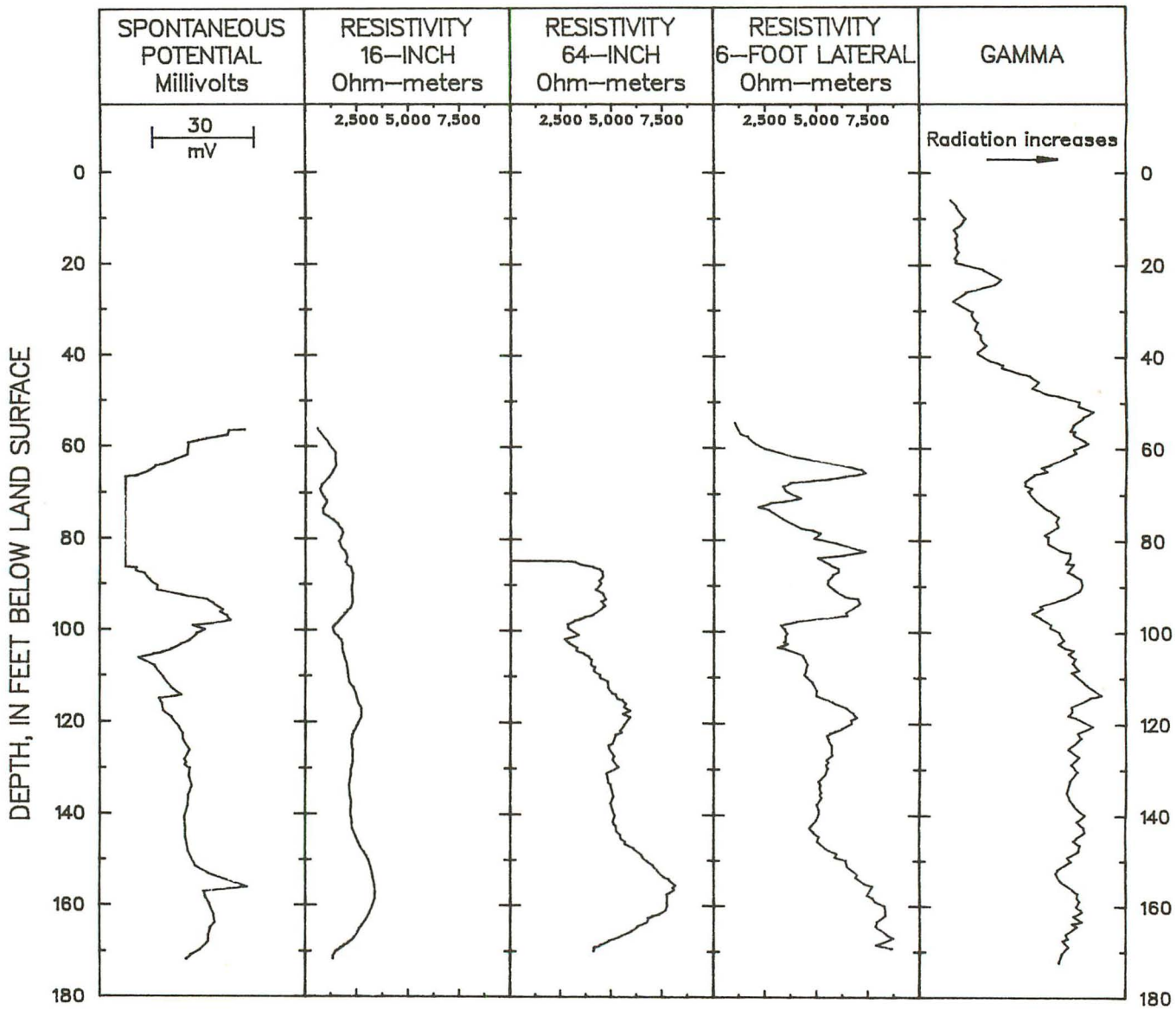


Figure 4.—Continued.

Well HO Be 74
Baltimore Gneiss
Casing depth: 44 feet
Altitude: 405 feet
Land surface datum

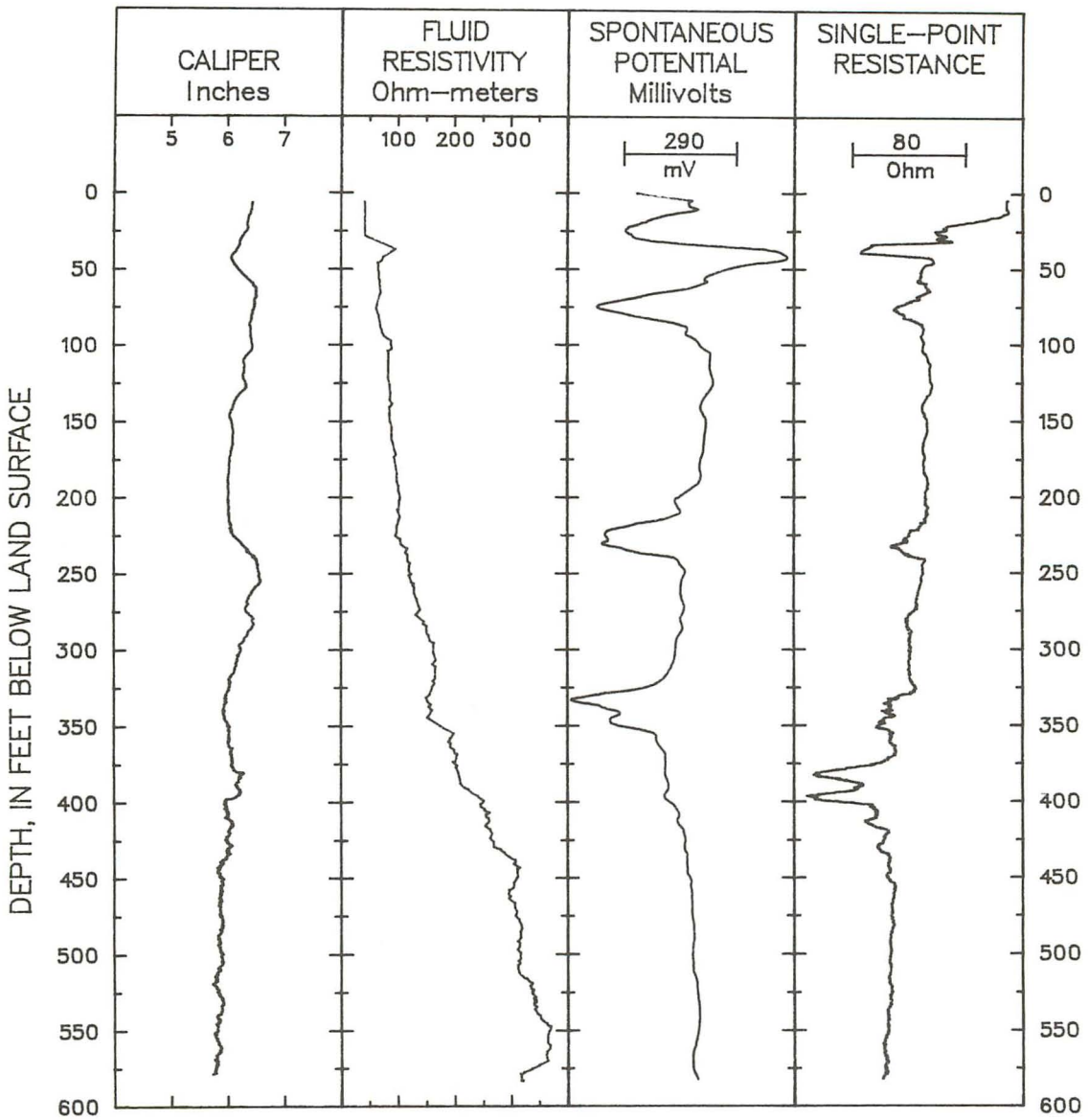


Figure 4.—Continued.

Well HO Be 74--continued
Baltimore Gneiss
Casing depth: 42 feet
Altitude: 405 feet
Land surface datum

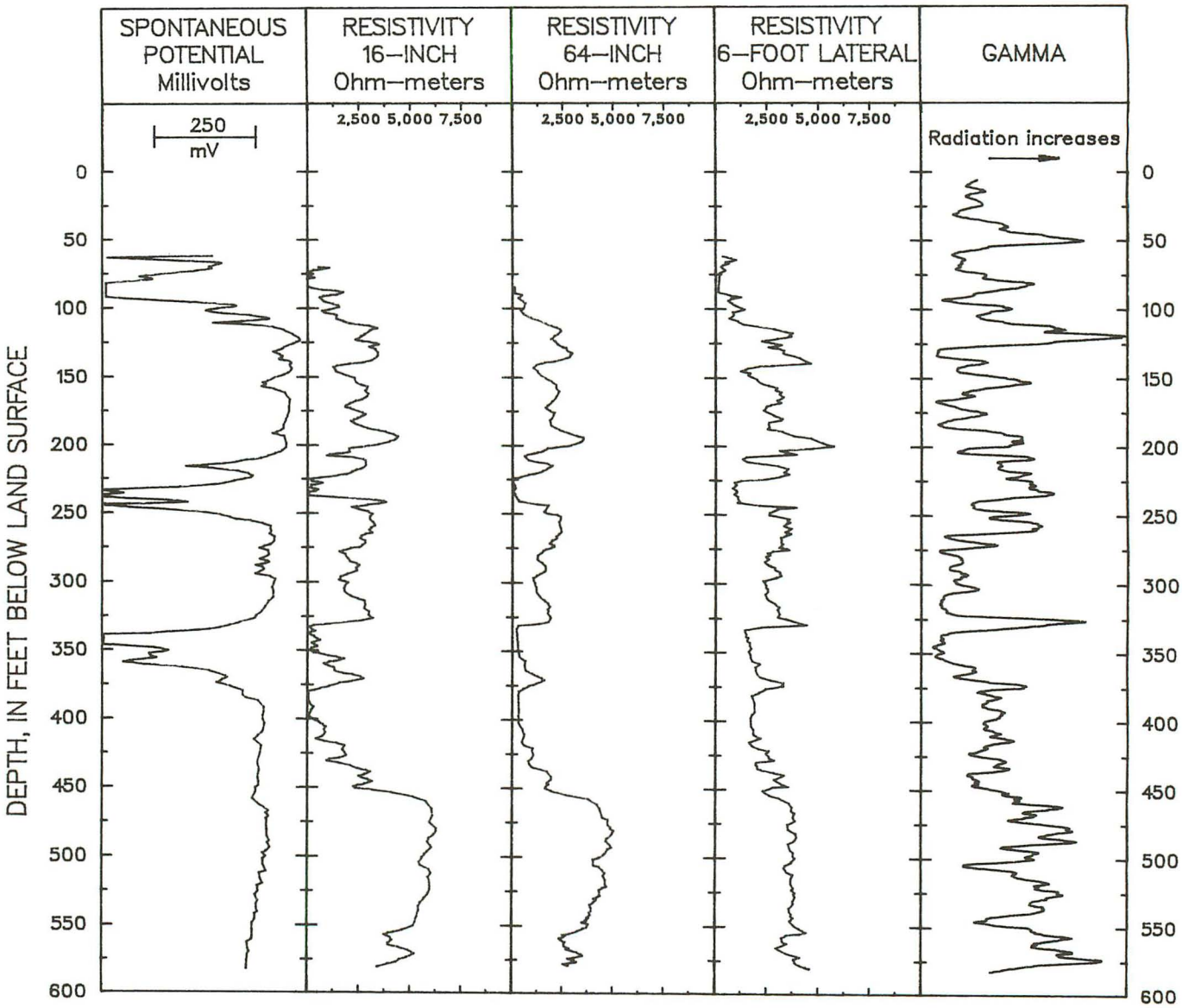


Figure 4.—Continued.

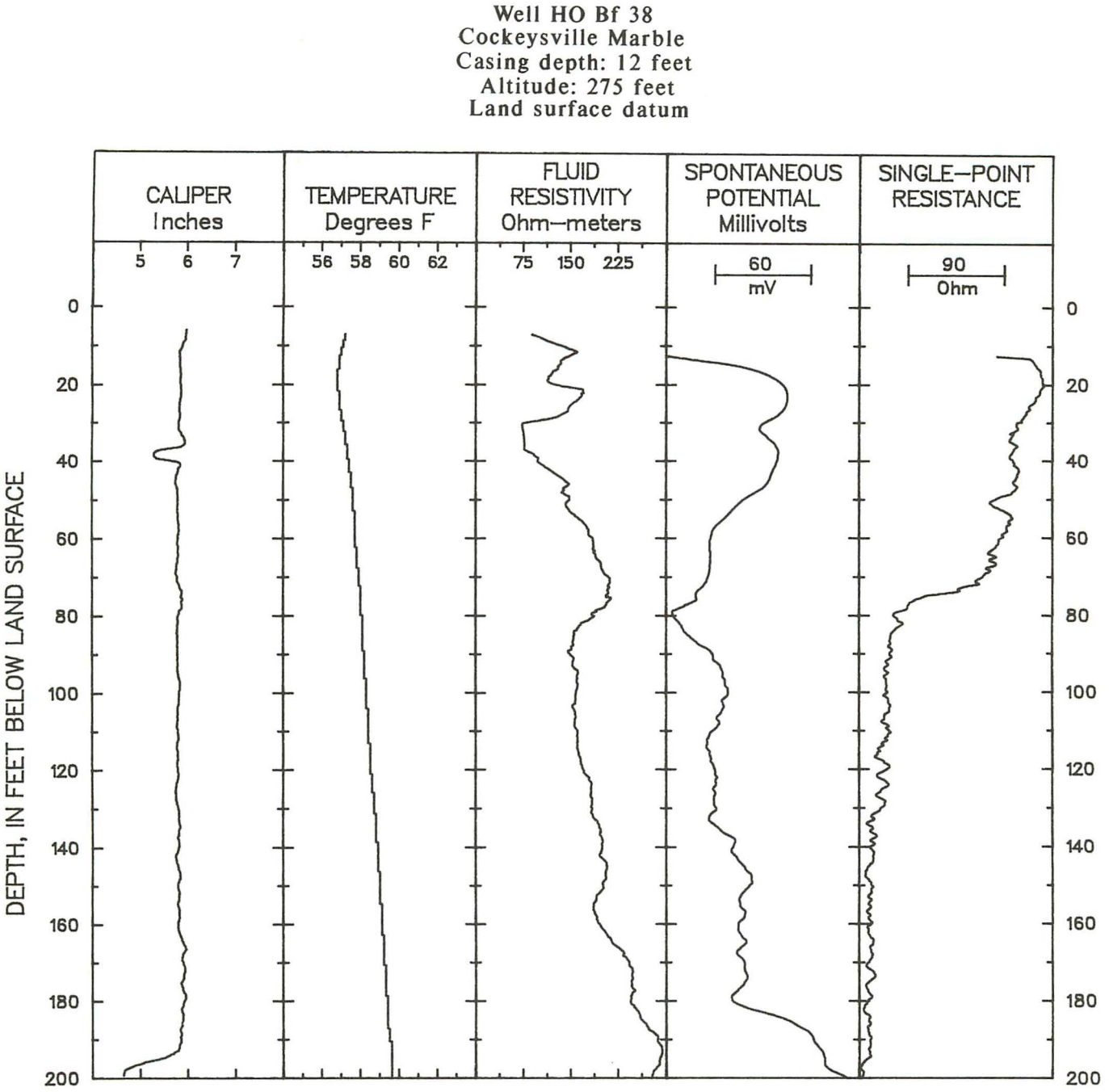


Figure 4.—Continued.

Well HO Bf 38--continued
Cockeysville Marble
Casing depth: 12 feet
Altitude: 275 feet
Land surface datum

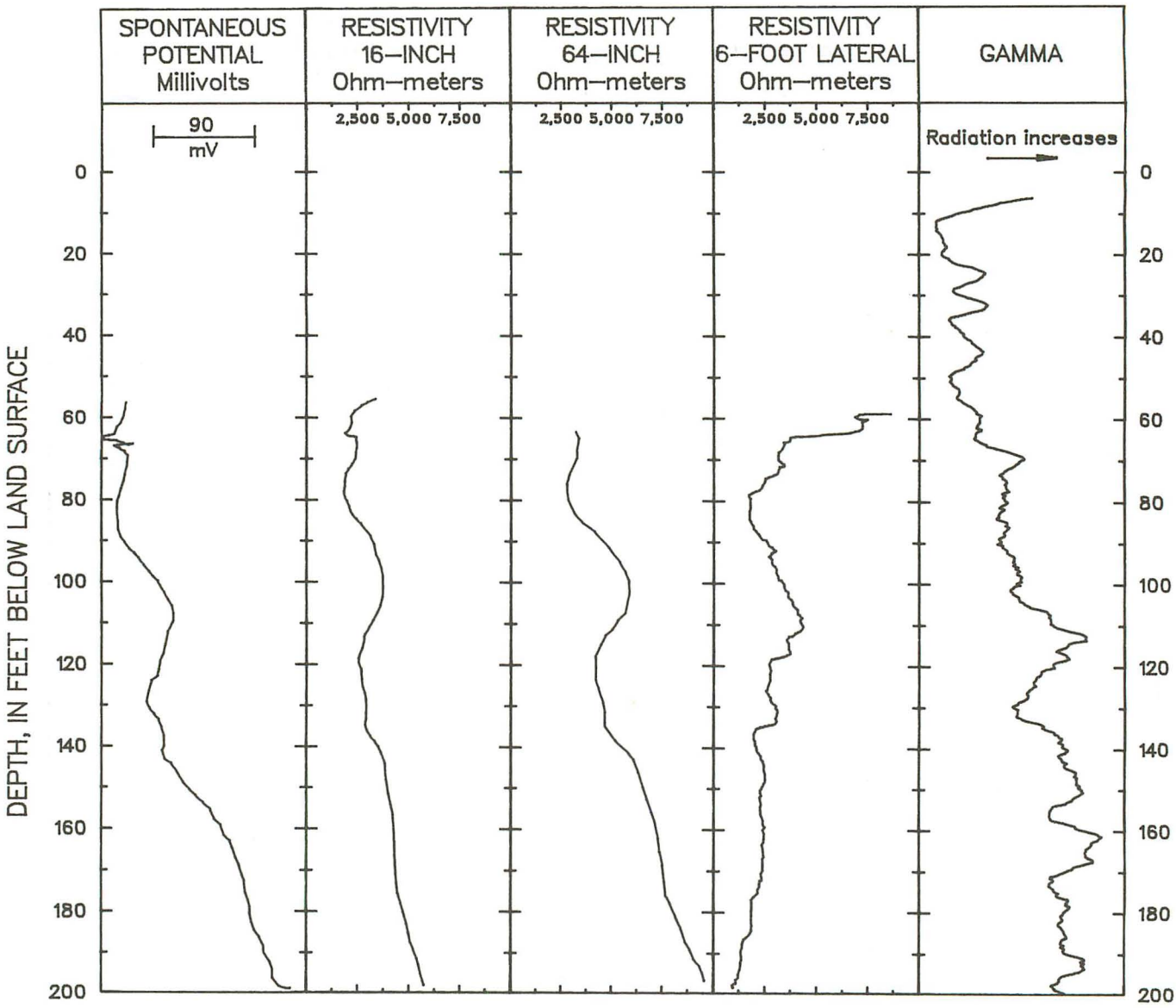


Figure 4.—Continued.

Well HO Ce 75
Oella Formation
Casing depth: 71 feet
Altitude: 435 feet
Land surface datum

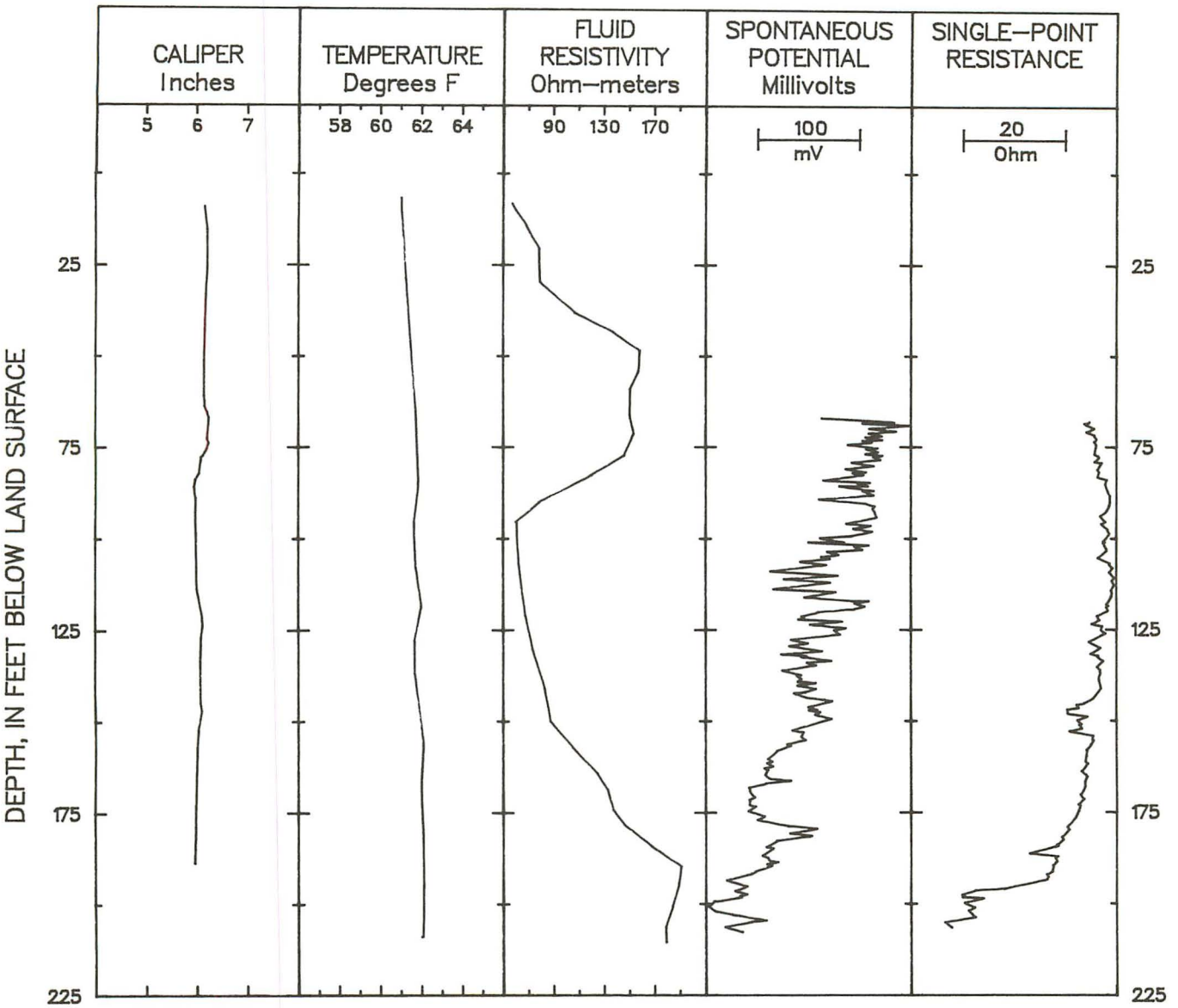


Figure 4.—Continued.

Well HO Ce 75--continued
Oella Formation
Casing depth: 71 feet
Altitude: 435 feet
Land surface datum

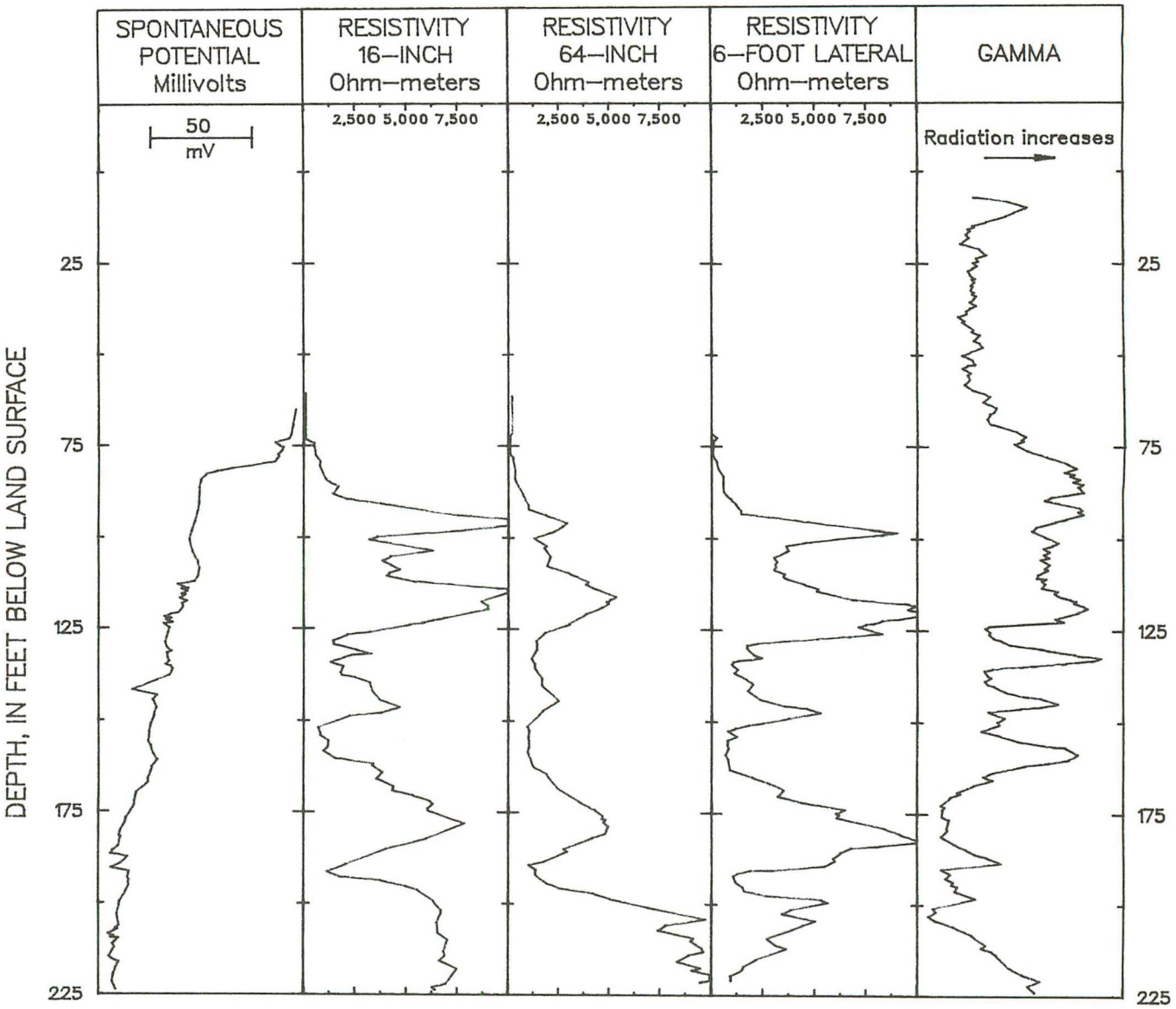


Figure 4.—Continued.

Well HO De 42
Sykesville Formation
Casing depth: 54 feet
Altitude: 365 feet
Land surface datum

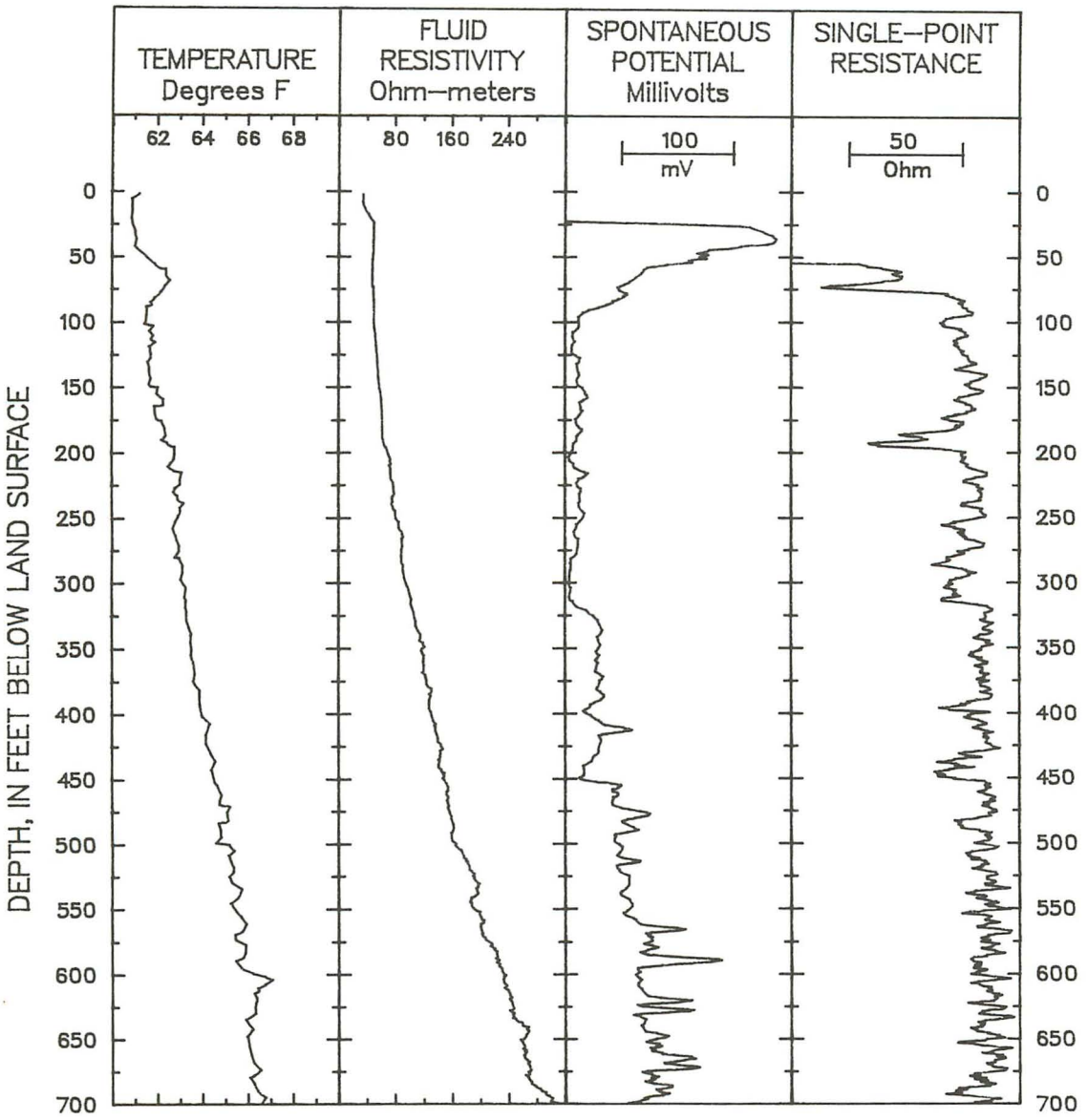


Figure 4.—Continued.

Well HO De 42--continued
Sykesville Formation
Casing depth: 54 feet
Altitude: 365 feet
Land surface datum

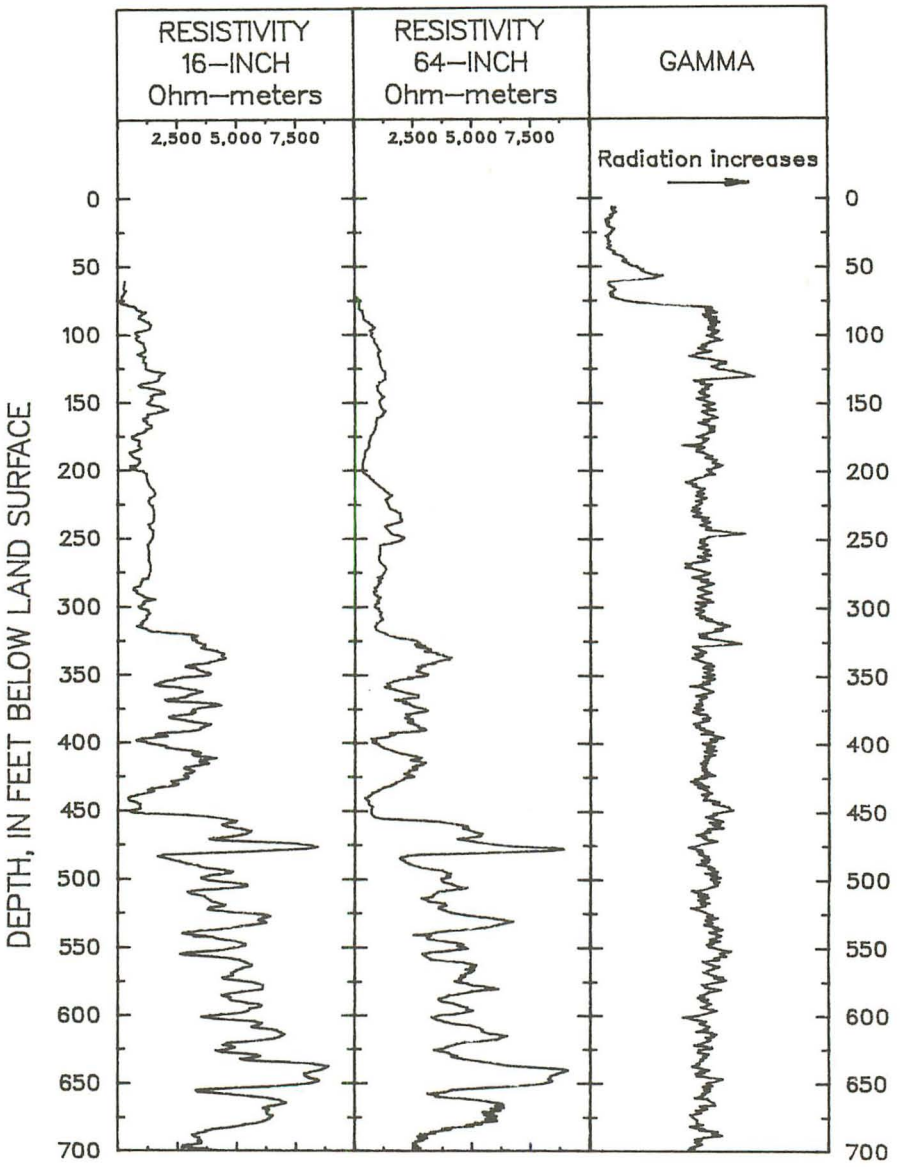
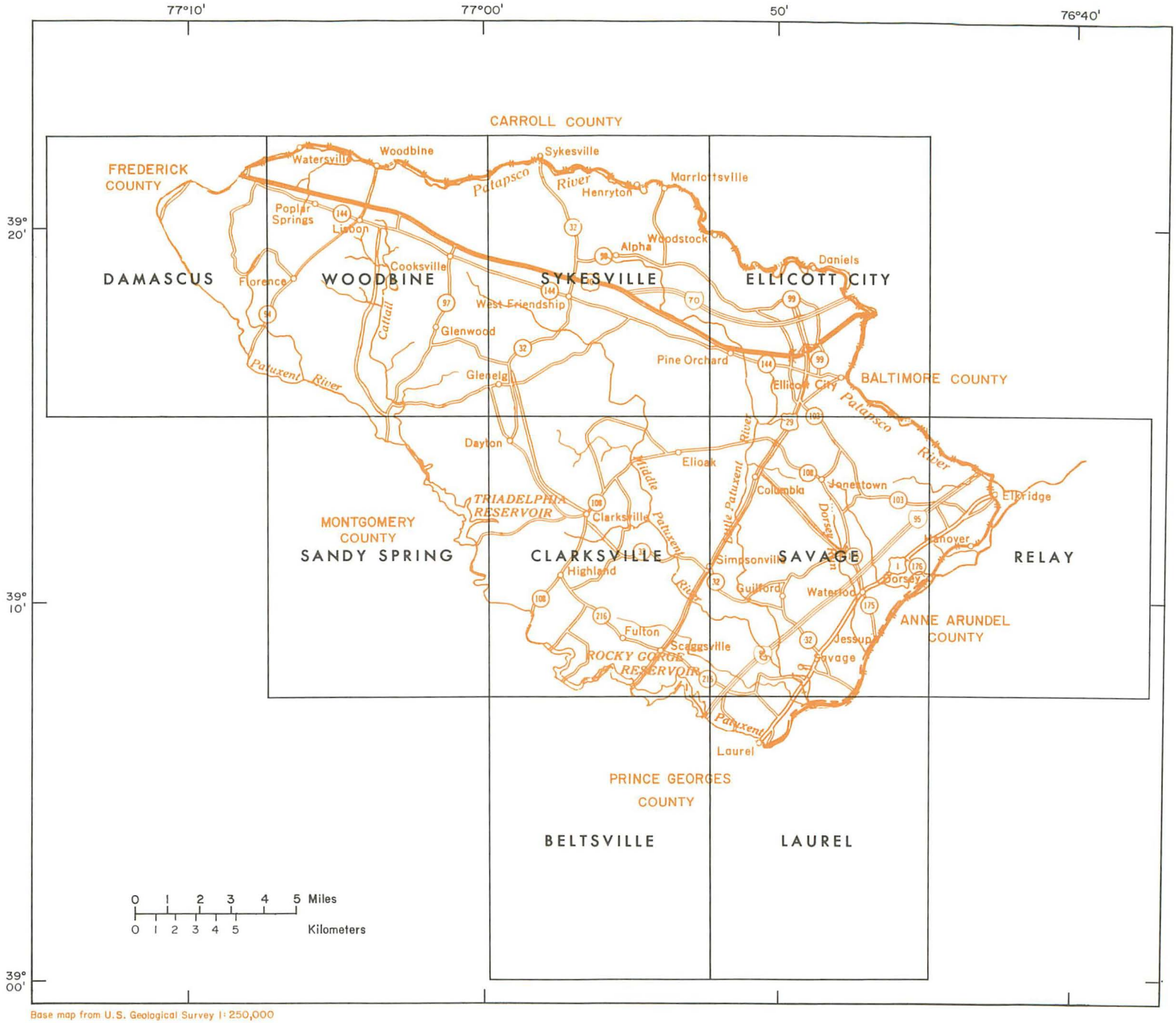
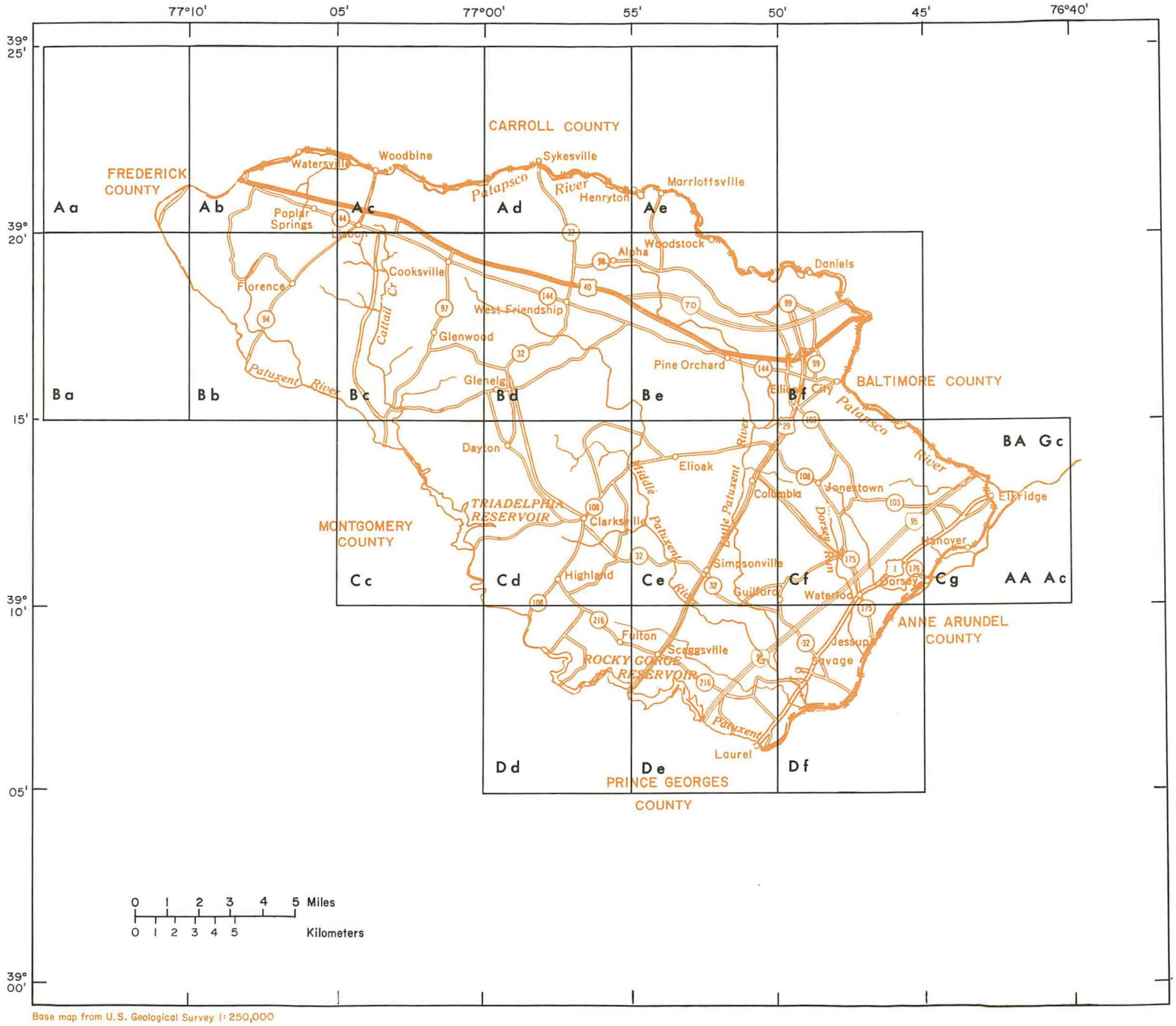


Figure 4.—Continued.



Base map from U.S. Geological Survey 1:250,000

Figure 5. Index map showing 7 ½-minute topographic quadrangle coverage of Howard County.



Base map from U.S. Geological Survey 1:250,000

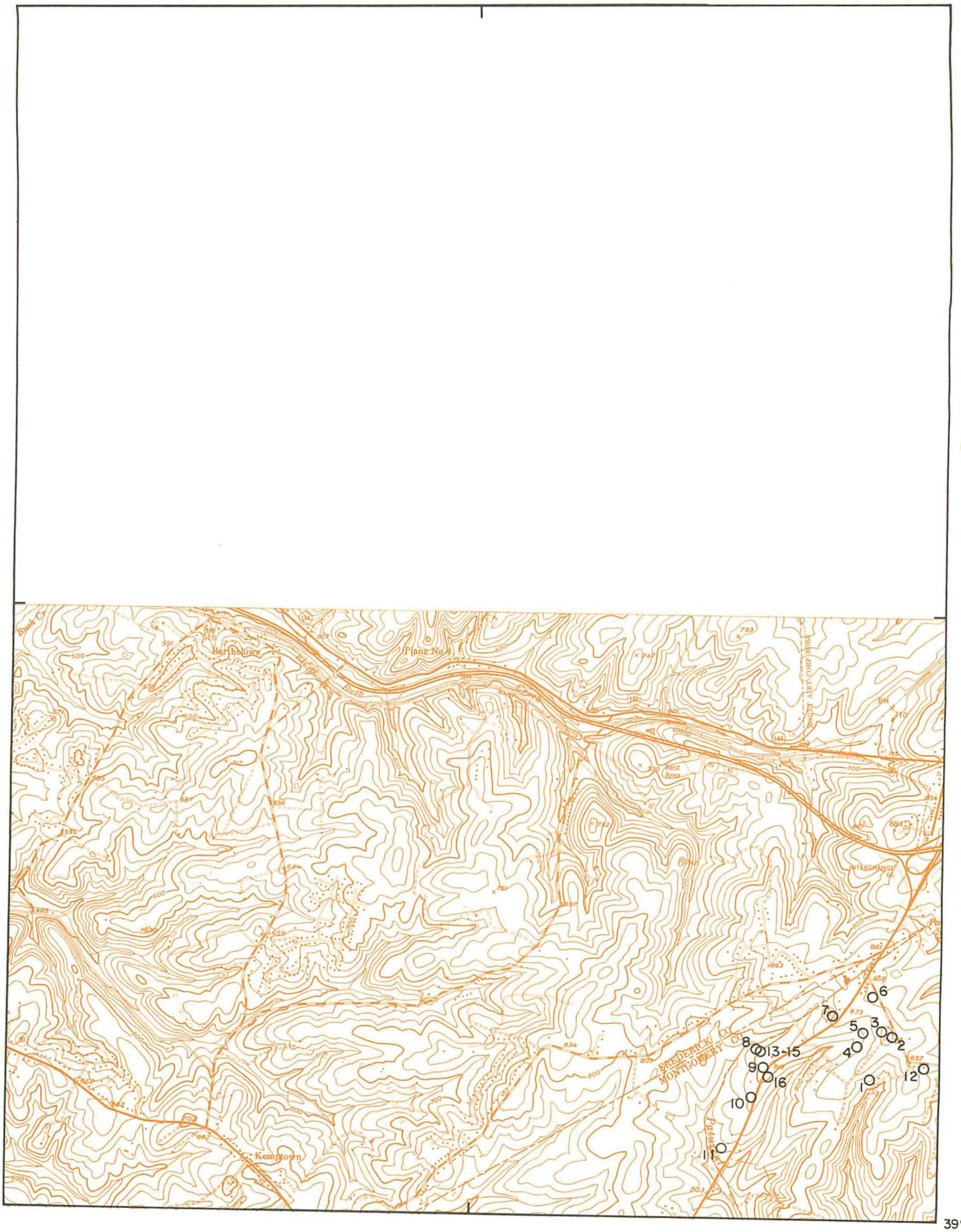
Figure 6. Index map showing 5-minute quadrangles of well and spring locations in Howard County.

MAPS SHOWING LOCATIONS OF WELLS AND SPRINGS

MAP SYMBOLS

○22 Well with site number

44 Spring with site number



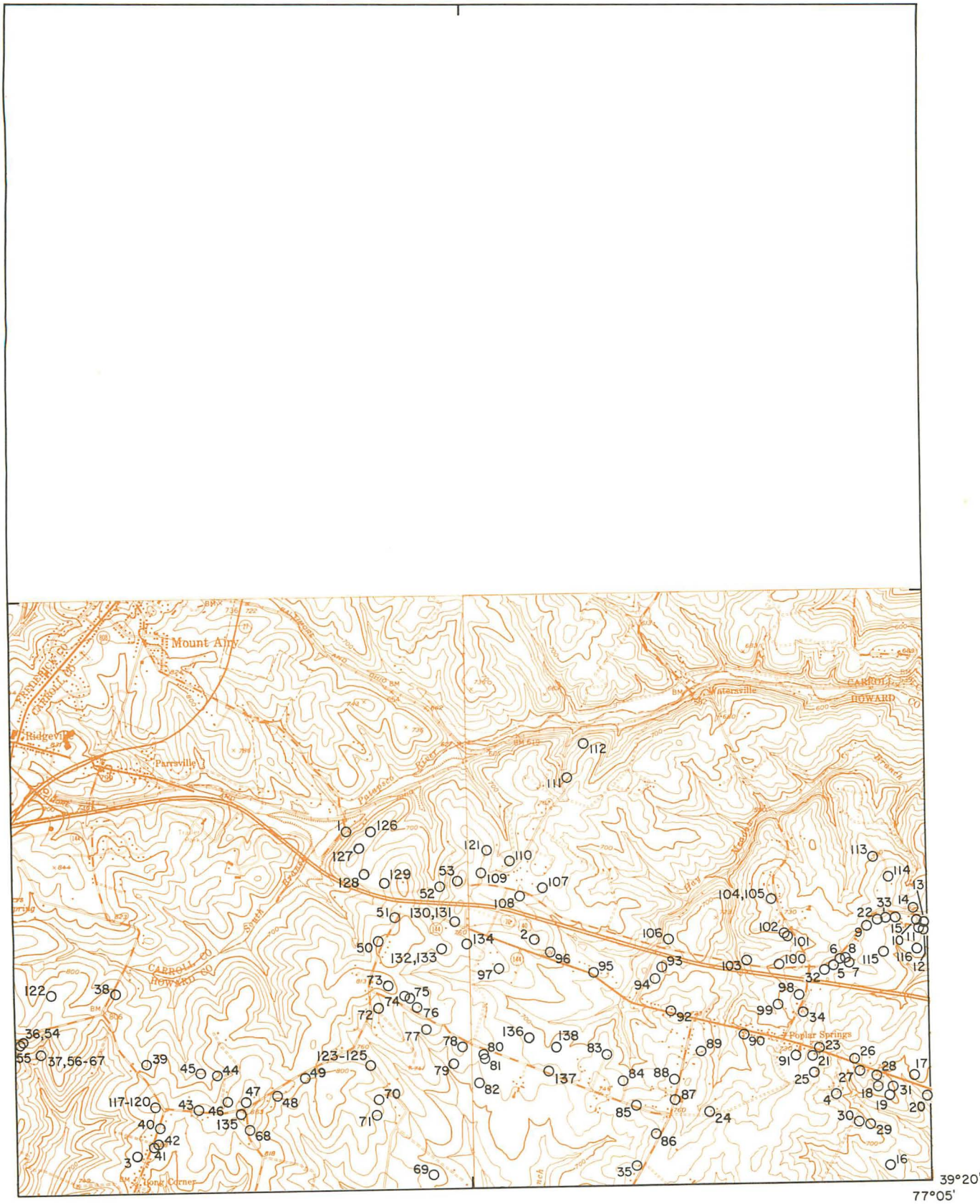
Aa

1 ½ 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

CONTOUR INTERVAL 20 FEET
DATUM IS NATIONAL GEODETIC VERTICAL DATUM OF 1929



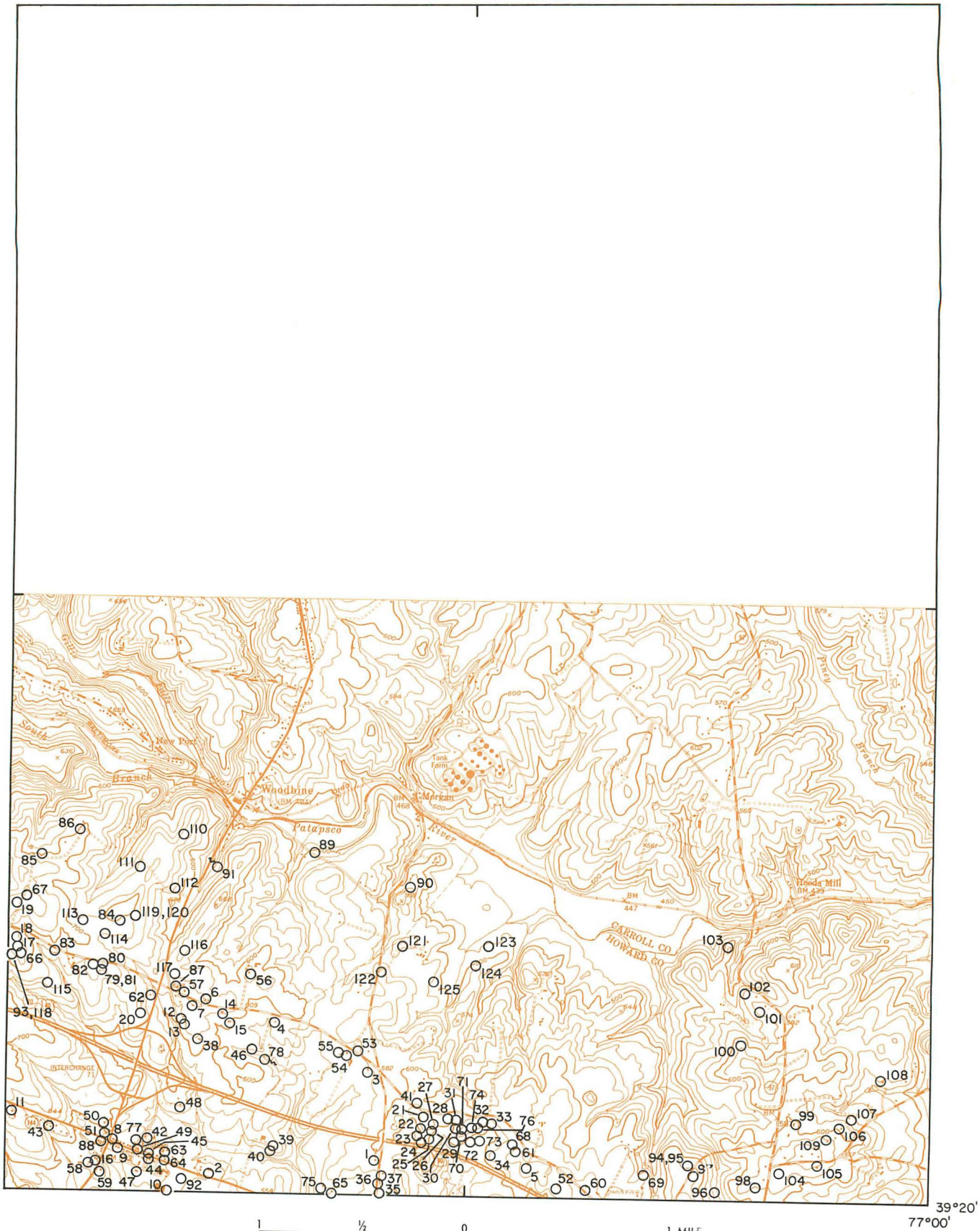
Ab

1 ½ 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

CONTOUR INTERVAL 20 FEET
DATUM IS NATIONAL GEODETIC VERTICAL DATUM OF 1929



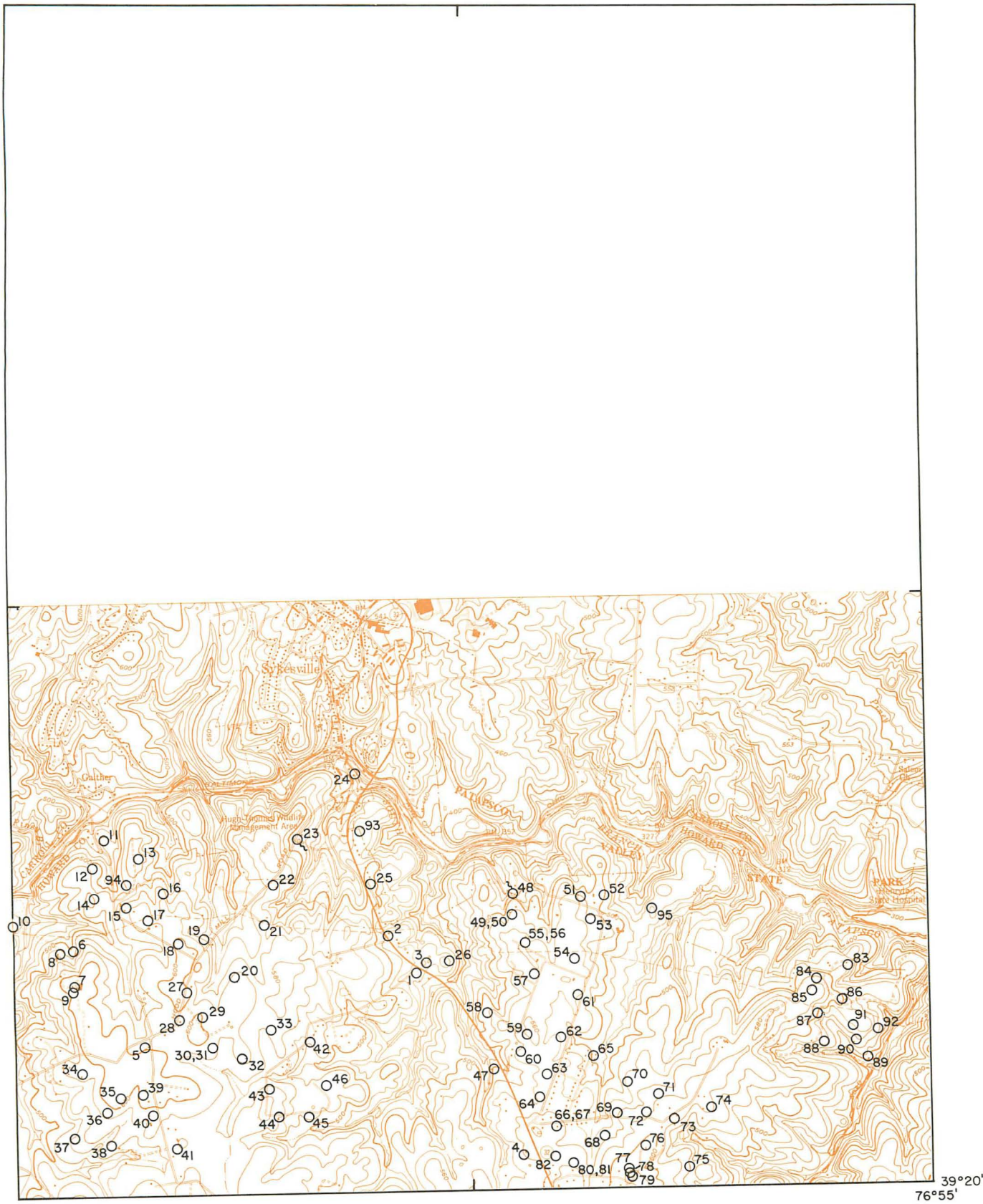
Ac

1 ½ 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

CONTOUR INTERVAL 20 FEET
DATUM IS NATIONAL GEODETIC VERTICAL DATUM OF 1929



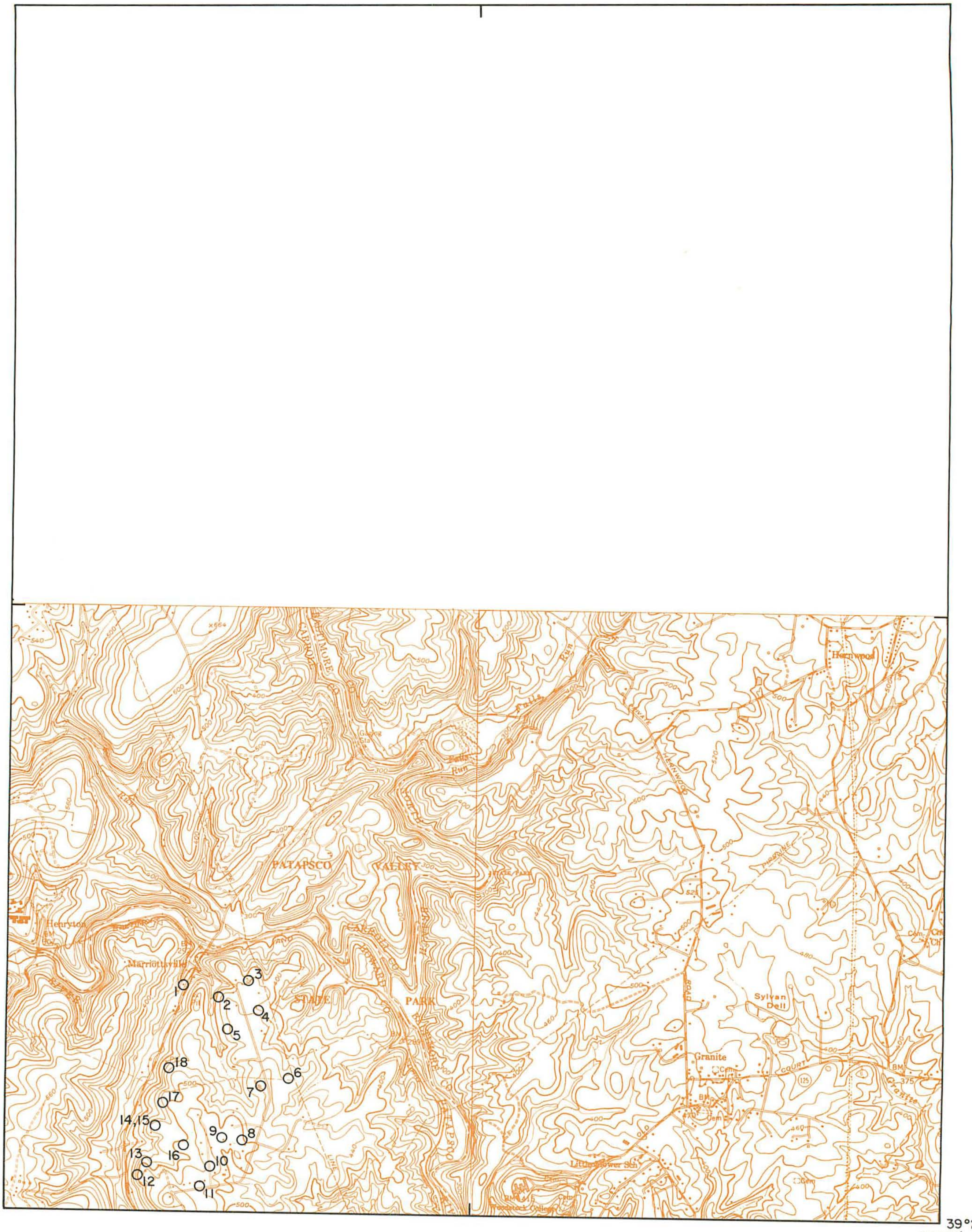
1 ½ 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

Ad

CONTOUR INTERVAL 20 FEET
DATUM IS NATIONAL GEODETIC VERTICAL DATUM OF 1929



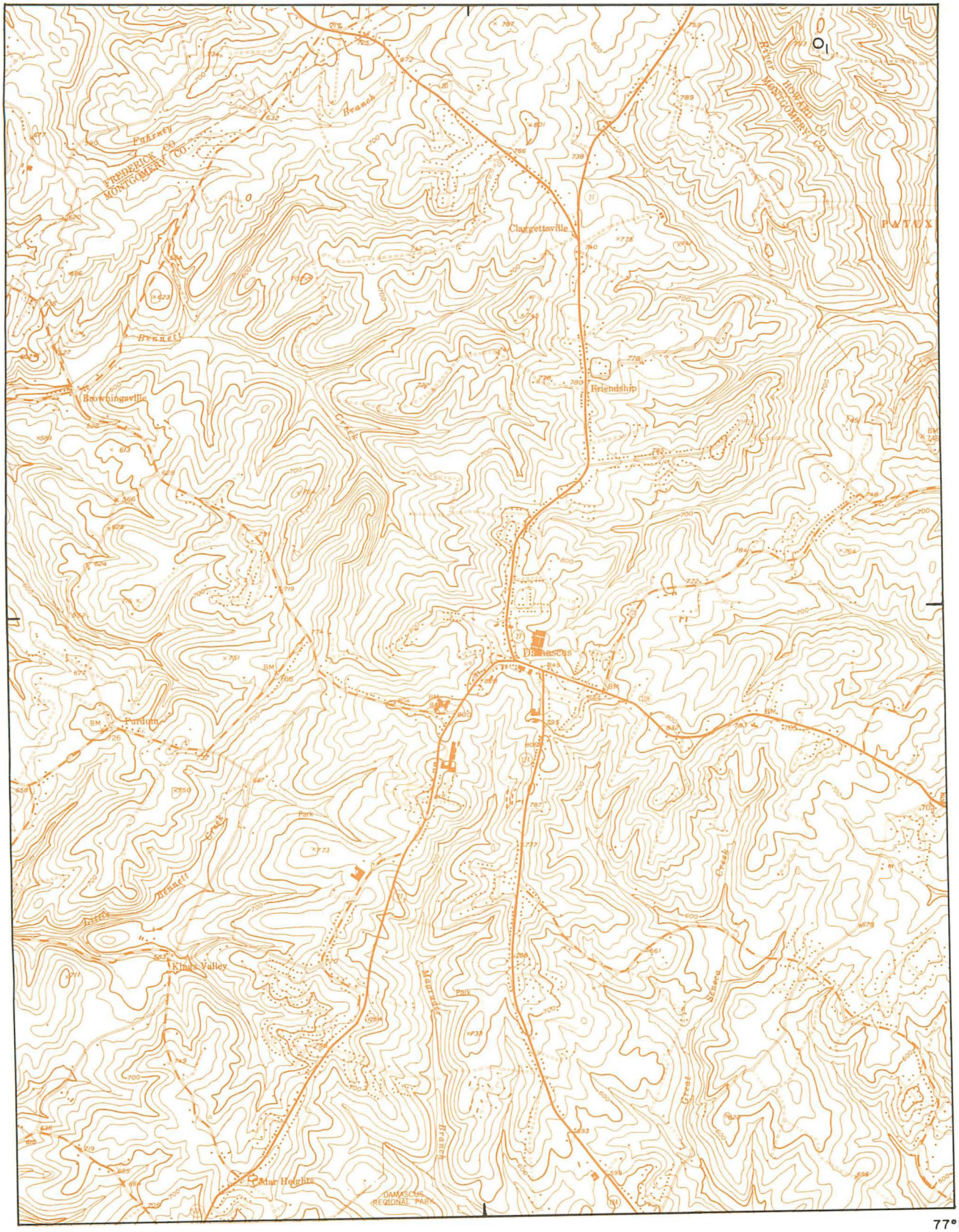
Ae

1 ½ 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

CONTOUR INTERVAL 20 FEET
DATUM IS NATIONAL GEODETIC VERTICAL DATUM OF 1929



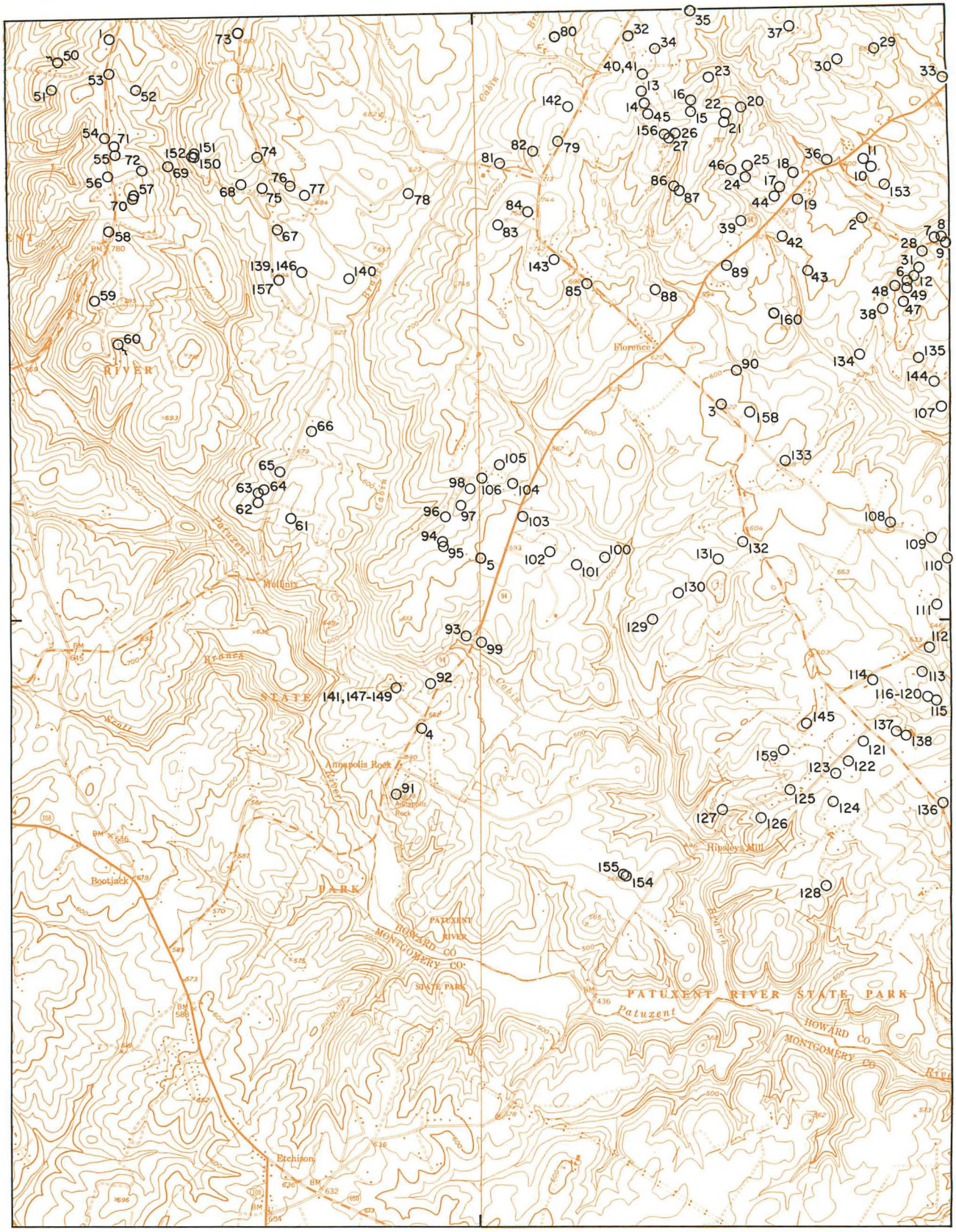
1 ½ 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

Ba

CONTOUR INTERVAL 20 FEET
DATUM IS NATIONAL GEODETIC VERTICAL DATUM OF 1929



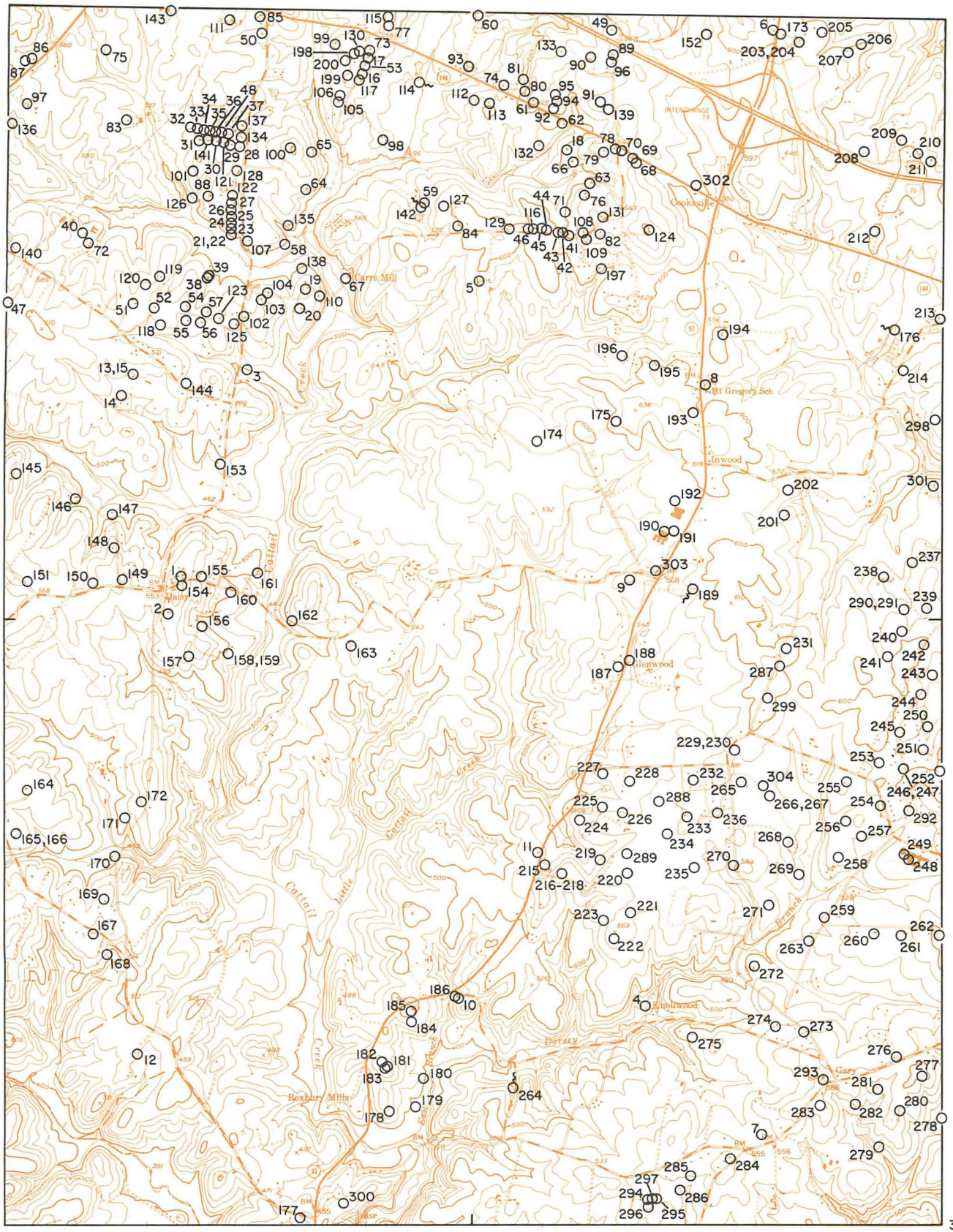
Bb

1 ½ 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

CONTOUR INTERVAL 20 FEET
DATUM IS NATIONAL GEODETIC VERTICAL DATUM OF 1929



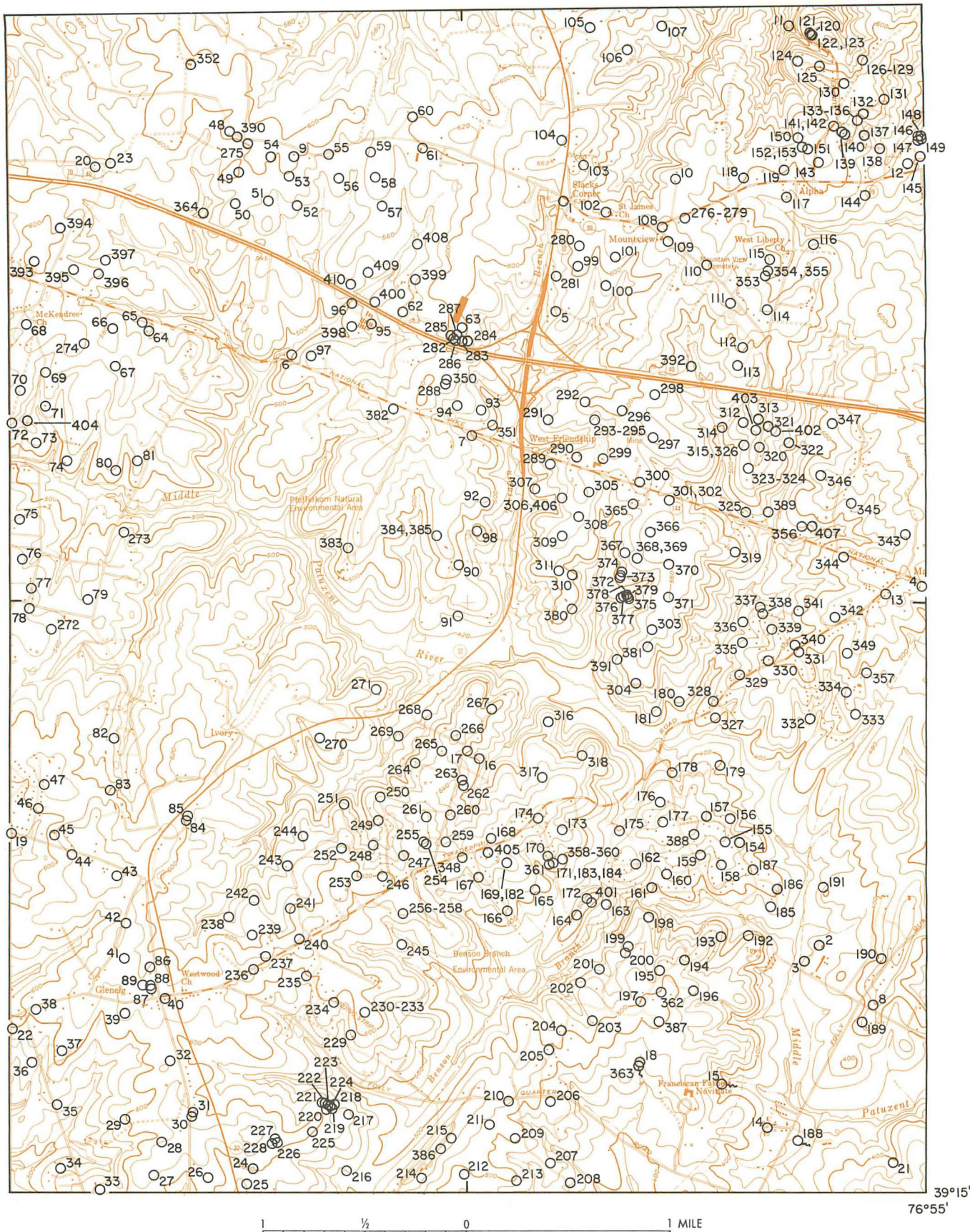
1 ½ 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

Bc

CONTOUR INTERVAL 20 FEET
DATUM IS NATIONAL GEODETIC VERTICAL DATUM OF 1929



Bd

1 ½ 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

CONTOUR INTERVAL 20 FEET
DATUM IS NATIONAL GEODETIC VERTICAL DATUM OF 1929

1 ½ 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

Be

CONTOUR INTERVAL 20 FEET
DATUM IS NATIONAL GEODETIC VERTICAL DATUM OF 1929

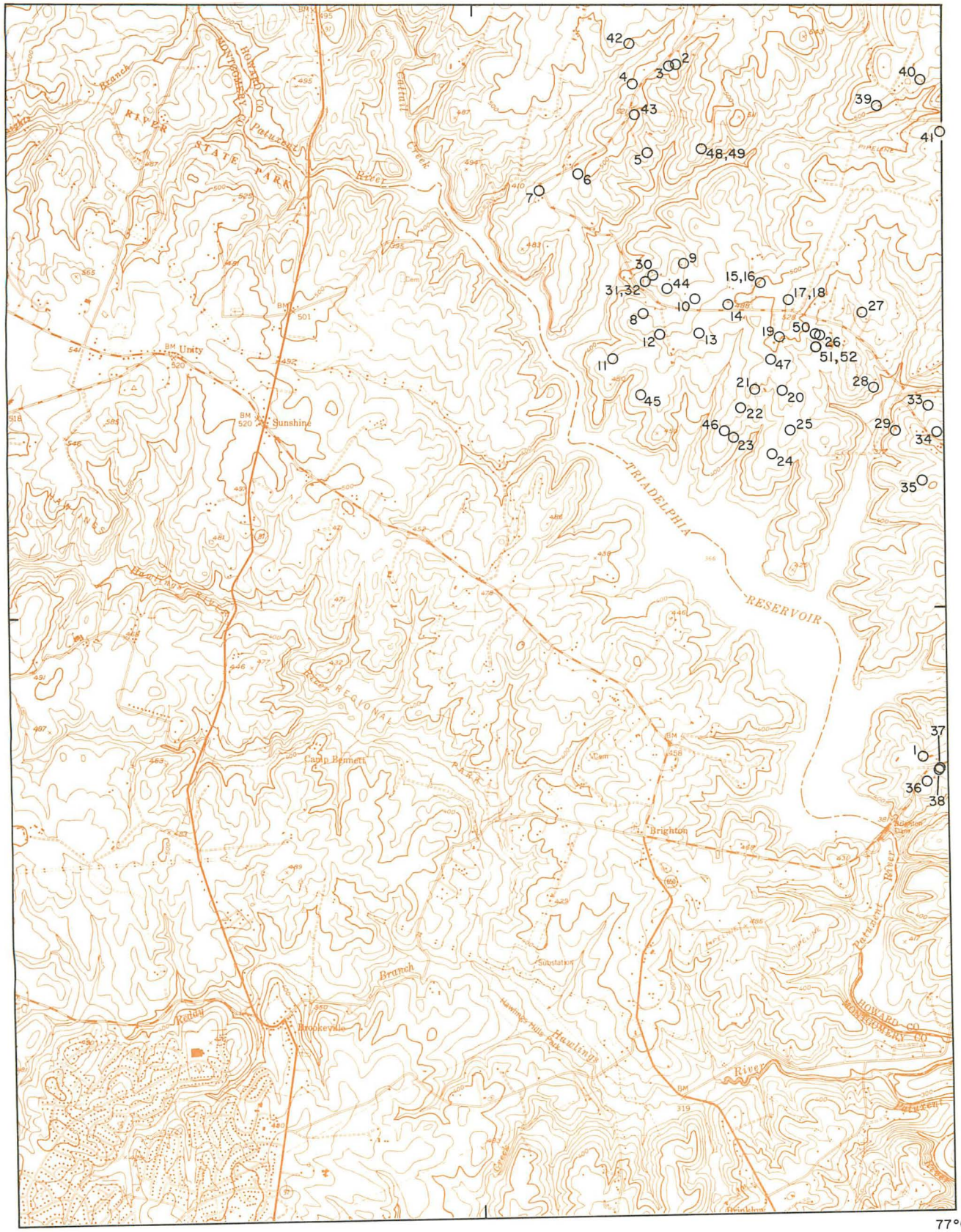
Bf

1 ½ 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

CONTOUR INTERVAL 20 FEET
DATUM IS NATIONAL GEODETIC VERTICAL DATUM OF 1929



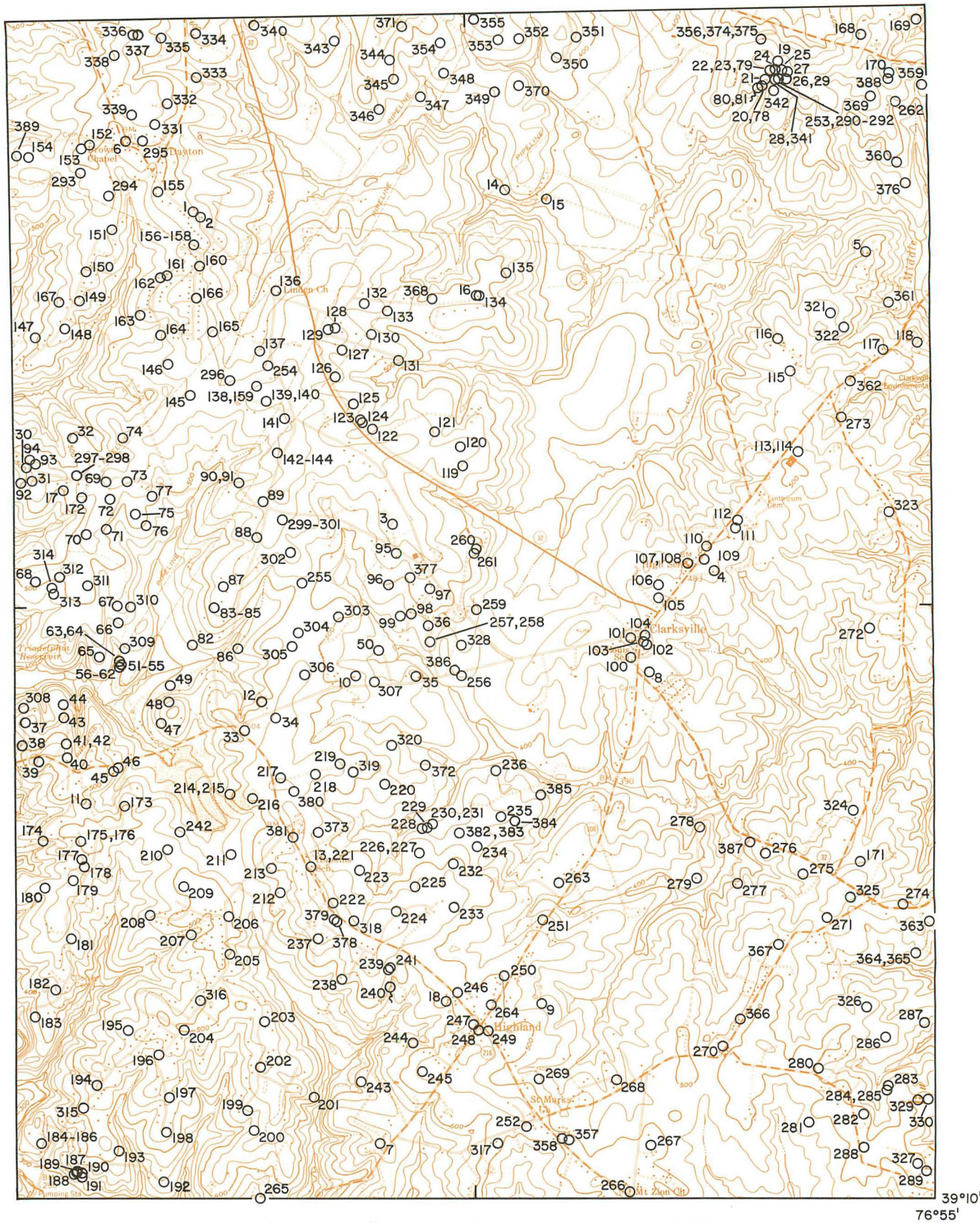
1 ½ 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

Cc

CONTOUR INTERVAL 20 FEET
DATUM IS NATIONAL GEODETIC VERTICAL DATUM OF 1929



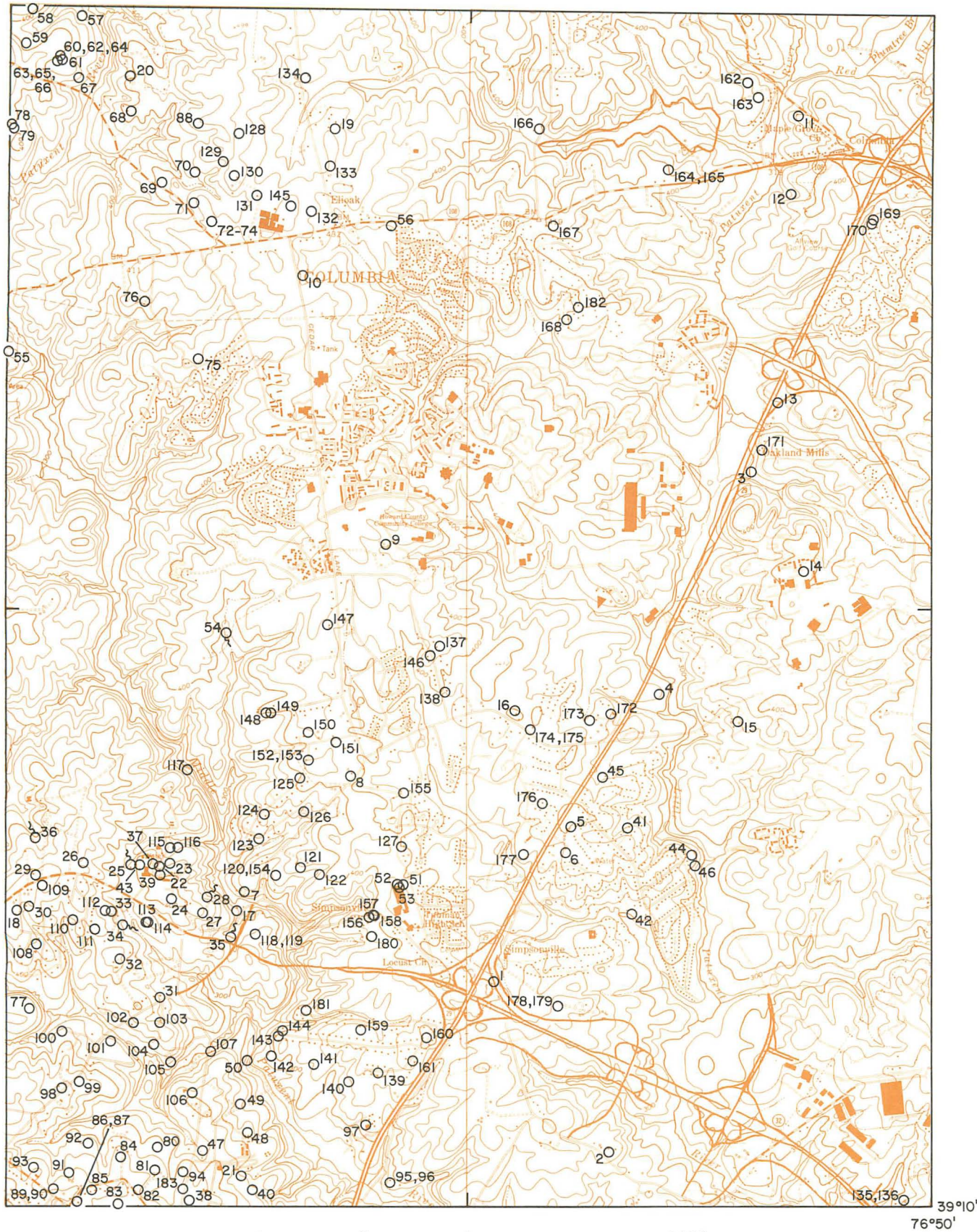
1 ½ 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

Cd

CONTOUR INTERVAL 20 FEET
DATUM IS NATIONAL GEODETIC VERTICAL DATUM OF 1929



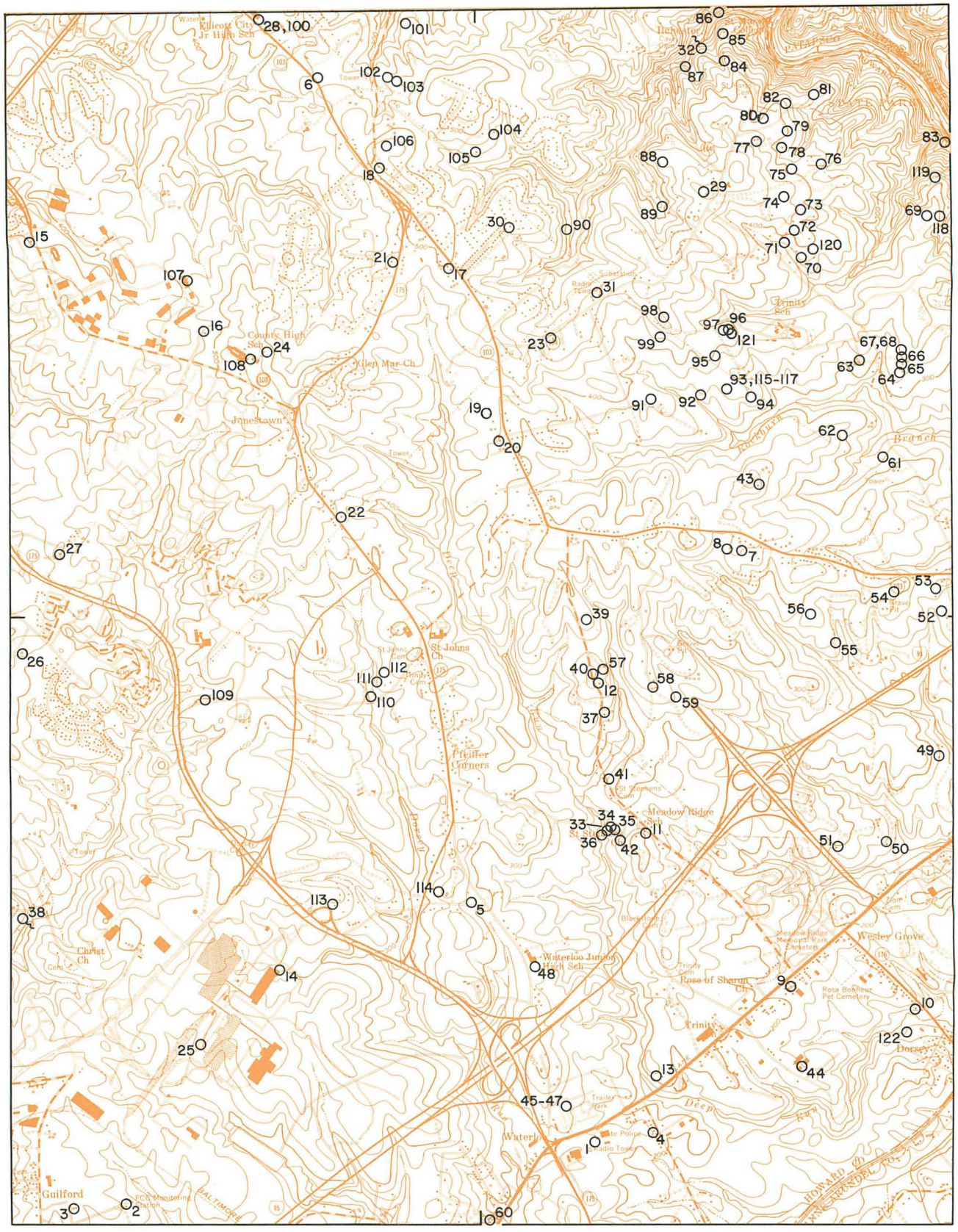
1 ½ 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

Ce

CONTOUR INTERVAL 20 FEET
DATUM IS NATIONAL GEODETIC VERTICAL DATUM OF 1929



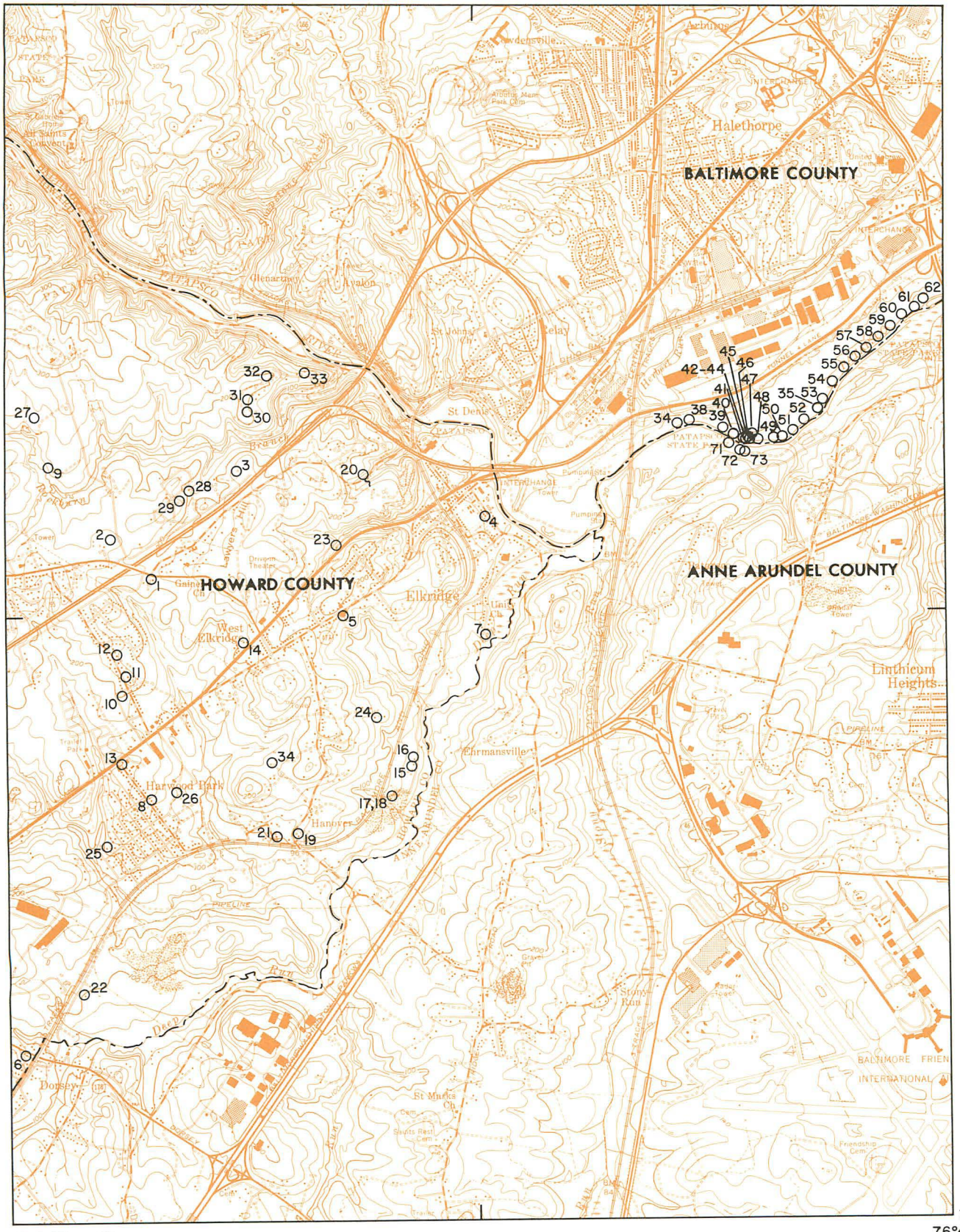
1 ½ 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

Cf

CONTOUR INTERVAL 20 FEET
DATUM IS NATIONAL GEODETIC VERTICAL DATUM OF 1929



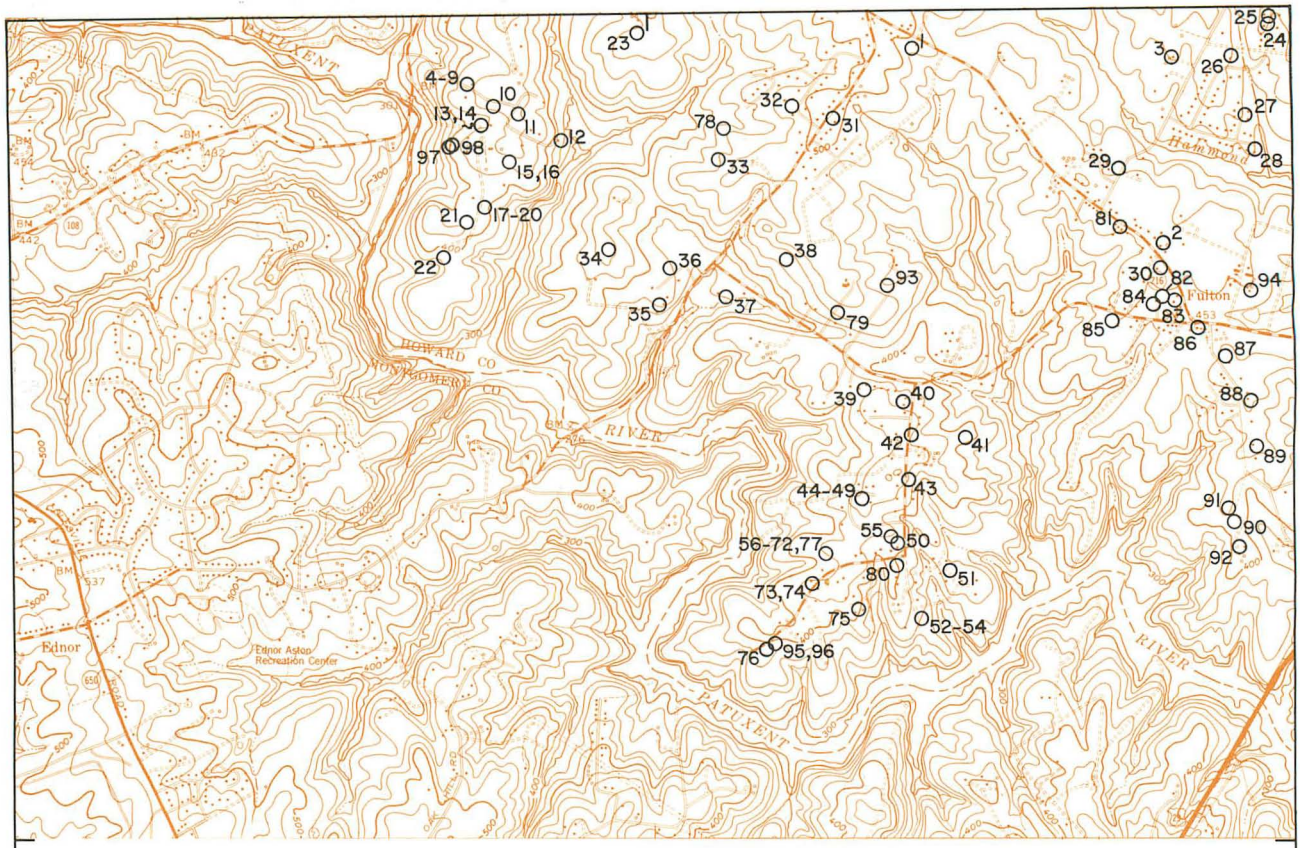
HO Cg
AA Ac
BA Gc

1 ½ 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

CONTOUR INTERVAL 20 FEET
DATUM IS NATIONAL GEODETIC VERTICAL DATUM OF 1929



39°05'
76°55'

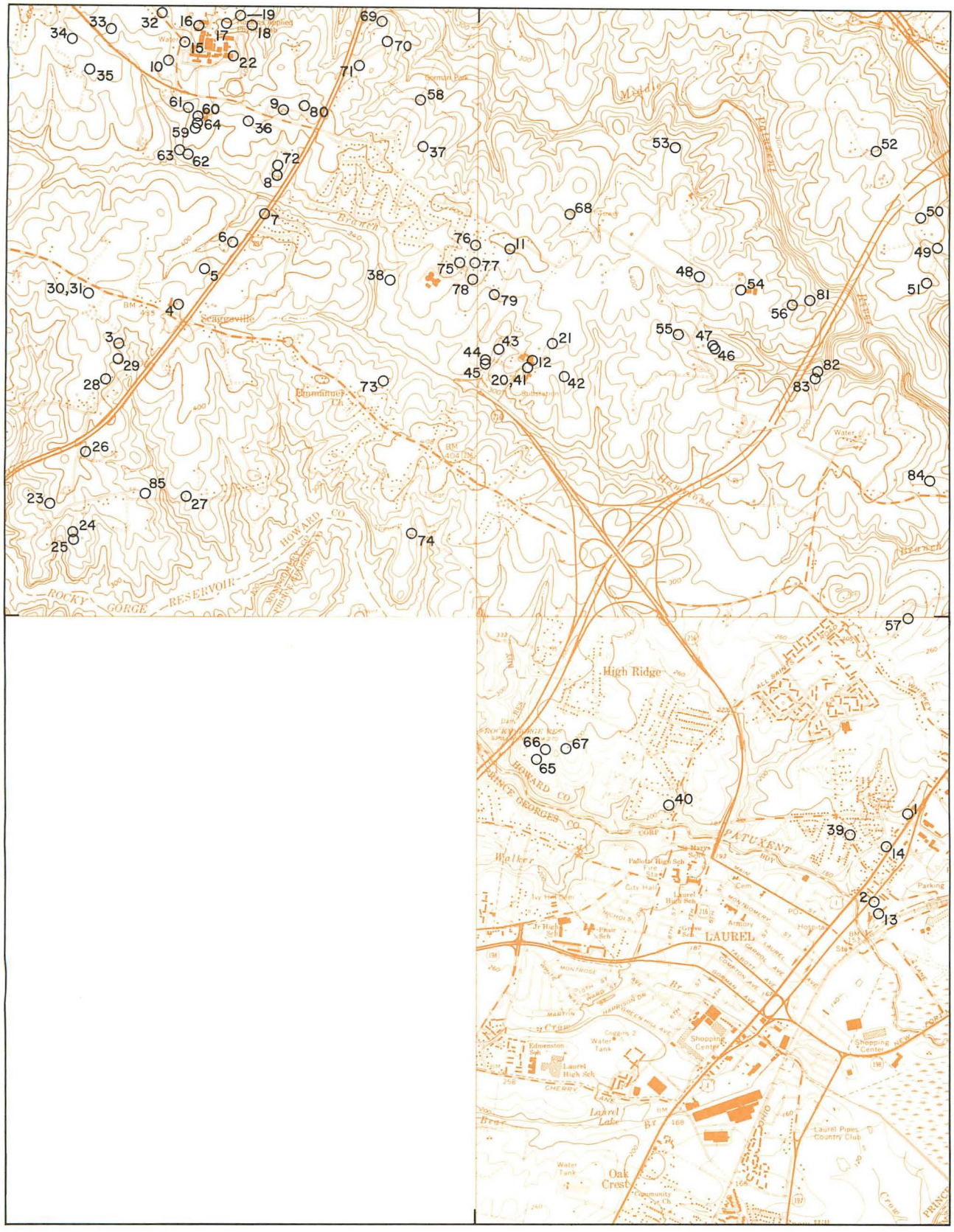
1 ½ 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

Dd

CONTOUR INTERVAL 20 FEET
DATUM IS NATIONAL GEODETIC VERTICAL DATUM OF 1929



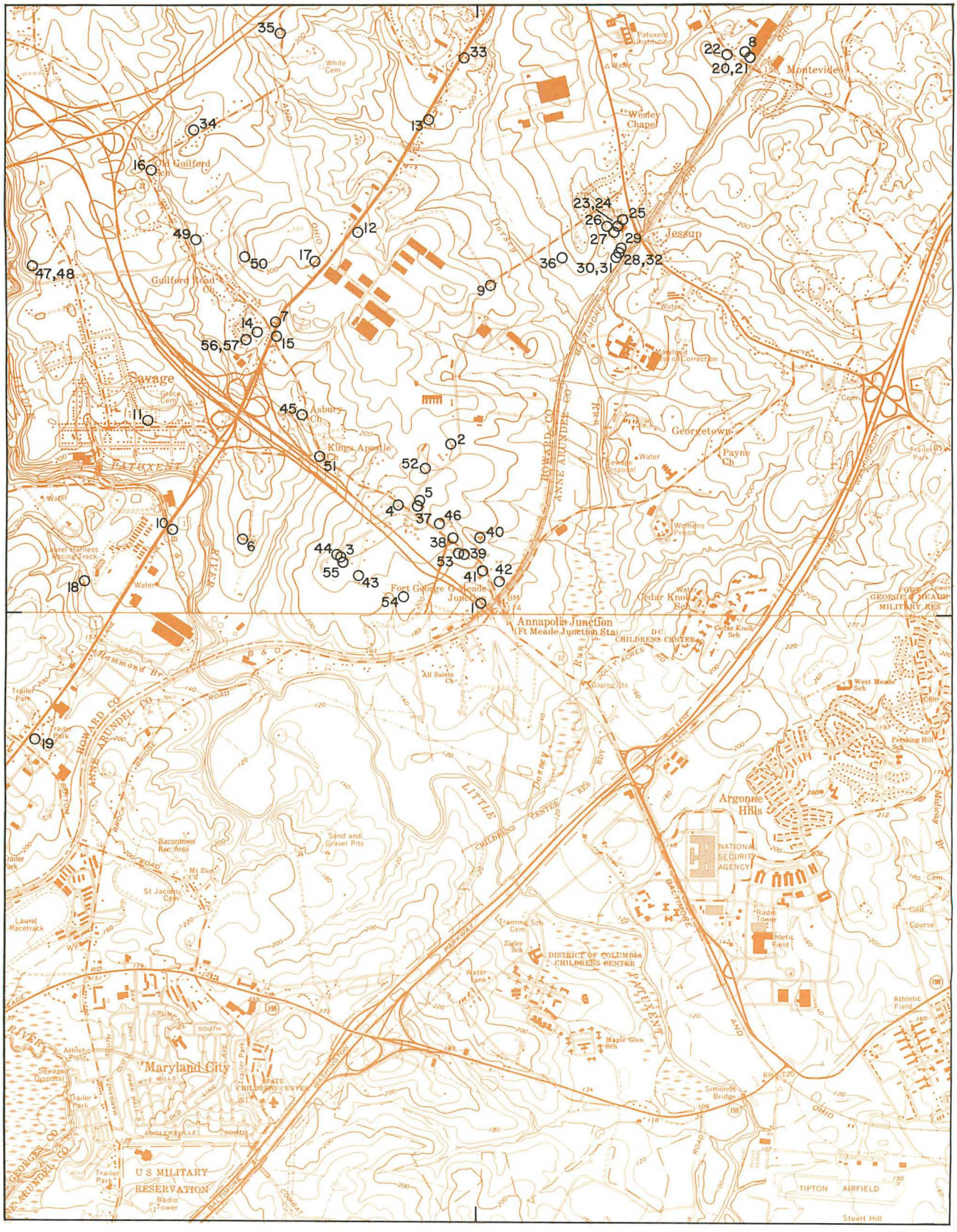
1 ½ 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

CONTOUR INTERVAL 20 FEET
DATUM IS NATIONAL GEODETIC VERTICAL DATUM OF 1929

De



Df

1 ½ 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

CONTOUR INTERVAL 20 FEET
DATUM IS NATIONAL GEODETIC VERTICAL DATUM OF 1929

MARYLAND GEOLOGICAL SURVEY
2300 St. Paul Street
Baltimore, Maryland 21218-5210
(410) 554-5505

Basic Data Reports:

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3. Hydrogeologic data from the Janes Island State Park test well (1,514 feet), Somerset County, Maryland, by H.J. Hansen, 1967, 24 p. . . . . $ 2.50

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5. Deep wells of Maryland, by J. Edwards, Jr., 1970, 162 p. . . . . $ 3.50*

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7. Harford County ground-water information: well records, pumpage, and chemical-quality data, compiled by L.J. Nutter and M.J. Smigaj, 1975, 89 p. . . . . $ 3.75

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10. Maryland ground-water information: chemical-quality data, compiled by R.S. Woll, 1978, 126 p. . . . . $ 9.50

11. Garrett County water well records, chemical-quality data, ground-water use, coal test-hole data, and surface-water data, compiled by L.J. Nutter, M.J. Smigaj, and L.L. Knobel; with a section on gas-well records, compiled by K.A. Schwarz and J. Edwards, Jr., 1980, 102 p. . . . . $ 7.00

12. Carroll County ground-water information: well records, spring records, and chemical-quality data, compiled by J.T. Hilleary and J.M. Weigle, 1981, 252 p. . . . . $ 9.50

13. Prince George's County ground-water information: well records, chemical-quality data, pumpage, appropriation data, observation well records, and well logs, compiled by M.D. Tompkins, 1983, 160 p. . . . . $ 8.50

14. Records of selected wells, Calvert and St. Mary's Counties, Maryland, compiled by D.D. Drummond, 1983, 117 p. $12.25

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17. Ground-water levels from the Maryland observation-well network, 1943-86, by M. J. Smigaj and R.G. Davis, Jr., 1987, 234 p. $10.25

18. Ground-water and surface-water data for Washington County, Maryland, compiled by M.T. Duigon, J.R. Dine, and M.D. Tompkins 1989, 273 p. $25.00

19. Hydrologic data for Howard County, Maryland, compiled by J.R. Dine, J.C. Adamski, and M.D. Tompkins, 1992, 240 p. $16.50

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* Available as microfiche copy